

EDITORS ■ CURT R. BARTOL ■ ANNE M. BARTOL

*Current Perspectives in*  
**FORENSIC  
PSYCHOLOGY**  
*and*  
**CRIMINAL  
BEHAVIOR**

EDITION

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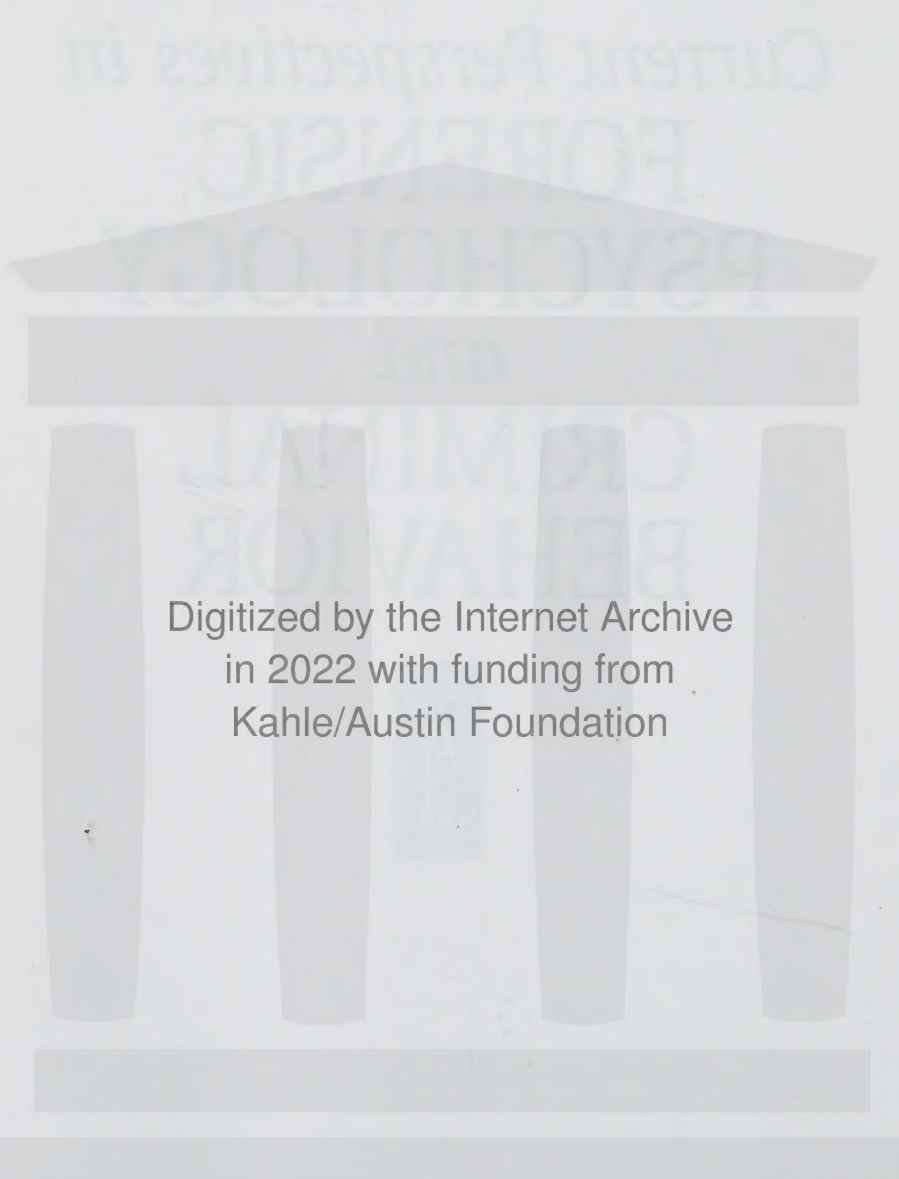
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CURT R. BARTOL ■ ANNE M. BARTOL  
EDITORS

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## PREFACE

**T**he articles in this book are offered as supplementary readings to accompany the main text in a variety of undergraduate courses, such as Introduction to Forensic Psychology, Criminology, Psychology and Criminal Justice, Psychology and Law, and similar courses. While most articles were originally published after 2000, a few were first published in the mid-1990s but have been well cited in the forensic literature. Included in the more recent articles are some that provide a different perspective on crime victims or on common or attention-getting crimes. In preparing this third edition, we again found it necessary to delete readings that appeared in the first two editions of this book in favor of recently published articles. Fortunately, most of the deleted readings from the first (two) editions can be found on the SAGE website.

In the interest of space, we have taken the liberty of editing most of the original works.

The ellipses indicate that paragraphs, sentences, or references have been removed. When substantial portions of an article have been omitted, we have indicated that in a footnote at the beginning of the article. In addition, all abstracts, authors' notes, footnotes, and many figures and tables have been removed. References now appear in a master reference list at the end of the book. Complete citations are included for those readers who wish to review the original publication, and we strongly encourage that.

The articles are introduced and are grouped in accordance with our view of forensic psychology as a specialty that has relevance to a wide range of both criminal and civil settings. Nevertheless, due to the vast amount of research on crime-related topics and the fact that this reader is a supplement to crime-related courses, the great majority of the articles relate to criminal matters.

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# **UNIT 1**

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## **INTRODUCTION**

# EDUCATIONAL AND TRAINING MODELS IN FORENSIC PSYCHOLOGY\*

DAVID DeMATTEO

GEOFFREY MARCZYK

DANIEL A. KRAUSS

JEFFREY BURL

The field of forensic psychology has quite recently emerged as distinct subdiscipline within professional psychology. Despite a historical lineage dating back to the early 1900s and the influential publication of Hugo Munsterberg's (1908) *On the Witness Stand*, the American Psychological Association (APA) did not formally recognize forensic psychology as a discrete specialization until 2001 (Otto & Heilbrun, 2002). Although specialty recognition by APA in any area of psychology other than clinical, counseling, school, or industrial-organizational is a relatively recent development, the recent recognition of forensic psychology as a specialty area

was arguably overdue in light of the field's long history and rapid growth over the past 30 years.

One indicator of the growth of forensic psychology is the number and range of educational and training opportunities available to students and practitioners. The development of the first joint-degree law-psychology graduate training program in 1973 at the University of Nebraska marked the beginning of a paradigm shift in how forensic practitioners are educated and trained (Bersoff, 1999). A number of law-psychology and forensic psychology programs have been developed since that time, and students and practitioners interested in forensic psychology now

\*Copyright © 2009 by the American Psychological Association (APA). Reproduced with permission. This article first appeared in *Training and Education in Professional Psychology* (2009), Vol. 3, No. 3, pp. 184-201. We have deleted sections on Postdoctoral Training and Credentialing.



have a range of educational and training options from which to choose.

Despite the increased availability of forensic psychology training programs, there is little consensus regarding the core educational components of these programs. Given the rapid growth of the field of forensic psychology, it is critical that training programs provide students with the necessary breadth of knowledge, skills, and experiences. Ensuring proper training takes on additional importance because of the increasingly varied roles being assumed by forensic psychologists in the areas of assessment, treatment, and consultation (Marczyk, DeMatteo, Kutinsky, & Heilbrun, 2008).

This article will first review the divergent and expanding roles assumed by forensic psychologists. We will then examine the educational and training models currently used in forensic psychology programs and consider whether these training models are adequately preparing students for forensic practice. Finally, we will offer a substantive training curriculum that emphasizes the core competencies that arguably should be included in doctoral-level forensic psychology training programs. It is important to note that a model curriculum for doctoral-level forensic psychology graduate programs has not yet been developed, and we hope that our proposed model will stimulate further discourse on this important topic. Although this article may primarily benefit training directors from doctoral-level programs that offer forensic psychology training, we believe this article will also prove useful for those who are less familiar with specialized training opportunities in forensic psychology. As student interest in forensic psychology continues to increase, it is becoming increasingly more important for nonforensic professionals to be able to educate their students about available training opportunities.

## DEFINING THE ROLE OF THE MODERN FORENSIC PSYCHOLOGIST

Psychologists have a long tradition of providing services to the legal system (see Bartol &

Bartol, 2006, and Otto & Heilbrun, 2002, for comprehensive summaries). Initial interaction between psychologists and the legal system, beginning in the early 1900s, consisted of the provision of clinical services to incarcerated adult offenders and juvenile offenders in detention centers (Otto & Heilbrun, 2002). Other early activities of psychologists providing services to criminal justice and the legal system included psychological fitness testing of law enforcement personnel and the pretrial evaluation of criminal offenders (Bartol & Bartol, 2006). These early efforts helped to cement the relationship between psychologists and the legal system, and the use of psychologists for evaluating law enforcement personnel, criminal offenders, and civil litigants has now become commonplace (Melton, Petrila, Poythress, & Slobogin, 2007). The U.S. Court of Appeals for the District of Columbia Circuit decision in *Jenkins v. United States* (1962), which held that appropriately qualified psychologists could testify in court as experts in psychiatric disorders and that psychological measures could be introduced in court to support their expert opinions, further expanded psychological practitioners' interactions within the courts. Following this decision, the use of psychologists as expert witnesses in judicial proceedings has increased dramatically, with thousands of forensic evaluations conducted each year on a variety of psycholegal issues (Otto & Heilbrun, 2002).

Although forensic psychologists now assume a prominent role within the forensic mental health and criminal justice systems, there is a vigorous debate within the parent field of law and psychology regarding the definition of forensic psychology and roles that may be appropriately assumed by forensic psychologists (Brigham, 1999; Hess, 2006). It is generally understood that forensic psychology is one specialty area within the broader rubric of law and psychology research and practice (Hess, 2006), but there is less agreement regarding the precise definition and scope of forensic psychology. At its basic level, forensic psychology can be conceptualized as the application of the science and profession of psychology to questions and issues relating to the law and the legal system. This is the definition of forensic

psychology adopted by the American Board of Forensic Psychology, or ABFP (2006). Although most practitioners would likely agree, at least in principle, with the core components of this definition, there is considerable disagreement over the scope of forensic psychology and what activities (i.e., research, assessment, and treatment) and roles should appropriately be considered the exclusive province of forensic psychology.

On the one hand, forensic psychology could be narrowly defined as only encompassing clinical psychology, counseling psychology, school psychology, or another specialty recognized by the APA, and consisting only of activities that provide clinical psychological expertise to the judicial system. This was the definition of forensic psychology endorsed by the American Psychology–Law Society, which is Division 41 of the APA, when it initially pursued formal specialty recognition for forensic psychology from the APA (Heilbrun, 2000; see Forensic Specialty Council, 2007). This definition only encompasses clinically based areas of psychology and therefore excludes practitioners without clinical degrees. Under this narrow and restrictive definition, research psychologists in the fields of social, experimental, and cognitive psychology would not be considered forensic psychologists, despite the obvious contribution that these researchers can make in certain legal contexts (e.g., reliability of eyewitness testimony, perceptions of jurors). It is important to note that this narrow definition may have been chosen for both practical and legal reasons. Practically, specialty recognition from APA is generally reserved for clinically based subspecialties, while legally many states prohibit the term *psychologist* from being used by psychological professionals who are not licensed by the state. It is rare that nonclinical practitioners would seek state licensure in such a jurisdiction and, as a result, research psychologists who study law–psychology issues could not legally refer to themselves as forensic “psychologists,” nor would they likely meet the requirements for specialty certification imposed by APA.

Dissatisfaction with narrow conceptualizations of forensic psychology soon emerged, which led to the proposal of several broader

definitions. For example, the Committee on the Revision of the Specialty Guidelines for Forensic Psychology (2006) recently adopted a broader definition of forensic psychology, which was subsequently endorsed by the American Psychology–Law Society. Under this definition, forensic psychology includes

all professional practice by any psychologist working within any subdiscipline of psychology . . . when the intended purpose of the service is to apply the scientific, technical, or specialized knowledge of psychology to the law and to use that knowledge to assist in solving legal, contractual, and administrative problems. (1.03)

This more expansive definition of forensic psychology reflects the widely varying roles that can be assumed by forensic professionals in terms of both clinical practice and research. This definition encompasses the clinically based activities of forensic psychologists, including policy psychology (i.e., application of clinical skills to law enforcement and public safety), correctional psychology (i.e., provision of assessment and treatment services in correctional settings), and forensic mental health assessment (i.e., assessment of criminal offenders and civil litigants to assist courts in answering legal questions) (Bartol & Bartol, 2006) while also recognizing that nonclinical/research psychologists are engaging in forensic psychology research if their research interfaces with some aspect of the legal system.

Several prominent researchers and commentators have also offered broader definitions of forensic psychology that include both clinical and nonclinical aspects. For example, Grisso (1987) defined a forensic psychologist as “any psychologist, experimental or clinical, who specializes in producing or communicating psychological research or assessment information intended for application to legal issues” (p. 831). Bartol and Bartol (2006) offered a similarly broad definition when they defined forensic psychology as

both (1) *the research endeavor* that examines aspects of human behavior directly related to the legal process . . . and (2) *the professional practice*



of psychology within or in consultation with a legal system that embraces both civil and criminal law and the numerous areas where they intersect. (pp. 3–4)

Finally, Goldstein (2007) recently defined forensic psychology as “the application of psychological research, theory, practice, and traditional and specialized methodology . . . to provide information relevant to a legal question” (p. 5).

## **EDUCATIONAL AND TRAINING OPPORTUNITIES IN FORENSIC PSYCHOLOGY**

Regardless of the precise definition, it is clear that the field of forensic psychology has experienced remarkable conceptual and empirical advances in the past three decades (Grisso, 2003; Heilbrun, 2001; Melton et al., 1997). These advances have been fueled by increased attention to the law’s demands (Melton et al., 2007); the development of specialized forensic assessment instruments (e.g., Grisso, 1998; Grisso & Appelbaum, 1998; Monahan et al., 2005; Quinsey, Harris, Rice, & Cormier, 2006); the founding of interdisciplinary professional organizations and journals (Otto & Heilbrun, 2002); and substantial growth in research, scholarship, and practice-related literature (e.g., Goldstein, 2007; Heilbrun, 2001; Heilbrun, Marczyk, & DeMatteo, 2002). As a result of this growth, psychologists are being called upon with increasing frequency to conduct forensic mental health assessments, provide treatment, and serve as consultants in a variety of criminal and civil contexts. Changes in the health care reimbursement system for psychologists have also caused forensic practice to become particularly appealing to more general clinical practitioners because forensic services are often not financially constrained by managed care (Melton et al., 2007). Because of this increase in interest, it is important that forensic psychology training programs adequately prepare students to engage in high-quality forensic practice, and more general clinical training programs should also be advised to supplement their basic training with forensically oriented courses and training opportunities to more fully meet the needs of their students. The growth and

development of forensic psychology is perhaps best evidenced by looking at the number and diversity of educational and training opportunities available to students and practitioners (Krauss & Sales, 2006; Marczyk et al., 2008). These opportunities range from undergraduate survey courses examining the broad intersection of law and psychology to joint-degree graduate programs offering terminal degrees in both law (JD) and psychology (PhD or PsyD). Moreover, opportunities for continuing education and postdoctoral specialization in forensic psychology are becoming increasingly more available.

As the popularity of forensic psychology has increased in recent years, the availability of forensic psychology training programs has increased almost commensurately. Forensic psychology training programs, or more general programs that offer a forensic psychology track or concentration, have proliferated rapidly in the past two decades. As will be discussed, a variety of educational and training opportunities in forensic psychology now exist at the undergraduate, graduate, and postdoctoral levels, and they offer a wide variety of educational and training opportunities in both clinical and nonclinical (i.e., research-based) forensic psychology. Even beyond the doctoral degrees, there are opportunities for advanced credentialing (i.e., board certification) for forensic practitioners who wish to distinguish themselves as having specific expertise in forensic psychology.

Despite the remarkable growth in educational and training opportunities in forensic psychology, there is little consensus regarding appropriate training models, curricula, and training goals (see Bersoff et al., 1997, and Krauss & Sales, 2006, for discussions of this problem). The field of forensic psychology continues to broaden in scope and diversity, and it encompasses a wide range of knowledge and skills (e.g., knowledge of legal standards; research skills; assessment, intervention, and consultation skills). As such, training programs must consider the varied roles that may be assumed by forensic psychologists. Although forensic psychology training programs have increased in number, scope, and sophistication in recent years, important questions

remain regarding the structure, focus, and goals of these programs.

The following sections will examine the educational and training opportunities available to students and practitioners interested in forensic psychology. After discussing the various training models employed in these programs, we will discuss a proposed model curriculum for doctoral-level programs that would serve to adequately prepare students to become forensic practitioners. Rather than ending the debate regarding appropriate training models, we hope that our proposed curriculum will stimulate further discussion of this important topic.

## Undergraduate Training in Forensic Psychology

Many colleges and universities currently offer at least one undergraduate course that covers some aspect of law–psychology, including forensic psychology. Several surveys conducted in the 1990s revealed an increase in the number of undergraduate law psychology courses being offered (Ogloff, Tomkins, & Bersoff, 1996), with many high-ranked psychology departments offering at least one law–psychology course (see Bersoff et al., 1997, for a review of this research). Anecdotally, law–psychology courses, particularly courses on forensic psychology, are among the most popular course offerings at the undergraduate level.

Recent years have witnessed an increase in the number and diversity of undergraduate law–psychology courses. Whereas most undergraduate courses offered in years past were survey courses that focused broadly on the intersection between law and psychology, newer courses offer a more detailed and sophisticated examination of circumscribed aspects of law and psychology. For example, undergraduate courses are being offered on child witnesses, the role of psychology in the legal process, and social science applications to the law (see the American Psychology–Law Society Web site [www.ap-ls.org] for a listing of available courses). A more recent development is the offering of undergraduate degrees in forensic

psychology. John Jay College of Criminal Justice now offers a bachelor of arts in forensic psychology that provides training in psychological theory, research methods, and the application of psychological principles to specific areas in the legal system. Of note, employment opportunities are somewhat restricted for those with bachelor-level training in forensic psychology. Although some graduates may find employment in various agencies or institutions, such as police departments, social service agencies, or court systems, these programs typically function to prepare students for additional education/training.

## Graduate Training in Forensic Psychology

Despite recent advances in course offerings and curricula in forensic psychology at the undergraduate level, educational and training opportunities for undergraduates interested in forensic psychology are still quite limited. There are considerably more educational and training opportunities in forensic psychology for students in graduate training programs. Depending on one's academic and professional interests, various options are available at both the master's and doctoral levels, and there are also several clinical and non-clinical joint-degree programs available for those who wish to obtain formal training in both law and psychology (see Krauss & Sales, 2006).

According to the *Guide to Graduate Programs in Forensic and Legal Psychology (2007–2008)* (American Psychology–Law Society, 2008), which was created by the Teaching, Training, and Careers Committee of the American Psychology–Law Society, there are nearly 50 programs that offer graduate training in forensic psychology (see also Burl, Shah, & DeMatteo, 2008). Broadly speaking, these programs can be categorized by program focus (e.g., clinical forensic psychology, nonclinical legal psychology), training models (e.g., clinical scientist practitioner, non-clinical scientist–scholar), and degrees awarded (e.g., masters, doctorate, joint-degree) (Krauss & Sales, 2006). On a more practical level, graduate programs in law and psychology, and



forensic psychology more specifically, differ quite considerably in terms of length of training. These programs can range from 2 to 7 years postbachelor's degree, with many students taking closer to 10 years to complete joint-degree programs. As the following discussion illustrates, those interested in forensic psychology have a rich variety of graduate training programs from which to choose.

There are roughly 12 programs that offer a master's degree in forensic psychology. Identifying the exact number of programs is difficult, because some programs do not admit students on a regular basis and other programs use terminology that makes it difficult to determine the exact nature of the training. Some of these programs are clinical in nature, while others are nonclinical. In terms of program goals, some programs are designed to prepare students for research or clinical positions within various institutions and professional agencies, such as prisons, juvenile facilities, social service agencies, police departments, probation and parole departments, court systems, and community mental health centers. Other programs seek to prepare students for continued training in PhD programs, with the recognition that graduates of doctoral programs typically have more employment opportunities (see Morgan, Kuther, & Habben, 2004).

There are a variety of educational and training opportunities available in forensic psychology in doctoral programs. A review of published program descriptions and the *Guide to Graduate Programs [in Forensic and Legal Psychology (2007–2008)]* (American Psychology–Law Society, 2008)] reveals that there are approximately 10 programs in which students can obtain a PhD in clinical psychology with a formal concentration (focus or specialty track) in forensic psychology, and there are roughly the same number of PsyD programs that have a formal programmatic emphasis in forensic psychology. In addition, another approximately 10 programs offer a PhD in other areas of psychology, such as social or experimental, with a formal concentration in forensic psychology, legal psychology, or psychology and law. Several of these programs offer a PhD specifically in forensic psychology or

legal psychology. Using a less formal approach, students in programs in which forensic psychology is not a core component can obtain relevant training and experience by working with faculty with forensic interests who offer relevant courses and practical experience.

Finally, there are several joint-degree programs (JD/PhD or JD/PsyD) for those students interested in obtaining formal training in both law and psychology. As of this writing, six programs offered JD/PhD (or JD/PsyD) programs in law and psychology: Drexel University, Pacific Graduate School of Psychology in cooperation with Golden Gate Law School, Simon Fraser University in cooperation with the University of British Columbia, University of Arizona, University of Nebraska, and Widener University (JD/PsyD). In some of these programs, students can pursue clinical or nonclinical psychology training. Of particular note is the University of Nebraska, which offers several joint-degree options, including JD/PhD, JD/MA, and PhD/MLS (i.e., master's of legal studies, which is a nonpractitioner degree requiring the student to complete the equivalent of 1 year of law school education). There are also several schools that permit students to pursue a JD and PhD concurrently but that offer no formal or coordinated/integrated curricula in law and psychology.

Students pursuing a PhD or PsyD in clinical psychology (or other applied areas of psychology, such as counseling and school psychology) must complete a 1-year APA-accredited predoctoral internship prior to receiving their degree. A substantial number of internships offer training and clinical/research experience in forensic psychology. . . . These internships differ greatly in terms of the range and depth of forensic experiences that are offered. A student interested in general clinical practice might benefit from completing a minor forensic rotation. This clinical experience would, at the very least, offer the beginnings of the knowledge and training necessary to pursue (if desired) later forensic practice and training. Other internships provide students with a forensic rotation with more expansive but still limited forensic activities (e.g., conducting assessments of criminal

offenders) while still other internships, such as those offered by the Federal Bureau of Prisons, are entirely forensically focused and provide students with a range of clinical experiences that are specifically directed at forensic assessment, treatment, and consultation among correctional populations. These specialized internships are ideal for those seeking to build upon an existing base of forensic knowledge, experience, and skills. Completing a forensic-focused internship is an effective way to broaden and refine one's repertoire of forensic knowledge and skills, and it can serve as a stepping-stone for obtaining employment in a specific area of forensic psychology. A forensic-focused internship is also useful for those students without significant forensic experience who are seeking to specialize in forensic psychology.

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## BASIC COMPETENCIES AND TRAINING MODELS IN FORENSIC PSYCHOLOGY

Although forensic psychology training programs have increased in both number and popularity in recent years, there is little consensus regarding which training models are most appropriate. It is important to note that the debate over appropriate training models in forensic psychology is not new (Bersoff, 1999; Bersoff et al., 1997; Freeman & Roesch, 1992; Otto, Heilbrun, & Grisso, 1990; Poythress, 1979). It is also likely that the continuing increase in forensic psychology programs and the increases in interest for forensic training will force the field to reexamine current training models and, perhaps, develop new ones as the field continues to expand. Moreover, as the roles of forensic psychologists continue to expand into new areas of research and practice, it is important that training programs properly prepare future researchers and practitioners by incorporating educational, training, and practical experiences that provide a solid foundation of forensic-related knowledge and skills.

The lack of consensus regarding appropriate training models for forensic psychology may in part reflect the lack of consensus regarding the definition of forensic psychology and the roles that forensic psychologists may properly assume. As previously discussed, some definitions of forensic psychology focus almost exclusively on the clinical aspects of the profession while other definitions are broader and consider areas of law-psychology research that are not exclusively clinical in nature. For example, although few would dispute that forensic mental health assessments of criminal offenders (e.g., competence to stand trial, mental state at the time of the offense) fall within the scope of forensic psychology, there is less agreement regarding whether psycholegal research conducted by cognitive, social, and experimental psychologists should be considered forensic psychology (e.g., reliability of expert testimony, perceptions of jurors). For the purposes of this article, we will use a broad definition of forensic psychology that encompasses both research and practice.

There are several training goals that may be appropriate in doctoral-level forensic psychology programs (Krauss & Sales, 2006). On the broadest level, students can be trained to become clinicians (i.e., applied forensic psychology), researchers (clinical or nonclinical), or both. Using this broad categorization, we will summarize the three training models predominantly used in doctoral-level psychology and forensic psychology programs.

Some programs train students to become *scientist-practitioners* using the Boulder model. Students in these programs are trained in the science and practice of clinical and forensic psychology, and graduates are particularly well suited for careers in research, academia, and practice. Because a key goal of scientist-practitioner training is scientifically based clinical practice, this model is only employed in clinical and counseling programs. Other clinically based programs follow a *practitioner-scientist* model of training. These programs focus less on research and more on the clinical/applied aspects of psychology



(e.g., PsyD programs). Students in these programs typically receive a heavy dose of practice-focused coursework and experiential training. Finally, some forensic psychology programs prepare students to become *scientist-scholars*, with either a clinical or nonclinical focus. Many of these programs are in areas other than clinical psychology, such as cognitive, developmental, and social psychology, and they train students to engage in empirical research designed to increase our forensic knowledge base and inform public policy. These three categories of training models are admittedly broad and not necessarily mutually exclusive or exhaustive, but they provide some indication of the types of training available in forensic psychology programs.

Given the expanding roles of forensic psychologists, it is admittedly challenging to design a graduate program that provides all of the educational, training, and experiential components needed to properly prepare students for a forensic career. This is particularly true given the time-limited nature of graduate training and differences between clinical and nonclinical forensic psychologists. Nevertheless, we believe it is possible to identify a core set of basic competencies that should be emphasized in doctoral-level forensic psychology training programs. We recognize that the APA Committee on Accreditation (2008) provides programs with considerable leeway when developing training models, provided that the training models cover the core areas identified by the Committee on Accreditation and have curricula designed to achieve their stated goals and objectives. As such, we are not arguing that all programs should blindly adopt our proposed curricula. With that said, we believe our proposed curricula is a solid starting point in terms of identifying core competencies in forensic training programs, and we hope it is useful in stimulating continued discussion on this issue.

Although most specialty training in forensic psychology takes place at the postdoctoral level (Otto & Heilbrun, 2002), we chose to focus on doctoral-level training programs because our

proposed curriculum is designed to offer foundational skills that will prepare graduates to (1) engage in practice without additional training (after obtaining licensure, if needed), or (2) seek more advanced training and experience at the postdoctoral level. At a minimum, it would seem that forensic practitioners should obtain training and experience in the following areas:

1. *Substantive psychology*, including core knowledge of basic areas of psychology central to one's major area of study (e.g., clinical, developmental, experimental, cognitive)
2. *Research design/methodology and statistics*, designed to prepare students to conduct research and/or be informed consumers of research
3. *Conducting research*, consisting of performing original empirical research that culminates in a doctoral dissertation (except in PsyD programs)
4. *Legal knowledge*, including foundations of the legal system, sources of law, legal research, relevant civil and criminal case law, criminal and civil procedures relevant to forensic practice, legal rules and professional guidelines relating to expert testimony, and substantive law in relevant areas (e.g., competence to stand trial, mental state at the time of the offense)
5. *Integrative law-psychology knowledge*, including introductory/overview foundational courses on forensic psychology, and knowledge of research in psycholegal areas such as eyewitness testimony, jury decision making, admissibility of scientific testimony, forensic assessment measures and techniques, and the treatment of offender populations
6. *Ethics and professional issues*, relating to general research and practice (e.g., *Ethical Principles of Psychologists and Code of Conduct* (American Psychological Association, 2003), and forensic research and practice (e.g., *Specialty Guidelines for Forensic Psychologists* (Committee on the Revision of the Specialty Guidelines for Forensic Psychology, 2006))
7. *Clinical forensic training* (for those in clinical training programs), including forensic mental health assessments, forensically based interventions, and/or forensic consultation

We believe that a focus on these core areas would adequately prepare doctoral-level students for basic forensic practice. These training elements were identified through several means, including a review of the *Guidelines and Principles for Accreditation of Programs in Professional Psychology* promulgated by the APA Committee on Accreditation (2008), which informed the broad and general training components of the curriculum, a review of existing forensic psychology training curricula, and a review of relevant literature and guidelines on forensic training. The forensic components overlap to some extent with the training goals identified by the Forensic Specialty Council (2007) in its educational and training guidelines, although the elements in the proposal are narrower in scope and designed to train graduate students as opposed to residents.

Of note, the first three elements would likely fall under the “broad and general” rubric identified by the APA Committee on Accreditation (2008), meaning that they are foundational skills not specific to forensic psychology. According to the Committee on Accreditation, broad and general training provides students with knowledge in scientific psychology and the foundations of practice, which prepares them for entry-level practice in professional psychology. As such, forensic psychology training programs would typically need to focus on adding the remaining four elements to their curricula. If these topic areas are covered through a combination of course work (required and elective), research experience, and practical experience, the inclusion of these elements should not lengthen the overall course of study for doctoral students.

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It is important to note that only those forensic psychology training programs that are housed within clinical, counseling, or school psychology programs are eligible for APA accreditation.

Stand-alone forensic programs are not currently accredited by the APA, and it remains an open empirical question whether such accreditation would serve to increase the quality of training that students receive and resulting forensic practice. A recent development, however, is the accreditation of postdoctoral fellowships in forensic psychology. A set of educational and training guidelines prepared by the Forensic Specialty Council (which includes representatives from the American Psychology–Law Society, ABFP, and American Academy of Forensic Psychology) in 2007 were recently endorsed by the Council of Specialties in Professional Psychology. As such, postdoctoral fellowships in forensic psychology can apply for APA accreditation.

## CONCLUSION

Given the increasing involvement of forensic psychologists in the civil and criminal justice systems, and the increasing numbers of students who are studying forensic psychology, it is critical that existing training programs adequately prepare future practitioners to assume a variety of roles. Just as traditional PhD programs in clinical psychology (at least those that adhere to the Boulder model) prepare students to function in a variety of roles (e.g., researcher, clinician, academic), it is essential that forensic psychology training programs prepare students to assume several different roles. Rather than creating specialists, forensic psychology training programs would be better advised to provide students with a foundational level of competence in a variety of core component areas, which is consistent with the guidelines promulgated by the APA Committee on Accreditation (2008) in terms of preparing students for entry-level practice in professional psychology. Specialization in a particular area of forensic psychology would seem to be best achieved at the postdoctoral level after the student has obtained a core set of competencies.



## **UNIT 2**

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# **POLICE AND INVESTIGATIVE PSYCHOLOGY**

## INTRODUCTION AND COMMENTARY

Police enforce and uphold the law, are gatekeepers to the criminal court process, and gather evidence that is used in courtroom settings. Nevertheless, psychologists that consult with police have not traditionally been considered forensic psychologists. As DeMatteo et al. noted in the first reading in this book, there has been considerable debate over how forensic psychology should be defined. Narrow definitions focus primarily on court-related clinical practice, whereas broader definitions encompass researchers and clinicians in a range of settings. Adopting a broader definition, we include police psychology, as well as the investigative psychology that is a subset of law enforcement consultation.

The article by Curt Bartol was written for a special issue of the journal *Criminal Justice and Behavior* dedicated to assessing the state of forensic psychology, broadly defined. Of particular interest are the four overlapping historical trends in police psychology that the author identifies: (1) cognitive assessment, (2) the search for personality attributes, (3) counseling and stress management, and (4) organizational consultation. Although these four activities continue, cognitive assessment has been deemphasized, and police psychologists today are more likely to engage in the other three categories.

The author's predictions for the future of the field, though offered reluctantly, are interesting to review in the light of the years after 1996, when this article was first published. Bartol could not have predicted the events of September 11, 2001,

or the subsequent deployment of troops to the Middle East, which had unanticipated effects on law enforcement nationwide. Vocabulary and resources, for example, shifted from phrases like *community policing* and *war on drugs* to *terrorist profile*, and *war on terror*. With the invasion of Iraq and the call-up of National Guard units, numerous law enforcement agencies across the United States lost officers, both temporarily and permanently as a result of casualties. Interestingly, to this day—and despite actual and intended troop withdrawals—these losses persist. Troops are deployed to Afghanistan and other countries, and the shortage of officers may be exacerbated by budget cuts in communities suffering from economic downturns. On a more positive note, however, “community policing” may be reinvigorated and psychologists consult with law enforcement on increasingly more matters.

The author's predictions also should prompt examination and discussion. Do women now make up close to 25% of police departments? (In most departments, the answer is no.) Have police psychologists become more involved in rural and semirural communities? (We are aware of no research that addresses this question.) Has pre-employment screening increased? (Yes.) Is there yet a graduate program specifically designed to prepare police psychologists? (Apparently not, but many psychologists maintain that this is not necessary, and that broad education is warranted.) Have police psychologists addressed diversity, multiculturalism, and discrimination

issues? (Certainly more than in the past, though continuing progress is needed.)

The next three articles in this section, as a group, focus on dispelling myths that are often associated with the psychology of law enforcement. In an article that will surely prompt spirited discussion, Scott O. Lilienfeld and Kirstin Landfield provide warning signs for identifying the pseudosciences—which are defined not by their object of study but rather by their approach to evidence. The authors urge police to be aware of red flags (e.g., extravagant claims or over-reliance on anecdotal evidence). Otherwise the decisions they make may result in harmful real-world consequences, including erroneous convictions.

William G. Iacono, a psychologist who has written, conducted extensive research, and testified on the polygraph, discusses in detail the most prominent technique used, the CQT (control or comparison question test). Claims of its accuracy are often exaggerated, the scientific community not directly engaged in polygraphy does not consider it theoretically sound, and it is recognized to be biased against innocent persons. The author explains why the CQT continues to be used despite these and other shortcomings. In the concluding section of the article, Iacono summarizes other methods for detecting guilty knowledge (rather than lies), which hold greater promise for use in forensic psychology.

Next, Brent Snook and his colleagues “take on” criminal profiling. The subtitle of their article, “What’s Behind the Smoke and Mirrors?” makes it clear that they will take an uncompromising view of a practice that is often revered by the entertainment media but which in their view lacks scientific basis and is grounded on outdated theories of personality. It is important to stress that Snook et al. do not paint with too broad a brush; they acknowledge that some profiling may have validity, and they simply ask for empirical evidence in that regard.

The final article in this section deals with the comprehension of *Miranda* rights and with false confessions, topics that have gained considerable attention in recent years. Researchers have been especially concerned about the ability of juveniles to understand their right against self-incrimination and their right to legal representation. Naomi E. Sevin Goldstein and her colleagues review key U.S. Supreme Court cases and the legal and psychological research in this area, and they report the results of their own study of 55 delinquent boys. Using a tool designed to assess *Miranda* comprehension, Goldstein et al. found significant misconceptions among these juveniles about their *Miranda* rights and the roles of defense lawyers. Furthermore, the study suggests that juveniles are susceptible to making false confessions, either because of their suggestibility or their need to acquiesce to authority.

As a group, the readings in this section provide only a sampling of what police psychologists do and how psychological research can be applied to police work. Many areas are not represented or are mentioned only briefly in the readings. For example, psychologists conduct research on police lineups and eyewitness testimony, offer stress-management workshops to officers and their spouses, accompany police on domestic violence calls, perform fitness-for-duty evaluations, and screen detainees held in police lockups for mental illness. The extent to which interested psychologists work directly with police—either consistently or “as-needed”—is limited primarily by the willingness of the police to call upon them for service. However, it is sometimes also limited by the unwillingness of psychologists to participate in activities that they consider unethical or antithetic to their professional and personal values, such as questionable interrogation practices. Nevertheless, police and consulting psychologists can perform a valuable service by educating the law enforcement community about what psychology can and cannot offer.



## POLICE PSYCHOLOGY

### *Then, Now, and Beyond\**

CURT R. BARTOL

My involvement in psychological services to law enforcement began in 1973 when I was asked to teach a course in abnormal psychology at a police academy. Shortly thereafter, law enforcement agencies began seeking my help in dealing with various psychological issues, such as job stress, interactions with the mentally disordered, and pre-employment screening. I soon found myself sliding into longer and longer hours consulting and training. I became a certified academy instructor in crisis intervention, interviewing and interrogation, hostage negotiation, and criminal psychology. I was appointed to a statewide Criminal Justice Training Council, where I helped establish standards for the screening and selection of law enforcement officers. It wasn't long before I was asked to evaluate and make recommendations concerning the police academy curriculum, with the idea of moving it from a paramilitary format to a human relations one. I also was asked by agencies nationwide to offer workshops on screening and selection or to participate in the training of police recruits.

At this point, I began to believe I was quite good and that I even possessed a tinge of charisma. It did not dawn on me then that it was more a case of being in the right place at the right time. The Law Enforcement Assistance Administration (LEAA), created by Congress in 1965, was in full swing, disbursing substantial funds to encourage law enforcement agencies to become more human sensitive. I began to realize that I simply happened to be one of the few psychologists in the area willing to work with law enforcement. Since this early propitious beginning, I have continued to provide many psychological services to a variety of law enforcement agencies. I also have conducted large-scale, longitudinal research projects by following the careers of officers in small-town police and sheriff's departments in an effort to identify potential predictors of success. Not surprisingly, I follow avidly developments in the emergence of police psychology.

The term *police psychology* is discomfiting, however, because it appears to preclude other law enforcement agents, such as deputy sheriffs,

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marshals, or constables. Blau (1994), a psychologist and deputy sheriff in the Manatee County (Florida) Sheriff's Department, may have felt the same way when he called his book *Psychological Services for Law Enforcement*. The term *law enforcement* also has its critics, however, particularly those who argue that police enforce the law selectively and minimally. The real work of police is maintaining order, keeping the peace, or being co-producers, with citizens, of public safety. Rather than weigh in heavily in favor of one or the other term, I will opt for the less cumbersome. Police psychology here will encompass all law enforcement agencies and agents, with the caveat that they do much more than—and sometimes much less than—enforce the law. In the remainder of the article, I shall sketch the development of police psychology, describe its current status, and try to predict its future.

### THEN: 20 YEARS AGO AND EARLIER

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When did police psychology begin? Some have said that the profession was launched formally at the National Symposium on Police Psychological Services (NSPPS) held at the FBI Academy on September 17, 1984 (Chandler, 1990; McKenzie, 1986). The proceedings of this meeting were published in a monograph (Reese & Goldstein, 1986) titled, like Blau's work, *Psychological Services for Law Enforcement*. The NSPPS was antedated by a number of symposia, conferences, and workshops on police psychology, however. The Society of Police and Criminal Psychology, for example, has had annual conferences and symposia on topics pertaining to police psychology since 1971. To set 1984 as the date for the origin of police psychology seems unjustified, given the amount of conference activity over a decade before that. Another important date in the history of police psychology was December 1968, when Martin Reiser was hired by the Los Angeles Police Department [LAPD] as a full-time psychologist. Soon afterward, in 1969, Reiser (1972) presented a paper at the Western Psychological Association Convention,

Vancouver, titled "The Police Department Psychologist." Chandler (1990) referred to this presentation as the informal birth of the profession of police psychology. Here, too, my own opinion differs. There is no doubt that Reiser's contributions to the field have been invaluable. In the early 1970s, he was clearly the most prolific writer on police psychology. In 1972, in cooperation with the California School of Professional Psychology [CSPP], he helped establish an internship in police psychology in the [LAPD]. To conclude, as Chandler did, that Reiser's paper marked the informal beginning of the profession is problematic, however. Psychologists were working in various capacities in law enforcement settings long before the 1970s. Reiser (1982) himself, in a collection of published papers, noted that he was not at all sure he was the first full-time police psychologist in the country. Reese (1986, 1987), a historian on psychological services to law enforcement, estimated that only six police agencies in the United States had full-time psychologists by 1977.

Before we become too myopic in our proclamations of historical firsts, we should realize that our international colleagues may have been ahead of us. Viteles (1929) reported that police departments in Germany were using psychologists in a variety of capacities as early as 1919. Chandler (1990) noted that, in 1966, the Munich (Germany) police were employing a full-time, in-house psychologist to train officers to deal with various patrol problems, such as crowd control. The informal origin of police psychology probably goes back more than 50 years, but I leave it to others to propose a more specific date. I much prefer to discuss the developmental stages of police psychology. A review of the literature suggests that police psychologists have pursued four distinct, although overlapping, trends, beginning with an affinity for cognitive assessment and proceeding through personality assessment, a clinical focus, and an organizational approach.

The first trend was concerned with the cognitive functioning of police officers, specifically intelligence and aptitude. This track probably

began in this country with Terman's (1917) testing (using the Stanford-Binet) of applicants for several fire fighter and police officer positions for the city of San Jose, California, in 1916. His results, which suggested police applicants were not a very intelligent lot, appeared in the first issue of the *Journal of Applied Psychology*. Five years after the Terman report, the intelligence of police officers still was being debated, particularly in the work of Thurstone (1922, 1924) and Telford and Moss (1924).

The cognitive approach, although never wholeheartedly subscribed to, had very little competition until the mid-1960s. Moreover, involving psychologists in policing seems to have been the exception rather than the rule. In a survey of 90 police departments (Oglesby, 1957), only 14 reported that they used some type of psychiatric or psychological input in their screening procedures. Only two departments said that they used a psychologist for the screening, with the rest preferring to use a psychiatrist. Interestingly, one department reported dropping the services of its psychiatrist because he rejected none of the 1,500 applicants. A subsequent survey by Narrol and Levitt (1963) to discover the extent of selection testing used by major police departments in the United States found an increase in the use of psychological testing. Specifically, they found that 100% of the departments used some kind of selection test, usually a standardized intelligence test (40%) or non-standardized aptitude test (87%) that usually was developed by the department itself. Only 22% were using any kind of personality inventory or psychiatric interview. However, only 6 of the 55 cities surveyed indicated that they employed qualified psychologists in connection with their selection procedures.

In the mid-1960s, interest shifted to assessing the personality attributes of police officers. Some of the shift from cognitive appraisal to personality assessment was probably due to widespread concerns directed at "IQ tests" and the danger of adverse impact on minority groups. The major impetus, however, was the report by the President's Commission on Law Enforcement and the Administration of Justice (1967) recommending

widespread use of psychological tests to determine the emotional stability of all potential officers. Specifically, the commission asserted:

Screening out candidates whose emotional stability makes them clearly unfit for police work—through psychological tests and psychiatric interviews—should also improve the capacity of police forces to improve community relations. . . . While there is no one psychological test that can reliably identify all candidates who are emotionally unfit for police service, a combination of tests and oral psychiatric interviews can pinpoint many serious character defects. (pp. 164–165)

The commission hoped that departments would reject police candidates who demonstrated racial and ethnic prejudice prior to being hired. Similarly, the 1968 National Advisory Commission on Civil Disorder called for screening methods that would improve the quality of the law enforcement officers hired (Scrivner, 1994).

In keeping with commission recommendations, Congress provided LEAA funds for law enforcement agencies to retain the services of mental health professionals. Many of us currently working in some capacity in law enforcement started our work with the help of some variant of LEAA funding. LEAA, which became President Johnson's centerpiece in his war on crime, also funded technical assistance, materials, training, college education (through LEEP, the Law Enforcement Education Program), and research, including searches for selection procedures that would identify emotionally suitable police officers. Because the funding was intended to identify the emotional stability and prejudices of law enforcement officers, psychologists were required to become more clinical and personality/psychopathology-based in their work with law enforcement organizations. In 1973, the Police Task Force Report of the National Commission on Criminal Justice Standards and Goals encouraged the establishment of a behavioral sciences resource unit or consultant for all law enforcement agencies.

By the early 1970s, personality assessment had increased, but it certainly was not the norm.



In a survey, Murphy (1972) found that only 44% of large municipal police departments used some kind of psychological test or inventory in evaluating applicants, most commonly the Minnesota Multiphasic Personality Inventory (MMPI). Murphy also found that only 13% of state agencies used psychological instruments for screening purposes.

Murphy (1972) concluded that general psychological testing for screening had not changed significantly over the 8 years since the Narrol and Levitt (1963) survey. However, he did notice an increase in the use of personality assessment. For example, the MMPI was the instrument of choice for nearly 50% of the agencies indicating that they used psychological testing in their screening and selection procedures.

The personality assessment trend had two research offshoots, the first being a search for the "police personality" (Lefkowitz, 1975). Agencies began to ask, Does law enforcement draw a certain type of person? Some psychologists obliged them by trying to answer. The question has yet to be answered satisfactorily, however, and researchers today have shifted their interests to other issues.

The second research offshoot involved an effort to identify instruments that could select in, as well as screen out. Selecting-in procedures are intended to identify those attributes (almost invariably personality) that distinguish one candidate over another as being a potentially more effective officer. Implicit in this assessment is the ability to rank order applicants, allowing agencies to select the top candidates from a pool who passed the initial screening procedures. This approach assumes that there are traits, habits, reactions, and attitudes that distinguish an outstanding cop from a satisfactory one. To the best of my knowledge, there is little evidence that psychologists can accomplish this goal in any satisfactory manner. For more than 20 years I have tried, unsuccessfully, to develop an instrument or instruments that would help identify applicants who would become above-average or superior officers in the field.

*Screening-out* procedures, on the other hand, try to eliminate those who demonstrate significant

signs of psychopathology or emotional instability, or who lack the basic ability or mental acuity to perform the job in a safe and responsible manner (Meier, Farmer, & Maxwell, 1987). On average, about 15% of candidates are screened out through personality assessment. We have been far more successful in our screening-out than in our screening-in determinations. Research on officers who did not succeed in law enforcement, for example, has suggested that warning signs were present on MMPI measures (Bartol, 1991), rendering them "true negatives." The "false negative" picture is much more difficult to obtain, however, because agencies generally heed the MMPI warning signs pointed out by the police psychologist.

The third trend is best represented by the word *stress*, which became the overriding theme from the mid-1970s to the early 1980s. More than ever before, clinicians were called upon to identify and dissipate stress, which presumably—if left unmanaged or untreated—would result in an array of psychological and physical health problems for the officer and potentially put the public at risk. *Stressors*, *burnout*, *post-traumatic stress disorder*, and *critical incident trauma* became standard terms in the police psychologist's vocabulary. Whether police officers actually experienced more stress than people in other high-risk occupations (e.g., air traffic controller) remained highly debatable (Yarmey, 1990), however. Nevertheless, there was little doubt that stress played a major role in the lives of law enforcement officers at all levels within the organization. The focus on stress was significant because it propelled police psychologists away from their traditional testing functions and into a much larger realm of opportunity and services. Consequently, psychologists began to offer not only stress management but also crisis intervention training, hostage negotiation training, domestic violence workshops, and substance abuse treatment.

The fourth trend reflects a discernible move into industrial/organizational kinds of issues and a drift away from exclusively clinical and mental health ones. During the mid-1970s, a trend developed toward looking more closely at

the law enforcement organization rather than emphasizing—sometimes to the exclusion of other factors—the person. There were moves, of course, in that direction earlier. Bard's work (Bard, 1969; Bard & Berkowitz, 1969) promoted a closer look at training and the police organization from a psychological perspective, for example. We will examine this organizational trend in more detail later in the article, when the future of psychological services to law enforcement is discussed.

During the 1980s, the development of police psychology seemed to reach a plateau. Federal funding to state, municipal, and county agencies became limited, and law enforcement agencies were inclined not to require or seek additional psychological services unless absolutely necessary. Although psychologists continued to consult with law enforcement agencies, give workshops, provide screening services, and offer therapy and counseling, there is no indication that the decade of the 1980s was one of significant growth. However, police psychologists did continue to refine their profession through conferences, professional meetings, and publications.

## **NOW: WHO, WHAT, AND HOW MUCH**

Perhaps the best way to describe the present work of police psychologists is to ask police psychologists themselves what they are doing. The following data are taken from an unpublished nationwide survey of 152 police psychologists conducted by the author during the spring of 1994. Respondents were members of the Police and Public Safety section of the American Psychological Association's Division of Psychologists in Public Service, the Council on Police Psychological Services (COPPS), the police psychology section of the International Association of Chiefs of Police, and the Society of Police and Criminal Psychology. The survey had a return rate of 74%, representing a good cross-section of the psychologists engaged in providing services to law enforcement. The respondents were asked to indicate whether they

were a full-time in-house police psychologist, a full-time consultant to law enforcement, or a service provider to law enforcement as part of their professional activity. Therefore, much of the discussion will be based on these three major professional groupings. Forty respondents were full-time in-house psychologists, 36 were full-time consultants, and the remainder ( $n = 76$ ) indicated that they worked with law enforcement as psychologists in some part-time capacity.

The respondents tended to be a rather senior group, with an average age of 48.7 ( $SD = 5.5$ ) and an average experience of 11.8 years ( $SD = 4.8$ ) in services to law enforcement. The age and experience data were highly similar to Scrivner's (1994) data on 65 psychologists employed in large-city police departments. No significant age differences were found between in-house psychologists and consultants, or between those employed full- and part-time. The average age of psychologists working in law enforcement underscores the point made above about the influence of LEAA funds on careers in police psychology.

Most (89%) of the respondents had Ph.D. degrees, followed by Ed.D. degrees (4.5%), master's degrees (3.6%), and Psy.D. degrees (2.7%). Most obtained their terminal degrees in clinical (60.7%), counseling (17%), or industrial/organizational (8%) psychology. Interestingly, the terminal degree-granting institution most frequently mentioned by the respondents was the CSPP (6.3%), probably reflecting the LAPD internship program started by Reiser. All but one of the CSPP graduates were working full-time in providing psychological services to law enforcement.

The average salary for psychologists employed full-time in psychological services to law enforcement was \$77,412 (median = \$64,000). However, psychologists who considered themselves full-time consultants in law enforcement made considerably more than individuals employed as full-time, in-house police psychologists (mean = \$102,192, compared to \$57,133; median = \$80,000, compared to \$53,000). About 25% of the respondents ( $n = 36$ ) were women. However, only 3 were employed as in-house psychologists. On the other hand, 14 of



the 36 full-time police consultants were women. There were no significant differences in salary or age between the men and women.

Participants in the nationwide survey were requested to indicate the type of services they provided specifically to law enforcement during a typical month, as well as the amount of time they usually spent on each activity. As expected, the respondents, as a whole, indicated that pre-employment screening consumed the largest percentage (34.3%) of their time. However, psychologists who engaged in full-time police services, particularly in-house psychologists, spent less time at this activity. In-house psychologists reported that only about 15% of their time involved pre-employment screening. A greater portion (28.7 %) of their time was occupied working directly with the officers in such services as counseling and treatment. Full-time consultants, on the other hand, spent about 27.5% of their professional time in pre-employment screening and 23.2% in the counseling of officers.

Interestingly, full-time consultants were more involved in providing various services to the family members of police personnel and were more engaged in fitness-for-duty evaluations. This pattern probably reflects a tendency for departments to contract out sensitive issues for more objective appraisals, thereby avoiding criticism about conflict of interest.

Unfortunately, little time in a typical month was spent dealing with victims. It is interesting to note, however, that Delprino and Bahn (1988) reported that police departments saw a great need for this service. Apparently, few departments are able to provide it because of the more immediate, pressing demands of agency personnel.

One surprising finding of the survey was the amount of time consumed by criminal or psychological profiling of offenders. Criminal profiling refers to the process of identifying personality traits, behavioral tendencies, and demographic variables of an offender, based on characteristics of the crime (Bartol & Bartol, 1994). On average, 2% of the total monthly work time of in-house psychologists and 3.4% of the monthly workload of part-time consulting psychologists

were directed at criminal profiling. Although this may not seem to be a dramatically high percentage, the finding is surprising, considering that a majority of the surveyed police psychologists (70%) did not feel comfortable profiling and seriously questioned its validity and usefulness. This skepticism was especially pronounced for the in-house psychologists (78%). One well-known police psychologist, with more than 20 years of experience in the field, considered criminal profiling "virtually useless and potentially dangerous." Many of the respondents wrote that much more research needs to be done before the process becomes a useful tool.

Several of the questions on the survey focused on the best way to prepare for police psychology as a career. Although 61% of the respondents had doctorates in clinical psychology, most indicated that, because of the rapid expansion of the psychological services requested by law enforcement agencies, a broad graduate education in psychology with a strong research focus was critical. Nearly 20% of the respondents felt that course work or background in industrial/organization psychology was highly desirable. Specific graduate coursework most recommended by all respondents was assessment (38%), testing (37%), counseling (33%), and crisis intervention (23%).

The psychologists appeared to be extremely satisfied with their careers. About 54% indicated that they were extremely satisfied, and 39% were moderately satisfied; only 3% were neutral or dissatisfied. Women were especially satisfied with the profession, with all female respondents indicating they were either extremely (65%) or moderately satisfied (35%).

The police psychologists also were asked about their perceptions of the current, as well as the future, job market in police psychology. Full-time and part-time police psychologists perceived the market similarly. About two thirds of both groups saw both the current and future job market as either *good* (defined as a balance between available positions and qualified psychologists), *very good* (more positions available than qualified psychologists), or *excellent* (many more positions than qualified psychologists).



These data suggest that police psychologists, as a whole, perceive good opportunities in the field and see room for expansion in the future.

## BEYOND: SANGUINE PREDICTIONS

I am usually as cautious predicting trends in the field as I am predicting human behavior. . . . Some of what follows . . . falls into the category of what *should* happen without being optimistic that it *will*. Psychologists should, for example, address issues of diversity, multiculturalism, and discrimination. I am not so sure we will.

In reality, police psychology in the United States depends greatly on political, economic, and social pressures, ultimately reflected in executive, legislative and, to a lesser extent, judicial decision making. The LEAA and a variety of presidential commissions had enormous influence on policing and police psychology during the late 1960s and 1970s. The media also have played a prominent role. Televised events focus public attention on police behavior, as they did during the 1968 Democratic Convention in Chicago. More recently, the videotape documenting Rodney King's beating by Los Angeles police officers, as well as the conviction of two officers by a federal jury, created a nationwide concern about the use of excessive force. As a result, Scrivner (1994), a police psychologist, was encouraged to conduct an extremely useful study examining the many psychological factors involved in excessive force and suggesting strategies for monitoring and preventing it. The recently completed Mollen Commission Report (July 1994), detailing widespread police corruption in New York City, should prompt police psychologists to address this disturbing behavior. In the relationship among crime, fear of crime, and the public perceptions of policing, the media are exerting a more powerful influence than ever before (Manning, 1994).

In an attempt to control police deviance, pre-employment screening (of the screening-out variety) will continue to be an important service provided by police psychologists. Although

organizational factors are relevant to explaining police behavior, the effort to identify potentially problematic officers should and will continue. Pre-employment screening, however, will be affected increasingly by legislation and judicial decision making. It is quite clear to me, for example, that police psychologists who continue to resist using the MMPI-2 in favor of the MMPI do so at their own risk, in light of *Soroka et al. v. Dayton Hudson Corporation* (1991).

Target stores (owned and operated by the [Target Corporation; formerly the Dayton Hudson Corporation]) administered a battery of psychological tests to candidates for security officer positions. The battery, called *Psych-screen*, was a combination of the MMPI and the California Psychological Inventory (CPI). Plaintiff Soroka argued, among other things, that MMPI questions probing religious attitudes and sexual orientation were invasive and offensive. The California Court of Appeals ultimately ruled that invasive psychological tests violated both the constitutional right to privacy and statutory prohibitions against improper inquiries into a person's sexual orientation and religious beliefs. Although the defendants could have attempted to justify continued use of the test, they chose instead to settle out of court and to stop using the test.

I have been disturbed by the reactions of some of my colleagues to this case. First, they believe that the case does not relate to them because the plaintiff was applying to a private security firm rather than a public police agency. This observation misses the point, because the court's decision struck a fatal blow to the content of the test, regardless of the context.

Second, some colleagues believe that this case should have been played out in the courts, rather than settled. They argue that, despite the Appeals Court's objections to the MMPI items, a case could be made for continued usage of the test if it could be shown to be job validated. Why the insistence on retaining an instrument that has so often made us uncomfortable and alienated professionals in other disciplines? As one who has been faced for many years with the

task of justifying offensive items on the original MMPI to students, police chiefs, and candidates, I am very happy that the court in this case forced the issue.

The MMPI-2 is a vast improvement over its predecessor and addresses many of the legal concerns about standardization and item content. Again, my opinion is not shared; some colleagues, even workshop presenters, proclaim that the revised test is nothing but a marketing gimmick. Those psychologists who wish to reduce their potential time in court, however, should use the MMPI-2 in place of the MMPI and validate it the best way possible on the population being evaluated. Screening instruments—including the MMPI-2—will continue to be tested in the courts on validation issues. Just as surely will they be tested on offensive item content, however.

One piece of recent legislation that may affect the work we do is the Americans with Disabilities Act (ADA), which became fully effective in July 1992. The ADA is the most far-reaching public law since the Civil Rights Act of 1964, affecting all levels of state and local governments, about 5 million private businesses, and some 43 million people defined by law as physically or mentally disabled (Bartol & Bartol, 1994, 2004b). The law prohibits employers from discriminating against any people with disabilities who can perform the essential functions of the jobs they hold or desire to hold. It specifically prohibits oral questions or questionnaire items pertaining to past medical history or otherwise eliciting information about disabilities. It is unclear at this time how the law will affect screening and selection procedures, but if police psychologists validate their methods in relation to effective performance measures, the overall effect of the ADA on police psychology is apt to be minimal.

Psychologists seeking to expand their contributions beyond the traditional screening, therapy, training, and crisis intervention areas may be drawn to the current zeitgeist of community policing. Its primary philosophy is straightforward: It attempts to form a coalition between the

community and the police to solve community problems. In application, the concept is not that clear, however.

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Moreover, proponents of community policing sometimes ignore segments of communities that do not feel that the police represent them. This current interest in community policing, then, challenges social and community psychology to give valuable input concerning attitudes and attitude change, as well as neighborhood and group dynamics. It should be an exciting area for police psychologists; at this point, however, I see little indication that these contributions are being made.

One area needing far more attention, by both practitioners and researchers, is the rural and semi-rural community. Police psychologists—at least those with high visibility—have studied and consulted with large, metropolitan police departments or state police agencies, to the neglect of small-town and rural law enforcement. Approximately 80% of the 17,000 local police agencies in this country are located in small towns (i.e., having fewer than 50,000 people) and rural communities. The current interest in community policing may shift some attention to small-town and rural policing, but it would be optimistic to think that they ever will be the center of research focus. Nevertheless, the need for psychological services is great. Small-town policing generates its own unique stress, for example, and some crimes, such as domestic violence, are believed to be more hidden. Therefore, psychologists involved in police training programs in small towns and rural areas are faced with challenging tasks.

The composition of police forces will continue to change significantly in the future, which, in turn, will affect the nature of police psychology. The two decades ahead will see greater attention to gender issues in policing, an important trend that is beginning to emerge. Research demonstrates that women and men are equally capable—cognitively, emotionally, and behaviorally—of doing law enforcement work (Bartol, Bergen,



Volckens, & Knoras, 1992). There are some indications that women may have a more "gentling effect" on law enforcement, using communication and interpersonal skills more effectively. This may be a crucial variable for policing in the future, especially as policing evolves into increased community involvement.

Women going into law enforcement still encounter sexual harassment and attitudinal resistance, primarily from their male supervisors. However, I anticipate a growing and substantial influx of women into both law enforcement and police psychology in the near future. In 1972, for instance, women constituted 4.2% of police officers employed in urban departments. By 1988, the figure had more than doubled to 8.8% (Manning, 1994; Martin, 1990). I fully expect that women will comprise at least 25% of the police forces within the next two decades. If these predictions are borne out, they will produce significant changes in police training and the prioritization of services. The needs of victims, for example, are more likely to be attended to with a better gender balance, both on police forces and among police psychologists.

The percentages of African Americans and members of other minorities will continue to increase, especially in the large metropolitan departments. At this writing, 58% of the officers in the Detroit Police Department are African American, and it is anticipated that the percentages in other major cities will begin to approximate that of the minorities within their community. It also is highly likely that the composition of police psychology will change. One glaring aspect of the police psychology survey described above is that only 3 of the 152 respondents were from minority groups.

The future also should see a shift from the counseling/clinical orientation to more non-mental health-oriented psychological services. This shift will be consistent with and accompany the overall changes occurring in policing. For example, there are clear indications that policing is moving away from the professional crime fighting model to a more corporate strategy model, where policing resembles a corporate business

rather than a public service agency (Manning, 1994; Moore & Trojanowicz, 1988). Manning (1994) observed "The currently fashionable language of economics and management used by command personnel to describe police functions, command obligations, and planning creates a picture of policing as a business" (p. 2).

Problem-solving strategies and strategic decision-making models are likely to predominate in the near future. Industrial/organization, community, and social psychology will be called upon to make many major theoretical and practical contributions to police psychology. These contributions will be especially notable in human resource management, police management skills, mediation, organizational psychology, community policing, human factors, and operations research. Psychological research on how to deal effectively with turnover rates, personnel dissatisfaction, and lowered morale in reactions to budget cuts and cycles of hiring blitzes and freezes will become critical.

During the personality trend of police psychology, a group of political and social scientists argued that police behavior was not the result of some personality characteristic that existed prior to entry into law enforcement but rather of the culture found within each department. Presumably, the rough edges of individual differences were sanded and polished by the social and political forces of the organization. Wilson (1968), for example, developed a departmental typology, consisting of various policing styles. He argued that the preexisting personality of the individual really did not matter. The department promoted specific policing styles, with differences in policing being explainable by differences among organizations. Wilson's perspective has merit. As I have found in my own consulting work, it is not uncommon for an individual to be regarded as a failure in one agency but a success in another. Nevertheless, individual attributes of some officers preclude them from being a success in any law enforcement setting. It is becoming increasingly apparent, therefore, that the study of police behavior requires a careful examination of all the systems involved, such as the individual or infrasystem, the organization,



the family, the culture, and the community. We need to be more sensitive to the interactions among these systems rather than to assume that one law enforcement organization is like any other.

Police psychology increasingly will become international in scope, with psychologists across the globe sharing ideas, research, and programs. Although this exchange takes place now, it will increase substantially within the next decade.

Traditionally, law enforcement has used psychologists on an "as needed" basis rather than for systematic human resource development and prevention (Scrivner, 1994). The growing array of available psychological services, therefore, has not been integrated systematically into law enforcement. For this to be accomplished, psychologists themselves must articulate what it is they have to offer; we cannot expect the police community to know how we can help. Psychological services directed toward prevention and proaction will, in the long run, bring more benefit to policing than the reactive activity that has been expected in the past.

More than anything else, police psychologists need to become better and more skillful researchers and evaluators of programs, including their own. One of the things that was most emphasized by practicing police psychologists in our survey was that aspiring police psychologists must be better equipped with research skills. In her survey, Gettys (1990) also found an unfortunate lack of research involvement by police psychologists. Chandler (1990) strongly recommended that future police psychologists become well versed and much more active in conducting research. He said this within the context of acknowledging that law enforcement agencies are highly prone to act on "hot" issues without the benefit of good research and evaluation. These hot issues have included missing children campaigns, voice stress analysis, use of psychics, ritualistic crimes, and satanic cults. Good research, he stated, eventually brings fad-like behavior in check.

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Finally, we need a broad-based graduate program in police psychology that will encompass not only clinical areas but also will prepare aspiring police psychologists in the many areas described here. . . . With the exception of a master's degree in forensic psychology offered by the John Jay College of Criminal Justice and various internships sponsored by some universities, I know of no academic graduate programs that prepare future police psychologists for the enormously diverse demands that they will encounter in the future. . . . A majority of the respondents in our survey thought that a graduate program in police psychology was an excellent idea, but they also strongly recommended that the program be diverse and academically broad. Several of the respondents believed that most traditional graduate programs are too narrow and circumscribed for training police psychologists. Therefore, with confidence, I predict that police psychology will have several graduate programs exclusively devoted to the field within the next decade.

In conclusion, police psychology has an extremely promising future. Professions rarely develop along a continuum of steady growth but usually expand and contract in a cyclical fashion. Police psychology is about to experience another upward swing, perhaps equal to the growth seen during the 1970s. Legislatures and much of the public continue to be convinced that the best way to deal with the crime problem is by improved and expanded policing, as demonstrated by the Crime Control Act of 1994. Although the law provides for preventive programs, it gives more support to law enforcement efforts, particularly those of the community policing variety. It is highly likely that this prioritization of policing will welcome the skills and knowledge of police psychologists. This anticipated growth in police psychology will be sustained, however, only if we engage in high-quality research designed to test the effectiveness of various programs, policies, methods, and innovations.

## SCIENCE AND PSEUDOSCIENCE IN LAW ENFORCEMENT

### *A User-Friendly Primer\**

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Throughout their careers, police and other law enforcement officials face an enormous array of challenges involving threats to life and liberty: questions of innocence versus guilt, split-second decisions regarding how to respond in a crisis, attempts to locate missing persons and solve serious crimes, lie detection, and the reconstruction of past criminal events, to name but a few. The accuracy of these techniques has the potential to determine crucial decisions, even those involving life or death. As in most professions, individuals in law enforcement must evaluate techniques with a critical eye before using them. Like all disciplines that interpret data to make real-world decisions, police work can easily fall prey to the seductive charms of pseudoscience.

Given these formidable challenges, it is hardly surprising that law enforcement officials have turned to scientific psychology for assistance in developing valid forensic techniques and evaluating the validity of scores of others. In the 1870s, Sir Francis Galton, cousin of Charles Darwin, experimented with a word association test (in which a test examiner says a word, like “money,” and awaits a response from the respondent) as a tool for lie detection (Matte, 2002). Similarly, in the early 1900s, Hugo Munsterberg (1908) performed classic demonstrations that underscored the fallibility of eyewitness testimony. Since then, psychological researchers have spearheaded the development of scientifically grounded procedures to enhance the accuracy of forensic techniques.

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Nevertheless, like many professions, including psychology itself, law enforcement has long struggled with the thorny problem of distinguishing scientifically supported from scientifically unsupported practices. Because much of police work has developed in isolation from psychological science, its practices are a jumbled mix of legitimate and illegitimate claims (see Brewer & Wilson, 1995, for an introduction). . . .

## **PSEUDOSCIENCE DEFINED**

Before discussing specific law enforcement techniques that fall under the broad umbrella of pseudoscience, we must define pseudoscience and how it differs from bona fide science. Traditionally, pseudosciences are disciplines that possess the superficial appearance of science but lack its substance (Lilienfeld, 1999; Ruscio, 2006). More informally, pseudosciences are imposters of science: They do not play by the rules of science even though they mimic some of its outward features. As a consequence, they can easily mislead untrained observers into concluding that they possess scientific merit. A cousin of pseudoscience is “junk science,” sometimes described as the intrusion of scientifically unwarranted claims into the courtroom (Huber, 1991; Park, 2001).

Pseudosciences have a hoary and checkered history in psychology (Leahey & Leahey, 1983). Such disciplines as phrenology, physiognomy, parapsychology (the study of extrasensory perception and psychokinesis), astrology, and subliminal persuasion for advertising purposes, among many others (see Hines, 2003), have traditionally displayed many of the telltale signs of pseudoscience. Nevertheless, pseudosciences are defined not by their object of study per se but by their approach to evidence, especially negative evidence (Lilienfeld, Lynn, & Lohr, 2003). In contrast to most developed sciences, which eventually—if often reluctantly—assimilate negative evidence into their corpus of belief, most pseudosciences remain largely insulated from contradictory data. It is in principle possible to approach parapsychology, for

example, from a scientific perspective, assuming that investigators are willing to admit well-replicated negative data into their web of belief and revise their hypotheses accordingly. Nevertheless, many parapsychologists (e.g., Radin, 1997) have not done so and insist that the evidence for extrasensory perception and related phenomena is promising or even conclusive despite approximately 150 years of repeated failures to replicate initial positive findings (Gilovich, 1991; Hyman, 1989).

Philosopher of science Mario Bunge (1983) proposed the categories of “research fields” and “belief fields” to demarcate sciences from pseudosciences, arguing that scientific practices are distinguished by research support as opposed to intuition or faith. For instance, subjective experience and intuition alone are insufficient for police officers to believe that their interrogation procedures produce accurate confessions; these procedures must be validated by scientific evidence.

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## **PSEUDOSCIENCE: KEY WARNING SIGNS AND EXAMPLES FROM POLICE WORK**

Indeed, a number of probabilistic indicators—which we can think of as warning signs—can help consumers of the literature to locate practices, including those in police work, on the fuzzy spectrum between science and pseudoscience. Numerous authors have provided varying lists of indicators that help to distinguish science from pseudoscience or “pathological science” (e.g., Bunge, 1984; Coker, 2001; Langmuir & Hall, 1953; Lilienfeld, 1999; Lohr, Fowler, & Lilienfeld, 2002; Park, 2001; Ruscio, 2006).

Here, we focus on 10 such indicators that we believe to be especially pertinent to law enforcement (see Table [3.1] for a summary of these indicators). Following each indicator, we offer one example from police work. In evaluating this list, we should bear in mind that no single indicator is either necessary or sufficient for the



**Table 3.1** Ten Indicators of Pseudoscience and Examples From Police Work

| <i>Pseudoscience Indicator</i>                         | <i>Example From Police Work</i>                 |
|--------------------------------------------------------|-------------------------------------------------|
| Lack of falsifiability and overuse of ad hoc maneuvers | Fingerprint analysis                            |
| Evasion of peer review                                 | Graphology                                      |
| Lack of self-correction                                | Truth serum                                     |
| Absence of safeguards against confirmation bias        | The interrogation process                       |
| Overreliance on testimonial and anecdotal evidence     | Eyewitness testimony                            |
| Extravagant claims                                     | Polygraph tests                                 |
| Ad antequitem fallacy                                  | Hypnosis for memory enhancement and refreshment |
| Reversal of burden of proof                            | Anatomically detailed dolls                     |
| Absence of connectivity                                | Criminal profiling                              |
| Use of hypertechnical language                         | Eye movement desensitization and reprocessing   |

*Note:* This table contains a single example from law enforcement for each listed pseudoscientific indicator; however, this is not an exhaustive list of pseudoscientific indicators nor of examples from law enforcement. Moreover, many of the examples from law enforcement probably exemplify more than one of the listed indicators of pseudoscience.

presence of pseudoscience; some developed sciences display one or more of these indicators, and some pseudosciences lack one or more of them. Nevertheless, the more such indicators exhibited by a discipline, the more suspicious of its claims we should become. Moreover, readers should bear in mind that many of the examples we provide from police work probably fulfill multiple hallmarks of pseudoscience.

### **Lack of Falsifiability and Overuse of Ad Hoc Maneuvers**

Philosopher of science Sir Karl Popper (1959) proposed that falsifiability is the central criterion distinguishing science from nonscience. By falsifiability, Popper meant that scientific claims could be demonstrated to be wrong if there were evidence contradicting them. Such statements as

“God created the universe” or “All humans are born with a soul that is spiritual but nonmaterial” may be true or false, but they are not falsifiable using scientific methods, because they could never be refuted with observable data. Popper criticized most of Freudian psychoanalysis and its offshoots (e.g., Adler’s individual psychology) as unfalsifiable (but see Grunbaum, 1984, for a competing view). According to Popper, many of the assertions of psychoanalysis, such as its claims that neurosis arises from a conflict between ego and id or that all children experience an Oedipal conflict, are difficult or impossible to refute with data.

As Popper (1959) observed, when researchers generate findings that seemingly falsify a given claim, pseudosciences often invoke ad hoc maneuvers—that is, escape hatches or loopholes—to explain away these negative findings. Admittedly, many developed sciences similarly invoke

ad hoc maneuvers to account for negative findings. Nevertheless, in the case of developed sciences, such maneuvers typically strengthen the theory's substantive content, increase the theory's capacity to make accurate predictions, or both (Herbert et al., 2000; Lakatos, 1970, 1978). In contrast, in most pseudosciences, ad hoc maneuvers are typically tacked onto the theory in a desperate effort to explain away negative findings and rarely enhance the theory's content or predictive power.

*Example from police work.* In the case of fingerprint analysis, some devotees claim an accuracy rate as high as 100% (Berinato, 2004; Cole, 2005, 2007). They often propose that a given fingerprint can be perfectly matched to an exemplar print, to the exclusion of all other potential sources of that print. When the technique fails, they commonly point to such special circumstances as a distorted or insufficient print or misuse of a fingerprint apparatus to explain why the findings did not support the claims (Cole, 2005, 2007). Furthermore, the FBI's latent print unit has averred that only poorly trained fingerprint examiners make errors; expert practitioners rarely if ever make errors, and the method per se is essentially infallible (Meagher, 1999, 2003). For such an argument to be falsifiable, examiner training and skill must be standardized and tested such that the error rates for all examiners are known prior to their analysis (Cole, 2006; Haber & Haber, 2007) rather than tacked on after a mismatch occurs. The repeated use of such ad hoc hypotheses after the fact to explain away negative findings renders a good deal of fingerprint analysis difficult or impossible to falsify and arguably more pseudoscientific than scientific.

## Evasion of Peer Review

Most mature sciences rely on peer review as a safeguard against error. In peer review, articles that evaluate scientific claims are sent to at least one—and typically three or more—outside

expert who is entrusted with the task of subjecting them to relatively impartial scrutiny. In many cases, these articles are rejected outright; in still others, they are either rejected with an invitation to resubmit following substantial revisions or accepted provisionally. Peer review is not a perfect filter against poor-quality research (e.g., Cicchetti, 1991; Peters & Ceci, 1982), but it is often an essential safeguard against error.

Many pseudosciences bypass this safeguard, preferring to evaluate claims “in house,” that is, on their own. As Newbold, Lohr, and Gist (2008) note, this evasion of peer review often stems from a reluctance to subject claims to skeptical inquiry. The infamous fiasco of cold fusion, in which two University of Utah scientists claimed in 1989 to achieve nuclear fusion using a simple tabletop device, illustrates the dangers of announcing scientific findings to the public before subjecting them to peer review. Virtually all later researchers using rigorous controls were unable to replicate their findings (Friedlander, 1998).

*Example from police work.* Graphology, the use of handwriting to infer personality or psychopathological characteristics, has been used in an attempt to detect child molesters and violent criminals, with virtually no evidence to support its validity (Beyerstein & Beyerstein, 1992). Without subjecting their claims to peer review, many advocates of graphology posit that specific handwriting “signs” are linked to psychological traits; for example, some maintain that people who cross their ts with small “whips” are especially sadistic (Beyerstein, 1996). Yet scores of studies suggest that graphology is virtually useless as a personality assessment or crime detection technique. Moreover, different and often contradictory schools of graphology have continued in isolation for decades. Despite the overwhelming scientific evidence refuting its claims, many graphology proponents continue to advance strong assertions without the restraint and measure of objectivity afforded by the peer review process.

## Lack of Self-Correction

In the long run, sciences tend to be self-correcting: Incorrect claims tend to be revised or weeded out, whereas correct claims tend to survive. In this respect, science at its best operates by means of a process akin to natural selection (see Campbell's [1974] discussion of "evolutionary epistemology"). In contrast, in most pseudosciences, faulty claims tend to persist for lengthy periods of time, resulting in intellectual stagnation (see also Newbold et al., 2008). The pseudoscience of astrology, which claims to predict people's futures from the exact position of the stars and planets at the moment of their birth, has persisted in virtually identical form for nearly 4,000 years (Hines, 2003) despite the fact that the gradual shifting of the earth's axis during this time (a phenomenon called "precession") has rendered the night sky of the early 21st century markedly different from the night sky 4 millennia ago.

*Example from police work.* A truth serum is a drug, typically a barbiturate (such as sodium amytal), that supposedly elicits truthful information from a suspect or other reluctant individual. Yet research shows that supposed truth serums are misnamed (Piper, 1993). They work in much the same way as do alcoholic beverages: They reduce people's inhibitions, making them more likely to disclose both false and true information. Moreover, evidence suggests that many people can lie even under the influence of truth serum. In the infamous Holly Ramona case (*Ramona v. Isabella et al.*, 1994), Holly "remembered" an 11-year history of continuous sexual abuse by her father, Gary Ramona, after psychiatrist Richard Rose administered sodium amytal. The accusations appeared at least in part to be due to suggestions by her therapist, Marche Isabella, and other mental health professionals, who convinced Holly that sexual abuse was a cause of her bulimia and depression (Johnston, 1997). In addition, the 1994 abuse charges against pop singer Michael Jackson surfaced only after Jordan Chandler, age 13, was

administered sodium amytal. The boy's father, Evan Chandler, and dental anesthesiologist Mark Torbiner administered the drug in Chandler's office and subjected Jordan to suggestive questioning techniques. Prior to these actions, the boy denied all allegations of sexual abuse (Taraborrelli, 2004). In both cases, purported truth serums may have been instrumental in generating uncorroborated accusations.

Yet there is some evidence that following the September 11, 2001, attacks, the U.S. government . . . expressed renewed interest in using truth serums to detect potential terrorists and assist in interrogations (Brown, 2006). Investigators in India similarly used truth serums to provide leads to police regarding terrorist attacks in 2003 (Katakam, 2004). The continued use of truth serums to elicit confessions or to unearth supposedly buried memories despite contrary scientific evidence dating back to the early 1950s illustrates a profound failure of self-correction.

## Absence of Safeguards Against Confirmation Bias

Some psychologists, such as Carol Tavis (see Tavis & Aronson, 2007), have argued that the scientific method is a systematic set of safeguards against confirmation bias—the tendency to seek out evidence that supports our hypotheses while ignoring, minimizing, or distorting evidence that does not (Nickerson, 1998). As a consequence of confirmation bias, we can blind ourselves to negative evidence, producing a psychological tunnel vision. Moreover, confirmation bias can result in an overemphasis on "hits" (corroborations of one's pet hypothesis) and an underemphasis on "misses" (failures to corroborate one's pet hypothesis). As Bunge (1967) observed, "the pseudoscientist, like the fisherman, exaggerates his catch and neglects his failures or excuses them" (p. 36). Yet as Paul Meehl (1978) noted, negative findings should generally be weighted more heavily than positive findings in evaluating psychological theories because science involves subjecting claims to the risk of refutation.



Scientists may often be just as prone to confirmation bias as are nonscientists (Mahoney & DeMonbreun, 1977). For example, research on the peer review process shows that clinical psychologists are more likely to accept an article if the results agree rather than disagree with their favored theoretical orientation (e.g., behavioral vs. nonbehavioral; Mahoney, 1977). Nevertheless, research methods afford scientists a substantial measure of protection against confirmation bias. For example, double-blind designs, now de rigueur in psychological and psychiatric treatment research, help shield investigators from the potentially distorting influences of their own hunches and hypotheses.

*Example from police work.* The interrogation process used by many law enforcement officials lacks many crucial safeguards against confirmation bias. Interrogators often form conclusions about the target suspect prior to obtaining sound evidence, and the process may become more about confirming those conclusions than obtaining impartial information (Millar & Millar, 1998; Vrij, 2008b). Such presumptions can lead interrogators to become closed-minded toward alternative hypotheses and render them likely to selectively seek out support for their initial hunches. Indeed, the presumption of guilt can influence interrogators to adopt an investigative style that inadvertently elicits guilty behavior from suspects.

Indeed, Kassin and Gudjonsson (2004) described how suspicion of guilt on the part of interrogators can shape their behavior and lead suspects to act anxiously or defensively, thereby confirming interrogators' suspicions. For example, if questioners increase bodily movement during an interrogation, the suspect is likely to mimic them and in turn appear nervous and "guilty" (Akehurst & Vrij, 1999; Chartrand & Bargh, 1999). As with any belief, an interrogator's confidence in the hunch that he or she is right can make it difficult to attend to data that do not support this belief (see also Snyder & Swann, 1978). Of course, in the heat of the moment, police officers must often make snap judgments

regarding whether to pursue a potential suspect or shoot a potentially armed individual. In such cases, a certain degree of confirmation bias is probably inevitable, perhaps even necessary. Nevertheless, police officers can help to avoid confirmation bias by taking pains to consider contrary evidence throughout all phases of the subsequent criminal investigation.

## Overreliance on Testimonial and Anecdotal Evidence

As a wise person once noted, "the plural of anecdote is not fact." Informal testimonials and anecdotes suggesting that a technique is effective can sometimes provide a justification for investigating that technique further in systematic studies (Gilovich, 1991), but they are never sufficient for concluding that a technique is effective. Many pseudosciences rely on informal personal evidence to validate their claims, thereby confusing Reichenbach's (1938) "context of discovery" and "context of justification." Anecdotes can sometimes be enormously useful in the context of discovery, that is, hypothesis generation. But with rare exceptions (e.g., existence proves that a given phenomenon cannot occur), anecdotes are not especially useful in the context of discovery, that is, hypothesis testing.

Anecdotal evidence, as superficially persuasive as it may seem, suffers from several marked evidentiary limitations. In particular, anecdotes may not be representative of most instances of a phenomenon; the police psychic who claims to have scored a "hit" in detecting a hidden body may not be typical of other psychics. Indeed, virtually all evidence suggests that police psychics are essentially useless for solving crimes (Hoebens, 1982; Marshall, 1978). In addition, anecdotes rarely exclude rival hypotheses for findings; a criminal profiler who correctly fingers the true murderer may have done so by chance or by relying on base rate information available to all nonprofilers (e.g., the fact that the murderer had a history of earlier violent crimes). As Paul Meehl (1995) observed, "the clear message of

history is that the anecdotal method delivers both wheat and chaff, but it does not enable us to tell which is which" (p. 1019).

*Example from police work.* In more than 75% of the now more than 200 cases in which DNA evidence has demonstrated a prior false conviction, eyewitness misidentification was a primary determinant of a guilty verdict (Dwyer, Neufeld, & Scheck, 2000; Gross, Jacoby, Matheson, Montgomery, & Patel, 2005; Rothstein, 2005; www.innocenceproject.org). In many of these cases, law enforcement officials probably relied too heavily on anecdotal testimony for proof of guilt. Individuals' subjective experiences are neither recorded nor preserved in memory exactly as the event occurred (Loftus, 1993) and can be contaminated at many steps between the witnessing of an event and the relayed testimony given at the police station or courtroom (see Turtle & Want, 2008).

Nevertheless, because anecdotal and testimonial reports are often subjectively powerful and affectively salient (Borgida & Nisbett, 1977; Nisbett & Ross, 1980), we may attach more evidentiary weight to them than they deserve (also see Snook, Cullen, Bennell, Taylor, & Gendreau, 2008, for the dangers of relying excessively on anecdotal evidence for drawing conclusions concerning the efficacy of criminal profiling). Indeed, mock jury decision-making studies demonstrate that jurors tend to place substantial emphasis on eyewitnesses' confidence in their reported memories despite findings indicating only modest correlations between eyewitness confidence and accuracy (Wells et al., 1998).

## Extravagant Claims

As Richard McFall (1991) observed, science is a prescription for humility. Indeed, Tavis and Aronson (2007) have described science as "a form of arrogance control" (p. 108; see also O'Donohue, 1997). Good scientists are aware that their claims are almost always provisional and might be overturned by later evidence (Sagan, 1995); they are also careful not

to overstate assertions in the absence of compelling data. In contrast, advocates of pseudoscience frequently advance extreme claims that greatly outstrip scientific evidence. For example, some advocates of Thought Field Therapy, a technique that purports to treat psychological disorders, such as long-standing phobias, by realigning clients' invisible energy fields, claim to be able to cure more than 97% of individuals with serious psychological disorders in a matter of a few sessions (Gaudio & Herbert, 2007). A basic tenet of science is that "extraordinary claims require extraordinary evidence" (Sagan, 1995; Truzzi, 1978).

The rationale here is that assertions that contradict established scientific principles require a higher onus of evidence than do claims that fit with extant knowledge (Pigliucci, 2005).

*Example from police work.* Some proponents of the polygraph or lie detector test have advanced extravagant claims regarding the accuracy of this device to detect lies, asserting that it operates with close to a 100% rate of accuracy (Iacono, 2008a). If these assertions are to be believed, the lie detector test is far more valid than virtually any known psychological test.

Yet as psychologist David Lykken (1998) observed, voluminous evidence suggests that polygraphs probably perform better than chance but are nowhere near as accurate as their most avid promoters assert (see also Ruscio, 2005; Saxe & Ben-Shakhar, 1999). Because it measures physiological arousal rather than lying per se, the polygraph test is prone to mislabeling innocent persons as guilty. Similarly excessive claims have sometimes been made by proponents of voice stress analyzers, which are also used for detecting falsehoods. Like polygraph tests, voice stress analyzers tend to mislabel many innocent persons as guilty (Gamer, Rill, Vossel, & Gödert, 2006; Lilienfeld, 1993; Long & Krall, 1990). As with any tool, extravagant claims should serve as red flags that proponents of a given practice have overstated its predictive capacity and are operating outside the bounds of good science.

## Ad Antequitem Fallacy

As the history of science teaches us, claims that have endured for a long time are not necessarily correct. For example, even though astrology is approximately 4,000 years old, there is no scientific support for its claims (Hines, 2003). The same holds for a host of other ancient practices that persist into the present day, including palmistry (palm reading) and numerous forms of fortune telling. Many pseudosciences fall prey to the ad antequitem fallacy: the error of concluding that because a claim is old, it must be valid. Yet many false claims persist for centuries or even millennia, in part because the influence of tradition and institutional inertia (the unwillingness of organizations, including police departments, to change their long-standing practices) is often powerful (Lilienfeld, Wood, & Garb, 2000).

*Example from police work.* The use of hypnotic-like procedures dates back to ancient times; the Greeks visited shrines of healing where they were given therapeutic suggestions during trances. The use of hypnosis in police practice probably dates back to at least the 1780s when, based on the work of Franz Anton Mesmer, the Marquis de Puységur famously hypnotized a person, Victor, and found that he showed astonishing clairvoyance.

By the 1840s, police solicited the aid of an alleged clairvoyant who purportedly disclosed the identity of a thief under hypnosis (Gravitz, 2006; Ramsland, 2008). Following the lead of the Maryland Court of Special Appeal in 1968 (*Harding v. State*, 1968; Martin, 2004), there has been an upsurge in the use of hypnosis for memory refreshment in criminal investigations (McConkey, 1995; also see Martin, 2004). A few police departments have even erroneously instructed people that memory is analogous to a video recorder, which can lead to confabulation in the absence of clear memories and “memory hardening,” that is, unwarranted confidence in memories (Meyer, 1992; Schefflin, Spiegel, & Spiegel, 1999). Despite a growing corpus of

research questioning the effectiveness of hypnosis for retrieving accurate memories (Dywan & Bowers, 1983; see also Wagstaff, 2008), it has remained a seductive technique. Because the use of hypnosis for memory recovery and refreshment has a lengthy history, it may be tempting but erroneous to conclude that it is strongly supported from a scientific standpoint.

## Reversal of Burden of Proof

In many pseudoscientific disciplines, there is an implicit expectation that others must prove the claims wrong. Yet a key principle of science is that the burden of proof almost always falls on those advancing an affirmative claim. By placing the onus on others to prove the claim false, pseudosciences eschew scientific accountability, which requires the burden of proof to rest on the claimant, not the skeptic. As it is often impossible in science to prove a universal negative, pseudosciences frequently inoculate their untested claims from empirical scrutiny. Furthermore, reversing the burden of proof often results in the commission of the ad ignorantum fallacy: the logical error of assuming a claim is correct merely because there is not overwhelming evidence against it (Lilienfeld et al., 2003; Shermer, 1997). For example, proponents of flying saucers have often demanded that skeptics account for every reported case of an unidentified flying object in naturalistic terms (Hines, 2003). Yet the burden of proof falls on proponents to provide unambiguous material evidence for at least one flying saucer, not on skeptics to account for every undocumented flying saucer report.

*Example from police work.* The use of anatomically detailed (anatomically correct) dolls to detect child sexual abuse has been mired in scientific controversy (Skinner & Berry, 1993; Wolfner, Faust, & Dawes, 1993). In particular, there are serious scientific questions about whether such dolls are valid for detecting child sexual abuse, largely because many nonabused children engage in sexualized doll play. As a consequence, such dolls often result in high false-positive rates



of abuse, especially among African American children. Moreover, anatomically detailed dolls typically lack standardization or norms and therefore cannot be considered true psychological tests, which would take into account the base rates of sexualized play among nonabused children (Hunsley, Lee, & Wood, 2003).

Despite such mixed and largely negative evidence, a working group commissioned by the American Psychological Association [APA] demurred from making any clear recommendations concerning anatomically detailed doll use, arguing that such dolls can “provide a useful communication tool in the hands of a trained interviewer” (Koocher et al., 1995, p. 218).

Surprisingly, this working group offered this recommendation even after acknowledging that “the data on AD [anatomically detailed] dolls may be equivocal when claims for diagnostic discrimination are made” (Koocher et al., 1995, p. 218). The working group’s recommendation reflects a misunderstanding of the onus of proof in clinical science. If the evidence for a technique’s validity is largely negative or at best equivocal and if the technique has the potential to produce harm (in this case, false allegations of abuse against family members or others), the scientifically appropriate stance is not agnosticism but rather serious cautions or even prohibitions against continued use pending further data.

### Absence of Connectivity

Unlike most well-validated areas of research, pseudoscientific disciplines lack “connectivity” with other scientific disciplines, meaning that they do not build on the existing corpus of evidence generated by previous research programs (Bunge, 1983; Stanovich, 2007). As a consequence, they typically lack the cumulative character of developed sciences. Pseudosciences frequently fail to build on well-established scientific principles, often claiming to have forged a novel paradigm that has been rejected by the scientific establishment.

In doing so, pseudosciences often insulate themselves from extant knowledge and the

greater scientific community. For example, many advocates of extrasensory perception, such as telepathy (mind reading), claim that extrasensory perception violates most or all known physical laws of information transmission (e.g., the inverse square law; Beyerstein, 1996). For example, they typically contend that people with extrasensory perception can read the thoughts of people halfway across the world just as well as those of people in an adjacent room. Although scientists should not completely dismiss the idea that unconventional evidence points to a paradigm shift, they are right to require compelling evidence before abandoning well-established scientific knowledge.

*Example from police work.* A great deal of criminal profiling lacks connectivity to previous psychological research (see Snook et al., 2008). In particular, the controversy regarding criminal profiling could perhaps have been averted had closer attention been paid to the long-standing literature on clinical versus actuarial (statistical) prediction (Meehl, 1954). In essence, criminal profilers are relying on clinical prediction: They are subjectively integrating information regarding details of the crime in their heads in an effort to pinpoint the likely culprit.

Yet we have known since Paul Meehl’s (1954) classic “little book” that cross-validated statistical formulas derived from outcome data consistently perform at least as well as, if not better than, clinical prediction. Indeed, a meta-analysis of 136 studies across a diverse body of domains, including criminal recidivism, response to psychological treatment, and graduate school performance, showed that statistical prediction is equal or superior to clinical prediction for the overwhelming majority of judgmental tasks (Grove, Zald, Lebow, Snitz, & Nelson, 2000). Had criminal profilers attended to this accumulated body of literature, they might have been more circumspect in their claims. In particular, they might have been considerably more cautious in their assertion that their accuracy exceeds that afforded by easily programmed actuarial formulas derived from the psychological and life

history characteristics of known criminals. Moreover, although criminal profilers typically assert that their accuracy stems from years or decades of exquisitely honed experience observing crimes and criminals, research consistently demonstrates that the relation between amount of experience and the accuracy of clinical prediction is negligible or nonexistent across a variety of judgmental tasks (Dawes, Faust, & Meehl, 1989; Garb, 1998; Grove & Meehl, 1996).

## Use of Hypertechnical Language

The use of overly technical language or specialized jargon can lend an air of authority to a discipline that is otherwise devoid of scientific legitimacy. In scientific disciplines, a new phenomenon often requires new terminology to differentiate it from a related concept. The use of neologisms may be warranted when they denote meaningful concepts, especially in cutting-edge fields of research. Pseudosciences, however, often employ impressive sounding psychological jargon ("psychobabble"; Rosen, 1977) to serve as scientific paraphernalia without tethering these terms to clear empirical referents (Lilienfeld et al., 2003; Tavis, 2000; van Rillaer, 1991). As Newbold et al. (2008) pointed out, hypertechnical language often imports superficially similar concepts and terms from scientific disciplines, such as neuroscience ("neurobabble"), to lend pseudoscientific assertions the cachet of scientific respectability.

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*Example from police work.* An increasingly popular psychotherapy, eye movement desensitization and reprocessing (EMDR), is used by a number of police departments in the United States in an effort to ward off stress reactions following shootings and other traumatic events (Parnell, 1997; Shapiro & Forrest, 2004; Wilson, Tinker, Becker, & Logan, 2001). EMDR was even used with a number of police officers who witnessed the terrorist attacks of September 11, 2001. Among other things, EMDR asks

clients to imagine the traumatic events they witnessed while tracking the therapist's back-and-forth finger movements with their eyes. A large body of controlled research demonstrates that EMDR, although more efficacious than no treatment, is no more efficacious than longstanding behavioral treatments involving exposure to traumatic imagery, suggesting that it is probably just a variant of exposure therapy (Deville, 2002; Herbert et al., 2000). Moreover, numerous studies suggest that EMDR's distinctive feature—the presence of lateral eye movements—is irrelevant to its therapeutic effects (Davidson & Parker, 2001).

Despite these findings, many proponents of EMDR have invoked explanations derived from neuroscience, such as synchronization of the brain's hemispheres or simulation of rapid eye movement sleep, to account for the purported therapeutic effects of eye movements (e.g., Shapiro, 1995). For example, one prominent sleep researcher and EMDR advocate conjectured that

the repetitive redirecting of attention in EMDR induces a neurobiological state, similar to that of REM [rapid eye movement] sleep, which is optimally configured to support the cortical integration of traumatic memories into general semantic networks. We suggest that this integration can then lead to a reduction in the strength of hippocampally mediated episodic memories of the traumatic event as well as the memories' associated, amygdala-dependent, negative affect. (Stickgold, 2002, p. 61)

In attempting to explain the effects of EMDR at a neural level, the developer of this method (Shapiro, 1995) similarly argued that "when the processing system is catalyzed in EMDR, the valence of the receptors is shifted downward so that they are capable of linking with the receptors of the neuro networks with progressively lower valences" (pp. 317–318).

Yet these accounts are "explanations in search of a phenomenon" because controlled studies indicate that eye movements do not contribute to EMDR's clinical effectiveness. As a consequence, these hypotheses are largely or entirely devoid of scientific meaning. As a

general take-home recommendation, law enforcement officials who are unschooled in psychological science should not assume that hyper-technical language necessarily communicates substantive meaning.

## CONCLUDING THOUGHTS

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Police and other law enforcement workers, like individuals in all applied disciplines, must keep a watchful eye on pseudoscientific and otherwise unsubstantiated claims. If they do not, they can end up making flawed decisions that result in false confessions, erroneous convictions, confabulated memories of early trauma, and a plethora of other harmful real-world consequences. Fortunately, by attending to the key warning signs of pseudoscience, law enforcement workers can learn to differentiate more from less scientifically plausible assertions and exercise appropriate skepticism when evaluating novel, controversial, and unsubstantiated techniques. In the long term,

attention to these warning signs may help police officers to decrease their risk for plausible, but erroneous, decisions.

We therefore recommend that training curricula for all law enforcement officers include an introduction to user-friendly guidelines for distinguishing scientific from pseudoscientific claims and for compensating for errors in reasoning (e.g., confirmation bias) to which all people are prone. In addition to modeling such curricula on research findings on human judgment and prediction (e.g., Arkes, 1981), psychological scientists can benefit from input from law enforcement officials to maximize the relevance of these curricula to the real-world exigencies of everyday police work. As humorist Josh Billings is said to have observed, "The trouble with people is not that they don't know but that they know so much that ain't so" (Knowles, 1979, p. 491; see also Gilovich, 1991). By learning to distinguish science from pseudoscience, police and other law enforcement workers can become more discerning consumers of the psychological literature and minimize their chances of believing what ain't so.



## EFFECTIVE POLICING

### *Understanding How Polygraph Tests Work and Are Used\**

WILLIAM G. IACONO

**T**o the dismay of a fearful public and the police, many crimes with a plausible suspect go unprosecuted due to a lack of hard evidence. It is possible that no amount of detective work will turn up the leads necessary to clear or indict the suspect. However, the evidence needed to resolve the case is present in the mind of the perpetrator. If only we could accurately access this information, more crimes would be solved, the innocent would rarely be falsely imprisoned, and the guilty liar would always be convicted. For more than half a century, the polygraph profession has claimed that we can resolve seemingly unsolvable cases by tapping into the physiological basis of a suspect's veracity. In this article, I will examine how well we can detect lying, using conventional police polygraph methods, and how law enforcement agencies can best use deception detection

procedures as investigative aids. My focus will be the so-called control or comparison question test (CQT), a procedure that is widely used in forensic settings.

#### PSYCHOPHYSIOLOGICAL BASIS OF THE CQT

It is generally recognized that there is no physiological response that is uniquely associated with lying. Moreover, the brain mechanisms involved in lying are unknown, rendering difficult the development of techniques that can distinguish liars from truth tellers. Hence, detection of deception methods is designed to compare physiological reactions to different types of questions. The first commonly used lie detection procedure, the relevant-irrelevant technique,

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involved comparing the response to crime-relevant questions (e.g., a question in a case involving alleged child sexual abuse, "Did you insert your finger in Susan's vagina?") with irrelevant questions covering inconsequential topics for which the correct answer was readily apparent ("Is today Tuesday?"). This technique is seldom used in forensic settings because even innocent people are more reactive to the threatening accusation contained in the relevant question than to the innocuous content covered by the irrelevant question (Horowitz, Kircher, Honts, & Raskin, 1997).

The CQT was developed to address the obvious imbalance in the psychological significance of the two types of questions by replacing the irrelevant query with a comparison question. Historically referred to as the "control" question, this question is also accusatory, but it does not deal with a transgression related to the commission of the crime. Instead, it probes the integrity of a suspect by querying about possible past misbehaviors that one who committed such a crime might also have engaged in. For instance, for a sex abuse case, the control question might take the form, "Have you ever committed a sexual act you were ashamed of?" or, because all relevant questions involve lying, "Have you ever lied to get out of trouble?" The CQT is also sometimes referred to as the "probable lie test" because it assumes that the control questions are likely to elicit lies or at least nervous denials. CQT proponents argue that because the control questions are the only questions for which the innocent have any reason to be concerned, truthful people will respond more strongly to the control than to the relevant question. By contrast, liars are expected to find the relevant questions of greater concern, so they should respond more strongly to these questions.

CQTs are administered such that there are multiple relevant questions (typically three), each paired with a different control question. These questions are typically repeated three times, with the order of questions changed with each repetition. A CQT may also include other questions (a test often has 10 questions total), but only the relevant and control questions are evaluated to

determine deception. Today's polygraph examiner is likely to use a laptop computer to digitize and record physiological reactions to the relevant and control questions. These reactions include skin conductance, monitored from the finger tips; respiration, recorded from belts around the chest and abdomen; and cardiovascular activity, tracked from a partially inflated blood pressure cuff placed around one arm. Computer software can be used to compare the magnitude of each type of physiological response to each control question and the relevant question with which it is paired, ultimately yielding an (unverifiable) estimate of the likelihood that an examinee is truthful or deceptive (e.g., "The probability of deception is less than .01."). Most examiners have been trained to process the physiological data manually to achieve the same goal. Because the algorithms on which computerized scoring is based are proprietary and thus cannot be evaluated, most examiners prefer to rely on their own scoring because they can defend it against outside scrutiny.

Most tests end with conclusive verdicts of either deception or nondeception. However, examiners in private practice typically claim about 10% of CQTs end inconclusively, and Patrick and Iacono (1991b) found that police polygraph operators had an inconclusive rate of just more than 20%. If possible, suspects with such outcomes are retested until a definitive result is obtained.

### **Test Administration: The CQT Interview and Interrogation**

The ideal lie detector test would be administered something like a medical X-ray assessment. When a trained X-ray technician administers the standard protocol, the results are independent of the procedure followed. For instance, were two different technicians to obtain X-rays on the same person, the resulting images would be highly similar. However, this type of standardization does not exist for the CQT, and it is important to understand how this can affect the outcome of the test.

The CQT is not so much a single test as it is a collection of procedures that have in common the inclusion of relevant and control questions. Whatever specific form it takes, the CQT is more accurately characterized as a polygraph-assisted interview than a test. This interview has three phases. It begins with a pretest component during which the examinee is interviewed by the examiner and the questions are formulated. This phase of the interview can cover a lot of ground but is likely to involve asking test subjects about their views regarding their honesty, the nature of the punishment that would be appropriate for the crime, the factual evidence surrounding the crime, the subject's explanation or interpretation of the facts, and how best to word the relevant questions so they can be understood and answered unambiguously "yes" or "no."

An important goal of this interview phase is to convince the subject that the control questions are just as important as the relevant questions. This is accomplished by getting the subject to agree that the kind of person likely to commit the particular crime would also be likely to engage in other types of misbehavior, such as deceiving the police. Without ever making a distinction between the control and relevant questions, the examiner then introduces possible control questions that the subject also agrees are reasonably worded and can be answered unambiguously—for example, "Have you ever lied to a person in a position of authority?"

Because the examiner admonishes the subject that the test will only work if the subject is completely truthful, many subjects, when confronted with a control question like this, will indicate that they have in fact lied to an authority figure—for example, to a parent or teacher. At this point, the control question is reworded so that it begins with this question: "Other than what you have told me about, have you ever lied to a person in a position of authority?" If the subject says "yes" then the examiner leads the subject to believe that making such admissions is somewhat incriminating thereby hoping that the subject will refrain from revealing any additional misdeeds. No matter how many times an innocent

person qualifies the coverage of a control question, the question nevertheless is still assumed to elicit a probable lie or at least significant concern when asked. It is noteworthy that the examiner must pick control questions that are appropriate, given the character of the subject. A repeatedly convicted felon who probably has a life history of lying to authority figures is likely to be asked a control question that covers more serious transgressions—for example, "Have you ever committed an undetected felony?"

The procedure followed to develop questions during the pretest interview is often characterized as establishing the "psychological set" of the examinee, the unsubstantiated notion that the individual's attention is involuntarily channeled to whatever question holds the greatest immediate threat to his or her well-being (Abrams, 1989; Matte, 1996). For the guilty, this means that the examiner has effectively ensured that their concern is directed to the relevant question. The psychological set of the innocent is appropriately established when the control question conveys the greater threat.

The second phase of the CQT involves asking the questions while the physiological reactions are recorded. Because the inflated blood pressure cuff becomes uncomfortable and about 20 [seconds] must elapse between each question to provide ample time for the physiological response to register and recover, a typical 10-question CQT lasts about 3 [minutes]. Each run through the question list produces a chart (or the computer equivalent of a chart) recording of the physiological reactions to the questions. Often, three such charts are obtained with the order of questions altered for each. Between each pair of charts, the subject is given the opportunity to alter the wording of questions that, with additional reflection, may seem unclear or confusing.

Some examiners also include a procedure designed to convince subjects they will be caught if they lie. The subject may be asked to choose a card from a marked deck or to write down a number between 1 and 10 and place it face up so both the subject and examiner can see it.



The examiner then asks the subject if he has selected any of a series of cards or numbers, including the chosen one, to see if the physiological reactions are strongest to the subject's pick. This test, sometimes called a stim test (intended to stimulate the subject to increase detectability) or acquaintance test (acquainting the subject with the inevitability of detection), is interpreted such that the subject's pick is always detected.

For subjects who are deemed to have deceptive outcomes, the third and final phase of the CQT involves confronting the subject in an attempt to obtain an admission or outright confession. Most examiners are expert interrogators who are adept at using what they know about the subject's character and demeanor during the interview, the crime facts, and the CQT outcome to convince subjects that it is in their interest to confess.

It should be apparent from the [previous] description that the CQT is not a standardized, objective procedure. Even when two examiners are trained to administer the same CQT protocol, the resulting CQTs will be different. CQTs are likely to vary in the choice of questions formulated to serve as relevants and controls, the wording and ordering of questions, the inclusion of other questions besides the relevants and controls, whether to include a stim test, the manual and/or computer scoring and interpretation of the resulting physiological data, and the degree to which the examinee buys the idea that all of the questions are equally determinative of test outcome. Although modern CQTs are computerized, computerization has no effect on any of these method variations; computers only ensure that the digitized physiological data are recorded for review and analysis. Computer scoring ensures reliability by reducing scoring inconsistency, but scoring algorithms have not been made available for scientific evaluation, have unknown validity, and are entirely dependent on the quality of the examiner's question development and administration of the CQT. Most examiners agree that the key ingredient for a competently administered CQT is the examiner.

Hence, successful lie detection rests with the examiner, not the polygraph or computerized scoring procedure.

## SCIENTIFIC SKEPTICISM REGARDING CQT THEORY

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Evaluation of a test's efficacy begins with an appraisal of its theoretical foundation. For the CQT, this involves evaluating the intended function of relevant and control questions. It is easier to understand why guilty suspects can be expected to fail a CQT than it is to understand why innocent suspects can be expected to pass. Because the relevant question has obvious import to the perpetrator of a crime and the typical control question is likely to seem inconsequential by comparison, larger responses can be expected in the category of relevants than in control category questions. However, the relevant question is just as relevant for the innocent suspect who fears false detection. One of the reasons why physiological deception detection seems plausible to us is that we can all recall an occasion when, caught in a lie, our face flushed, our heart rate picked up, and our hands became clammy.

Field polygraphs are quite capable of registering these physiological changes; indeed, they work as well as sophisticated laboratory polygraphs for this purpose (Patrick & Iacono, 1991a). However, these same physiological reactions are likely to arise with the passionate denial that occurs when false charges are leveled against us. The fear of detection is indistinguishable from the fear of false detection; the physiological reactions recorded by the polygraph under these two circumstances cannot be discriminated one from the other.

Other factors also undermine our confidence that control questions work as intended. If an innocent person is not lying in response to a control question, cannot think of a lie associated with the control question, or has divulged all instances of lying during the review of control questions carried out in the pretest interview

(i.e., the subject actually believes the examiner's assertion that the CQT cannot be passed if any lie is held back), the test will be failed. Hence, the CQT is biased against innocent suspects. As Patrick and Iacono (1991b) demonstrated, police polygraph examiners appear to understand this, because virtually the only time they disregard their own physiological data collected during a CQT, the data indicate deception. Hence, sometimes charts that clearly indicate deception are countermanded in examiner-written reports that conclude the result was inconclusive or truthful. By contrast, nondeceptive charts are almost never interpreted by examiners as indicating they believe the subject is actually deceptive, nor are such charts reclassified by examiners as inconclusive.

Even for the guilty we have no way of knowing for certain that the CQT works as intended. As noted elsewhere (Iacono & Patrick, 1987), there are many reasons why a guilty person may respond more strongly to a control than to a relevant question. For instance, in the case of sex offenders, many of their crimes are undetected, but these crimes are likely to be covered by a typical control question—for example, “Have you ever committed a sex act you were ashamed of?” A guilty sex offender who is worried that the polygraph will lead to suspicion in other crimes by virtue of concern directed at control questions has ample reason to respond disproportionately more strongly to these questions.

These criticisms of the CQT have not been effectively addressed by the polygraph profession. For instance, to circumvent problems associated with probable lie control questions, a CQT alternative has been proposed, the directed lie test (DLT). In a DLT, the probable lie control question is replaced with a question that the suspect agrees will be answered with a deliberate lie—for example, “Have you ever made even one mistake?” The suspect is asked to think of the mistake when responding to the directed lie question, ensuring that the question elicits a lie. However, for the innocent, the directed lie question still does not match the relevant question in

psychological significance, and the fact that it does not is obvious, making it analogous to the irrelevant question in the relevant-irrelevant technique. For the guilty, the directed lie could deal with a matter of equal or greater significance than that covered by the relevant question. Although used forensically, the DLT does not have a strong following, in part because the purpose of the directed lie questions is transparent, making it easier for individuals who use countermeasures to understand that it is this question to which they should attempt to augment their physiological response.

Another way the polygraph community has dealt with the criticisms directed at the use of probable lie controls has been to stop referring to them as such. Hence, in 1999, after almost 50 years of reference to these questions as controls, the American Polygraph Association renamed the CQT . . . the comparison question test.

## CQT ACCURACY

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The debate concerning CQT accuracy has raged for decades and is too broad a topic to consider fully here but has been hashed out thoroughly elsewhere, especially in a legal text that presents comprehensive detailed arguments supporting both the case for (Honts, Raskin, & Kircher, 2002) and the case against (Iacono & Lykken, 2002) forensic applications of the CQT. The most thorough analysis of polygraph testing undertaken to date was published as a book by the National Research Council (NRC), [Committee to Review the Scientific Evidence on the Polygraph (2003)] of the National Academy of Sciences. The NRC was composed of a panel of distinguished scientists who, although they had no direct involvement with polygraph testing, had the expertise to evaluate polygraph tests. The NRC examined the world literature on polygraph testing, including unpublished U.S. government data and reports, some of which, because they were classified, have never been available for analysis. Because the CQT has received the most



research attention, much of the NRC report is relevant to the evaluation of the CQT. Some of the NRC findings are highlighted [next].

## The Practitioner Perspective

In my experience, which now spans several decades and includes considerable contact with examiners working for government agencies and in private practice, practitioners are convinced that errors are so minimal that they are virtually nonexistent. Furthermore, although they may acknowledge that errors are occasionally made, they attribute them to incompetent examiners. It is not uncommon to encounter experienced examiners, who have given hundreds or thousands of tests, claiming that they are unaware of ever having made a mistake.

Confronted with the fact that the CQT has no compelling theoretical basis and that, therefore, claims of high accuracy seem implausible, practitioners respond that the absence of theory is irrelevant because, in practice, the CQT works and that's all that matters.

Few examiners have the scientific training necessary to evaluate the literature on CQT accuracy. Their training consists of practical experience in law enforcement and completion of a course on polygraph techniques completed with one semester or less of class work. Hence, they turn to institutions such as the American Polygraph Association or to PhD-level psychologists who also practice polygraphy for their opinions regarding validity. Both sources marshal evidence suggesting that the CQT has extremely high accuracy. The American Polygraph Association Web site ([www.polygraph.org](http://www.polygraph.org)) cites an analysis of validity studies that they commissioned to an entity referred to as Forensic Research Incorporated (Forensic Research Incorporated, 1997). This analysis proclaims a 98% accuracy figure based on a review of a dozen CQT field studies involving over 2,000 real life forensic evaluations. The handful of psychologists directly involved in the polygraph profession have reached similar conclusions. Two of the most

visible scientists practicing polygraphy, David Raskin and Charles Honts, have argued that when used as forensic evidence in court, their analysis of CQT field studies supports an overall accuracy rate for the CQT of 97.5% (Honts et al., 2002).

An interesting question concerns how it is possible that dozens of field studies based on thousands of cases can be so wrong in their appraisal of polygraph accuracy. The answer derives from the inability to appreciate the significance of a research design flaw that runs through field studies. Despite the fact that the existence of this serious defect has been known for decades, the polygraph community has continued to publish and cite these flawed studies to substantiate their claims of near infallibility. A case in point is a recent CQT validity study carried out by three polygraph examiners (Mangan, Armitage, & Adams, 2008), which claims 100% accuracy in the identification of both guilty and innocent suspects. Like the other studies based on real life applications of the CQT that preceded it, this investigation relied on a confession as the guilt criterion. A confession not only identifies the guilty party but it also establishes as innocent co-suspects in the same case. A typical confession study determines validity by examining how often charts scored deceptive came from guilty people and how often those scored nondeceptive came from innocent people.

In Mangan et al. (2008), when charts scored inconclusive were eliminated, following this verification method, the test outcome matched the criterion perfectly, so CQT accuracy was 100%! Although many questions can be raised about the adequacy of the confession criterion (e.g., Are cases that yield confessions representative of cases in general? Aren't some confessions false?), the serious problem introduced by relying on confessions is that they are obtained by the examiner (during the posttest phase of the CQT described earlier) after the examiner judges the CQT deceptive. Under these circumstances, the outcome of the test (deception) and the criterion (confessing) are not independent leading, of



course, for the two to be in agreement virtually all of the time. Note that had the examiner erred by passing a guilty person, there would be no posttest interrogation and therefore no confession, and this false negative error would be missed by Mangan et al. Note as well that had the examiner erred by failing an innocent person, despite proceeding with the posttest interrogation, there would be no confession, and this false positive error would be missed by Mangan et al.

Under the circumstances, it should not be surprising that Mangan et al. (2008) reported 100% accuracy. What is surprising is that studies like this continue to be published. Iacono and Patrick (1987) pointed out this fatal flaw more than 20 years ago and demonstrated empirically how it leads to inflated estimates of polygraph accuracy (Patrick & Iacono, 1991b). I illustrated how this procedure can be used to prove 100% accuracy for the CQT even if its true accuracy was chance (Iacono, 1991), and a similar point has been made by other scientists reviewing this methodology (NRC, 2003, pp. 113–115). No discussion of the criterion contamination problem caused by relying on confessions can be found in Mangan et al., and citation to these critical sources is missing from their paper. However, their report is not inconsistent with the past practices of polygraph advocates; neither Forensic Research Incorporated (1997) nor Honts et al. (2002) dealt with this issue when advancing their claims of nearly perfect CQT accuracy.

## Countermeasures

Honts and colleagues have published compelling findings showing that guilty individuals can readily defeat a CQT when briefly instructed how to do so (Honts, Devitt, Winbush, & Kircher, 1996; Honts, Hodes, & Raskin, 1985). This can be accomplished by covertly enhancing the response to control questions (e.g., by engaging in mental arithmetic when these questions are asked or lightly biting the tongue), and these covert maneuvers are undetectable. Moreover, although the CQT is ideally administered in a

manner that makes it difficult to readily identify control questions, anyone who wishes to can easily find out how to identify controls by accessing articles such as this one or Web sites such as [www.antipolygraph.org](http://www.antipolygraph.org). Nevertheless, these practicing scientists have concluded that the possible use of countermeasures is of no consequence in real life CQTs because those undergoing CQTs cannot figure out on their own how to use them to advantage (e.g., Honts & Alloway, 2007). In Honts and Alloway, this conclusion was reached by testing undergraduates who were asked to steal movie-pass vouchers. A total of 10 individuals in the guilty condition were asked to read a 220-page book containing information regarding how to beat a CQT, and if they were successful, they were to receive theatre passes as a bonus. One can reasonably ask how this motivational manipulation might compare to the motivation criminals have to learn to beat a CQT. The former involves working hard for a possible but trivial reward of movie tickets; the latter involves trying to avoid incarceration. Considered from this perspective, it is perhaps not surprising that only seven guilty subjects admitted trying to use countermeasures, and only two beat the CQT.

## Independent Scientific Evaluation

Scientists with no direct involvement in the polygraph profession have repeatedly reviewed the scientific literature on CQT accuracy. They have concluded that the accuracy claims of the polygraph profession are exaggerated and indefensible and that guilty individuals can use countermeasures to appear truthful on the CQT. These opinions are reflected in reviews spanning several decades (Lykken, 1974; Saxe, Dougherty, & Cross, 1985) as well as in recent evaluations of the literature carried out for texts in polygraphy and forensic psychology (Ben-Shakar, 2002; Iacono & Patrick, 2006; Oksol & O'Donohue, 2003), on behalf of the German legal system (Fiedler, Schmod, & Stahl, 2002), and for the U.S. government (NRC, 2003). That these negative conclusions are based on review of the same

literature that proponents rely on indicates that the standards for what constitutes adequate science are considerably relaxed for those whose livelihood depends on the legitimacy of the CQT as a lie detector. Some of the findings of the NRC (2003) are especially noteworthy:

There has not even been any systematic effort to develop theoretical clarity regarding the mechanisms purported to cause differential responses to relevant and comparison question in relevant-irrelevant or comparison question polygraph tests. (pp. 92–93)

In short, the bulk of polygraph research . . . can be accurately characterized as atheoretical. (p. 94)

The polygraph studies that met our criteria for consideration do not generally reach the high levels of research quality desired in science . . . relatively few of the studies are of the quality level typically needed for funding by the U.S. National Science Foundation or the U.S. National Institute of Health. (p. 108)

Virtually all of the observational field studies have been focused on specific incidents and have been plagued by measurement biases that favor overestimation of accuracy, such as examiner contamination, as well as biases created by the lack of a clear and independent measure of truth. (p. 214)

In summary, we were unable to find any field experiments, field quasi-experiments, or prospective research-oriented data collection specifically designed to assess polygraph validity and satisfying minimal standards of research quality. (p. 115)

All of the physiological indicators measured on the polygraph can be altered by conscious efforts through cognitive or physical means, and there is enough empirical research to justify concern that successful countermeasures may be learnable. (p. 216)

Research on the polygraph has not progressed over time in the manner of a typical scientific field. It has not accumulated knowledge or strengthened its scientific underpinnings in any significant manner. (p. 213)

What is remarkable, given the large body of relevant research, is that claims about the accuracy of the polygraph made today parallel those made throughout the history of the polygraph: practitioners

have always claimed extremely high levels of accuracy, and these claims have rarely been reflected in empirical research. (p. 107)

Almost a century of research in scientific psychology and physiology provides little basis for the expectation that a polygraph test could have extremely high accuracy. (p. 212)

These NRC conclusions are noteworthy in part because they are the types of observations that are often made in fields that are characterized as pseudoscience, especially those where practitioners have an economic stake to defend the legitimacy of their techniques.

From the NRC (2003) critique, it is evident that the field (a) is devoid of meaningful theory, (b) has failed to accumulate knowledge, (c) relies on studies of poor quality, (d) ignores evidence that contradicts the likely effectiveness of the technique, (e) continues to make claims that are unsubstantiated, and (f) makes claims that are difficult to believe given what we know about human psychophysiology.

Further confirmation that scientists are doubtful of the claims of professional polygraphy derives from two surveys of scientific opinion carried out with members of the Society for Psychophysiological Research and Fellows of the American Psychological Association's Division of General Psychology (Iacono & Lykken, 1997). Both surveys obtained high return rates and achieved remarkably similar appraisals indicating that the CQT is not theoretically sound, that claims of high validity are unreasonable, and that countermeasures to defeat the CQT can easily be learned. Only the APA Fellows were asked to estimate the accuracy of the CQT; their estimate was 61.5%, far lower than the estimated accuracy advertised by the polygraph community. Against this backdrop of overwhelming skepticism, 93% agreed that strong empirical evidence should be required before the accuracy claims of proponents are believed.

The consensus among scientists at arm's length from the practice of polygraphy is that the CQT cannot possibly be highly accurate.

However, these same scientists are not arguing that the CQT has no validity. The accuracy of the CQT is indeterminate. The NRC [2003] concluded that for those untrained in countermeasures, accuracy rates are “well above chance, though well below perfection” (p. 214). Although the meaning of this statement is itself ambiguous, David Lykken and I (Iacono & Lykken, 2002) argued elsewhere that although methodological limitations inherent to the polygraph literature make it impossible to arrive at precise estimates of CQT accuracy, the best available field studies support accuracies of 57% and 75% for innocent and guilty suspects, respectively. This conclusion is derived from an analysis of three studies that used real life cases to estimate accuracy in field applications (Horvath, 1977; Kleinmuntz & Szucko, 1984; Patrick & Iacono, 1991b). Unlike other field studies of the validity of the CQT, each of these investigations included criteria for determining ground truth that was at least in part independent of the outcome of the polygraph test. For example, Patrick and Iacono (1991b) used confessions obtained during the course of the police investigation to determine ground truth instead of relying only on confessions that followed a failed polygraph as the guilt criterion. As such, these studies are among the least likely to overestimate CQT accuracy.

## WHY DOES CQT USE CONTINUE?

In the face of such strong conclusions to the contrary, it is worthwhile to consider why CQT use is widespread and, in fact, on the rise. The answer lies in part with the utility of polygraph testing. As noted, the third phase of the CQT interview involves interrogating those who are deemed to be deceptive. Armed with a failed polygraph, the examiner can use this result as an opening to probe the suspect regarding why the test was failed and what additional knowledge the suspect has about the case that is being withheld. In the hands of a skilled examiner, many

suspects are led through a conversation that ends with an outright confession or perhaps the revelation of valuable information, such as evidence that incriminates someone else. A confession not only resolves a case (and as noted, provides a flawed criterion of ground truth in a validity study) but it also ensures successful prosecution. From a law enforcement perspective, a cost-benefit analysis supports the use of the CQT: The benefit of occasionally solving important cases, such as murders and sex crimes, clearly outweighs the cost of a typical polygraph program. In addition, because an innocent person who fails a CQT is unlikely to confess and because only confessions, not the failed CQT, are admissible as evidence, the risk to the innocent is perceived as minimal. Finally, although guilty individuals may erroneously pass a CQT, they can nevertheless be prosecuted based on other evidence. Polygraph testing is thus viewed by law enforcement as a valuable tool for solving cases that conserves limited resources that might profitably be applied to other cases.

This confession-eliciting utility feature has also been used to justify the expansion of polygraph testing to sex offender treatment. Public outrage over repeat offending by previously convicted sex offenders has led many states to mandate the use of polygraphs to monitor sex offenders on probation or parole. Under these circumstances, the examinee must pass a CQT confirming that inappropriate sexual behavior remains controlled. In addition, CQTs are given to sex offenders in state-run treatment programs. Sex offenders are known to conceal many of their offenses, but effective treatment is believed to depend on the ability of therapists to understand fully the range of their past offenses. Hence, many states now require inmates to take polygraph tests regarding their truthfulness about past offending and current possible reoffending, primarily because under the pressure of having to take a CQT, offenders are likely to make admissions about their sexual misbehavior that would otherwise remain hidden (Grubin, Madson, Parsons, Sosnowski, & Warberg, 2004).



In addition, it is important to realize that CQTs given as part of a criminal investigation are typically administered in circumstances where the evidentiary trail is unlikely to result in a prosecution. Many polygraph programs associated with law enforcement agencies are viewed as a limited resource that should only be used after other means of resolving a case have been exhausted. Many forensic applications of the CQT involve sex crimes where the physical evidence is inconclusive. These may involve children who are unreliable witnesses or sexual assaults where the accused alleges the encounter was consensual. Relying on the CQT to assist evidence gathering, including securing confessions, can be an effective tool to resolve such cases—cases that otherwise would end with the perpetrator back on the street, possibly reoffending. It is for this reason that major law enforcement agencies continue to use polygraph tests despite persisting doubts about their validity.

More important, the confession-inducing feature of the CQT also helps explain why examiners are convinced the CQT is nearly infallible. The selective nature of the feedback, which examiners obtain regarding the likelihood that their verdicts are correct, serves to convince them they do not make mistakes. That is, when someone fails a CQT and confesses, the examiner learns immediately that “deception indicated” was the correct call. If an innocent person fails, no confession is likely, and this error will go undetected (note that if the innocent person falsely confessed, this error would not only go undetected, it would further strengthen the examiners’ conviction that errors seldom occur). If a guilty person passes the CQT, no confession would follow, and this error would also go undetected. Under these circumstances, polygraphers occasionally learn when they are correct, but they do not learn about their errors.

Of course, there are other ways in which guilt or innocence might be established independently of the outcome of a polygraph test. However, because examiners are convinced of the

accuracy of their methods, when there is a disagreement between the CQT outcome and some other criterion of guilt, in my experience, it is the guilt criterion that is seen as faulty, not the CQT. For instance, acquittal by a jury does not signify that the defendant was innocent but that guilt was not established beyond reasonable doubt. Conviction of an individual who passed a CQT simply confirms that sometimes justice is denied to the innocent.

## RELYING ON THE CQT

Despite the convictions of polygraphers that the CQT is highly accurate, science does not support the use of polygraph tests. Even the proposition that the CQT has utility as a means of gathering incriminating evidence has not been evaluated empirically. Nevertheless, there is widespread evidence from anecdotal accounts that crimes are frequently solved by obtaining confessions following failed CQTs. In addition, the use of polygraph tests by law enforcement is not abating; if anything, it is expanding to other areas, such as monitoring programs targeting sex offenders on conditional release, and even in the investigation of presumed terrorists in the Iraq and Afghan wars (using a hand-held portable polygraph, Battelle Memorial Institute, 2007). Against this backdrop, what uses of the CQT seem justified?

1. It must be realized that the CQT cannot be used as the ultimate arbiter of truthfulness. In my experience of working with police who rely on polygraph tests, this is the most common mistake officers make when they are given the results of polygraph tests on suspects they are investigating. As Patrick and Iacono (1991b) found in their work with the Canadian police, once someone fails a polygraph test, the presumption is made that the perpetrator is known, and additional investigative work is likely to cease if the person does not confess. Sex offender treatment programs have also made this mistake, assuming that a failed CQT provides

- prima facie evidence of guilt (see Meijer, Verschuere, Merckelbach, & Crombez, [2008]).
2. Innocent individuals are more likely to fail than are guilty individuals to pass. This conclusion, which is supported by field studies of CQT validity (Horvath, 1977; Kleinmuntz & Szucko, 1984; Patrick & Iacono, 1991b), reflects the fact that CQT control questions do not provide adequate control for the emotional impact of the threatening accusation contained in the relevant questions. This means that, in general, passed CQTs are more credible than failed CQTs.
  3. Qualifying this conclusion, guilty individuals can produce truthful CQTs by engaging in countermeasures. It is not known to what degree countermeasures are used in real life cases, but information about how to use them can be easily accessed on the Internet ([www.polygraph.com](http://www.polygraph.com); [www.antipolygraph.org](http://www.antipolygraph.org)). Polygraph examiners do not believe that countermeasures are effective because they sometimes catch individuals who make clumsy attempts to use them, such as by controlling their respiration, something that shows up readily in polygraph tracings. However, when mental and covert physical manipulations have been found to be effective, even experienced examiners are not able to detect them (Honts et al., 1985, 1996).
  4. The utility of the CQT for eliciting confessions makes it a valuable option to use in crimes where the evidentiary trail is weak. Because abuses can occur when the CQT is used this way, steps must be taken to avoid coercion. At a minimum, the entire CQT procedure should be recorded to allow independent review of the methods used to elicit the confession. Although most confessions that follow failed CQTs are probably genuine, accounts of false confessions are known. Whether confessions could be obtained as easily without using the CQT is not known. Voice-stress analysis, a discredited method for identifying liars (NRC, 2003), is also used by the police to obtain confessions, despite its lack of validity. Social psychologists have long known that belief in the efficacy of the technique may be all that is needed to obtain admissions from guilty individuals (Jones & Sigall, 1971).
  5. The results of a CQT should best be seen as generating a hypothesis about where to focus resources during criminal investigation. Just as there may be many reasons why a suspect's fingerprints are found or are not found on a murder weapon, so there are many reasons why an individual may pass or fail a CQT.

## LOOKING TO THE FUTURE

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The CQT has been with us for more than 60 years. During this time, its use has grown, not diminished, despite repeated highly critical evaluations that have not been effectively rebutted. Hence, it is unlikely that forensic application of the CQT will change significantly in the near future.

How likely is it that new methods of deception detection with proven validity will emerge? Although functional MRI (magnetic resonance imaging) studies have been carried out to help elucidate the neurophysiological basis of lie detection (see Iacono, 2007, for a review), at present, the brain processes underlying deception are not understood. Until they are, it seems unlikely that a human lie detector capable of identifying a unique physiological signature associated with the act of lying will become available anytime soon.

However, an alternative to lie detection, the detection of guilty knowledge or concealed information, does hold promise as a forensic tool. The guilty knowledge test (GKT), as introduced by Lykken (1959) 50 years ago, is a recognition memory test that assesses whether an individual has specific knowledge of a crime, knowledge only possessed by the police and the perpetrator. In a typical GKT, a suspect is exposed to guilty knowledge information as well as other types of information with similar thematic content. Imagine pictures of weapons being flashed on a computer screen.

The perpetrator would be expected to recognize the weapon used in the crime, and the picture of this weapon, when processed by the

brain, produces a recognition response evident in both autonomic nervous system reactivity and cerebral electrical responses. The other weapon pictures, because they are of no special significance to the perpetrator, elicit only weak responses by contrast. Because an innocent person with no crime-related knowledge has no reason to respond differentially to any of the pictures, no recognition response would be evident except by chance.

To increase the likelihood of accurate detection, many item series can be used for the GKT (e.g., pictures of the victim along with victims in other crimes, series of words where one word in the series is clearly associated with the crime—such as a word designating something that was removed from the crime scene). With the inclusion of a sufficient number of item series, there is little likelihood that an innocent person would show recognition to all or even many of the guilty options by chance, so false positive outcomes are uncommon. This technique is the preferred method of deception detection in Japan (Nakayama, 2002), and it is conceivable that its application in countries that use the CQT will become more commonplace. At present, however, its use outside of Japan is rare.

The application of the GKT has been extended by substituting the recording of cerebral event-related potentials (ERPs) for autonomic reactivity. ERP-based GKTs have included manipulations that ensure a given administration to a specific individual was correctly carried out, allowing for inconclusive outcomes for some individuals. In addition, tests can be structured to lessen the likelihood of success with countermeasures, an area that clearly requires additional research (Mertens & Allen, 2008) before these procedures are advanced for field application. A full exposition of these methods lies beyond the scope of this article, but recent reviews cover them in some detail (Iacono, 2007, 2008b; Meegan, 2008). Unlike the CQT, this technique has a strong scientific foundation and is based on current understanding of brain processes underlying memory. As such, it is likely to have other applications as well, including assessing memory loss associated with amnesia (Allen, 2002) and dissociative disorders (Allen & Iacono, 2001) as well as verifying the accuracy of eyewitness identification (Lefebvre, Marchand, Smith, & Connolly, 2007). Because this GKT adaptation has multiple potential applications, the likelihood is high that it will undergo further refinement.



## THE CRIMINAL PROFILING ILLUSION

*What's Behind the Smoke and Mirrors?\**

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Criminal profiling (CP) is the practice of predicting a criminal's personality, behavioral, and demographic characteristics based on crime scene evidence (Douglas, Ressler, Burgess, & Hartman, 1986; Hicks & Sales, 2006). This practice is being utilized by police agencies around the world despite no compelling scientific evidence that it is reliable, valid, or useful (Snook, Eastwood, Gendreau, Goggin, & Cullen, 2007). This disparity between the use and the lack of empirical support leads one to consider the question: Why do people

believe CP works despite the lack of evidence? We explain this [CP] illusion in terms of the nature of the information about CP that is presented to the people and how they process that information.

Our article is divided into five sections. First, we outline current knowledge of CP techniques, the frequency with which CP is used in criminal investigations, and the extent to which police officers and mental health professionals perceive CP as a valuable tool. Second, we argue that CP has no basis in scientific theory and has meager

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empirical support as an investigative tool. The third and fourth sections are devoted to a consideration of how the discrepancy may have arisen between the lack of evidence supporting CP practices and beliefs about its effectiveness. Specifically, in the third section, we discuss some of the ways that information about CP is distorted as it is conveyed. In the fourth section, we discuss some cognitive tendencies that are useful for learning and reasoning but appear to have led police officers, profilers, and the rest of us to form an illusory belief about CP. Fifth, we conclude by arguing that CP should not be used as an investigative tool until it receives adequate scientific support.

## THE CRIMINAL PROFILING ENVIRONMENT

Constructing a profile of an unknown criminal typically involves three stages (Hicks & Sales, 2006; Homant & Kennedy, 1998). Police officers collect crime scene data (e.g., photographs, detective reports, and autopsy results). These data are then forwarded to a profiler who makes predictions about the personality, behavioral, and demographic characteristics of the likely criminal. These predictions are then reported to the investigating officers. In principle, CP differs little from what so-called psychic detectives allegedly do in helping law enforcement agencies catch criminals or find missing persons (see Lyons & Truzzi, 1991; Nickell, 1994; O'Keeffe & Alison, 2000; Wiseman, West, & Stemman, 1996).

Although there are no standardized techniques for making these predictions, the different approaches to CP can be broadly classified as having a clinical or statistical orientation. Clinically oriented profilers draw on their training, knowledge, experience, and/or intuition to predict offender characteristics (e.g., Ault & Reese, 1980; Copson, Badcock, Boon, & Britton, 1997; Douglas & Munn, 1992; Holmes & Holmes, 1996; Keppel & Walter, 1999; Turvey, 1999; West, 2000). By contrast, statistically oriented predictions are derived from an analysis of offenders who have previously committed crimes

that are judged as similar to those being investigated (e.g., Canter & Fritzon, 1998; Davies, Wittebrood, & Jackson, 1997; Farrington & Lambert, 1997; Jackson, van den Eshof, & de Kleuver, 1997; Keppel & Weis, 1993; Santilla, Häkkinen, Canter, & Elfgrén, 2003).

Published accounts testify to prolific growth in the utilization of CP techniques. For example, between 1971 and 1981, the FBI provided CP assistance on 192 occasions (Pinizzotto, 1984). A few years later, Douglas and Burgess (1986) indicated that FBI profilers were being asked to assist in 600 criminal investigations per year. A more recent account indicated that CP was applied by 12 FBI profilers in approximately 1,000 cases per year (Witkin, 1996). Police officers in the United Kingdom also appear to be incorporating CP into their investigations more frequently. Copson (1995), for instance, reported that 29 profilers were responsible for providing 242 instances of CP advice between 1981 and 1994, with the prevalence of CP increasing steadily during that period. Other professionals, such as police psychologists, are also becoming involved in CP (Bartol, 1996).

Although we do not have exact estimates of CP prevalence elsewhere, its use has been documented in numerous countries, including Canada, Finland, Germany, Sweden, and the Netherlands (Åsgard, 1998; Clark, 2002; Jackson, Herbrink, & van Koppen, 1997).

As the prevalence of CP has increased, there has been a simultaneous increase in the volume of published literature addressing the practice. For example, in a recent quantitative review of 130 CP articles, it was found that the number of published CP articles has increased from 5 articles between 1976 and 1980, to 9 between 1981 and 1985, 10 between 1986 and 1990, 22 between 1991 and 1995, 56 between 1996 and 2000, 27 between 2001 and 2005, and 1 in 2006 (Snook, Eastwood, et al., 2007; see also Dowden, Bennell, & Bloomfield, 2007). Moreover, the authors of many of these articles promote CP as a useful investigative tool.

The results of Snook, Eastwood, et al.'s (2007) examination accorded well with the views

expressed by a significant number of police officers and mental health professionals. These views were identified from surveys about whether or not CP advice is valuable. In the earliest survey, Douglas (as cited in Pinizzotto, 1984) found that solving cases was attributed to CP advice in 46% of the 192 instances where FBI profiling was requested. Similarly, Jackson, van Koppen, and Herbrink (1993) found that five out of six surveyed police officers in the Netherlands reported some degree of usefulness for advice given by an FBI trained profiler.

Likewise, Copson (1995) found that 82.6% of a sample of 184 police officers in the United Kingdom claimed that CP was operationally useful, and 92.4% reported that they would seek CP advice again. Consistent with these results, Trager and Brewster (2001) showed that a significant portion of police officers in the United States believe that CP has value. Finally, Torres, Boccaccini, and Miller's (2006) recent survey of 92 forensic mental health professionals indicated that 86% believe that CP is a useful law enforcement tool.

## THE LACK OF A SCIENTIFIC BASIS TO CRIMINAL PROFILING

Having established that CP is in widespread use and that people generally believe that CP works, we now present a critical review of the CP literature. This review reveals the blunt reality that (a) most of the typologies used to create criminal profiles are in fact false typologies, (b) the majority of CP approaches are based on an outdated theory of personality that lacks empirical support, and (c) there is no compelling evidence that predictions made by professional profilers are significantly more accurate than those made by nonprofilers.

## Are Commonly Used Profiling Typologies Actually False Typologies?

Current profiling practices typically involve some type of classification system, or typology,

which is used to categorize both crime scene behaviors and offender background characteristics. By far the most routinely used typology is the FBI's organized-disorganized dichotomy, which was developed from interviews with offenders (Ressler, Burgess, Douglas, Hartman, & D'Agostino, 1986). The assumptions underlying this typology are that (a) offenses can be categorized as organized (e.g., well planned) or disorganized (e.g., unplanned) based on the behaviors present at a crime scene, (b) offenders can be categorized as organized (e.g., high functioning) or disorganized (e.g., low functioning) based on the background characteristics of the offender, and (c) there is a correspondence between offenses and offenders (i.e., organized offenders commit organized crimes and disorganized offenders commit disorganized crimes).

Although the organized-disorganized typology has been the driving force behind CP practices around the world for many years, it has only recently been the subject of empirical scrutiny. Preliminary evaluations of this typology suggest that it does not match the variations in offender behavior. For example, Canter, Alison, Alison, and Wentink (2004) examined whether 100 murders committed by serial killers in the United States could be categorized as organized or disorganized. Using a multidimensional scaling procedure, they analyzed 39 crime scene behaviors that had been categorized as organized or disorganized in the FBI's *Crime Classification Manual* (Douglas, Burgess, Burgess, & Ressler, 1992). In contrast to what would be predicted from the typology, the analysis did not reveal any distinct subsets of organized and disorganized behaviors, thus making it difficult to see how serial homicides may be categorized easily in this way.

Similar findings have been reported for other popular classification systems (Canter & Wentink, 2004; Melnyk, Bloomfield, & Bennell, 2007). For example, Melnyk et al.'s (2007) examination of Keppel and Walter's (1999) serial sexual homicide typology, which was borrowed from research on rape and refined on the basis of Keppel's experiences as a homicide investigator, failed to find any evidence supporting the hypothesis that



offenses or offenders could be categorized as power-assertive, power-reassurance, anger-retaliatory, and anger-excitation. As with the organized-disorganized dichotomy, the credibility of Keppel and Walter's typology collapses under empirical scrutiny.

Nevertheless, there are signs that progress is being made. Several individuals are attempting to develop CP classification systems and are going through the steps required to validate those systems (e.g., Häkkinen, Lindof, & Santilla, 2004; Kocsis, 2006; Salfati, 2000). Others are taking a bottom-up approach to profiling by identifying individual behavior-offender associations and the condition in which these will arise (e.g., Goodwill & Alison, 2007). However, this research is in its infancy, and the typologies emerging are still not used widely in CP circles. Unfortunately, that role is currently taken up by classification systems that are not largely supported by psychological science.

### **Is CP Based on an Empirically Supported Theory?**

In a similar way to the classic trait theory that was popular in personality psychology up until the late 1960s (Mischel, 1968), the majority of CP approaches (e.g., the organized-disorganized dichotomy) assume that criminal behavior is determined by underlying dispositions within offenders that make them behave in a particular way (e.g., Åsgard, 1998; Badcock, 1997; Boon, 1997; Canter, 1995; Douglas et al., 1992). The assumptions that emerge from this theory are fundamental to CP (Alison, Bennell, Mokros, & Ormerod, 2002; Woodhams & Toye, 2007). For example, the theory leads to the assumption that offenders will exhibit similar behaviors across their offenses as [a function of their traits versus seeing situational factors as] the determinants of behavior. Perhaps more important for the practice of CP, the theory also suggests that offenders will display similar behaviors in their crimes and in other aspects of their lives (e.g., interpersonal relationships).

How do these assumptions manifest themselves in practice? Take, for example, the FBI's popular organized-disorganized dichotomy that was described [previously]. This model of CP assumes that offenders are driven to behave either in an organized or disorganized fashion across all aspects of their lives. This supposedly allows the crimes committed by an individual to be correctly linked (i.e., a criminal committing an organized crime will continue to commit organized crimes) and the background characteristics of the offender to be accurately profiled (i.e., crime scenes consisting of organized behaviors reflect the fact that the offenses were committed by an organized individual; Ressler et al., 1986).

How valid are these assumptions? It is our contention that trait-based models of profiling are fundamentally flawed. Criminal profilers do not seem to have recognized that a consensus began to emerge in the psychological literature some 40 years ago that to rely on traits or personality dispositions as the primary explanation for behavior was a serious mistake.

Situational factors contribute as much as personality dispositions to the prediction of behavior (Bowers, 1973; Mischel, 1968). This is equally true when predicting criminal behavior (Alison et al., 2002; Andrews & Bonta, 2006; Bennell & Canter, 2002; Gendreau, Smith, & French, 2006; Woodhams & Toye, 2007).

This importance of situational factors is apparent when one actually considers the empirical research in the profiling domain. For example, some studies report that offenders exhibit a reasonable degree of consistency across their crimes, but typically this is only found for a specific subset of behavior. In Bennell and Canter's (2002) study of serial commercial burglary, very low levels of consistency were observed for behaviors related to items stolen and entry methods (two domains that are heavily dependent on situational factors).

However, a high level of consistency was found for crime site selection choices. Similar results (i.e., relatively high levels of consistency for some behaviors but low levels for many others) have been reported for residential burglary (Bennell & Jones, 2005), commercial robbery

(Woodhams & Toye, 2007), and sexual offenses (Sjöstedt, Långström, Sturidsson, & Grann, 2004). In other cases, no evidence of across-crime consistency is found. For example, even when using liberal definitions of consistency and multiple methods for classifying and analyzing behaviors, Bateman and Salfati (2007) found no evidence of consistency across the crimes committed by serial killers. This finding is particularly alarming considering the frequency with which profiling is used in such cases (Snook, Haines, Taylor, & Bennell, 2007; Trager & Brewster, 2001).

A similar picture emerges when evaluating the degree to which offenders exhibit consistency across their crimes and other aspects of their lives. At best, small pockets of psychologically meaningful consistency have been identified, whereby a specific crime scene behavior is found to relate to a specific background characteristic. For example, Davies et al. (1997) found that rapists who forced entry into premises were four times more likely to have prior convictions for property offenses than those who did not engage in that behavior. Similarly, striking the victim twice or more during a rape indicated that the offender was three times more likely to have a prior conviction for a violent offense than those who did not display this degree of aggression. Other research, however, has not found these relationships. House (1997), for instance, tested the hypothesis that rapists who exhibit a high degree of criminality in their rapes (e.g., overt criminal acts indicative of attempts to conceal identity and avoid apprehension) would be more likely, than other types of rapists (e.g., sadistic, aggressive, or pseudointimate), to exhibit background characteristics related to criminality (e.g., previous incarceration). This was found not to be the case. Even when ignoring the requirement for an underlying theoretical account for a behavior-characteristic relationship, Mokros and Alison (2002) and Woodhams and Toye (2007) were still unable to find compelling evidence of consistency. In general, profilers seem unaware of this empirical research and its implications.

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## **Can Professional Profilers Make Accurate Predictions?**

Douglas et al. (1986) stated that

The process used by an investigative profiler in developing a criminal profile is quite similar to that used by clinicians to make a diagnosis and treatment plan . . . Investigators traditionally have learned profiling through brainstorming, intuition, and educated guesswork. (p. 405)

This clinically based process is reminiscent of psychoanalytic approaches to therapy where mental health professionals diagnose their clients through subjective interpretations and unsupported methods (Dawes, 1997). Empirical research has shown that clinical experience has a limited effect on the accuracy of psychologists' and psychiatrists' judgments across a range of tasks (e.g., Garb, 1998; Garb & Boyle, 2003; Meehl, 1997). In addition, Faust and Ziskin (1988) found low intraclinician and interclinician consistency in judgments of mental health status and argued that when clinicians' predictions are compared against objectively determinable hard data their error rate often exceeds their accuracy rate.

A similar trend exists within the CP domain, where negligible quantitative differences have been found between the predictive ability of professional profilers and nonprofilers. The accuracy of profiler predictions has been tested by comparing the performance of the so-called professional profilers with that of the nonfiler groups in mock profiling scenarios (Kocsis, 2004b; Kocsis, Hayes, & Irwin, 2002; Kocsis, Irwin, Hayes, & Nunn, 2000; Pinizzotto & Finkel, 1990). In a typical experiment, profilers and nonfiler groups are asked to review details of a solved crime (or crime series) and then make predictions about the likely offender via a multiple choice questionnaire. Predictions are typically divided into four categories: cognitive processes, physical attributes, offense behaviors, and social history/habits (the results from these four categories are also combined to form an

overall profile performance measure). The accuracy of the predictions is checked against the actual perpetrator's characteristics. Because of a lack of clear agreement on who should be considered a profiler, Snook, Eastwood, et al. (2007) conducted two meta-analyses of these studies.

The first analysis compared the predictive accuracy of a group of self-labeled profilers and experienced investigators against nonprofilers (e.g., college students and psychologists). The profilers/investigators were more accurate than nonpolice personnel on an overall measure of profile accuracy ( $r = .24$ ) and on the physical attribute category ( $r = .10$ ). In contrast, the predictive accuracy of the profilers/investigators was marginally worse or no better than the nonprofilers when it came to predictions of cognitive processes ( $r = -.06$ ), offense behaviors ( $r = .00$ ), and social history/habits ( $r = -.09$ ). With respect to all comparisons, as the 95% confidence intervals (CI) about the point estimates were wide (e.g., two to five times the limit of .10), and often included 0, the estimates of the effect sizes were deemed imprecise.

In the second analysis, the experienced investigators were included in the nonprofiler group. In this analysis, the results favored the profilers across all the four predictor categories, but again the 95% CI were unacceptably wide. The best result came when the overall profile was considered ( $r = .32$ , 95% CI = .10 to .54). Even if one assumes that this optimistic result could be replicated, it warrants consideration that many variables included in this analysis are well known in the criminological literature (e.g., the likelihood that a serial offender will be of a particular age, have particular convictions, suffer substance abuse problems, etc.). This means, in our view, that any police professional with a good knowledge of the criminological literature should be able to achieve this level of success simply by relying on base rate information. In other words, success in CP may not be based on specialized knowledge of the peculiarities and idiosyncrasies found at a given crime scene.

In sum, there is no compelling scientific evidence to support the positive view of CP that

dominates popular opinion. Far from cutting edge science, CP approaches are based on typologies that lack empirical support and are often based on an outdated understanding of human behavior. In addition, professional profilers often produce predictions that are not significantly more accurate than nonprofilers. Given this state of affairs, one might wonder why police officers continue to request the assistance of profilers. Whereas some police officers report using CP because they believe that it works (e.g., Copson, 1995; Jackson et al., 1993; Pinizzotto, 1984), there are likely other officers who use CP but do not believe that it works. We suspect that some of these officers might use CP because they believe (or are instructed) that it is their duty to use all available investigative techniques. Others may believe that they have nothing to lose in seeing what a profiler can offer to an investigation. It is not known, however, whether CP is helpful or harmful to police investigations.

As positive beliefs about the validity and reliability of CP are not supported by empirical evidence, the rest of this article is devoted to explaining why people might believe that CP works. ...

## THE MESSAGE

Research shows that second hand knowledge, such as that acquired from the media, often does not reflect the actual state of affairs (Sprott, 1996). Thus, unless people adopt a critical approach to information consumption, their judgments about the viability of practices like CP can be contaminated by the inaccurate or biased information that is being conveyed (Stanovich, 1992). The following are the four aspects of information from the CP environment (i.e., messages about CP) that have the potential to convince people that CP works.

## The Power of $N = 1$

Personal stories about exceptional incidents and experiences can be very seductive because



they are concrete, vivid, and memorable (Bor-gida & Nisbett, 1977; Stanovich, 1992). However, their seductiveness has no relation to their credibility. A cornerstone of the scientific method is that conclusions should not be drawn from anecdotes that have no way of being replicated or understood in a way that permits generalization (Fearon, 2003; Wallston, 1983). Yet because anecdotes hold appeal in their concrete example and because most people are not trained to seek objective facts and reliable evidence (Carroll, 2003; Gilovich, 1991; Sagan, 1996; Shermer, 2003), people may automatically allow information obtained from anecdotes to form the foundation of their beliefs.

Unfortunately, many published accounts of CP rely on anecdotal evidence to illustrate how the technique is useful in catching criminals (e.g., Canter, 1994; Cook & Hinman, 1999). Snook, Eastwood, et al. (2007), for example, found that 60% of the 130 CP articles they reviewed used at least one anecdote as a source of knowledge. The most vivid and widely cited anecdote is undoubtedly that of New York's Mad Bomber, George Metesky (Brussel, 1968). In their attempts to catch the bomber, investigators requested the assistance of psychiatrist James A. Brussel to profile the criminal. Among other things, Brussel reportedly predicted that the bomber was a regular man, of ordinary fashions, who was foreign born and attended church regularly and that he would be wearing a buttoned double-breasted suit when apprehended by authorities. It is often reported that Brussel correctly predicted a number of factors such as Metesky's demeanor, social activities, health condition, and even the double-breasted suit. However, certain details of this case are typically overlooked when it is discussed in CP accounts. For example, rarely is it mentioned that Brussel's profile was published in the *New York Times* during the investigation ("16-year," 1956) and that Metesky was acknowledged as following the media reports (Berger, 1957b), thus opening up the possibility that Metesky consciously or unconsciously altered his behavior based on what he had read. In addition, the profile did not

actually solve the case as is commonly implied (Kocsis, 2004a). Information found on disgruntled employees in personnel files led investigators to inquire about Metesky (Berger, 1957a).

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## **Repetition of the Message That Profiling Works**

Empirical research shows that the likelihood of an individual's agreeing with a message generally increases as the message is repeated (Cacioppo & Petty, 1979). Thus, repeating the message that CP is an effective investigative tool may contribute to the CP illusion. In addition to repeated messages that CP works, people are often told that more and more people are becoming trained in CP. For example, one proponent of profiling stated that "As more and more personnel become trained and experienced in the application of the investigative technique of CP, more agencies will believe in its use" (Davis, 1999, p. 293). Repeated suggestions that police officers seek CP input for investigations because they find it helpful can also persuade people that CP is viable (Kocsis, 2003).

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## **Inappropriate Reliance on Correct Predictions**

Profilers can create the impression that their trade is viable by overemphasizing their correct predictions (e.g., Canter, 1994; Douglas & Olshaker, 1995; McCrary & Ramsland, 2003) and by conducting studies that only measure accuracy as the number of correct predictions rather than the proportion of correct predictions (Kocsis, 2004b; Kocsis et al., 2000; Kocsis et al., 2002; Pinizzotto & Finkel, 1990). When all the necessary and pertinent information is not reported, readers may form beliefs based solely on the information that is presented to them (Gilovich, 1991; Paulos, 1988; Plous, 1993).

Previous research in the judgment and decision-making domain (Chapman & Chapman, 1967; Crocker, 1981, 1982; [P. A.] White, 2003) suggested that the exclusive presentation of correct predictions can lead people to overestimate the accuracy and potential utility of profiles. An article by Douglas et al. (1986) illustrates nicely how correct predictions are accentuated to promote the belief that CP is beneficial. Douglas and his colleagues presented a profile that predicted 29 criminal characteristics, but when discussing the accuracy of the profile, the authors emphasized just the 11 correct predictions (10 hits and 1 correct rejection). With some effort, one can collect all the evidence that is necessary (and should have been presented) for a reader to sufficiently assess the validity of that profile. If there were 11 correct predictions (hits and correct rejections), then there were 18 incorrect predictions (false alarms and misses). The profile was only 38% accurate! Because profilers focus their attention on their successes, they (and potentially the consumers of their profiles) appear to overattribute the causality of solved cases to their CP predictions (Lassiter, Geers, Munhall, Ploutz-Snyder, & Breitenbecher, 2002). It should not be overlooked that incorrect predictions have the potential to mislead an investigation.

## The Myth of Profiling Experts

Experts are people who have professional competence in a specialized area, usually acquired in the course of extensive theoretical and practical training (Kurz-Milcke & Gigerenzer, 2004). Because of this, people often accept information that is communicated to them by apparent authority figures or experts as being correct (Bochner & Insko, 1966; Milgram, 1964). This has been referred to in the literature as the use of an expertise heuristic (i.e., that experts' statements can be trusted; Reimer, Mata, & Stoecklin, 2004). Evidence for usage of the expertise heuristic is already available in the CP domain. For example, police officers viewing a profile rate it as more accurate when the

production of the profile is attributed to an expert rather than a nonexpert (Kocsis & Hayes, 2004; Kocsis & Heller, 2004).

Experts in a criminal investigative context ought to provide the police with specialized skills or knowledge beyond that of the ordinary police officer (Gudjonsson & Copson, 1997). Some profilers claim that they possess accumulated wisdom, investigative and behavioral science experience, and training and/or knowledge of abnormal behavior that provides them with the necessary skills to predict offender characteristics from crime scene data, which is presumably beyond the ability of the average police officer and layperson (e.g., Ault & Reese, 1980; Blau, 1994; Cook & Hinman, 1999; Douglas & Burgess, 1986; Hazelwood, Ressler, Depue, & Douglas, 1995). Other profilers claim that their skills and knowledge have come from a long, formal scientific education that trained them to identify the statistical relationships between crime details and criminal personality and background characteristics (e.g., Canter, 1994; Godwin, 1999; Kocsis, Cooksey, & Irwin, 2002a, 2002b; Salfati & Canter, 1999). To date, however, profilers have failed to show that their training improves their ability to develop accurate profiles (Snook, Eastwood, et al., 2007).

Other than the possession of specialized skills or knowledge, profilers might also be viewed as experts because they have testified as expert witnesses in court (McCann, 1992). Legal scholars, however, have been quick to challenge this notion because CP is not a generally accepted scientific technique, is not reliable, cannot prove the guilt of the defendant, and does not provide explanations that are outside the normal understanding of the jury (Ormerod, 1996a, 1996b; Risinger & Loop, 2002). Moreover, profile-based evidence has, on occasion, been found unacceptable by the courts because it has been considered junk science (e.g., *State v. Fortin*, 1999). Also challenging the expert profiler label is the lack of consensus about who can be a profiler and a generally accepted regulatory body that provides professional profiling designations.



## THE MIND

People believe all kinds of strange things that are uncorroborated by scientific evidence. Prescient examples include the occurrence of alien abductions, the hot hand phenomenon in basketball, reincarnation, remote viewing, and the mystical power of the Egyptian pyramids (Gilovich, 1991; Hines, 1988; Vyse, 1997). Researchers have spent a great deal of time investigating how and why people might believe in unproven things. According to Shermer (2002), a consensus among many of these scientists is that the human mind evolved to identify patterns among environmental occurrences, a process that is believed to have been adaptive for the species, but which can lead to the identification of meaningless patterns. The identification of meaningless patterns can explain to a certain degree why people might believe that things such as psychic predictions, past-life regressions, and CP predictions are valid. Note that it is not our contention in this article to claim that these beliefs are irrational. Beliefs are merely a product of processing information from the environment. When the information is bogus, so will be the belief. Four aspects of human cognition that contribute to the CP illusion are discussed [next].

## Reasoning Errors

People may believe in CP because of misguidance by natural human reasoning processes. People attempt to find order and meaning in an uncertain world and then form beliefs that can guide future behaviors (Gigerenzer, 2002; Shermer, 2003). From an evolutionary perspective, such cognitive processes allowed people to adapt to and control changing environments. However, in attempting to find useful patterns, people sometimes observe meaningless patterns. For example, a baseball player who does not shave before a game in which he hits two [home runs] may infer that not shaving increases his performance and consequently never shave again before a game. This type of natural reasoning is often labeled superstition (Vyse, 1997). In the

psychological literature, a variety of ways in which natural cognitive processing can lead to erroneous inferences have been documented (see Myers, 2002, for an overview of cognitive distortions). A consideration of these cognitive tendencies can help explain why profilers, police officers, and the public might believe CP works.

Judgment and decision-making research (e.g., Gilovich, 1991; Myers, 2002) suggests that profilers might assign more personal responsibility to investigative success than to investigative failure (i.e., self-serving bias) and be more confident in their ability to make accurate predictions than they should be (i.e., overconfidence). In addition, profilers and the public may attribute perceived successes to the profiler's abilities and discount the importance of the police officers' contribution (i.e., fundamental attribution error). Furthermore, profilers, police officers, and the public might be susceptible to misperceiving a profiler's competence if they evaluate the accuracy of a profile after the apprehension of the criminal (i.e., hindsight bias), or perceive a relationship between a profiler's predictions and the resolution of a case where one does not exist (i.e., illusory correlation).

After-the-fact reasoning is one particularly good example of how natural reasoning can lead to the detection of meaningless patterns (Carroll, 2003; Gilovich, 1991; Pope & Vasquez, 2005; Sagan, 1996; Shermer, 2002). Many events follow sequential patterns without being causally related; after this does not necessarily mean because of this. In some cases, criminal profiles appear to be the primary cause of the successful resolution of an investigation simply because a profile was obtained before the case was solved (e.g., Copson, 1995; Tenten, 1989; Wilson, Lincoln, & Kocsis, 1997). It might be the case that people believe in CP due to the inability to distinguish between meaningful and meaningless patterns.

A ubiquitous cognitive tendency that may also explain why profilers, law enforcement officers, and the rest of us believe in the veracity and predictive validity of CP is confirmation bias. Confirmation bias involves looking for, often unconsciously, evidence that confirms an existing belief



and ignoring or filtering out evidence that disconfirms that belief (Nickerson, 1998; Shermer, 2003). This type of cognitive tendency has been shown to affect general public and scientists alike and, according to Shermer, is the most powerful of all cognitive biases that operates to confirm and justify many weird beliefs. He has argued that psychics, fortunetellers, palm readers, and astrologers all depend on confirmation bias to convince people of their abilities. Specifically, he believes that telling the client what to expect in the future (a one-sided event instead of a two-sided event) causes the client to notice the occurrence of a predicted event but ignore or filter out the nonoccurrence of a predicted event. By extension, it would not be surprising to discover that confirmation bias plays a role in the formation, and defense, of positive beliefs regarding CP. ...

### **Finding Meaning in Ambiguous Information**

Clinical and personality research has consistently demonstrated that people are inclined to accept ambiguous, vague, and general statements as accurate descriptions of their own personalities (e.g., Dickson & Kelly, 1985; Johnson, Cain, Falke, Hayman, & Perillo, 1985; Sundberg, 1955). This phenomenon has been coined the Barnum effect, and within the psychological field, it is believed to be especially problematic for the acceptance of clinical diagnoses (Snyder, Shenkel, & Lowery, 1977). Some researchers attribute the considerable acceptance rate of high base-rate feedback to human gullibility, whereas others note the importance of factors such as social desirability, situational insecurity, and interpreter prestige (Piper-Terry & Downey, 1998). Furthermore, Snyder, Larsen, and Bloom's (1976) results suggested that people are more inclined to accept a bogus personality description when it is believed to be based on a psychological assessment procedure rather than an alternate technique such as astrology, although in that study, differences in the degrees of acceptance were marginal.

In the CP context, a similar effect can occur when individuals evaluate whether or not an ambiguous profile describes a suspect accurately. Many profiles are so ambiguous that they can appear to describe any suspect (Alison, Smith, Eastman, & Rainbow, 2003). For example, Alison, Smith, Eastman, et al. (2003) analyzed 21 criminal profiles that were used in major criminal investigations and found a total of 3,090 statements. Of the 880 statements that contained predictions about the characteristics of the unknown criminal, 82% were unsubstantiated, 55% were unverifiable, 28% were falsifiable, and 24% were ambiguous.

In a related study, Alison, Smith, and Morgan (2003) examined police officers' propensity to estimate the accuracy of an ambiguous profile. Two groups of officers were given the same ambiguous profile but substantially different descriptions of the criminal that the profile supposedly described (only one being that of the genuine offender). Accuracy judgments for both groups averaged 5.3 out of 7, suggesting that when a criminal is apprehended, any profile might retrospectively appear to describe him or her accurately.

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### **Imitation and Social Contagion**

People often believe things, or do things a certain way, because they were believed or done that way by others (Dawkins, 2003). Dawkins (2003) contends that people form some beliefs without ever connecting them to evidence of their veracity. Simon (1990) has similarly argued that a large amount of what we know is naturally acquired from other people's behavior and instructions, and the tendency to accept the beliefs of others allows people to obtain knowledge and skills that may be useful in many of life's activities. Imitating others is adaptive because people do not need to expend much time or cognitive resources to carefully evaluate the consequences of everything they have observed (Simon, 1990). Believing things through imitation is the outcome of bounded

human rationality in a complex world (Simon, 1990), but the consequence of uncritical acceptance of ideas is that people sometimes accept unhelpful information.

Police officers may believe CP is a valid investigative technique because they observe other police officers using it and accept messages promoting its effectiveness. Support for this argument comes from the results of a survey by Jackson et al. (1993). They found that police officers who used CP learned about it through informal policing networks within their police force and contact with colleagues who possessed knowledge about CP. Other ways by which officers learn about CP are through lectures, articles in police publications, and technical training at police academies and colleges (Jackson & Beke-rian, 1997). As we have already described, most of these information sources present CP as a viable investigative tool.

Related to imitation is the phenomenon of social contagion. Social contagion research suggests that people will adopt others' beliefs after observing behavior that appeared to work. For example, suicide often occurs in clusters and is therefore thought to be contagious (Stack, 2000). According to Gould, Jamieson, and Romer (2003), fictional and nonfictional portrayals of suicide may make taking one's own life appear as an effective tool for achieving personal gain. Social contagion has also been documented for such phenomena as burnout among teachers (Bakker & Schaufeli, 2000), violence and aggression (Berkowitz & Macaulay, 1971; Goldstein, Arnold, & Rosenberg, 2001), military coups (Li & Thompson, 1975), mood (Neumann & Strack, 2000), and scratching in Japanese monkeys (Nakayama, 2004). Using CP and believing it works is likely contagious as well.

The importance of contagion to an account of why CP is believed to be a good idea is evidenced by numerous instances of public popularity. For example, according to Egger (1999), the Mad Bomber case ignited the notion that CP is a viable tool, but it was developments made by the FBI (e.g., training programs, extensive publications, television appearances) that led to the

rapid growth in CP activities in the United States. In the United Kingdom, it appears that the apparent success of David Canter's [1994] profile in the Railway Rapist case led to an upsurge in both the interest and usage of CP. For instance, Copson (1995) found a tripling of the number of profile requests in the year following that case. Although it may be difficult to assess whether CP contagion exists, it is indisputable that there has been a steady rise, with intermittent dramatic increases, in CP use (e.g., see Copson, 1995, for data from the United Kingdom). This suggests that both imitation and social contagion may be contributing to the CP illusion.

### **Mistaking Fiction for Fact**

People are particularly attracted to phenomena that appeal to fantasy by focusing on the powers that ordinary people lack but desire (Sagan, 1996). Green, Brock, and Kaufman (2004) asserted that individuals generally want to be entertained and tend to seek out fiction rather than nonfiction to achieve this entertainment. They suggested that the main reason people appear to be attracted to the media is the desire to escape from the real world. They also maintain that people are susceptible to adopting beliefs about real world events that are entirely based on fictional accounts.

Because people are often intrigued by the criminal mind, CP activities tend to generate considerable public fascination. This observation is evidenced by the number of books, films, and television programs that deal with CP as well as the recent growth in college and university courses that address CP issues. Grubin (1995) . . . also suggested that CP appeals to fantasy because it conjures up the image of "the cerebral sleuth relying solely on his acute powers of observation and deductive reasoning to identify an elusive and much feared serial rapist" (p. 262). Indeed, some researchers have actually attributed, or at least associated, the origins of CP to fictional detectives such as Edgar Allan Poe's C. Auguste Dupin, Agatha Christie's Hercule Poirot, and Sir Arthur Conan Doyle's Sherlock Holmes (Blau, 1994;

Campbell, 1976; Canter, 2000; McCann, 1992; Muller, 2000). The profiling fantasy is also the result of journalists who write about profilers with mystical powers of deduction, thereby increasing the public's belief in the validity of an unproven investigative method (Alison & Canter, 1999).

## CONCLUSION

There is a growing belief that profilers can accurately and consistently predict a criminal's characteristics based on crime scene evidence. This increased belief is evident from the fact that CP is becoming prevalent as an investigative technique, that positive opinions of CP are being communicated in published literature, and that police officers and mental health professionals support the use of CP. We contend that this belief is illusory because a critical analysis of research on CP showed that the field lacks theoretical grounding and empirical support. We proposed that belief in such a pseudoscientific practice is due to an interaction between the message and the mind—that is, the interaction between the information that people receive about CP and the way they process that information.

As CP has the potential to mislead criminal investigators, and thereby either hinder the apprehension of guilty criminals or lead to wrongful convictions, it is a practice that must be approached critically. Various information sources present fictional or nonfictional anecdotes involving the invaluable help of expert profilers in solving serious cases. The expert profilers use post hoc analysis of ambiguous predictions to create the impression that they reduced a detective's uncertainty about how to proceed with an investigation by providing a simple solution to a complex case. This has the potential of generating a reliance on a process that does not advance an investigation.

The belief that CP works is troubling because of the meager scientific evidence to support the practice. Nevertheless, we agree with Lilienfeld (2005) that there are at least three reasons for researchers to conduct proper scientific evaluations of practices that currently lack scientific support. First, CP may actually work. As Lilienfeld has argued, extraordinary claims may be shown to contain a core of truth that should not be automatically dismissed. In our opinion, the burden is on profilers, who make extraordinary claims about their abilities, to prove their worth by actually participating in controlled experimental studies. Second, people deserve to have an accurate view of CP. Conducting and disseminating scientific research is the best method to ensure that this occurs. Third, the effect of CP on police investigations is unknown. Research will be able to determine these effects, whether positive or negative. We anticipate that police officers might argue that they do not have time to wait for scientific evidence from CP research because they have to use something to assist them in their investigations. Such a response is justified, but, according to Lilienfeld, it is likely to cause tension between those who are skeptical about CP and those who believe that CP can contribute to an investigation. More than 50 years of CP practice have passed without much rigorous scientific evaluation. We contend that it is now time to remove the shroud of secrecy in the CP field, evaluate it, and put the burden back on profilers to prove their worth. We explored the CP illusion with the intention of providing a natural explanation for a belief that lacks scientific support. The next logical step is to test the various claims that we have made in this article. All currently uncorroborated statements we have made are testable and falsifiable by scientific research. Until this occurs, we advocate that readers approach CP, and even our article, with a critical mind.



# JUVENILE OFFENDERS' MIRANDA RIGHTS COMPREHENSION AND SELF-REPORTED LIKELIHOOD OF OFFERING FALSE CONFESSIONS\*

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**T**he procedural safeguards established by *Miranda v. Arizona* (1966) protect defendants against self-incrimination and police intimidation. The U.S. Supreme Court established the content of the *Miranda* warnings, but the specific wording varies across jurisdictions. A typical *Miranda* warning informs suspects

You have the right to remain silent. Anything you say can be used against you in court. You have the

right to a lawyer. If you cannot afford one, one will be appointed for you before questioning if you wish. If you choose to answer questions, you may stop at any time to consult your lawyer. (Oberlander & Goldstein, 2001)

Prior to the *Miranda* decision, courts recognized coerced confessions as inherently untrustworthy and used a "totality of the circumstances" test to determine admissibility of a waiver of

\*This article was published in *Assessment* (December 2003), Vol. 10, No. 4, pp. 359–369. We have deleted sections on psychometric properties, figures, and most results but have kept most of the introductory material and discussion intact. Readers wishing for more information about the study's results are encouraged to review the original article.

rights against self-incrimination (Oberlander & Goldstein, 2001). This voluntariness test allowed courts to consider the influence of factors such as a suspect's age, intelligence, custody status at the time of confession, background, and prior history with the criminal justice system (*Coyote v. U.S.*, 1967; *Johnson v. Zerbst*, 1938). In 1964, the U.S. Supreme Court decided in *Malloy v. Hogan* that the constitutional bases for the voluntariness requirement (i.e., the Fifth Amendment right against self-incrimination and the Fourteenth Amendment right to due process) applied to states. Two years later, *Miranda* affirmed and expanded this decision, providing clearer guidelines for informing suspects of their rights prior to and during police interrogations. Over time, the basis of the *Miranda* decision has been challenged, and attempts have been made to eliminate the presumption that a confession is invalid unless suspects in custodial interrogation are informed of their rights prior to interrogation (*Dickerson v. U.S.*, 2000). However, in *Dickerson v. U.S.*, the court reaffirmed the constitutional underpinnings and implications inherent in *Miranda*, allowing it to assert authority over and uphold *Miranda*. The court also pointed out the importance of *Miranda*, stating that it had "become embedded in routine police practice" (*Dickerson v. U.S.*, 2000).

The juvenile justice system was founded on the notion that youthful offenders require special protections because of their developmental vulnerabilities (Oberlander, Goldstein, & Ho, 2001). Historically, there was an underlying belief that troubled children and adolescents could be reformed to become productive members of society, and, therefore, sentences were intended to rehabilitate rather than provide retribution (Grisso, Miller, & Sales, 1997). Because of the belief that children were not criminals, juvenile trials were carried out in the manner of civil proceedings. Therefore, protections that were provided to adults, such as *Miranda* warnings, did not apply to youth. In the landmark rulings of *Kent v. U.S.* (1966) and *In Re Gault* (1967), the due process rights and procedural protections that serve as the basis of *Miranda* warnings were

extended to juveniles. In *Kent* (1966), the court found that "the right to representation by counsel is not a formality. It is not a grudging gesture to a ritualistic requirement." In *[In Re] Gault* (1967), the court stated that "admissions and confessions of juveniles require special caution" because juveniles are at a disadvantage when dealing with police because of their vulnerability and immaturity.

As juveniles increasingly are tried as adults and juvenile sentences become more punitive, adequate understanding of *Miranda* rights is a particularly important issue to safeguard valid confessions and fair sentencing. The *Miranda* court established that a waiver is only valid if it is given knowingly, intelligently, and voluntarily (*[Miranda v. Arizona]*, 1966). In other words, the suspect must understand the vocabulary in the warning and the basic meaning of the rights, appreciate the consequences of waiving the rights, and provide the waiver without coercion or police intimidation (Grisso, 1981).

Because of juveniles' intellectual and emotional immaturity, they are at increased risk for poor comprehension and false confessions (i.e., admitting to the commission of crimes they did not commit) (Oberlander & Goldstein, 2001). In *Gallegos v. Colorado* (1962), the court recognized this risk and held that an "interested adult" would provide additional protection to help ensure the validity of a youth's confession. In addition, in *People v. Lara* (1967), the court decided that adolescent defendants might not fully comprehend the meaning of the effect of the waiver and, thus, may have difficulty meeting the "intelligent" requirement for a valid waiver. In 1979, in *Fare v. Michael C.*, the Supreme Court affirmed the "totality of the circumstances" approach as the federal constitutional standard and applied it to juvenile as well as adult proceedings. Similar to the "totality" test used to determine adult waiver validity, factors typically considered for validity of juveniles' waivers include a defendant's age, intelligence, maturity, and prior experience with criminal proceedings as well as details of the interrogation, such as the amount of time elapsed between

arrest and confession, when the confession was given, and whether the defendant was advised of the *Miranda* rights (Grisso, 1981; Oberlander & Goldstein, 2001).

## MIRANDA COMPREHENSION ASSESSMENT TOOLS

### Instruments for Assessing Understanding and Appreciation of *Miranda* Rights

Researchers have developed instruments to assess defendants' capacities to provide knowing, intelligent, and voluntary waivers. Grisso's (1998) *Instruments for Assessing Understanding and Appreciation of Miranda Rights* is among the recommended tools for forensic psychologists conducting evaluations of youth or adult defendants' capacities to waive *Miranda* rights (Oberlander & Goldstein, 2001). Although these instruments are widely used and well respected among attorneys, judges, and psychologists, they were created and normed in the 1970s using now-outdated language of the *Miranda* warnings from St. Louis County, Missouri. Since the creation of the original instruments, a fifth prong has been added to many jurisdictions' *Miranda* warnings that explicitly inform suspects that they can choose to stop questioning and consult an attorney at any time. The language used in Grisso's instruments is more complicated than modern versions of the *Miranda* warnings currently used in most jurisdictions across the United States, thereby potentially limiting the utility of the instruments. Furthermore, it is unclear whether adolescent norms from the 1970s are generalizable to youth in the 21st century.

To maintain the validity and applicability of these instruments, Condie, Goldstein, and Grisso (2003) revised the assessment tools in several ways. The language was generalized to reflect typical *Miranda* warnings used in jurisdictions across the United States. Additionally, the newly introduced fifth prong was added to each of the

relevant *Miranda* instruments. A fifth instrument, Perceptions of Coercion during Holding and Interrogation Process (P-CHIP), was added to assess juveniles' self-reported likelihood of offering true and false confessions in response to specific police behaviors during interrogation. Finally, the generation of new norms reflects juveniles' comprehension of *Miranda* rights during the first decade of the 21st century. The revised instruments, the *Miranda* Rights Comprehension Instruments-II (MRCI-II), are described in the Method section of this article.

### RESEARCH ON JUVENILES' COMPREHENSION OF MIRANDA RIGHTS

Although used clinically today, Grisso initially developed his instruments in the 1970s to study juveniles' capacities to waive rights, and he conducted much of the existing research in this area. Comparing male and female youth and adults from offending and nonoffending populations, results of his studies suggested that juveniles under the age of 15, as a class, do not understand the nature and significance of the rights to remain silent and to counsel. Therefore, they are likely incapable of validly waiving these rights. Specifically, as a class, juveniles younger than 15 years of age failed to meet both the absolute and relative standards of comprehension. However, the interaction between age and IQ seemed to be a better predictor of *Miranda* comprehension for older youth than did age alone. For instance, 15- and 16-year-olds with IQ scores below 80 also failed to meet both absolute and relative standards. Fifteen- to 16-year-olds with average intelligence were able to understand their rights as well as 17- to 22-year-old adults of comparable intelligence, but one third to one half of these adolescents exhibited inadequate comprehension using the absolute criteria (Grisso, 1981).

Grisso (1981) also found that, overall, gender and socioeconomic status were not significantly related to *Miranda* rights comprehension.



However, among juveniles with low IQ scores (i.e., below 80), African American juveniles exhibited poorer comprehension than did White youth. This interaction was found across the three *Miranda* comprehension measures, including the Comprehension of Miranda Rights–Recognition Instrument (CMR–R), which required no verbal expressive abilities. Prior court experience was unrelated to understanding the words and phrases in the *Miranda* warning, overall, but ethnicity significantly moderated the relationship between the number of prior felony referrals and *Miranda* comprehension scores. Scores were higher among White juvenile offenders with three or more felony charges. Conversely, African Americans with three or more felony referrals demonstrated lower comprehension scores.

A number of American (e.g., Ferguson & Douglas, 1970; Grisso, 1981; Lawrence, 1983; Shepherd & Zaremba, 1995; Wall & Furlong, 1985) and Canadian (Abramovitch, Higgins-Biss, & Biss, 1993; Abramovitch, Peterson-Badali, & Rohan, 1995) studies have explored young people's understanding of the rights to legal counsel and to silence. Some of these studies have examined offender populations, whereas others have focused on nonoffender populations, such as students. Results suggested that simplified versions of warnings did not improve understanding (Ferguson & Douglas, 1970), that education improved surface knowledge but not deeper understanding of rights (Wall & Furlong, 1985), and that adolescents who understood their rights were more likely to assert them (Abramovitch et al., 1993). Studies have also supported Grisso's findings that age (Abramovitch et al., 1995) predicted understanding of rights.

In addition to diminished comprehension of rights, juveniles are more suggestible than adults are (Richardson, Gudjonsson, & Kelly, 1995) and, therefore, may be more easily persuaded or coerced by police during interrogations. Because confessions are one of the most powerful sources of evidence in determining guilt (Kassin & Neumann, 1997), it is important

to investigate whether juveniles involved with the justice system are particularly likely to offer false confessions.

Research focusing on the suggestibility of juvenile offenders revealed that when performance was subjected to criticism and negative feedback, male youth in custody were more likely than nonoffending adults to concede to suggestive questions (Gudjonsson & Singh, 1984). Gudjonsson and Singh (1984) concluded that delinquent adolescents may be particularly responsive to interpersonal pressure during interrogation and that delinquent adolescent boys may be more prone to offer untrustworthy testimony when they have been criticized and pressured by interrogators. Similarly, compared to adults, adolescent suspects with lower intellectual abilities are likely to be more suggestible and may be more vulnerable to offering false confessions (Richardson et al., 1995). This is a particularly relevant finding, as, based on a sample of more than 6,000 youth involved with the juvenile justice system, the average IQ was 81 (Bove, Goldstein, Appleton, & Thomson, 2003).

## METHOD

### Participants

As part of a larger, ongoing study to develop norms for and establish psychometric properties of the MRCI–II (Condie et al., 2003), the revised version of the *Instruments for Assessing Understanding and Appreciation of Miranda Rights* (Grisso, 1998), data were collected from 57 boys in a residential postadjudication facility in Massachusetts between October 1999 and August 2000. Ages ranged from 13 to 18 years ( $M = 16.3$ ,  $SD = 1.3$ ). The ethnicity breakdown was 34.5% White, 21.8% Latino, 14.5% African American, and 5.5% Asian; 21.8% identified as another ethnicity, and one youth did not provide information about his ethnicity. All youth were fluent in English; one adolescent spoke Spanish as his primary language. Juveniles' self-reported

delinquent offenses ranged from curfew violations to attempted murder. Other crimes for which juveniles frequently reported they were arrested included armed robbery, breaking and entering, and drug possession.

The Massachusetts Department of Youth Services provided participation consent for all youth in the postadjudication facility at which the research was conducted. Parents were also contacted by mail and invited to deny participation. Furthermore, assent was obtained from all youth participants. No parents denied participation, and all youth agreed to participate. Youth were thanked for their participation with a \$20 gift certificate to a music store that could be used postrelease. Two youth were withdrawn from the study because they were transferred out of the facility before data collection was completed. Thus, results of this study are based on data from the 55 youth [who] completed all measures.

## Measures

The five instruments included in the MRCI-II (Condie et al., 2003) are as follows:

*Comprehension of Miranda Rights-II (CMR-II).* This instrument assesses adolescents' understanding of a standard *Miranda* warning by asking them to explain the meaning of each specified right in their own words. Total CMR-II scores range from 0 to 10 points. Responses are rated according to standardized scoring criteria to determine if youths' responses are *adequate*, *questionable*, or *inadequate*, with corresponding scores of 2, 1, or 0, respectively. Scoring criteria were developed for the original instruments by a national panel of lawyers and psychologists (Grisso, 1998). CMR-II scoring for the additional prong of the *Miranda* warning paralleled the original, and warnings reviewed the updated scoring criteria. A Pearson correlation established a test-retest reliability of .61 (Mesiarik, Goldstein, & Thomson, 2002).

*Comprehension of Miranda Rights-Recognition-II (CMR-R-II).* This instrument assesses adolescents' understanding of each *Miranda* warning without reliance on verbal expression skills. The examinee is presented with a series of three preconstructed sentences for each of the five *Miranda* warnings. The examinee is then asked to determine whether each sentence is semantically identical to the corresponding sentence of the *Miranda* warning. Correct responses are awarded one point each, and incorrect responses are awarded zero points. Total CMR-R-II scores range from zero to 15 (a possible three points per warning). Test-retest reliability was established,  $r = .75$  (Mesiarik et al., 2002).

*Function of Rights in Interrogation (FRI).* This instrument remains identical to that included in Grisso's [1998] *Instruments for Assessing Understanding and Appreciation of Miranda Rights*. The FRI assesses the examinee's appreciation of the significance of *Miranda* rights in interrogation situations and legal proceedings. The examinee is presented with four drawn pictures and corresponding scenarios related to legal processes (e.g., a picture of a boy in a room with two police officers is accompanied by a story about a suspect being questioned about a recent crime). The examinee is then asked 15 standardized questions to assess appreciation of the significance of the warnings in three areas: recognition of the nature of interrogation (NI subscale), significance of the right to counsel (RC subscale), and significance of the right to silence (RS subscale). Scoring procedures are identical to those of the CMR-II, and total scores range from 0 to 30. A Pearson correlation of .58 was found for test-retest reliability (Mesiarik et al., 2002).

*Comprehension of Miranda Vocabulary-II (CMV-II).* This instrument assesses adolescents' understanding of legally relevant vocabulary words frequently used in *Miranda* warnings across U.S. jurisdictions. While the examinee



views a list of words, the examiner reads each word aloud, uses it in a sentence, and reads it aloud again. The examinee is then asked to define the term. For the MRCI-II, 12 words were added to Grisso's original 6 to promote the utility of the instruments throughout the United States. Scores range from 0 to 36. Methods of scoring each item are identical to those of the CMR-II and FRI. As with the CMR-II, scoring of new items paralleled Grisso's original, and the scoring criteria were reviewed by a panel of experts prior to use. A test-retest correlation coefficient of .77 was found for this instrument (Mesiarik et al., 2002).

*Perceptions of Coercion During Holding and Interrogation Process (P-CHIP).* Designed to supplement the revised instruments, the P-CHIP assesses examinees' self-reported likelihood of offering true and false confessions during hypothetical holding and interrogation procedures. The examiner reads a scenario aloud to the individual about a boy who reports to the police that he was mugged by an individual of the examinee's age and gender; the examinee is asked to pretend that he is the suspect. The examiner then adds hypothetical situations about police behavior to the original scenario. Following each hypothetical situation, the examiner asks for ratings about the youth's probable discussions with police if he did commit the alleged offense, his stress level if he is guilty, and his probability of offering a confession if he did not commit the crimes of which he is accused. The scenarios that are presented to the examinee are based on guidelines for interrogation tactics recommended in the police training manual *Criminal Interrogations and Confessions* (Inbau, Reid, & Buckley, 1986). These scenarios include positive pressure items (e.g., police officers express sympathy and understanding to elicit a confession), negative pressure items (e.g., police officers use intimidating tactics to persuade the youth to confess), and parental pressure items (e.g., police persuade the youth that his parents will be proud if he confesses).

The scoring criteria for the P-CHIP are composed of three subscales. For each subscale, a scenario is read aloud by the examiner, and the

examinee is asked to choose a response to each of the 26 items describing police behaviors. The first subscale is designed to assess the response to police questioning if the suspect is guilty of the alleged offense. Three options are provided: Say nothing to the police (0 points), talk to the police but not about the crime (1 point), or talk to the police about the crime (2 points). Total scores range from 0 to 52. For the second subscale, scoring is based on a rating of stress level in response to the 26 specified police behaviors. Item scores range from 1 (*very stressed*) to 6 (*very relaxed*), and total scores range from 26 to 156. For the third subscale, scores are based on the examinee's self-reported likelihood of offering false confessions in a variety of police interrogation situations. Scores for each item range from 1 (*will definitely falsely confess*) to 6 (*will definitely not offer a false confession*), and total scores range from 26 to 156. For the purposes of data analysis, the stress and false confession subscores were reverse scored so that higher scores represent more stress and greater self-reported likelihood of false confessing.

Stability of the P-CHIP was established using Pearson correlations for test-retest for each subscale. The subscale measuring responses to police questioning if the suspect is guilty had a correlation of .76, the stress subscale had a correlation of .71, and the false confession subscale had a correlation of .77 (Mesiarik et al., 2002).

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## EVALUATION OF MRCI-II SCORES

For clinical purposes, scores on the five MRCI-II instruments should be evaluated separately as each instrument is designed to measure a different facet of understanding and appreciation. Youths' scores on each scale can be judged against either an absolute standard or a relative standard to determine the level of understanding and appreciation of *Miranda* rights.

As described by Grisso (1981), to meet a minimal absolute standard of understanding,



juveniles may not have inadequate understanding of any prongs of the *Miranda* warning (i.e., no zero-point responses on a particular measure, such as the CMR-II). To meet a somewhat higher absolute standard of understanding, juveniles must have adequate understanding of each *Miranda* warning prong (i.e., 2-point responses on each item of a particular measure, such as the CMR-II). In contrast to the absolute standards that assume a requisite level of basic comprehension, the relative standard compares juveniles' scores to the adult level of understanding of *Miranda* rights, which, frequently, is less than perfect (Grisso, 1981).

## Procedure

Adolescents completed a demographics survey and the following three instruments: (a) verbal scales of the Wechsler Abbreviated Scale of Intelligence (WASI) (Psychological Corporation, 1999), (b) verbal scales of the Wechsler Individual Achievement Test (WIAT) (Psychological Corporation, 1992), and (c) the MRCI-II. Verbal scales were used because verbal IQ tends to be a good representation of overall IQ (Wechsler, 1997), and IQ and verbal skills are theoretically more relevant to *Miranda* comprehension and false confessions than are performance abilities and math achievement.

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## RESULTS

### Miranda Comprehension

Male juvenile offenders in this study produced a mean verbal IQ score of 83 ( $SD = 13.57$ ) and an average overall *Miranda* comprehension score of 1.6 ( $SD = .29$ ), with *Miranda* comprehension ranging from 0 (*no understanding*) to 2 (*full understanding*).

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Controlling for age, higher IQ predicted better *Miranda* comprehension among adolescent delinquent boys.

Although analysis of variance (ANOVA) revealed no overall significant differences in *Miranda* comprehension among the various ethnic groups in the study,  $F(4, 49) = 2.40, p = .06$ , planned comparison results revealed that the overall *Miranda* rights comprehension scores were significantly higher for African American youth ( $M = 1.73, SD = .07$ ) than they were for Latino youth ( $M = 1.38, SD = .35$ ),  $t(12.4) = 3.33$  (homogeneity of variance not assumed),  $p < .01$ . No significant differences were found among the other ethnic groups.

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### Self-Reported Likelihood of Offering False Confessions

Rates of self-reported likelihood of false confessions revealed that 42% of male juvenile offenders reported they were leaning toward giving a false confession in at least 1 of the 26 hypothetical police interrogation situations. Twenty-five percent reported they would definitely give a false confession in at least one hypothetical situation. For this male juvenile offender sample, confession scores ranged from 36 to 156 (i.e., higher scores represent greater self-reported likelihood of falsely confessing).

*Miranda* comprehension correlated negatively with false confessions—the better the comprehension, the less likely youth were to report they would falsely confess,  $r = .34, p = .01$ .

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## DISCUSSION

Results of this study suggest that adolescent male offenders' *Miranda* comprehension in the early 21st century is similar to the levels of understanding of delinquent boys in the 1970s.

Despite speculation that youth are more knowledgeable about police interactions and *Miranda* rights than children were 3 decades ago, this research suggests that adolescents' *Miranda* comprehension has not significantly improved over time. This continuity across generations suggests that *Miranda* comprehension may be a developmental skill beyond the capacity of young adolescents. In addition, consistent with earlier findings, age and IQ are still the primary predictors of *Miranda* comprehension; older youths were generally better able to understand the *Miranda* warnings than were younger youths, and juveniles with higher IQ scores demonstrated better comprehension than those with lower IQs. Special education enrollment also was related to *Miranda* comprehension. Compared with Grisso's (1981) findings, youth continue to exhibit similar misunderstandings of their rights. Like adolescents three decades ago, juveniles frequently misunderstood that they were entitled to consult with an attorney before interrogation and to have an attorney present during interrogation. Furthermore, similar percentages of youth mistakenly believed that lawyers only protect the innocent and that the right to silence can be revoked at a later date by a judge. The two most commonly misunderstood vocabulary words at both time points were "interrogation" and "consult." Juveniles understood the former to be analogous with a court hearing, and youth often failed to understand the advisory purpose of "consultation," describing it as a simple conversation instead. Thus, despite increased exposure to the *Miranda* warnings from depictions in television and movies, juvenile offenders today understand their rights in much the same way adolescents did generations ago. Therefore, mere exposure to the rights appears to be an inadequate method of promoting the legal protections of youth. It should be noted, however, that those most frequently misunderstood words appearing in the more complicated versions of the *Miranda* warning, so their relationship to overall comprehension might not be relevant in some jurisdictions. The updated version of the vocabulary

test includes a span of simple and complex words appearing in warnings to increase the likelihood that words in the instruments are relevant to a broad range of jurisdictions.

The P-CHIP does not assess a suspect's actual likelihood of falsely confessing to a crime, but results suggest that there is considerable danger of youth offering false confessions to police during hypothetical holding and interrogation procedures. Interestingly, only age was found to be a significant predictor of self-reported likelihood of falsely confessing; *Miranda* comprehension was not independently related. One explanation for this finding may be that younger children are more prone to suggestibility (Gudjonsson & Singh, 1984), but there may be a more general developmental feature of acquiescence to authority that would increase the probability of offering a false confession.

## Original Versus Revised Instruments

Similar findings from the research conducted in the 1970s and the current study suggest that until the MRCI-II is released, the original *Instruments for Assessing Understanding and Appreciation of Miranda Rights* continues to offer critical insight into juvenile defendants' capacity to waive rights. However, revisions made to the original instruments in the MRCI-II have increased their utility with today's warnings and their generalizability across jurisdictions.

The simplification of the language of the *Miranda* warnings in the revised instruments and the addition of the fifth *Miranda* prong to all of the relevant instruments provide norms that are appropriate for a broader range of jurisdictions. Likewise, because the warnings in the MRCI-II are more similar to the actual warnings administered in most jurisdictions, forensic evaluators should find better generalization of the test results to true capacity to waive rights.

Considering that juvenile offenders are at increased risk of offering false confessions (Richardson et al., 1995), the newly added P-CHIP is an essential component of the assessment

instruments. This study represents the first published research on this instrument. Should further research establish its validity, the P-CHIP would serve as the first assessment tool to directly assess youths' likelihood of offering false confessions. Furthermore, as Grisso's instruments assessed the knowing and intelligent requirements for a valid waiver, the P-CHIP would be the first instrument to directly tap into the voluntariness construct.

## Limitations of Research Findings

Although results of this study may contribute valuable information to forensic evaluators and policy makers interested in juveniles' capacity to waive *Miranda* rights, there are several limitations of this study. First, participants were juvenile offenders in a postadjudication facility and, therefore, had already been through legal hearings and experienced the serious consequences of being sent to a secure facility. As a result, participants may have learned about their rights during their talks with attorneys or during their hearings. In addition, youth who confessed to crimes and were adjudicated delinquent and sent to the facility may have learned that information they provided to police was used against them in court. Thus, data from this study may represent an overestimate of preadjudicated youths' *Miranda* rights comprehension, the population for which *Miranda* evaluations are most critical. For the same reasons, the data may represent an underestimate of preadjudicated youths' likelihood of falsely confessing to a crime. However, results of Grisso's (1981) studies and the current study consistently demonstrated that, overall, juveniles' *Miranda* comprehension does not improve as youths acquire greater experience with the justice system. Similarly, we found that juveniles' self-reported likelihood of offering a false confession did not decrease with an increase in the number of occasions on which they said police read them the *Miranda* warnings. Thus, the findings from this study probably apply to preadjudicated youth. The additional testing that is part of the ongoing multistate study will confirm

that assumption, as the majority of participants are preadjudicated youth.

Another potential limitation of the current study is that only male juvenile offenders served as participants in this study. Consequently, results may not be generalizable to adolescent girls in the juvenile justice system. Grisso (1981), in his original research, however, found no gender differences in juveniles' *Miranda* comprehension. Again, the ongoing, multistate study involves female juvenile offender participants, and results should reveal whether the lack of gender difference is consistent across 3 decades. We speculate that although a gender difference will not exist for *Miranda* comprehension, female delinquents will be more suggestible than male delinquents and will, therefore, be more likely to say they would falsely confess to a crime under police pressure.

Another limitation of the study is the use of verbal IQ as a measure of overall IQ. Certainly, there are many aspects of intelligence other than verbal IQ that may be necessary for understanding, appreciating, and asserting *Miranda* rights, such as problem-solving abilities and memory. Such skills were not assessed during this study because of time limitations for administering instruments. However, future studies should assess other aspects of intelligence as well as other skills that may affect *Miranda* decision making, such as ability to inhibit responses. Because the P-CHIP is a new instrument, its validity has not been established. It is unclear whether youth behave as they say they would in actual interrogation situations. Consequently, assessment data on self-reported likelihood of offering false confessions should be interpreted with caution until further data are collected. Research also has suggested that stressful situations may heighten suggestibility and increase a youthful offender's likelihood of falsely confessing to a crime (Gudjonsson & Singh, 1984; Richardson et al., 1995). Given that a research study is far less stressful than a true police interrogation, juveniles' P-CHIP scores may underestimate their actual likelihood of offering false confessions.



## Research and Policy Implications

The results of this study have implications for courts determining juveniles' capacities to waive *Miranda* rights and offer valid and admissible confessions. Age and IQ are two of the most common factors courts use in weighing the "totality of the circumstances," and this research supports the continued use of these factors in decision making. Similarly, courts consider academic history as part of the totality of the circumstances surrounding the validity of a *Miranda* waiver. The current study provides the first findings that examination of special education status is important when evaluating *Miranda* comprehension.

If the results of the multistate extension of this study are consistent with the results obtained from this sample of male juvenile offenders, public policy reform may be needed to obtain valid confessions from adolescents, particularly those below age 16 with low IQs. To promote the validity of waivers, many states have introduced an "interested adult" rule, requiring that a

suspect below a specified age have an opportunity to consult a parent, guardian, or other interested adult party prior to or during interrogation. However, research suggested that this policy has failed to fulfill its goal, as parents present during interrogations rarely helped their children understand or assert their rights. Furthermore, parents who did guide their children during interrogations, frequently persuaded them to confess to crimes (Grisso, 1981). Should policy makers truly wish to guarantee that juveniles' confessions are valid, it would be ideal for all youth under the age of 15 or 16 to have an attorney present during interrogation. However, many police departments might object to this policy recommendation because of their goal of crime solving. Consequently, a potential alternative that would decrease the likelihood of invalid waivers and promote the probability of confessions' admissibility involves the brief, structured assessment of *Miranda* comprehension prior to interrogation.

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## **UNIT 3**

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# **CRIMINAL AND DELINQUENT BEHAVIOR**

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## INTRODUCTION AND COMMENTARY

**E**xplanations (or theories) of juvenile delinquency, and criminal behavior range from those that are individually based to those that indict the broad society in which the individual is imbedded. At one pole are biologically based explanations—such as those related to primary psychopathy. At the midpoint of the continuum we find those theories that consider multiple individual and social influences on a person's behavior, such as the theories focusing on families and peers. At the other pole are theories that reject individual differences and place the blame for crime on society at large, such as those that suggest that a capitalist society encourages those who hold power to commit crimes (e.g., political crimes or corporate crimes).

Most of the readings in this section were selected to represent crimes or psychologically based theories that have received considerable attention in the psychological literature. We begin the section, though, with an article by Michael Aamodt that urges caution in approaching common beliefs about crimes and offenders. In down-to-earth language (e.g., "People are clueless..."), the author discusses many of the myths surrounding such topics as serial killers, workplace violence, typologies, and police suicides and proposes four principles for reducing the frequency of inaccurate beliefs. Toward the end of the article, the author also makes an important point about the value of meta-analyses to research in criminology.

No readings thus far have focused on the topic of illegal drugs. Their distribution and use are of concern because of the harm they can perpetrate (e.g., self-destruction of the user; violence associated with drug cartels). The topic is controversial in many contexts. Numerous people argue that substance abuse should be treated as a health issue, not a crime issue. It is also argued that "wars on drugs" are hypocritical and have been waged primarily against the impoverished. In the next selection, Elena Pope and Michelle Shuldice discuss still another aspect: substance use and abuse in the context of acquaintance rape. The authors, both physicians, have written an informative review of the properties and effects of these "date-rape drugs," which not only decrease resistance but also impair the victim's memory of the event. However, their presence in the victim is difficult to detect, and specific tests must be requested. The authors thus provide helpful information not only for potential victims but also for investigators.

Like acquaintance rape, a crime that has received considerable recent attention is stalking. Defining this illegal behavior presents unique challenges, however. In addition, the perceptions of the stalking target are crucial. The selection by Lorraine Phillips and colleagues focuses on this important aspect. The researchers conducted two experiments that examined how college students, male and female, perceived behavior described in a variety of vignettes.



They wondered whether the perception of stalking was affected by such variables as the gender of the perpetrator and the target, past experiences with stalking, and the relationship between the stalker and the target. Some gender effects were found, with women in one study being somewhat more likely than men to perceive behavior as stalking. However, there were several unanticipated findings as well.

In the next selection, we move from discussion of specific crimes to characteristics of some perpetrators, specifically criminal psychopaths. Robert D. Hare, arguably the foremost contemporary researcher and expert on psychopathy, reviews what psychology has learned about this rare phenomenon. Psychopaths—who are believed to comprise between 11% and 25% of the prison population, depending upon the study—are extremely resistant to treatment, but they often play the treatment game quite well. Hare's article is part literature review and part personal recollection of a struggle to have psychopathy recognized, accepted, accurately diagnosed, and understood.

Those who offend against children are the topic of the next article by Robert Prentky and his colleagues. They summarize research findings on child sexual molestation, including its frequency and characteristics of the offenders, such as their social competence and the developmental influences on their adult behavior. For example, research has found that caregiver inconstancy—frequent changes in a child's primary caregiver—is a powerful predictor of sexual violence as well as attachment disorder in adulthood.

All sex offenders are not alike, a finding made very clear in this reading. Even within a category of these offenders, there are important differences.

Thus, the article outlines systems for the classification of child molesters, including the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) (*DSM-IV*) classification and the heavily researched model developed by the Massachusetts Treatment Center, the MTC:CM3. There is also discussion of the various approaches to sex offender treatment and the methods of assessing risk of future offending.

The final article in this section, by John Paul Wright and Danielle Boisvert, draws attention to the growing field of biosocial criminology, a research and theoretical specialization that revisits the relation between biology and crime but in a modern, more academically sophisticated light. The authors assert that the many theories and perspectives in criminology do not adequately take into account research that sheds light on why juveniles and adults under similar social and economic situations, and sometimes even within the same family, display varying degrees of serious antisocial behavior. Here is another article likely to produce spirited discussion, particularly among sociologically oriented criminology students. Nevertheless, the authors end their article with policy implications (e.g., reduce lead in the environment) to which few criminologists would object.

As a group, these readings represent either cutting-edge theory in criminal psychology (e.g., psychopathy, biocriminology) or crimes that are serious, widespread, and often resistant to efforts at prevention and prosecution (e.g., acquaintance rape, stalking, and child sexual assault). They will likely continue to capture the research attention and theory building efforts of criminal psychologists.

# REDUCING MISCONCEPTIONS AND FALSE BELIEFS IN POLICE AND CRIMINAL PSYCHOLOGY\*

MICHAEL G. AAMODT

**A**lthough certainly not alone, the field of police and criminal psychology seems to be an area that is highly susceptible to beliefs for which there is no empirical basis (Honig, 2007; Walker, 1989). Whether it is the notion that police have higher suicide and divorce rates or that crime rates greatly increase during a full moon, there are many commonly held beliefs that are not supported by scientific evidence (Kappeler, Blumberg, & Potter, 2000; Kelly, Rotton, & Culver, 1986). Perhaps more disturbing is that not only are many of these beliefs not based on an empirical source but many are perpetuated in spite of evidence to the contrary.

Identifying these misconceptions is important as they can result in the waste of human and financial resources. For example, as will be discussed in greater detail later in this article, a

common belief is that police officers have much higher suicide rates than the population in general. As a result of this belief, the Federal Bureau of Investigation (FBI) held a 3-day conference in 1999 to discuss this issue and to develop law enforcement-specific interventions to address the problem of high suicide rates in law enforcement. During the conference, it was determined that suicide rates for law enforcement were actually lower than that of the general population and that law enforcement personnel commit suicide for the same reasons as the general public. Thus, time and effort spent on law enforcement-specific interventions would likely not be successful (Violanti, 2007).

Another example of a problematic misconception is the confidence that law enforcement place in their ability to detect deception (DePaulo & Pfeifer, 1986; Vrij, 2000). As will be discussed

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later in this article, meta-analytic results are clear that such a belief is not supported by research (Aamodt & Custer, 2006). Allowing such a belief to perpetuate could result in officers placing too much confidence in their judgments with regard to whether a suspect or witness is telling the truth, potentially compromising the effectiveness of an investigation (Vrij & Mann, 2001).

Over the past several years, my students and I have conducted research to investigate the accuracy of some common beliefs in police and criminal psychology. In this article, I will discuss some of this research and propose four principles that, if considered, might reduce the frequency of inaccurate beliefs in police and criminal psychology. Prior to discussing these principles, it is important to distinguish between the two types of beliefs that will be presented in this article: beliefs that are held despite research indicating they are wrong (e.g., police suicide rates) and beliefs that might actually be valid but are based on “studies” that do not actually exist (e.g., more police officers die from suicide than die in the line of duty).

## **PRINCIPLE 1: FIND THE ORIGINAL SOURCE**

A major source of misinformation in police and criminal psychology is the use of secondary sources, a practice that most likely has greatly increased in recent years due to the availability of information on the Internet. There are two major problems in relying on secondary sources: the actual existence of a primary source and the accuracy of the information cited in the secondary source.

### **The Existence of a Primary Source**

There are many examples in police and criminal psychology in which secondary sources cite other secondary sources concerning a primary source that never existed. An excellent example of such a situation is the often-cited profile of the employee who “goes berserk” and engages in workplace violence.

Many sources over the past 15 years have provided the profile of a White male in his 40s, often citing reports by the National Institute for Occupational Safety and Health (NIOSH) as the source of this information. The problem with citing such a profile is that prior to 2002, the NIOSH profile included all perpetrators of workplace violence, the majority of which were individuals who killed employees while in the process of committing a crime such as robbery. Thus, because the NIOSH profile did not separate the types of people who commit workplace violence (e.g., criminals, current employees, disgruntled customers, jilted lovers), we do not know if the profile is accurate of the employee who goes berserk or merely reflects the profile of a criminal who kills in the process of committing another type of crime.

An extensive search for a primary source prior to 2002 not only failed to find the primary source relied on by many writers but also found that only 44% of employees who commit workplace homicide fit the profile of a White male in his 40s (Glotz, 2007). Although one could argue that such a percentage supports the profile, as census data indicate that only 9% of the U.S. population are White males in their 40s (Glotz, 2007), the important point is that this profile was commonly cited, although there was no actual source for the profile.

Another example of a nonexistent primary source is the often-cited “finding” that police officers are much more likely than the general public to get divorced. Quotes from Internet sites include the following:

- Surveys of police officers continually reflect estimates of divorce rates as high as 75%.
- Police officers . . . have a high divorce rate, about second in the nation.
- Compared to national averages, police officers have been reported to have . . . double the divorce rate.
- Police officers, for example, face divorce rates averaging between 66% and 75%.
- The police profession has the highest rates of divorce, alcoholism, domestic violence, and suicides.



Although Web sites are consistent in their reports of the high divorce rates, with some actually attributing the source of the divorce rates to “surveys,” none actually cites the primary source from which these statistics originated. Our search of the literature was unable to find any original source that supports the 66%, 75%, or “double the national average” rates. After a qualitative review of the literature, Kappeler et al. (2000) concluded that the high divorce rate for police is based on myth. Furthermore, our analysis of the 2000 census data indicates that the divorce/separation rate for police officers is well below the national average (McCoy & Aamodt, 2008).

A third example is the belief that the majority of police officers die within 5 years after retirement (Honig, 2007). This statistic is used to support intervention programs for retired police officers. Although cited less often than many of the other misconceptions discussed in this article (I personally have heard this statistic twice at conferences), it is equally as perplexing, and I could not find the original source for this belief. It is not surprising that it appears that this belief is not valid, as data from two retirement systems (Arizona Public Safety and Los Angeles County Employees) indicate that male police officers who retire at age 55 live an average of 24 additional years, and female officers live an average of 29 additional years (Honig, 2007).

## **The Loss of Information Across Secondary Sources**

A problem with relying on secondary sources is that one cannot be sure if the information in a secondary source accurately reflects the information in the primary source. Two excellent examples in the field of psychology of this lack of accuracy are the use of the “little Albert” story to demonstrate the role of classical conditioning in learning phobias and the use of the “Kitty Genovese” story to demonstrate the lack of bystander intervention. In reviews of the accuracy of textbook information, Harris (1979) found many errors in the secondary accounts of little Albert,

as did Manning, Levine, and Collins (2007) with what really happened to Kitty Genovese. For example, Harris found that two texts indicated that little Albert was conditioned to fear a rabbit rather than a rat; many texts incorrectly included such postconditioning stimuli as a teddy bear, a white furry glove, a fur pelt, a cat, and Albert’s aunt; and three texts described how Watson removed little Albert’s fear of the rat, although no such reconditioning was actually done.

Manning and her colleagues (2007) compared the myth of the attack of Genovese to what actually happened and found numerous discrepancies between the story and the reality. For example, most textbooks as well as an early newspaper article mention the 38 witnesses who saw the attack yet did nothing to help. Not only is there no evidence that there were 38 eyewitnesses but at least 2 of the witnesses took action and called the police.

## **PRINCIPLE 2: COMPARE APPLES WITH APPLES**

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### **Police Officer Suicide**

Some of the misconceptions in police psychology seem to be the result of comparing statistics with the wrong comparison group. An example of this practice is the belief that suicide rates for police officers are much higher than those of the general population. The genesis of this belief probably goes back to the 1995 Fraternal Order of Police (FOP) study of insurance claims by 92 local FOP chapters that found that the suicide rate for police officers was 22 per 100,000 compared with 12 per 100,000 in the general population. Since that study, authors and media sources have frequently reported the following:

- Police officers commit suicide at twice the rate of the general population.
- More police officers commit suicide than are killed in the line of duty.
- [Three hundred] officers commit suicide each year.

- Police officers are almost always high on the list of suicide groups.
- Police suicide is an epidemic.
- Twice as many cops commit suicide as are killed in the line of duty.
- Three times as many police officers commit suicide than are killed in the line of duty.

Let's explore the science behind these beliefs. In 1999, the FBI held a conference to discuss suicide and law enforcement and subsequently published an edited series of papers on that topic (Sheehan & Warren, 2001). At this conference, Aamodt and Stalnaker (2001) presented the results of a meta-analysis of police suicide studies. The meta-analysis indicated that at first glance the suicide rate of police officers at 18.1 per 100,000 was indeed higher than the population rate of 11.7.

Comparing the suicide rate of law enforcement personnel with the general population, however, violates the principle of comparing apples with apples. Compared with the general population, police officers in the United States are more likely to be White, male, and between the ages of 25 and 54. In the general U.S. population, suicide rates are higher in men than in women, Whites than African Americans, and people between the ages of 25 and 54 than in younger or older individuals. As shown in Table [7.1], the suicide rate for the population of individuals in the United States comparable with those in law enforcement is 21.89. When the

suicide rate of police officers (18.1 [as reported by Aamodt & Stalnaker, 2001]) is compared with the 21.89 rate for a comparable demographic population, it appears that police officers have a lower rate of suicide than the population. The proportionate mortality ratio (rate for law enforcement/rate of the general population) is 82.69 when apples are compared with apples versus 152 when the officers are improperly compared with the rate in the general population. These findings were replicated in a subsequent meta-analysis by Loo (2003).

If we use these data to look at the assertion that more police officers commit suicide than are killed in the line of duty, we again find a lack of support for a commonly held belief. Data collected by the Officer Down Memorial Page, Inc. (n.d.), indicate that an average of 160 officers died each year in the line of duty between the years 2002 and 2007. According to U.S. Department of Justice (n.d.-b) figures, there were 836,787 law enforcement personnel in 2004 (731,903 state and local; 104,884 federal). Multiplying the law enforcement suicide rate (18.1 per 100,000) by the number of law enforcement personnel results in an estimate of approximately 152 law enforcement suicides per year. Although these estimates do not support the belief that more officers commit suicide than are killed in the line of duty, the statistics are close enough to support the notion that suicide is certainly a problem in the law enforcement community, although no more of a problem than in the population in general.

**Table 7.1** Expected Law Enforcement Suicide Rate for Ages 25 to 54

| <i>Race/Gender</i> | <i>Suicide Rate</i> | <i>% in Law Enforcement</i> | <i>Adjusted Rate</i> |
|--------------------|---------------------|-----------------------------|----------------------|
| White/male         | 26.6                | 72.1                        | 18.46                |
| White/female       | 6.3                 | 8.9                         | 0.56                 |
| Black/male         | 13.5                | 16.9                        | 2.28                 |
| Black/female       | 2.9                 | 2.1                         | 0.61                 |
| Total              |                     |                             | 21.89                |

One could certainly quibble with some of the data [just] provided. Suicide rates are merely estimates, as there are financial and emotional reasons for not reporting a death as a suicide. With that said, until research indicates that underreporting of suicide is more prevalent in the law enforcement community than in the general population, the notion of comparatively high suicide rates for law enforcement personnel is not supported by the data.

## The Race and Sex of Serial Killers

Serial killers are commonly profiled in the media as being White males in their mid- to late 20s. The racial component of this profile seems reasonable, as 73.9% of serial killers in the United States are White (Aamodt et al., 2007). As shown in Table 7.2, however, when the percentage of White serial killers from 1980 to 2000 is compared with the percentages of Whites in the U.S. population during the same period, the belief that serial killing is a “White thing” is only supported because there are more Whites in the U.S. population than other racial or ethnic groups. When comparing apples with apples, the race of serial killers seems to mirror that of the U.S. population.

In looking at the sex of serial killers, our data indicate that 10.1% of serial killers are women (Aamodt et al., 2007), and data from a smaller

database of 399 serial killers indicate that 15.5% of serial killers are women (Hickey, 1997). Again, this percentage initially seems to support the commonly held profile of serial killers. But, when we compare this percentage with the percentage of homicides that were committed by women between 1976 and 2005 (11.2%; U.S. Department of Justice, n.d.-a), we see that although men are much more likely than women to commit homicide, once women have killed, they are as likely as men to kill again. Thus, homicide may be a “man thing,” but serial killing, *per se*, is not.

It is important that the reader not interpret [these] findings as a condemnation of the criminal profiling performed by trained professionals who take into consideration extensive crime scene information when developing profiles. Instead, our research provides an example that criminal behavior is complicated, and simple profiles can be misleading. Furthermore, it should also be noted that the [previous] analysis of serial killers was based on a serial killer’s being defined as a person who kills at least three people, representing three or more separate events, with a cooling-off period between the murders. Further research is needed to determine specific demographic profiles for the various types of serial killers, such as the typology proposed by Lane and Gregg (1992; e.g., visionaries, missionaries, lust, thrill, gain, and power).

The Glotz (2007) study on workplace violence provides another example of the need to compare apples with apples—in this case, profile percentages with census data. Glotz found that 50% of employees committing workplace violence were White, and the Bureau of Labor Statistics (BLS) (2005) reported that 52% of employees committing workplace violence were White. When these percentages are compared with census data indicating that 76% of the U.S. population is White, it would appear that Whites are actually underrepresented in employees who commit workplace violence. Likewise, BLS data indicate that 80% of employees committing

**Table 7.2** Race of Serial Killers in the United States (1980–2006; in percentages)

| <i>Race</i> | <i>U.S. Serial Killers</i> | <i>1980, 1990, 2000 Census</i> |
|-------------|----------------------------|--------------------------------|
| White       | 72.82                      | 74.40                          |
| Black       | 21.33                      | 11.95                          |
| Hispanic    | 5.13                       | 9.55                           |
| Asian       | 0.72                       | 2.81                           |



workplace violence are men, a figure well above the 50% figure reported by the U.S. Census Bureau for the U.S. population as a whole.

### PRINCIPLE 3: THINGS ARE ALWAYS MORE COMPLICATED THAN THEY SEEM

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In issues related to police and criminal psychology, it seems that people want simple answers and the media are happy to oblige this desire. It is unfortunate that there are few things in police and criminal psychology, or in life for that matter, that are simple. A good example of this need for simplicity occurred with the D.C. snipers (Lee Malvo and John Muhammad) in 2002. Many criminology experts were quoted in the media as profiling the unknown serial killers as White males in their mid- to late 20s—a profile, as mentioned previously, that is commonly thought to be true of serial killers. As it turned out, both snipers were Black men, and one was 41 years old and the other 17. Had we paid attention to Principle 3, we would not have been surprised that such a simple profile was so off target.

In viewing the data on 1,237 U.S. serial killers contained in the Radford University Serial Killer Database (Aamodt et al., 2007), at first glance, the common serial killer profile appears to be accurate, as 74.1% of serial killers are White, 89.9% are men, and the median age of a killer at the start of the series is 27.0. These figures are similar to those reported in earlier, smaller databases (e.g., Gorby, 2000; Hickey, 1997). If, however, we start to combine these demographics, our profile falls apart. When sex and race are combined, 65% of serial killers are White men. When we add age to the mix, only 18.2% are White men in their mid- to late 20s (ages 24–29). So, the commonly held profile of serial killers would correctly match only 18% of serial killers!

Another example is the IQ of serial killers. The media often portray serial killers as being above average in intelligence, often citing them

as being very high in intelligence. The following are examples from the Internet and news reports:

- Most serial killers actually are more intelligent than average.
- They . . . are often intelligent underachievers.
- They tend to be intelligent.
- Many serial killers have above average intelligence.
- Serial killers are generally intelligent.

Such portrayals are probably due to the media's focusing on high-profile serial killers such as Ted Bundy or on mythical serial killers such as Hannibal Lecter in *Silence of the Lambs*. Using the data on the IQs of 95 serial killers (Aamodt et al., 2007), we find that the mean IQ is 103 and the median is 102—figures that place serial killers in the average range of intelligence. Similar averages were found in a study of 29 German serial killers ( $M = 100.5$ ; Snook, Cullen, Mokros, & Harbort, 2005).

But, as one would expect from Principle 3, serial killer IQ is complicated and depends on several factors. For example, our data indicate that serial killers who rape their victims have lower IQs ( $M = 98.6$ ) than do serial killers who do not rape their victims ( $M = 107.2$ ). Likewise, serial killers who used a personal method of killing their victims (e.g., strangle, suffocate, or stab) had lower IQs ( $M = 100.4$ ) than did serial killers using more impersonal methods such as guns, bombs, and poison ( $M = 108.6$ ). Another example of the complexity of serial killer IQ can be found in Snook et al. (2005), who demonstrated that the home-to-crime distance of German serial killers was greater for more intelligent serial killers than for less intelligent serial killers.

### PRINCIPLE 4: PEOPLE ARE CLUELESS

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Many of the misconceptions we have in the field of police and criminal psychology come from a belief that humans are good at making judgments about others and that people in the field of police

and criminal psychology are better at making certain types of judgments than are others. It is not surprising that the research does not support such a view.

## Detecting Deception

As mentioned previously, law enforcement personnel are more confident in their ability to detect deception than is the general public (Vrij, 2000), a belief that initially seems reasonable given the constant opportunity to talk with citizens and criminals who may be deceptive or might be displaying the wide range of emotions experienced by victims of crimes or critical incidents. The research, however, indicates that when it comes to detecting deception, the law enforcement community is no better than the rest of the world. Meta-analyses have shown that in general, accuracy in detecting deception (54%) is barely above chance levels, "professional lie detectors" such as detectives and police officers are no more accurate (55.51%) than the general public, and individual difference variables such as gender, experience, age, and confidence are not related to accuracy in detecting deception (Aamodt & Custer, 2006; Bond & DePaulo, 2006). Although the results of individual studies might suggest that certain groups (e.g., parole officers, teachers) are better at detecting deception than others, when the same video clips of deception are used across samples, groups such as police officers, teachers, parole officers, and criminals detect deception at the same low levels (Calcaño, Keen, Storey, Costello, & Aamodt, 2006).

## Predicting Employee Success

This lack of ability to read people is certainly not limited to detecting deception or to law enforcement personnel. Indeed, psychologists also show this lack of ability to read people and make accurate judgments in the field of police psychology. Our meta-analyses and research indicate that judgments from clinical interviews

do not predict police performance, clinical interpretations of test profiles do not predict police performance, and the addition of a clinical interview to a battery of tests might actually decrease the accuracy of prediction (Aamodt, 2004; Baczynska, 2005).

[These] . . . results are hardly surprising, as people tend to exhibit this pattern of "cluelessness" across many situations. Meta-analyses indicate that human judgment in employment interviews is a poor predictor of future performance (Huffcutt & Arthur, 1994), students have difficulty assessing their own levels of competence (Kruger & Dunning, 1999), and the confidence of eyewitnesses is poorly correlated with eyewitness accuracy (Sporer, Penrod, Read, & Cutler, 1995).

The use of judgment in employee selection provides further examples of the inability of human judgment to predict behavior. In baseball, when a player's batting average is below .200, it is said that the player has failed to cross the Mendoza Line, a term that was probably coined in 1979 and refers to shortstop Mario Mendoza's .198 batting average that season.

It appears that in the field of psychology, the use of judgment to make employment predictions also fails to cross the Mendoza Line. Meta-analyses indicate that when validity coefficients exceed .20, they are the result of structured systems (e.g., structured interviews, assessment centers) that are designed to reduce individual judgment. Uncorrected validity coefficients for selection procedures relying heavily on unstructured judgment do not cross the Mendoza Line. For example, references and letters of recommendation ( $r = .18$ ; Aamodt & Williams, 2005), unstructured interviews ( $r = .11$ ; Huffcutt & Arthur, 1994), and graphology ( $r = .09$ ; Simner & Goffin, 2003) all fall below .20.

## CONCLUDING THOUGHTS

This article discusses some common myths with regard to police and criminal psychology and suggests that consideration of four principles

might reduce our reliance on these myths. Because the discussed myths seem to be perpetuated despite evidence to the contrary, they must serve a useful function in the law enforcement community. Determining the functions that are served by these myths would be an interesting topic for further research.

The perpetuation of myths might also serve a business function for police psychologists and other mental health providers, in that these myths may provide justification for intervention programs aimed specifically at the law enforcement community. There are, for example, a number of educational programs designed to prevent police suicides.

How can we prevent the spread of misinformation in police and criminal psychology? One obvious thought is to perform due diligence in researching a topic. This is especially important for academicians and practitioners who conduct training. Such diligence would include ensuring that a primary study actually exists,

reading the primary study, and searching for newer research that may support or refute the earlier research.

Another thought is that meta-analysis results should always trump the results of single studies. When a meta-analysis or other review of the literature clearly says one thing, citing one study (which was probably included in the meta-analysis) that contradicts that review is probably not a good idea. This is not to say that one cannot criticize the methods or conclusions of a meta-analysis, but disregarding the body of scientific evidence in favor of a single favorable study is not good professional practice.

Finally, continued research efforts should be made to support or refute information that is commonly believed in police and criminal psychology. One study on a topic is never enough, and follow-up studies and replications, although not always as appealing to conduct, provide greater confidence with regard to the accuracy of common beliefs and practices.



## DRUGS AND SEXUAL ASSAULT

### *A Review\**

ELENA POPE

MICHELLE SHOULDICE

**R**ecent statistical figures illustrate an alarming trend in sexual assault. According to a U.S. study, 25% of women have been sexually assaulted during their lifetime (Schwartz, 1991). In 75% of the cases, the assailant was known to the victim (National Victim Center and Crime Victims Research and Treatment [Center], 1992). The incidence is even higher in adolescents and young women. One study estimated the lifetime prevalence of date rape among adolescents to be between 20% and 68% (Rickert & Wiemann, 1998). Apart from younger age, there are other demographic characteristics that have been reported to increase vulnerability to date rape, including early sexual activity, earlier age of menarche, past history of sexual abuse or prior victimization, and higher acceptance of rape myths and violence toward women. An independent risk factor seems to be the use of alcohol and drugs (Rickert &

Wiemann, 1998). According to the American Academy of Forensic Sciences, one third of cases of sexual assault occurred in the context of alcohol use (Li, 1999). Other studies quote that more than 75% of the perpetrators and more than 50% of the victims had been consuming alcohol before the assault (Koss, 1984; Koss & Dinero, 1989; LeBeau et al., 1999). The effects of alcohol may contribute to misinterpretation of friendly cues as sexual invitation, decreased coping mechanisms, and inability to defend against an attack (Rickert & Wiemann, 1998).

But alcohol is not the only substance associated with sexual assault. Various drugs have recently been reported to be used in association with sexual assault by an acquaintance (LeBeau et al., 1999). All of these drugs have a similar clinical profile: rapid onset of action and ability to induce sedation and anterograde amnesia (inability to recall events after ingestion).

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Moreover, their formulation is such that they can be added to drinks without the victim's knowledge (Smith, 1999). When used in combination with alcohol, potential for central nervous system (CNS) depression (sedation) increases and so does the risk of sexual assault (Le Beau et al., 1999).

### FLUNITRAZEPAM (ROHYPNOL)

Rohypnol is a fast acting benzodiazepine, 10 times more potent than diazepam (Valium) (Matilla & Larni, 1980). Its effects consist of rapid induction of sleep (hypnotic effect), sedation, and muscle relaxation (Simmons & Cupp, 1998). These effects, coupled with anterograde amnesia and relatively low cost, make Rohypnol very attractive for a potential perpetrator (Calhoun, Wesson, Galloway, & Smith, 1996). The drug is not legal in Canada or the United States but is marketed in South America, Asia, and Australia by Hoffman LaRoche Pharmaceuticals. It is supplied as 0.5 mg, 1 mg, and 2mg tablets in bubble packaging, which gives the appearance of a prescribed medication. Rohypnol is tasteless, odorless, and soluble in alcohol. Because of reports of its use as a date rape drug, a new formulation has been produced that dissolves more slowly, changes clear drinks into a bright blue color, and clouds dark beverages.

Once absorbed, Rohypnol quickly distributes into body tissues from plasma, then is metabolized and excreted mainly by the kidneys (Simmons & Cupp, 1998). Its half-life (time at which 50% of the drug is eliminated from the body) is about 20 hours. However, because it is readily distributed into various tissues, its clinical effects are much shorter than its half-life. Typically, Rohypnol's effects begin approximately 20 to 30 minutes post-ingestion and peak at 2 hours. Psychomotor impairment, such as delayed reaction time, muscle relaxation, and amnesia, can last up to 12 hours (Simmons & Cupp, 1998). The severity and duration of sedative effects may be accentuated by use of alcohol, carbonated beverages, and coffee (Calhoun et al., 1996).

The detection of Rohypnol is difficult. Urinary metabolites are present in very low concentration, and detection can be accomplished only within 72 hours of ingestion (Smith, 1999). Various laboratory methods have been tried to enhance the ability of detection. Recently, a sensitive assay using gas chromatography/mass spectrometry (GC-MS) technique was developed with a limit of detection of 2 ng/mL (LeBeau et al., 1999; Simmons & Cupp, 1998). When submitting a victim's urine sample, one has to be familiar with the capabilities of the laboratory used or, ideally, submit specimens to specialized laboratories.

### GHB

GHB is also known as gamma-hydroxybutyrate sodium oxybate. It is currently available legally only as an investigational drug for the treatment of narcolepsy (Smith, 1999). Between 1996 and 1999, the Drug Enforcement Administration (DEA) received 22 reports of sexual assaults committed under influence of GHB (Smith, 1999).

GHB causes CNS depression (sedation) secondary to direct action at the brain receptor level (GABAb). The initial symptoms, occurring 15 to 30 minutes after ingestion, consist of drowsiness, confusion, and dizziness. Rapid decrease in level of consciousness (even coma), vomiting, and respiratory depression may follow (Smith, 1999). Occasionally, patients experience terrifying hallucinations and paranoia. As with Rohypnol, anterograde amnesia is common, which may limit the victim's ability to provide detailed recall of the assault. The spectrum of clinical symptoms is dose dependent. Doses of 10 mg/kg induce amnesia and somnolence, whereas doses exceeding 50 mg/kg can lead to coma and severe respiratory depression ("Gamma-Hydroxy Butyrate Use," 1997). The sedative effects may be enhanced by the use of alcohol or other drugs.

The usual formulation of GHB is a white powder that can be added to any liquid. The resultant solution is colorless and odorless with a

mild, salty or soapy taste. The onset of action is short (15 to 30 minutes). Sedation may last a few hours, with full recovery approximately 8 hours after ingestion. Occasionally, dizziness may last up to 2 weeks (Smith, 1999).

Given the short half-life (20 minutes to 1 hour) of GHB, detection is very difficult. Urine assays using GC-MS can detect GHB in certain laboratories if done within 12 hours of ingestion of the drug (LeBeau et al., 1999; Smith, 1999).

## KETAMINE

Ketamine is a general anesthetic used widely in medicine. Its illicit use has been reported, and DEA received at least one case report in which Ketamine was used to facilitate sexual assault (Smith, 1999).

The major effects of Ketamine consist of analgesia (decreased pain) and amnesia, with an onset approximately 20 minutes after ingestion. Higher doses may lead to a feeling of detachment from the surroundings and floating. Hallucinations and rapid eye movements (nystagmus) have also been reported (Smith, 1999). Intravenous as well as oral preparations are available. The standard anesthetic dose is 2mg/kg intravenously or 5 to 10 mg/kg intramuscularly. The dosage used for illicit purposes is unknown. Ketamine undergoes extensive hepatic (liver) metabolism and elimination by the kidneys.

Currently, there is no available detection test.

## MDMA (ECSTASY)

Ecstasy is a synthetic chemical derived from an essential oil of the sassafras tree. Merck first synthesized this chemical in 1912. Given the psychotherapeutic effects and its growing popularity, Ecstasy became illegal in the United States in 1985. Currently, it is a very popular drug, particularly at rave parties. Because of the big demand, anything can be sold as Ecstasy, with potentially serious results.

Ecstasy's effects consist of euphoria, disinhibition, and dizziness. Other symptoms described in association with Ecstasy are nystagmus (involuntary eye movements) and hallucinations (Morland, 2000). Dangerous effects associated with it derive from hyperthermia (increased body temperature) leading to dehydration, hyponatremia (decreased body salt), seizures, and irregular cardiac rhythm (Ajaelo, Koenig, & Snoey, 1998).

MDMA (Ecstasy) is readily absorbed and starts acting approximately 30 to 60 minutes after its ingestion. The peak effects tend to occur at around 1 to 5 hours, with symptoms lasting up to 8 hours depending on the ingested amount. It is metabolized in the liver and eliminated by the kidneys as an active metabolite usually within 24 hours after intake. The hallucinogenic effects are typically seen in doses ranging from 50 to 150 mg.

The presence of the drug can qualitatively be detected in blood and urine by using methods such as thin layer chromatography and gas or gas-liquid chromatography (Jurado, Gimenez, Soriano, Menendez, & Repetto, 2000). However, because various labs have different detectable concentration limits, consultation with laboratory staff should occur.

## CONCLUSION

Date rape is a common occurrence, especially among young women and adolescents. Drugs and/or alcohol may be used with the intention of decreasing resistance to the assault by causing sedation as well as by decreasing detailed recollection of the events by the victim because of induced amnesia.

The most common substances reported in association with sexual assault are alcohol, cocaine, and marijuana. This is not surprising because they make up a great majority of street drugs. However, other drugs such as Rohypnol, GHB, Ketamine, and Ecstasy have recently been associated with sexual assault, probably because of their amnesic potential. All of these drugs share several features: CNS depression (sedation), impaired



judgment, impaired memory, decreased motor control, and decreased inhibition. Depending on the dose of the drug and/or use of other substances (especially alcohol), clinical effects can be significant enough to lead to respiratory depression, irregular heart rhythm, and coma.

The possession, sale, or use of most of these drugs is a criminal offense in most of the United States and in Canada. Hence, the detection of these drugs is of paramount importance, particularly given the victim's frequent difficulty recollecting the events surrounding the assault or the details about the perpetrator. Detection of these drugs may be problematic because of limitations in laboratory testing methods. The short half-life of these drugs in combination with a victim who may not seek medical attention immediately due to an inability to recall events may make detection of these drugs even more problematic. A recent review suggested a standard

protocol for specimen collection in rape victims (LeBeau et al., 1999). This includes a specimen collection as soon as possible after the event. Urine specimens should be obtained within 72 to 96 hours after ingestion and kept refrigerated. Blood specimens are less useful. It is important to know that, with the exception of Ecstasy, standard toxicology screening rarely detects substances potentially used in sexual assault, and specific testing must be requested. A high index of suspicion is therefore recommended, particularly in sexual assault cases when the victim reports sedation or an inability to recall events clearly. Blood analysis is possible if collection is obtained within 24 hours of the assault and the specimen is collected in a tube with sodium fluoride or potassium oxalate preservative. The testing request should specify what substance is suspected. Knowledge about a laboratory's ability to detect these substances is very important.

## IS IT STALKING?

### *Perceptions of Stalking Among College Undergraduates\**

LORRAINE PHILLIPS

RYAN QUIRK

BARRY ROSENFELD

MAUREEN O'CONNOR

As public interest in stalking crimes grew during the past decade, critics have increasingly pointed to the ambiguity ("vagueness") present in most legal definitions of stalking (e.g., Jordan, Quinn, Jordan, & Dail-eader, 2000; Mullen, Pathé, & Purcell, 2000). For example, California's anti-stalking law specifies that the behavior must "be such as would cause a reasonable person to suffer substantial emotional consequence" (California Penal Code, Section § 646.9, 1990). Even New York's recent anti-stalking law, developed long after concerns regarding definitional ambiguity had

been raised and litigated, requires that the victim must experience a "reasonable fear of material harm" from the stalker for the behaviors to qualify as "stalking" (New York Criminal Procedure Law, Section § 120.45, 1999; Pappas, 2000). But despite attempts to define the contours of stalking, these laws offer little, if any, guidance as to what behaviors would qualify as inducing a "reasonable fear" or engendering "substantial emotional harm." Indeed, the same behaviors could be interpreted as frightening by one individual yet seem flattering or absurd to another (Jordan et al., 2000). How then does one

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determine whether a stalker's actions meet the legal requirement for criminal prosecution or even constitute stalking in lay terms?

Despite the importance of understanding individual differences in perceptions of stalking, research has rarely focused on understanding the factors that influence these perceptions. At one extreme of this continuum are the occasional reports, although largely anecdotal, of false accusations of stalking (often termed "false victimization syndrome" (Mohandie, Hatcher, & Raymond, 1996; Pathé, Mullen, & Purcell, 1999; Sheridan & Blauuw, 2004). On the other hand, many stalking victims fail to recognize or interpret the harassment they are subjected to as "stalking," and therefore, they neglect to seek appropriate help or take protective measures that might be necessary. More critically, third-party observers, such as police officers or coworkers, may find it particularly difficult to perceive the behavior as sufficiently threatening to the target to constitute stalking. Even when stalking or harassment is accurately recognized, individual reactions vary tremendously, with some stalking victims moving to another state and changing their identity and others continuing their lives seemingly without significant interference. Clearly, perceptions of the risk posed by a stalker play a central role in determining how an individual should react. These same perceptions will also determine the efficacy of stalking laws as law enforcement officials, prosecutors, judges, and, ultimately, jurors must also evaluate whether particular behaviors rise to the level of unlawful stalking.

Although early attention to stalking focused largely on celebrity victims and gradually expanded to the general public, stalking has only recently been identified as a significant problem plaguing college students. Several studies have observed high rates of stalking among college students that far exceed the prevalence rates found in the general population (e.g., Bjerregaard, 2000; Fremouw, Westrup, & Pennypacker, 1997; Haugaard & Seri, 2000). For example, Fremouw and his colleagues (1997) reported that 27% of the women and

15% of men in their sample of West Virginia University students had been stalked. Bjerregaard [2000] found a comparable rate of stalking among college students; 25% of the women in her sample and 11% of the men reported this experience. Not surprisingly, female victims in Bjerregaard's sample were more likely than males to be threatened by their stalker and were also more likely to express fear for their physical safety. In fact, female stalking victims reported twice the level of fear compared to male victims, even when they had received similar threatening communications.

Despite the importance of victim perceptions in both defining and reacting to stalking, very little research has attempted to identify factors that influence these perceptions. Hills and Taplin (1998) studied the perceptions of Australian adults in response to a stalking vignette that varied across two dimensions, the nature of the perpetrator/target relationship . . . and the presence or absence of an implicit threat. . . . Interestingly, despite a growing body of research demonstrating that stalkers who were previously involved in an intimate relationship with the target of their harassment (i.e., "former intimates") are more likely to be violent than are offenders who target strangers (e.g., Rosenfeld, 2003), both categories of targets reported fear, but the likelihood of calling the police was significantly greater in response to the "stranger" vignette. The presence of a threat, on the other hand, had no impact on perceived fear, but it did correspond to an increased likelihood of calling the police. . . .

Dennison and Thomson (2000) also studied a large sample of Australian adults ( $N = 540$ ) in their investigation of the influence of situational variables on determinations of stalking and perceptions of the perpetrator's intentions. They, too, studied perpetrator/target relationship (strangers, acquaintances, or former intimates), the intent of the perpetrator (whether there was explicit evidence of actions that would instill fear or cause emotional harm), and the impact this behavior had on the victim (extreme fear, moderate fear, or no fear). . . .



In a subsequent study, Dennison and Thomson (2002) expanded this methodology in a study of 1,080 Australian adults by adding an additional variable—that is, perpetrator persistence. Because their previous study utilized a vignette in which perpetrators were highly persistent, they added two additional conditions describing perpetrators whose actions reflected either moderate or low levels of persistence. As in their previous study, the vast majority of respondents (83%) characterized the behavior described in the vignette as stalking, but they found a significant difference across gender, with 86% of women labeling the vignette as stalking compared to 78% of men. Not surprisingly, degree of persistence and the presence of specific intent were significantly associated with the determination that stalking had occurred. They also found that women were more likely than men to perceive the perpetrator as intending to inflict fear and cause physical or mental harm to the target. Although they also observed a number of effects for perpetrator/target relationship, these associations were more complex (often taking the form of interaction effects). However, because their vignettes only depicted a male perpetrator and a female victim, the extent to which these gender effects reflect a greater concern or awareness of stalking on the part of women in general versus a greater concern for the potential violence inflicted by males is unknown. Moreover, in many analyses, the magnitude of the gender effects they observed was relatively modest. Nevertheless, the authors concluded that the factors that influence perceptions of stalking might be more complex than had been previously thought.

Interestingly, analogous research literature focusing on sexual harassment perceptions has evolved over the past decade that has examined the influence of individual- and situational-level variables on determinations of whether behaviors were perceived as sexual harassment. Fairly consistently, gender of the participant plays a small but significant role in explaining sexual harassment judgments (e.g., Gutek et al., 1999;

Rotundo, Nguyen, & Sackett, 2001 . . . ). But this gender effect may also be explained by sexist attitudes and perceptions of the target's credibility (see Wiener & Hurt, 1999). Interestingly, a target's prior personal experience with sexual harassment does not appear to influence sexual harassment perceptions (Stockdale, O'Connor, Gutek, & Geer, 2002).

The sexual harassment literature shares many similarities to the emerging research on perceptions of stalking and provides a context for understanding the gender effects found in both literatures. In an effort to supplement this small but growing body of research, the current investigations focused on whether behaviors would be more or less likely to be considered stalking depending on situational factors . . . and participant characteristics . . . . In the first of these studies, the behavior of the perpetrator was described in a relatively ambiguous manner to increase the variability of subjective perceptions as to whether the vignette described stalking and whether a risk of harm existed, whereas the second study systematically manipulated the seriousness of the behavior.

Specifically, it was hypothesized that female participants and those who report having previously been the target of stalking would be more likely to label the vignettes as "stalking" and would associate greater risks to the perpetrators' behavior. In addition, the impact of terminology (i.e., use of the term stalking versus a description of repetitive harassment behaviors) on reports of whether one has been stalked was explored. In the second study, similar effects regarding participant gender were hypothesized (i.e., female participants would be more likely than men to label the vignettes as stalking), although it was anticipated that the proportion of participants labeling the vignettes as stalking would increase as the severity of the behaviors increased. Both studies also hypothesized that vignettes describing a male perpetrator and a female target would be readily classified as stalking and would generate higher levels of safety concerns.

## EXPERIMENT 1

### Method

Participants were students in introductory psychology classes at a large private university in the northeast United States; the students volunteered for this study as a method of fulfilling the course research requirement. Participants were informed that they would be participating in a study of perceptions of behavior in which they would read a series of vignettes and answer several questions that pertained to each. Each participant received a questionnaire packet that contained one of six stalking vignettes, all of which described interactions between a male and a female using a  $2 \times 3$  design to vary gender of the perpetrator and target (male perpetrator pursuing a female target and female perpetrator pursuing a male target) and the relationship between these individuals (stranger, acquaintance, and a previous romantic relationship or former intimate). Table [9.1] presents examples of these vignettes. Participants also completed a

brief demographic questionnaire, and they read and responded to two additional vignettes with accompanying questions that served as a filler to distract attention from the stalking vignette.

After reading the vignette, participants indicated their reactions to a series of questions using a Likert-type scale from 1 (*definitely*) to 5 (*definitely not*). These questions included whether the behavior described in the vignette constituted stalking . . . , whether the target should be worried about his or her safety, whether the target should meet with the perpetrator, whether the perpetrator would become violent, whether the target should seek help from the police or security, and whether the perpetrator needs psychiatric treatment. To ease interpretation of the data, responses to several of these questions were reversed so that a higher score on all variables reflected a greater degree of concern over the perpetrator's behavior.

Participants were also asked several questions that pertained to their personal experiences with stalking. The wording in the primary question used to assess prior stalking victimization was

**Table 9.1** Sample Stalking Vignettes: Experiment 1

*Prior intimate relationship.* Jane and Joe, both of whom are doctors, had been dating for several months. Joe realized that things were not working out in the relationship and decided that it would be best to break up with Jane. Jane, however, wanted to continue the relationship. Since the breakup, Jane has called Joe several times, but he no longer answers her phone calls. Jane has also sent flowers and other gifts to Joe's house along with personal letters. Lately, Joe thinks that he has seen Jane outside his house.

*Acquaintance.* Jane is a doctor in a large hospital where Joe, another doctor, was recently hired. Shortly after meeting Jane, Joe became interested in pursuing a relationship with her. Joe called Jane on the telephone, but she indicated that she was not interested in a relationship. Since then, Joe has called Jane several times, but she no longer answers his phone calls. Joe has also sent flowers and other gifts to Jane's house along with personal letters. Lately, Jane thinks that she has seen Joe outside her house.

*Stranger (no prior relationship).* Joe, a doctor, was interviewed by the local news after his hospital announced that it would be laying off employees. Jane, a doctor too, saw Joe on television being interviewed. Jane found Joe to be very attractive and was interested in pursuing a relationship with him. Jane called Joe on the telephone, but he indicated that he was not interested in a relationship. Since then, Jane has called Joe several times, but he no longer answers her phone calls. Jane has also sent flowers and other gifts to Joe's house along with personal letters. Lately, Joe thinks that he has seen a woman outside his house.

also varied to ascertain whether the term *stalking* influenced perceptions of one's own experiences. Toward this end, half of the participants were asked whether they had "ever been stalked," and the remainder were asked whether they had "ever been repeatedly followed (i.e., more than once) and/or harassed by another person." Participants who responded affirmatively to this question were asked to provide details regarding the stalking experience, including the number of times they have been stalked . . . , the length of time this behavior continued, and the occurrence of several specific stalking behaviors (e.g., receiving unwanted gifts, waiting outside of work or school).

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## DISCUSSION

The results of this study contradicted our hypothesis that female participants would be more likely to label the vignettes as stalking compared to male participants. Moreover, there was no difference in perceptions of whether the behavior described constituted stalking between vignettes describing a male perpetrator and female target versus a female perpetrator and male target (although the three-way interaction effect suggests that some complex relationships between character gender and perpetrator/target relationship may exist). This interaction clearly requires further analysis before any conclusions can be drawn. Finally, there was no relationship between prior experience as a target of stalking and perceptions of stalking, again contradicting commonsense assumptions regarding the influence of past experience on perceptions of behavior. This null finding, however, is consistent with the emerging literature on perceptions of sexual harassment, which demonstrate that prior sexual harassment victimization does not influence perceptions of whether behaviors constitute sexual harassment (Stockdale et al., 2002).

Despite the compelling findings observed in this study, a number of questions arose, such as whether young, predominantly Caucasian undergraduates are an appropriate reference group against which to base conclusions regarding stalking perceptions. In addition, because the behaviors described in these vignettes were deliberately vague, it is unclear whether similar findings would emerge if the behaviors described were more strongly suggestive of stalking. These limitations were addressed in the subsequent study in which vignettes varied according to the severity of the stalking behaviors described (rather than the relationship between perpetrator and target). This study also included a substantially larger sample with considerably greater diversity in terms of ethnicity, age, and socioeconomic levels.

## EXPERIMENT 2

### Method

Participants in the second study consisted of 376 undergraduate and graduate students in an urban, public college that has the primary mission to provide undergraduate and graduate training in criminal justice and related fields. Participants were recruited through undergraduate and graduate classes. Each participant was given one of six possible vignettes that described an interaction between a man and a woman (Tom and Mary) who met at a party. Based on the New York State anti-stalking law, three scenarios depicting potential stalking behavior were developed. One scenario depicted behaviors that did not meet the definition of stalking under New York State law, while a second scenario depicted behaviors that were consistent with stalking in the fourth degree (misdemeanor stalking), and the third scenario depicted behaviors that were consistent with stalking in the third degree (felony stalking). Each of these scenarios was built on the previous one such that the length of each scenario became slightly longer as the criminality of the perpetrator's behaviors increased (Table [9.2]). Finally, two



**Table 9.2** Study Two: Sample Vignettes With Conditions Embedded—Tom Pursuing Mary

(Paragraph 1) *All conditions.* Tom met Mary at a party that a mutual friend hosted. They talked for a while at the party before going their separate ways. Mary worked at the local bank as a teller. Mary noticed that Tom began coming into the bank to make transactions.

(Paragraph 2) *No stalking condition.* Usually he would wave at Mary if he saw her, and a few times, he waited specifically for Mary to help him with his transaction. After a few weeks of the same pattern, Mary was beginning to question Tom's intentions. She didn't think that anyone could possibly have as much banking to do as Tom seemed to have.

(Added to Paragraph 2) *Third- and fourth-degree stalking conditions.* Within a few weeks, Tom started calling the bank to make sure Mary was working before he came in. Mary took a week off from work and went out of town. When she came back to work her manager was very angry with her, "Some guy named Tom keeps calling at least 6 or 7 times a day to see where you are at. I told him not to call here anymore." The bank manager warned Mary that if this continued he would have to fire Mary.

(Paragraph 3) *No stalking condition.* Mary, not sure of how to reach Tom, called their mutual friend. Mary was informed that Tom is very shy but found her very easy to talk to and would like to take her out on a date. Mary called Tom and thanked him for his interest in her. She then explained that she was not interested in dating anyone but would like to remain friends with Tom. Tom agreed and told Mary that if she changed her mind to just call him.

(Added to Paragraph 3) *Third- and fourth-degree stalking condition.* Mary also told Tom that the bank that she works for does not like its employees to receive too many personal phone calls. Mary told Tom that if it is an emergency, he is welcome to call her at the bank, but she does not want to lose her job. Tom agreed.

(Paragraph 4) *No stalking condition.* Mary still saw Tom at the bank, but now she was seeing him when she went to the market, and he was on the same bus that Mary takes to and from work. When Tom would see Mary, he would wave or smile. Mary decided to tell Tom to stop following her. When she did, Tom told her that she was nuts. "This is a small town. What market would you like me to shop in? Where do you think I should do my banking?" Mary just shrugged her shoulders and told Tom that she didn't care where he shopped or banked as long as she wasn't around. Despite confronting Tom, Mary would still see Tom when she was working or running errands, but he would not acknowledge Mary.

(Added to Paragraph 4) *Fourth-degree stalking condition.* The next day Mary came to work to find a teddy bear holding a red rose with a card signed "your special friend Tom." Later that morning, Tom called her to see if she received the gift. Mary thanked him and reiterated that she could not receive phone calls. Later that day Tom called just to say "Hi" and then called to find out if she would like to go to dinner. Mary turned Tom down and asked him to stop calling her. The next day Tom called Mary at the bank to apologize for his behavior and promised never to call again.

(Added to Paragraph 4) *Third-degree stalking condition.* The following week when Mary was leaving work, Tom was waiting in the bank parking lot. Mary ignored Tom when he said hello to her and just walked to her car. Tom became very angry and began to yell at Mary, "I don't understand you Mary. . . . I am a really nice guy and would make you happy if you only let me. I only came here to apologize to you. Why won't you go out with me? Do you really think that you are so much better than me. . . . Just wait. . . . It is only going to be a matter of time before you go out with me." Tom then walked away. The next day Tom called Mary at the bank to apologize for his behavior.

versions of each of these three scenarios were created—one describing a male perpetrator and a female victim and a second describing the reverse scenario, thus resulting in a total of six conditions.

After reading the vignette, participants indicated their reactions to a series of questions using a 5-point, Likert-type scale where 1 = *definitely* and 5 = *definitely not*. These questions included whether the behavior described in the vignette constituted stalking . . . , whether the behavior would be considered a crime (specifically, stalking under New York law), whether the perpetrator has a legitimate purpose for contacting the target, whether the target should be worried about his or her safety, whether the perpetrator would become violent, and whether the perpetrator suffered from mental illness. Participants were also asked about their own familiarity level with New York anti-stalking law along with a series of demographic questions.

## DISCUSSION

This study further supported the earlier findings regarding the lack of any influence of either participant or perpetrator/target gender on perceptions of whether stalking has occurred. On the other hand, these data supported the previous finding that vignettes describing a male perpetrator and female target elicited greater concerns regarding safety than vignettes describing a female perpetrator and a male target. Contrary to the expectations, female participants were no more likely than male participants to label the vignettes as stalking. However, these results support the distinctions made by New York State's anti-stalking law, as participants were more likely to correctly identify both of the vignettes describing fourth-degree stalking and third degree stalking as stalking as compared to the no-stalking condition (but no significant differences existed between the two stalking vignettes). Interestingly, although few differences in perceptions were observed across ethnic groups, there was no identifiable pattern to

these findings, and the relatively small number of participants in some categories limits the ability to interpret these findings.

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## GENERAL DISCUSSION

With a growing number of anti-stalking laws defining stalking in terms of whether the individual had a "reasonable fear" of harm, the need to understand how individuals perceive stalking behaviors has become increasingly evident. These studies addressed several important aspects related to perceptions of stalking in complementary ways. In particular, these studies represent some of the first attempts to systematically analyze the extent to which stalking behaviors, victim perpetrator relationships, and gender (of both the parties and the respondents) influence determinations of whether stalking has occurred and the potential risk posed to victims.

The first study utilized a vignette in which the determination of whether stalking had actually occurred was ambiguous. In this context, the relationship between target and perpetrator (i.e., strangers, coworker acquaintances, or former dating partners) and the gender of these actors (i.e., male perpetrator/female target vs. female perpetrator/ male target) significantly influenced responses to the stalking vignettes. Specifically, participants were significantly less likely to characterize the vignette as stalking when the actors were described as having previously been involved in an intimate relationship compared to the vignette describing the two characters as having been merely acquaintances or having had no prior relationship (strangers). Interestingly, this apparent reluctance to characterize harassing behaviors as stalking when a prior relationship exists stands in contrast to the growing body of epidemiological data demonstrating that stalking is far more common among prior intimates compared to acquaintances or strangers (e.g., Budd & Mattinson, 2000; Tjaden & Thoennes, 1998).

On the other hand, although gender of the vignette characters did not influence determinations of whether stalking had occurred, it did influence perceptions of safety for the target of the behaviors. Several indicators of concern for safety differed significantly depending on the perpetrator/target gender, including whether the target should be concerned for his or her safety, should seek help from the police or hospital security, and should meet with the perpetrator. Interestingly, a question directly targeting the risk of violence (i.e., "How likely is it that Joe/Jane will be violent toward Jane/Joe?") did not differ by perpetrator/target gender, suggesting that the influence of gender on perceived risk may be somewhat subtle. Alternatively, participants may be more sensitive to fear-inducing behaviors when the target is a woman, even though they do not fear explicit assault or violence *per se*.

The perception of male stalkers as more dangerous than female stalkers, although clearly logical, is not consistent with the existing empirical data. Rates of violence among female stalkers have been comparable to those for males in several studies (Purcell, Pathé, & Mullen, 2001; Rosenfeld, [2003]; Rosenfeld & Harmon, 2002), and there is no evidence that the severity of violence inflicted by women stalkers is substantially less than males. Yet the finding that male stalkers engender more concern than female stalkers echoes the data presented by Sinclair and Frieze (2000), who observed that men generate more fear in those individuals whom they pursue than women do, even when they do not display overt indications of aggression.

The second study utilized a similar methodology, but instead of comparing responses to an ambiguous vignette, vignettes were systematically varied in terms of the severity of stalking behavior (i.e., vignettes that did not fulfill the New York State definition of stalking vs. vignettes characterizing misdemeanor and felonious stalking). In these analyses, in which gender of the perpetrator and target were varied in a similar manner to the first study (male perpetrator/female

target vs. female perpetrator/male target), severity of stalking clearly influenced determinations of whether stalking had occurred (supporting the validity of the experimental manipulation). Participants were significantly more likely to consider the behaviors described to be criminal (i.e., reflecting stalking) in the vignettes describing third and fourth-degree stalking (felony and misdemeanor, respectively) compared to the no-stalking vignette. There were no differences between the third- and fourth-degree stalking vignettes regarding criminality. As in the first study, perpetrator/target gender did not influence determinations of stalking but did influence safety concerns, as participants considered the stalker to be significantly more likely to harm the target when the perpetrator was male and the target was female versus the reverse scenario (female perpetrator/male target).

Gender of the participant, however, appears to have a more complex effect on stalking perceptions. In the second study, women participants were somewhat more likely to perceive the vignettes as indicative of stalking than were men, regardless of the perpetrator/target gender. This finding is similar to the gender effect found by Dennison and Thompson (2002). Yet, in the first study, no such main effect emerged. Instead, a significant three-way interaction effect between participant gender, gender of the vignette characters, and relationship of the vignette characters was found. Both men and women appeared more likely to identify the behavior described in the stranger vignette as stalking when the perpetrator was of the same gender as the participant, whereas they rated the acquaintances vignettes as more indicative of stalking when the target was of their same gender. This pattern may reflect a tendency to identify with the behavior of the perpetrator in the stranger vignettes and the target in the acquaintance vignettes, decreasing the likelihood that participants would identify the behavior described in the vignette as inappropriate (i.e., stalking). Because perpetrator/target relationship was not varied in the second study, it is unclear whether these effects



would have remained consistent in cases where the stalking behaviors were more clear-cut. Thus, although there may be some differences in how men and women perceive certain aspects of stalking, these differences are quite modest and inconsistent. Also observed in the second study was an unexpected influence of ethnicity on safety concerns and attributions for the stalking behavior. Because there was no consistent pattern to these findings, their implications are unclear. Furthermore, the first study was almost entirely composed of Caucasian participants, precluding the analysis of any ethnicity effects. Clearly, these findings, which have not emerged in any of the published research to date, require further exploration.

[In the first study,] contrary to the expectations, participants who reported personal prior experience of having been stalked did not differ from those who reported no such experience in relation to perceptions of stalking or risk of harm. (These data were not available in the second study.) Although it was anticipated that participants who had been previously stalked would be more attuned to this behavior—and therefore be more likely to identify harassing behaviors as stalking—this pattern did not emerge. This null finding might reflect sample limitations, as stalking victimization among college students may be different in nature, intensity, and impact from stalking victimization among the general population (hence, the substantially higher rates of stalking victimization reported by college students compared to the general population). Individuals who have experienced more severe types of stalking than that of typical college students might have more readily identified the vignettes as indicative of stalking, whereas the college students studied in this investigation did not reveal this pattern. Alternatively, this null finding may reflect a limitation of the study methodology, as more striking differences might emerge with different vignette characteristics (e.g., more overt or potentially dangerous stalking behaviors). Yet similar null findings regarding the lack of influence of past experience on harassment perceptions have been reported in the context of

sexual harassment (Stockdale et al., 2002). Thus, although commonsense assumptions often foster the belief that past experience with harassment may sensitize targets to future harassment, these null findings call such assumptions into question.

Despite the consistency across these two studies with regard to many aspects of stalking perceptions, several methodological limitations are noteworthy. First, although there is no doubt that stalking occurs among college undergraduates, the nature of these experiences may be quite different than among the general population. However, this criticism is substantially less valid for the data reported in the second study, in which participants ranged in age from 18 to 60 and reflected a broad diversity of ethnic and socioeconomic backgrounds. Moreover, many of these findings supported and extended those of previous researchers who used samples drawn from the general public (i.e., Dennison & Thompson, 2000, 2002; Hills & Taplin, 1998), suggesting that sample differences may not have dramatically influenced the study results.

Also, although ecological validity concerns may apply to the analysis of ambiguous vignettes in the first study (i.e., the behaviors described were not indisputably reflective of stalking), this criticism does not apply to the second study, and yet similar results regarding gender effects emerged. The second study, however, utilized vignettes of varying lengths, as each vignette built on the previous one by adding additional stalking behaviors (to be consistent with the legal standards for stalking offenses in New York). Thus, the finding that increasing levels of stalking severity were associated with increased likelihood of labeling the behaviors as stalking is confounded by the amount of information presented in the vignettes. Future research should evaluate the possibility that vignette length influences perceptions of stalking.

The analysis of the perpetrator/target relationship is also necessarily limited. First, this variable was included only in the first study, and in this vignette, the actors were described as

physicians. The characterization of the actors as credible authority figures may have decreased the likelihood that some respondents would identify the behaviors as indicative of stalking, particularly among a college student sample in which respect for authority figures may be heightened. Because this variable was not included in the second study, it is unclear whether similar relationship influences would occur in a scenario in which stalking was less ambiguous, although the results of previous research (e.g., Dennison & Thompson, 2002) suggests that the influence of situational variables may be less pronounced as the ambiguity of the behaviors decreases. Nevertheless, by varying the perceived credibility and/or prestige of the vignette characters, this potentially important determinant of participant stalking perceptions may emerge as a significant factor, either in isolation (i.e., a main effect) or in conjunction with other variables (i.e., interaction effects).

Despite these limitations, the present investigations represent one of the few attempts to analyze the interrelationships between characteristics of the harassment and characteristics of the respondents in terms of perceived stalking and risk of harm. These findings demonstrate that both participant gender and the characteristics of the perpetrator and target influence perceptions of stalking and the risks associated with this behavior. The implications of these findings for the legal system are multiple, including the possibility that jurors' perceptions may differ in a systematic manner whether a stalking victim's claims of reasonable fear are justified. Also, the relatively lesser concern paid to female stalkers in these studies suggests an important avenue for clinical intervention, as male stalking victims may underestimate the risk of harm posed by a female stalker. Clearly, further attention is needed to better understand the perceptions and stereotypes that influence behavior in response to stalking.

## PSYCHOPATHY

### *A Clinical Construct Whose Time Has Come\**

ROBERT D. HARE

**P**sychoopathy is a socially devastating disorder defined by a constellation of affective, interpersonal, and behavioral characteristics, including egocentricity; impulsivity; irresponsibility; shallow emotions; lack of empathy, guilt, or remorse; pathological lying; manipulativeness; and the persistent violation of social norms and expectations. This article is a personal, selective view of some major changes and trends in the empirical research on psychoopathy from 1974 to 1994. The focus is on the assessment and diagnosis of psychoopathy and its implications for the mental health and criminal justice systems, with brief reference made to several recent trends in the application of cognitive neuroscience to the study of the disorder.

Let me begin with a framework that helps me to make sense of what often appears to be senseless behavior (Hare, 1993, 1995). Psychopaths can be described as intra-species predators who use charm, manipulation, intimidation,

and violence to control others and to satisfy their own selfish needs. Lacking in conscience and in feelings for others, they cold-bloodedly take what they want and do as they please, violating social norms and expectations without the slightest sense of guilt or regret. Viewed in this way, it is not surprising that in spite of their small numbers—perhaps 1% of the general population—they make up from 15% to 25% of our prison population and are responsible for a markedly disproportionate amount of the serious crime, violence, and social distress in every society. Furthermore, their depredations affect virtually everyone at one time or another, because they form a significant proportion of persistent criminals, drug dealers, spouse and child abusers, swindlers and con men, mercenaries, corrupt politicians, unethical lawyers, terrorists, cult leaders, black marketeers, gang members, and radical political activists. They are well represented in the business and corporate world, particularly during

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chaotic restructuring, where the rules and their enforcement are lax and accountability is difficult to determine (Babiak, 1995). It is not uncommon for psychopaths to emerge as “patriots” and “saviors” in societies experiencing social, economic, and political upheaval (e.g., Rwanda, the former Yugoslavia, and the former Soviet Union). Wrapped in the flag, they enrich themselves by callously exploiting ethnic, cultural, or racial tensions and grievances.

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## THE CONSTRUCT OF PSYCHOPATHY

Psychopathy began to emerge as a formal clinical construct in the last century, but references to individuals we now readily recognize as having been psychopathic can be found in biblical, classical, medieval, and other historical sources (Cleckley, 1976; Rotenberg & Diamond, 1971). Like most clinical constructs, psychopathy has been, and continues to be, the subject of considerable debate, scientific and otherwise. Some commentators, no doubt influenced by the inconsistent, fuzzy, and legalistic ways in which the term has been used, have suggested that the disorder is mythological, a view that appeals to those who feel uncomfortable about psychiatric labels or the role of individual differences in abnormal and antisocial behavior. Clinical and empirical evidence, however, clearly indicates that the construct, whatever we label it—psychopathy, sociopathy, antisocial personality disorder, dyssocial personality disorder—is anything but mythological. It is true that the etiology, dynamics, and conceptual boundaries of the disorder are the subject of much speculation, but at the same time, there is a reasonably consistent clinical tradition concerning its core affective, interpersonal, and behavioral attributes. Interestingly, this traditional view of psychopathy cuts across a broad spectrum of groups, including psychiatrists, psychologists, criminal justice personnel, and experimental psychopathologists, as well as the lay public (. . . Cleckley, 1976;

Davies & Feldman, 1981; . . . Livesley, Jackson, & Schroeder, 1992; . . .).

Of course, agreement on the descriptive features of a disorder means little unless it can be shown that the features define a valid clinical construct capable of reliable identification. That they do, in my opinion, is beyond question. Descriptively, the clinicians “got it right,” and my own research efforts are firmly grounded in their work. However, translating their keen insights into solid empirical research has long been hampered by inadequate measurement of the construct.

## THE ASSESSMENT OF PSYCHOPATHY

Progress in any discipline is difficult without psychometrically sound procedures for measuring key constructs. Psychopathy is no exception, and the lack of such procedures has hindered not only the development of a body of replicable, theoretically meaningful research findings but also society’s acceptance of psychopathy as an important clinical construct with practical implications.

### DSM-II

The second edition of the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders* [2nd ed.] (*DSM-II*) appeared in 1968. In line with clinical tradition, it described psychopaths (referred to as people exhibiting an antisocial personality) as unsocialized, impulsive, guiltless, selfish, and callous individuals who rationalize their behavior and fail to learn from experience (American Psychiatric Association, 1968). However, *DSM-II* did not provide explicit diagnostic criteria for the disorder, and in the 1970s, many researchers attempted to operationalize the disorder in other ways (see review by Hare & Cox, 1978). For example, my colleagues and I made global ratings of psychopathy based on clinical accounts of the disorder (especially those by Cleckley, 1976). Other researchers used scales derived

from self-report inventories, such as the Minnesota Multiphasic Personality Inventory (Dahlstrom & Welsh, 1960) and the California Psychological Inventory (Gough, 1969). The psychometric properties of most of these procedures, as indicants of psychopathy, were unclear, and the tenuous relationships they bore to one another made it difficult or impossible to generate a solid body of replicable research findings (Hare, 1985). I might add that although self-report and other personality tests play an important role in clinical assessment, their use as reliable indicants of psychopathy for clinical or research purposes cannot be recommended.

### DSM-III

With the publication of the [*Diagnostic and Statistical Manual of Mental Disorders* (3rd ed.)] *DSM-III* (American Psychiatric Association, 1980), the diagnostic situation improved in one respect but worsened in another. The improvement was the introduction of a list of explicit criteria for psychopathy, now referred to as antisocial personality disorder (APD). Unfortunately, these criteria consisted almost entirely of persistent violations of social norms, including lying, stealing, truancy, inconsistent work behavior, and traffic arrests. Among the main reasons given for this dramatic shift away from the use of clinical inferences were that personality traits are difficult to measure reliably and that it is easier to agree on the behaviors that typify a disorder than on the reasons why they occur. The result was a diagnostic category with good reliability but dubious validity, a category that lacked congruence with traditional conceptions of psychopathy. . . .

### THE PSYCHOPATHY CHECKLIST AND ITS REVISION

In 1980, I first described a research tool for operationalizing the construct of psychopathy (Hare, 1980). Later referred to as the Psychopathy Checklist (PCL), it was revised in 1985 and formally

published several years later (Hare, 1991; see also Hart, Hare, & Harpur, 1992). Recently described as "state of the art" (Fulero, 1995, p. 454), the [Psychopathy Checklist-Revised] (PCL-R) is a 20-item clinical rating scale completed on the basis of a semi-structured interview and detailed collateral or file information. Each item is scored on a 3-point scale according to specific criteria. The total score, which can range from 0 to 40, provides an estimate of the extent to which a given individual matches the prototypical psychopath, as exemplified, for example, in the work of Cleckley (1976). The PCL-R's psychometric properties are well established with male offenders and forensic patients and, to an increasing extent, with female (Strachan, 1994) and adolescent (Forth, Hart, & Hare, 1990) offenders. Indices of internal consistency (alpha coefficient, mean inter-item correlation) and inter-rater reliability are high, and evidence for all aspects of validity is substantial. Mean PCL-R scores in male and female offender populations typically range from about 22 to 24, with a standard deviation of from 6 to 8. Mean scores in forensic psychiatric populations are somewhat lower, about 20, with about the same standard deviation. For research purposes, a score of 30 generally is considered indicative of psychopathy, although some investigators have obtained good results with cutoff scores as low as 25.

The high internal consistency of the PCL and PCL-R indicates that they measure a unitary construct, yet factor analyses of each version consistently reveal a stable two-factor structure (Hare et al., 1990; Harpur, Hakstian, & Hare, 1988). Factor 1 consists of items having to do with the affective/interpersonal features of psychopathy, such as egocentricity, manipulativeness, callousness, and lack of remorse, characteristics that many clinicians consider central to psychopathy. Factor 2 reflects those features of psychopathy associated with an impulsive, antisocial, and unstable lifestyle, or social deviance. The two factors are correlated about .5 but have different patterns of correlations with external variables. These patterns make theoretical and clinical sense. For example, Factor 1 is correlated

positively with prototypicality ratings of narcissistic and histrionic personality disorder, self-report measures of narcissism and Machiavellianism, risk for recidivism and violence, and unusual processing of affective material (see below). It is correlated negatively with self-report measures of empathy and anxiety. Factor 2 is most strongly correlated with diagnoses of APD, criminal and antisocial behaviors, substance abuse, and various self-report measures of psychopathy. It is also correlated negatively with socioeconomic level, education, and IQ. The PCL-R factors appear to measure two facets of a higher-order construct, namely, psychopathy.

Comparisons between the PCL-R and the *DSM-III-R* category of APD are illuminating . . . . Although PCL-R scores are significantly correlated with diagnoses of APD in forensic populations, the association is an asymmetric one. This is because in these populations, the base rate for PCL-R-defined psychopathy is much lower (15% to 25%) than the base rate for APD (50% to 75%). Most of the psychopaths also meet the criteria for APD, but most of those with APD are not psychopaths. That is because APD is defined largely by antisocial behaviors and consequently taps the social deviance components of psychopathy (Factor 2) much better than it does the affective/interpersonal components of the disorder (Factor 1). APD more or less leaves out the personality traits necessary to differentiate between psychopathic and other criminals.

Although my colleagues and I have taken great pains to differentiate between psychopathy and APD, some clinicians and investigators use the labels as if the constructs they measure were interchangeable. They are not, and the failure to recognize this simple fact results in confusion and misleading conclusions (see Hare, 1996; Mealey, 1995).

## The Psychopathy Checklist: Screening Version

The PCL-R takes several hours to complete, too long for the average clinician working in

acute psychiatric and mental health facilities. Several years ago, John Monahan asked if it would be possible to develop a brief version of the PCL-R for use in the John D. and Catherine T. MacArthur Foundation project on the prediction of violence in the mentally disordered. With generous support from the foundation, we began development of the 12-item Psychopathy Checklist: Screening Version (PCL:SV) (Hart, Cox, & Hare, 1995; Hart, Hare, & Forth, 1993). The PCL:SV is conceptually and empirically related to the PCL-R and can be used as a screen for psychopathy in forensic populations or as a stand-alone instrument for research with non-criminals, including civil psychiatric patients (as in the MacArthur Foundation project). It has the same factor structure as the PCL-R, with the affective/interpersonal and socially deviant components of psychopathy each being measured by six items.

## Psychopathy in Children

Most clinicians and researchers are reluctant to speak of psychopathic children, yet it is likely that the personality traits and behaviors that define adult psychopathy begin to manifest themselves in childhood (Lahey & Kazdin, 1990; Robins, 1966; Robins & Rutter, 1990). If so, early intervention is essential if we are ever to have any hope of influencing the development and behavioral expression of the disorder. The problem, however, is complicated by general failure to differentiate the budding psychopath from other children who exhibit serious emotional and behavioral problems, particularly those children diagnosed with conduct disorder, attention-deficit hyperactivity disorder, or oppositional defiant disorder.

Recently, Frick, O'Brien, Wootton, and McBurnett (1994) modified the PCL-R items so that they were suitable for children and could be rated by parents and teachers. In a sample of clinic-referred children between the ages of 6 and 13 years, the items identified much the same two-factor structure (although in reverse order) as that found with adults (Harpur, Hare, & Hakstian, 1989).



One dimension was associated with impulsivity and conduct problems (similar to PCL-R Factor 2) and the other with the interpersonal and motivational aspects of psychopathy, such as lack of guilt, lack of empathy, and superficial charm (similar to PCL-R Factor 1). These two dimensions had different patterns of associations with a variety of external variables, including conduct disorder. An important implication of their findings is that children with conduct disorder constitute a small subset with, and a larger subset without, psychopathic features. Presumably, each subset has a different developmental history and requires different treatment strategies.

### DSM-IV

In preparation for the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) (*DSM-IV*) (American Psychiatric Association, 1994), the American Psychiatric Association carried out a multisite APD Field Trial (Hare, Hart, & Harpur, 1991; Widiger & Corbitt, 1993). Stated goals of the Field Trial were to shorten the criteria set and to improve coverage of the traditional symptoms of psychopathy. These symptoms were represented by a 10-item psychopathic personality disorder (PPD) criteria set derived from the PCL:SV and by the *ICD-10* [*International Classification of Diseases*] criteria for dyssocial personality disorder (World Health Organization, 1990). The PPD items were as follows: lacks remorse, lacks empathy, deceitful and manipulative, glib and superficial, inflated and arrogant self-appraisal, early behavior problems, adult antisocial problems, poor behavioral controls, impulsive, and irresponsible. The results of the Field Trial were described in detail by Widiger et al. (1996).

Many researchers and clinicians hoped that the Field Trial would bring the diagnosis of APD back on track, but it did so only in a limited sense and certainly not explicitly or formally. The *DSM-IV* criteria for APD remain problematical (see Hare & Hart, 1995) . . .

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*DSM-IV* presents clinicians working in the criminal justice system with an additional problem. The term *psychopathy* was absent in *DSM-III-R*. The *DSM-IV* text (American Psychiatric Association, 1994) now says that APD "has also been referred to as psychopathy, sociopathy, or dyssocial personality disorder" (p. 645), thereby making it easier for forensic clinicians to use the construct of psychopathy in their reports or court testimony. Indeed, the text makes many references to the personality traits traditionally associated with psychopathy. However, the listed diagnostic criteria for APD actually identify individuals who are persistently antisocial, most of whom are not psychopaths . . .

It seems that the *DSM-IV*—perhaps inadvertently—has established two different sets of diagnostic criteria for APD, one for the general public and one for forensic settings. Individuals diagnosed as APD outside of forensic settings might not be so diagnosed once they find themselves in prisons or forensic hospitals, unless they also exhibit personality traits indicative of psychopathy. The inclusion of such traits in the forensic diagnosis of APD apparently is a matter of judgment for the individual clinician; as a result, a given offender or defendant might be diagnosed as APD by a clinician who chooses to use only the listed criteria and as *not* APD by one who chooses to include psychopathic personality traits in the diagnosis. In each case, the diagnostic strategy would be consistent with *DSM-IV* guidelines, a situation that should provide some interesting courtroom debates.

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. . . [A]n unfortunate consequence of the approach adopted in the *DSM-IV* is that, now more than ever, researchers and clinicians will be confused about the relationship between APD and psychopathy, sometimes using them interchangeably and other times treating them as separate clinical constructs. Perhaps most serious will be situations in which a clinician diagnoses an offender or forensic patient as APD according to the formal *DSM-IV* criteria and then uses the

research literature on psychopathy to make statements about treatability, likelihood of reoffending, and risk for violence. As I indicate [next], the predictive validity of psychopathy, as measured by the PCL-R, is impressive but has little direct relevance to APD.

## Psychopathy: Continuum or Discrete Category

One of the questions often raised by clinicians, researchers, and the public is this: Do psychopaths differ from the rest of us in degree or in kind? Many researchers (e.g., Blackburn, 1993; Livesley & Schroeder, 1991) prefer dimensional conceptualizations of personality disorders, whereas formal diagnostic systems, such as the *DSM-IV*, make it difficult to adopt anything other than a categorical view (i.e., that an individual is either APD or not APD).

Recently, Harris, Rice, and Quinsey (1994) used extensive file information to obtain PCL-R scores for 653 male forensic patients, in order to determine if the dimensional PCL-R reflected a dimensional or a categorical construct. Using four different taxonomic methods, they obtained results consistent with the hypothesis that psychopathy is a discrete category, or taxon. Their procedures allowed for the emergence of only two groups or classes of patients, those in the psychopathy taxon and those not in the taxon. They concluded that the optimal PCL-R score for inclusion in the psychopathy taxon was about 25, somewhat lower than the cutoff score of 30 recommended for research purposes (Hare, 1991). More recently, David Cooke (personal communication, November 21, 1994) analyzed two large sets of PCL-R scores, one from male offenders who had taken part in research conducted by my laboratory and the other from his own stratified random sample of the Scottish prison population. Cooke's analyses differed from those of Harris et al. (1994) in two important ways: His PCL-R scores were based on both semi-structured interviews and file information, and his taxonomic procedures allowed for the emergence of more

than two classes of offenders. Each of his two samples yielded three classes, one clearly being a psychopathy taxon. The optimal PCL-R score for inclusion in this taxon was between 28 and 32, in line with the recommended cutoffs for the diagnosis of psychopathy.

The results of these studies are certainly suggestive, but more research is needed, in part because of problems with taxonomic methods but also to determine the generalizability of the findings not only in different samples and cultures but with different procedures for the assessment of psychopathy.

## PSYCHOPATHY AND THE CRIMINAL JUSTICE SYSTEM

Over the past two decades, one of the more dramatic changes in our view of psychopathy has been in its significance to the criminal justice system, particularly with respect to the assessment of risk for recidivism and violence. Guze (1976), for example, noted that once a person had been convicted of a felony, psychiatric diagnoses, including sociopathy, were not very helpful in predicting criminal activities. This view, however, was compromised by the use of diagnostic criteria at that time that permitted almost 80% of felons to receive a diagnosis of sociopathy. By way of contrast, there is now an extensive literature indicating that current assessments of psychopathy, either by themselves or as part of risk equations, are highly predictive of treatability, recidivism, and violence. This literature is based almost entirely on research involving the use of the PCL-R. For this reason, each of the studies referred to in the rest of this article used the PCL-R for the assessment of psychopathy, unless otherwise indicated.

## Psychopathy and Crime

Although some psychopaths manage to ply their trade with few formal contacts with the criminal justice system, their personality clearly is compatible with a propensity to violate many



of society's rules and expectations. The crimes of those who do break the law run the gamut from petty theft and fraud to cold-blooded violence (Hare & McPherson, 1984; Kosson, Smith, & Newman, 1990; Wong, 1984). However, it is primarily the violence of psychopaths that captures the headlines, particularly when it ends in an apparently senseless death.

The ease with which psychopaths engage in instrumental and dispassionate violence (Cornell et al., 1993; Serin, 1991; Williamson, Hare, & Wong, 1987) has very real significance for society in general and for law enforcement personnel in particular. For example, a recent study by the Federal Bureau of Investigation (1992) found that almost half of the law enforcement officers who died in the line of duty were killed by individuals who closely matched the personality profile of the psychopath.

Although the typical criminal career is relatively short, there are individuals who devote most of their adolescent and adult life to delinquent and criminal enterprises (Blumstein, Cohen, Roth, & Visher, 1986). Many of these career criminals become less grossly antisocial in middle age (Blumstein et al., 1986; Robins, 1966). About half of the criminal psychopaths we study show a relatively sharp reduction in criminality around age 35 or 40, primarily with respect to nonviolent offenses (Hare, McPherson, & Forth, 1988). Their propensity for violence and aggression appears to be rather persistent across much of the life span, a finding also reported by Harris, Rice, and Cormier (1991). I should note that age-related reductions in overt criminality do not necessarily mean that the individual has become a warm, loving, and moral citizen. Robins (1966) observed that many psychopaths become less grossly antisocial with age but remain thoroughly disagreeable individuals. My own experience with several "reformed" or "resocialized" psychopaths can certainly attest to the folk validity of her observation (Hare, 1993).

The question I would ask is this: Are age-related reductions in the criminality of psychopaths paralleled by changes in core personality traits, or have these individuals simply learned

new ways of staying out of prison? Although I share the view of many clinicians that the personality structure of psychopaths is too stable to account for the behavioral changes that sometimes occur in middle age, empirical, longitudinal evidence is needed to resolve the issue. Meanwhile, a recent cross-sectional study of 889 male offenders provides a clue to what we might expect (Harpur & Hare, 1994). The offenders ranged in age from 16 to 70 at the time they were assessed with the PCL or the PCL-R. Scores on Factor 2 (socially deviant features) decreased sharply with age, whereas scores on Factor 1 (affective/interpersonal features) remained stable with age. These results are consistent with the view that age-related changes in the psychopath's antisocial behavior are not necessarily paralleled by changes in the egocentric, manipulative, and callous traits fundamental to psychopathy . . . .

## Recidivism and Risk For Violence

Perhaps the most dramatic change over the past 20 years in the perceived—and actual—importance of psychopathy to the criminal justice system has been in its predictive validity. Various actuarial systems generally did a fairly good job in predicting criminal behavior, and the use of personality traits resulted in little or no incremental validity. As a psychopathy researcher, I always found this situation perplexing. I could never understand, for example, why two individuals with much the same scores on some actuarial device—based on similar criminal and demographic characteristics—but one egocentric, cold-blooded, and remorseless and the other not, could possibly present the same risk. That they do not is clearly indicated by the results of a score of recent studies . . . .

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## Recidivism Following Treatment

In my home city of Vancouver, it is not uncommon for a trial judge to accept expert testimony



that a defendant convicted of a serious crime is a psychopath and then to sentence him to a prison where "he can receive treatment." Much the same scenario probably is played out in many other jurisdictions. The uninformed views of the judge and the protestations and anecdotes of those who run prison programs notwithstanding, there is no known treatment for psychopathy. This does not necessarily mean that the egocentric and callous attitudes and behaviors of psychopaths are immutable, only that there are no methodologically sound treatments or "resocialization" programs that have been shown to work with psychopaths. Unfortunately, both the criminal justice system and the public routinely are fooled into believing otherwise. As a result, many psychopaths take part in all sorts of prison treatment programs, put on a good show, make "remarkable progress," convince the therapists and parole board of their reformed character, are released, and pick up where they left off when they entered prison.

Several recent studies illustrate the point. For example, Ogloff, Wong, and Greenwood (1990) reported that psychopaths, defined by a PCL-R score of at least 30, derived little benefit from a therapeutic community program designed to treat personality-disordered offenders. The psychopaths stayed in the program for a shorter time, were less motivated, and showed less clinical improvement than did other offenders. It might be argued that even though the psychopaths did not do well in this program, some residual benefits could conceivably show up following their release from prison. However, in a survival analysis, Hemphill (1991) found that the estimated reconviction rate in the first year following release was twice as high for the psychopaths (83%) as for the other offenders (42%).

Some of the most popular prison treatment and resocialization programs may actually make psychopaths worse than they were before. Rice, Harris, and Cormier (1992) retrospectively scored the PCL-R from the institutional files of patients of a maximum-security psychiatric facility. They defined psychopaths by a PCL-R score of 25 or more, and non-psychopaths by a score below 25. They then compared the violent recidivism rate

of 166 patients who had been treated in an intensive and lengthy therapeutic community program with 119 patients who had not taken part in the program. For non-psychopaths, the violent recidivism rate was 22% for treated patients and 39% for untreated patients. However, the violent recidivism rate for treated psychopaths was *higher* (77%) than was that for untreated psychopaths (55%). How could therapy make someone worse? The answer may be that group therapy and insight-oriented programs help psychopaths to develop better ways of manipulating, deceiving, and using people but do little to help them understand themselves.

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## Sex Offenders

The past few years have seen a sharp increase in public and professional attention paid to sex offenders, particularly those who commit a new offense following release from a treatment program or prison. It has long been recognized that psychopathic sex offenders present special problems for therapists and the criminal justice system. Indeed, some jurisdictions make provision for designating convicted sex offenders as psychopaths and for sentencing them to indefinite terms of detention . . .

The prevalence of psychopathy—defined by a PCL-R score of at least 30—appears to be relatively high among convicted rapists. Forth and Kroner (1994) reported that in a federal prison, 26.1% of 211 rapists, 18.3% of 163 mixed sex offenders (including child molesters), and 5.4% of 82 incest offenders were psychopaths. Forth and Kroner's (1994) sample of sex offenders included 60 who were either serial rapists or rapists who killed their victims; 35% of these offenders were psychopaths. The prevalence of the disorder seems to be particularly high among offenders adjudicated by the courts as "sexually dangerous." For example, Prentky and Knight (1991) found that 45.3% of 95 rapists and 30.5% of 59 child molesters in the Massachusetts Treatment Center

for Sexually Dangerous Persons at Bridgewater met the PCL criteria for psychopathy.

Sex offenders generally are resistant to treatment (Quinsey, Harris, Rice, & Lalumiere, 1993), but it is the psychopaths among them who are most likely to recidivate early and often. For example, Quinsey, Rice, and Harris (1995), in a follow-up of 178 treated rapists and child molesters, concluded that psychopathy functions as a general predictor of sexual and violent recidivism. In a survival analysis, they found that within 6 years of release from prison, more than 80% of the psychopaths, but only about 20% of the non-psychopaths, had violently recidivated. Many, but not all, of their offenses were sexual in nature. Most dangerous of all were psychopaths sexually "turned on" by violence (Rice, Harris, & Quinsey, 1990).

The implications of psychopathy are just as serious among adolescent sex offenders as among their adult counterparts. Preliminary results from a longitudinal study of adolescent sex offenders (ages 13 to 18) released after treatment at a forensic facility in Vancouver revealed that the mean PCL-R score for 193 male sex offenders was 21.4 ( $SD = 7.0$ ), with about 18% meeting our criteria for psychopathy (O'Shaughnessy, Hare, Gretton, & McBride, 1994). Survival analyses indicated that the reconviction rate for sexual offenses in the first 36 months following release was low (i.e., less than 10%) and unrelated to psychopathy. However, the pattern for other types of offenses was quite different. Thus, within 36 months of release, about 70% of the psychopaths and 40% of all other offenders had been convicted of a non-sexual offense. The results were most striking within the first 12 months of release; the reconviction rate for non-sexual crimes was about 55% for psychopaths, but only about 15% for all other offenders. About 31% of the psychopaths and only 14% of the other offenders had been convicted for a non-sexual violent offense within 12 months of release. One conclusion is that, following release, many of our adolescent sex offenders, and most of the psychopathic ones, were more likely to be convicted of a non-sexual

than a sexual offense. Many of these individuals were not so much specialized sex offenders as they were offenders, and their misbehavior—sexual and otherwise—presumably was a reflection of a generalized propensity to violate social and legal expectations. If so, it may be as important to target antisocial tendencies and behaviors as it is to treat sexual deviancy.

## COGNITIVE NEUROSCIENCE AND THE CRIMINAL JUSTICE SYSTEM

Twenty years ago, much of the theory and research on psychopathy was influenced by prevailing theories of learning, emotion, and motivation (Hare, 1978; Hare & Schalling, 1978). We learned much about the biological (especially the autonomic) correlates of psychopathy and about the role of rewards and punishments in establishing and maintaining psychopathic behavior. Although scientifically valuable, much of this work had little practical impact on the general public or on forensic and mental health workers. The situation is beginning to change dramatically, primarily because of the increasing use of procedures and paradigms from cognitive psychology and neuroscience (see Newman & Wallace, 1993). Research on cognition and emotion is particularly interesting because of its potential implications for the issue of criminal responsibility.

Clinicians have long maintained that the cognitions, language, and life experiences of psychopaths lack depth and affect. Recent laboratory research provides neurophysiological support for this view. Space prevents anything more than brief reference to some of this work. Perhaps the most interesting findings are that psychopaths seem unable or unwilling to process or use the deep semantic meanings of language; their linguistic processes appear to be relatively superficial, and the subtle, more abstract meanings and nuances of language escape them (Gillstrom, 1994 . . . ; Williamson, Harpur, & Hare, 1991). Furthermore, behavioral, electrocortical, and brain imaging research adds weight to the clinical belief that



psychopaths fail to appreciate the emotional significance of an event or experience (Larbig, Veit, Rau, Schlottke, & Birbaumer, 1992; Patrick, 1994; Williamson et al., 1991).

In short, psychopaths appear to be semantically and affectively shallow individuals. Presumably, the deep semantic and affective networks that tie cognitions together are not well developed in these individuals (Hare, 1993). Perhaps this is why psychopaths show, on close examination, signs of what seems to be a subtle form of thought disorder. For example, Williamson (1991) scored the audiotaped narratives of male offenders for cohesion and coherence in discourse. She found that the narratives of the psychopaths contained more than a normal amount of logical inconsistencies, contradictions, and neologisms and showed a tendency to derail or “go off track.” In some respects, it is as if psychopaths lack a central organizer to plan and keep track of what they think and say (Gillstrom & Hare, 1988).

Why do these cognitive and linguistic problems typically go undetected? For one thing, psychopaths use their own attributes to put on a good show. Intense eye contact, distracting body language, charm, and a knowledge of the listener’s vulnerabilities are all part of the psychopath’s armamentarium for dominating, controlling, and manipulating others. We pay less attention to what they say than to how they say it—style over substance. Because it is so easy to become sucked in by psychopaths, my research group routinely videotapes all of our interviews for later, more detached, analysis. We advise others to do likewise.

The cognitive, linguistic, and behavioral attributes of psychopaths (Hare, 1993; Newman & Wallace, 1993) may be related to cerebral dysfunction, particularly in the orbito/ventromedial frontal cortex (Gorenstein & Newman, 1980 . . . ; Lapiere, Braun, & Hodgins, 1995). This dysfunction need not actually involve organic damage (Hart, Forth, & Hare, 1990) but could reflect structural or functional anomalies in the brain mechanisms and circuitry—including the orbito/ventromedial frontal cortex, medial

temporal cortex, and amygdala—responsible for the coordination of cognitive and affective processes . . . ). Behavioral and neuroimaging studies indicate that damage to these regions can produce a dissociation of the logical/cognitive and affective components of thought (Damasio, Grabowski, Frank, Galaburda, & Damasio, 1994), or even what Damasio, Tranel, and Damasio (1987) refer to as *acquired sociopathy*.

The relevance of this to the criminal justice system is that very little of what we do is based solely on logical appraisals of situations and their potential ramifications for us and others. In most cases, our cognitions and behaviors are heavily laden with emotional elements. As Damasio (1994) recently put it, “emotion is integral to the process of reasoning” (p. 144). I would argue that it is also an essential part of “conscience.” However, it is this very element that is missing or seriously impaired in psychopaths; their conscience is only half formed, consisting merely of an intellectual awareness of the rules of the game. The powerful motivating, guiding, and inhibiting effects of emotion play little role in their lives, presumably not so much by choice as because of what they are. In effect, their internalized rule-books are pale, abridged versions of those that direct the conduct of other individuals.

In most jurisdictions, psychopathy is considered to be an aggravating rather than a mitigating factor in determining criminal responsibility. However, I’ve been asked if research evidence of the sort presented [previously]—affective deficit, thought disorder, brain dysfunction—might lead some to view psychopathy as a mitigating factor in a criminal case. As one psychiatrist put it, perhaps psychopathy will become “the kiss of life rather than the kiss of death” in first-degree murder cases. This would be appalling, because psychopaths are calculating predators whose behavior must be judged by the rules of the society in which they live. However, the issue is really one for the judicial system to settle. If psychopathy is used as a defense for a criminal act, the flip side of the coin is that the disorder currently is untreatable, and any civil commitment likely would be permanent.



## BAD, MAD, OR BOTH?

There is a related issue that complicates matters even further. Psychopaths typically are judged legally and psychiatrically sane. Many clinicians and investigators believe that psychopathy is incompatible with psychoticism, and there is some evidence to support their position (Hart & Hare, 1989). Not everyone agrees with this view, though. Some argue that psychopathy and schizophrenia are part of a common spectrum of disorders. Cleckley (1976) himself considered psychopathy to be closer to psychosis than to normality; after all, he titled his book *The Mask of Sanity* for a reason. Also, some forensic psychiatrists say that they occasionally see a mentally disordered offender who is both a psychopath and a schizophrenic. A recent study by Rasmussen and Levander (1994) suggests that diagnostic co-morbidity of this sort is not uncommon in maximum security psychiatric units housing severely violent or dangerous patients. They evaluated 94 consecutive admissions to such a unit in Norway and found that 22 patients met the PCL-R criteria for psychopathy. Of these, 12 (55%) also satisfied the *DSM-III-R* criteria for schizophrenia. They suggested that in such patients, schizophrenia may be superimposed on an underlying syndrome of psychopathy and, conversely, that psychopathy may be a vulnerability factor for schizophrenia. In any case, the combination would seem to be a particularly dangerous one, assuming that diagnoses are valid.

I suspect that genuine cases of psychosis-psychopathy co-morbidity are rare. More common are psychopaths who malingers, that is, fake psychotic symptoms in order to avoid prison. They present a particularly difficult problem for the mental health and criminal justice systems, typically bouncing back and forth between prisons and forensic psychiatric facilities (Gacono, Meloy, Sheppard, Speth, & Roske, 1995). Criminal psychopaths are more likely to be bad than mad.

## THE FUTURE

Psychopathy has long been a poor relative of experimental psychopathology, even though it has no equal in terms of the amount and degree of social, economic, physical, and emotional distress generated. The number of dedicated researchers is small and the research funding miniscule in comparison with the manpower and funding devoted to schizophrenia, the affective disorders, and even APD. The nature of psychopathy, however, provides just as much of a challenge as does any other clinical disorder. Of course, it is easier and more convenient to study psychiatric patients than psychopaths. The former manifestly are impaired and either seek or are sent for treatment, where they provide a steady pool of readily available research subjects for well-funded programs designed to understand and help them. Psychopaths, on the other hand, suffer little personal distress, seek treatment only when it is in their best interests to do so, such as when seeking probation or parole, and elicit little sympathy from those who study them. Furthermore, studying them in a prison environment is fraught with so many institutional and political problems, inmate boycotts, staff roadblocks, and red tape that most researchers simply give up after a few projects. In addition, and unfortunately in my view, resources have been targeted primarily at programs and projects that eschew the politically incorrect idea that individual differences in personality are as important as determinants of crime as are social forces.

As the title of this article implies, the situation is changing rapidly. Even those opposed to the very idea of psychopathy cannot ignore its potent explanatory and predictive power, if not as a formal construct then as a static risk factor. In the next few years, indices of psychopathy almost certainly will become a routine part of the assessment batteries used to make decisions about competency, sentencing, diversion, placement, suitability for treatment, and risk for

recidivism and violence. Because psychopaths with a history of violence are a poor risk for early release, more and more will be kept in prison for their full sentence, whereas many other offenders will be released early with little risk to society. However, unless we are content simply to warehouse high-risk offenders, we must develop innovative programs aimed at making their attitudes and behaviors less self-serving and more acceptable to the society in which most eventually must function.

Following publication of a book written for the general public (Hare, 1993), scores of people called or wrote to ask why I devoted so much space to psychopathic criminals and so little to the psychopaths with whom they daily lived and worked and who somehow always managed to stay out of prison. Many of these correspondents seemed caught up in emotionally damaging and dangerous situations from which there apparently was no escape (see Meloy, 1992). Their plight raises an issue that urgently needs to be addressed and researched: the prevalence of psychopathy in the general population and its expression in ways that are personally, socially, or economically damaging but that are not necessarily illegal or

that do not result in criminal prosecution. We study incarcerated offenders for two reasons: The base rate for psychopathy is high, and we have access to enough solid information to make reliable assessments. However, we must find ways of studying psychopaths in the community if we are ever to provide some relief for their victims, which is to say, all of us.

Prognostications are always risky, but the next decade will certainly see dramatic advances in our understanding of psychopathy, in large part because of increasing cross-cultural and interdisciplinary collaborations. Family and twin studies will combine with developmental investigations to provide the first solid data on the interactive roles of heredity and environment. Neuroimaging and neurophysiological protocols will lead to new insights into brain structure and function and may set the stage for effective intervention programs. Finally, there will be a continuation of the recent trend toward integration of pure research and practical application, for example, the conceptual linkage between the neurophysiological evidence of abnormal affective processes in psychopaths and their penchant for callous, cold-blooded behavior.

# CHILD SEXUAL MOLESTATION

## *Research Issues\**

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### INTRODUCTION

Few criminal offenses are more despised than the sexual abuse of children, and few are so little understood in terms of incidence (the number of offenses committed), prevalence (the proportion of the population who commit offenses), and re-offense risk. Despite longstanding public concern over the medical, emotional, and monetary costs associated with child sexual victimization, rigorous programs to enhance the accuracy of predictive decisions involving sexual offenders are of fairly recent origin. Because of inadequate methodologies, studies on the psychology, behavior, treatment, and recidivism rates of child molesters have often yielded inconsistent findings. The uncertainty of information about sexual offenders raises questions about the effectiveness of special

commitment statutes and ad hoc discretionary and dispositional decisions directed toward this group.

Before it can combat child molestation effectively, the criminal justice community must first understand it. Empirical knowledge of the factors that lead individuals to sexually abuse children can support and inform the sentencing, probationary, clinical, and supervisory decisions that must be made with regard to child molesters. This report is divided into four main sections. Section 1 discusses the frequency of child sexual molestation and factors leading to sexual deviancy in individual offenders. Section 2 includes classification models for typing and diagnosing child molesters and describes treatment approaches and strategies for community-based maintenance and control. Section 3 talks about re-offense risk as it relates to criminal justice decisions and

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discusses predictors of sexual recidivism. To illustrate the variability of recidivism among child molesters, section 4 presents the findings of a 25-year follow-up study of 115 released offenders. [Editor's note: Section 4 is omitted here.] Finally, some of the shortcomings of current approaches to reduce child molester re-offense risk are touched on in the report's conclusion, and an argument is made for post-release treatment and aftercare programs.

The information included in this Research Report has been distilled from several interrelated reports and studies sponsored by the National Institute of Justice (NIJ) to strengthen the efficacy of intervention and prevention strategies and ultimately reduce child sexual victimization rates.

## SECTION 1. OCCURRENCE AND ETIOLOGY

### Frequency of Child Sexual Abuse

The assumption that sexual crimes against children and teenagers are underreported is now commonly accepted. Sexual offenses apparently are more likely than other types of criminal conduct to elude the criminal justice system. This inference is supported by the reports of both sex offenders and sexually abused children. Offenders report vastly more victim-involved incidents than those for which they were convicted (Abel, Becker, Mittelman, et al., 1987). It is impossible to determine how representative these anonymous self-reporting offenders are, compared to all of the non-incarcerated and unidentified sex offenders in the population.

A telephone survey of a national probability sample of 2,000 children between the ages of 10 and 16 revealed that 3.2 percent of girls and 0.6 percent of boys had suffered, at some point in their lives, sexual abuse involving physical contact. If one infers that those statistics can be generalized to the rest of the country, children have experienced (but not reported) levels of victimization that far exceed those reported for adults (Finkelhor &

Dziuba-Leatherman, 1994). This finding is consistent with a recent report indicating that teenagers are at greater risk than adults for rape (Bureau of Justice Statistics [BJS], 1996).

In addition to underreporting, incidence estimates are also affected by a number of methodological problems. Although research on criminal conduct of any type may be hampered by these difficulties, sexual crimes seem to be especially susceptible. For instance, sexual offenses involve behavior that is not as clear-cut as that occurring in nonsexual crimes (such as robbery, burglary, or auto theft) because they often include nonsexual offenses (e.g., kidnapping, breaking and entering, or simple assault) as well as a variety of different sexual violations. The criminal charges springing from such a litany differ from one jurisdiction to another, and the resulting conviction may be for a "lesser," that is, nonsexual, offense (e.g., pleading out to simple assault). Given this unevenness in legal system dispositions, it is not surprising to find wide variations among—and wide ranges within—incidence/prevalence estimates.

### Characteristics of the Offender

The sexual abusers of children are highly dissimilar in terms of personal characteristics, life experiences, and criminal histories. No single "molester profile" exists. Child molesters arrive at deviancy via multiple pathways and engage in many different sexual and nonsexual "acting-out" behaviors.

**Sexual focus.** Evidence shows that sexual focus in child molesters comprises two separate components. The first is intensity of pedophilic interest, i.e., the degree to which offenders are focused or "fixated" on children as sexual objects. The second component involves the exclusivity of their preference for children as sexual objects. The second component is inversely related to social competence, as measured by the extent and depth of adult social and sexual relationships, and it is independent of the intensity of pedophilic interest.

**Physiological arousal.** Logic suggests that a behavioral dimension of sexual interest in children would be accompanied by varying degrees of physiological arousal to them. Plethysmographic assessment (i.e., measurement of penile volume changes [phallometry] in response to sexual stimuli) has demonstrated an ability to discriminate between child molesters and comparison groups of non-molesters (Barbaree & Marshall, 1988; Freund & Blanchard, 1989 . . .) as well as among subgroups of child molesters defined by victim gender preference (same sex vs. opposite sex) and by relationship to victim (incest vs. non-incest). For example, exclusive incest offenders demonstrate far less sexual arousal in response to children than do extrafamilial child molesters. Offenders with strong pedophilic interest show more sexual arousal to depictions of children than their low-fixated counterparts.

**Victimization of offenders as children.** Some support exists for the notion that child molestation may be related to an offender's restaging or recapitulation of his own sexual victimization. Tests of the recapitulation theory on a sample of 131 rapists and child molesters revealed that child molesters who committed their first assault when they were 14 or younger were sexually victimized at a younger age than were offenders who committed their first assault in adulthood. They also experienced more severe sexual abuse than offenders with adult onset of sexual aggression (Prentky & Knight, 1993). No evidence of recapitulation of sexual abuse among rapists was found in this study. It should be pointed out, however, that regardless of whether or not they were sexually abused (and, if so, by whom and at what age), *all* offenders in the sample went on to commit sexual offenses.

By itself, sexual victimization is too narrow a factor to explain child molestation. No inexorable link exists between experiencing sexual abuse as a child and growing up to be a child molester; the "outcome" of child molestation is a much more complex phenomenon. Most victims of childhood sexual abuse do not go on to become perpetrators. As is true for other kinds

of maltreatment, childhood sexual victimization becomes a critical element in the presence or absence of a variety of other factors (e.g., co-occurrence of other types of abuse, availability of supportive caregivers, ego strength of child-victim at the time of abuse, and treatment), all of which moderate the likelihood of becoming a child molester. In addition, the severity of the long-term effects of childhood sexual abuse is influenced by clear morbidity factors (e.g., age at onset of abuse, duration of abuse, the child's relationship to the perpetrator, and invasiveness and/or violence of the abuse). The weight and significance of having been sexually abused are specific to the individual child molester.

**Social competence.** A variety of studies have documented the inadequate social and interpersonal skills, under-assertiveness, and poor self-esteem that, in varying degrees, characterize individual offenders (Araji & Finkelhor, 1985; Marshall, Barbaree, & Fernandez, 1995 . . .). Social competence deficits are pervasive among child molesters and must be considered clinically significant. As is true for sexual abuse suffered by offenders during childhood, however, social competence deficits constitute but one important factor in the complex etiology of child molestation.

**Impulsive, antisocial personality.** Research shows that child molesters who committed their first sexual offense in adolescence had histories of being disruptive in school (verbally or physically assaulting peers and teachers), showed high levels of juvenile antisocial behavior, and, as adults, manifested a greater degree of nonsexual aggression. For some types of child molesters, sexual offenses are part of a longer criminal history, reflecting an antisocial lifestyle and impulsive behavioral traits that probably had been present from childhood (Prentky & Knight, 1993; Prentky, Knight, & Lee, 1997; Quinsey, Rice, & Harris, 1995). A history of impulsive, antisocial behavior is a well-documented risk factor associated with some child molesters.

**Developmental influences.** Recognition of the multiple factors that determine child molestation has led clinicians and investigators to examine the antecedent and concurrent experiences that place sexual abuse in a developmental context. One variable, “caregiver inconstancy,” measures the frequency of changes in primary caregivers and the longest time spent with any single caregiver; it reflects the permanence and consistency of the child’s interpersonal relationships with significant adults. Caregiver inconstancy, a powerful predictor of the degree of sexual violence expressed in adulthood (Prentky et al., 1997) interferes with the development of long-term supportive relationships, increasing the likelihood of an attachment disorder. Attachment disorders may be characterized by intense anxiety, distrust of others, insecurity, dysfunctional anger, and failure to develop normal age-appropriate social skills. Thus, specifiable early childhood experiences may lead to interpersonal deficits and low self-esteem that severely undermine development of secure adult relationships. Individuals having these interpersonal and social shortcomings are more likely than others to turn to children to meet their psychosexual needs.

## SECTION 2. TYPOLOGY AND TREATMENT

### Classification of Child Molesters

**Diagnosis and assessment.** Just as the childhood and developmental experiences, adult competencies, and criminal histories of child molesters differ considerably, so do the motives that underlie the behavior patterns that characterize their sexual abuse of children. Thus, informed decisions about these offenders require some understanding of the dimensions believed to be important in discriminating among them. Diagnosis aims to reduce this diversity by assigning the offender to a class or group of individuals with similar relevant characteristics. Identifying and measuring these relevant characteristics is the task of assessment.

A reliable, valid classification system can improve the accuracy of decisions (1) in the

criminal justice system (where dangerousness and re-offense risk are assessed and resources are allocated), (2) in the clinical setting (where a more informed understanding of particular classes of offenders can be used to optimize treatment plans), and (3) in the design of more effective primary prevention strategies. A classification model may also help in deciphering critical antecedent factors that contribute to different outcomes (i.e., different “types” of child molesters).

**DSM-IV classification.** The 1994 edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* places pedophilia under the heading, “Sexuality and Gender Identity Disorders” (American Psychiatric Association, 1994). According to *DSM-IV*, the onset of pedophilia “usually begins in adolescence,” and its course is “usually chronic.” Specific behavioral criteria for diagnosing pedophilia are listed, as follows:

- The subject has experienced, for at least 6 months, recurrent intense sexual urges or fantasies involving sexual activity with a prepubescent child (age 13 or younger).
- The subject has acted on these urges or is markedly distressed by them.
- The subject is at least 16 years old and at least 5 years older than the victim. (Late adolescent subjects who are involved in ongoing relationships with 12- or 13-year-old youngsters are excluded.)

Three other specifications figure in this classification system: (1) whether the client is sexually attracted to males, females, or both; (2) whether the offenses are limited to incest; and (3) whether the client is an “exclusive” (attracted only to children) or “nonexclusive” type.

Although the *DSM-IV* classification system may succeed in isolating the “pedophilic” child molester, it fails to capture those incest and extrafamilial offenders without known 6-month histories of sexualized interest in children. Requiring evidence that an individual has met the first (and critical) diagnostic criterion dealing



with “recurrent intense sexual urges or fantasies” involving children will inevitably screen out a large number of child molesters.

**Sex-of-victim model.** Classification of child molesters on the basis of their victims’ sex—same-sex, opposite-sex, or mixed-group offenders—has shown stability over time (Fitch, 1962; Langevin et al., 1985). In addition, it has demonstrated predictive validity as well as some concurrent validity (e.g., it corresponds as expected with penile plethysmographic responsiveness to stimuli depicting specific ages and sexes) (Freund, 1965, 1967; Frisbie, 1990 . . . ). Many reports have suggested that, among extrafamilial offenders, same-sex child molesters are at highest risk to re-offend, and opposite-sex child molesters are at lowest risk. However, the sex-of-victim distinction has not received consistent support. In contrast to the typical finding, at least four recent studies found either no differences in recidivism rates among groups or differences that were opposite to prediction Abel, Becker, Murphy, & Flanagan, 1981; Prentky & Quinsey, 1988; . . . ).

The reasons for discrepant findings based on the sex-of-victim distinction are unclear, although several possibilities come immediately to mind:

- The large number of unreported sexual assaults on children
- Possible biases against reporting homosexual encounters
- Situational factors that might lead to assaults on the less-preferred sex
- Incarceration after a single assault

Further, some studies do not distinguish between incest offenders, who are almost exclusively heterosexual in their choice of victims, and non-incest offenders. Assuming that “true” incest offenders (that is, those whose offenses are exclusively intra-familial) constitute a clinically and theoretically meaningful group of child molesters, the proportion of such cases in any particular sample might affect the differences found between same- and opposite-sex offenders.

### **Clinically derived multidimensional systems.**

In the earliest taxonomic systems for child molesters, which were based exclusively on clinical experience, three subtypes consistently appeared:

- Offender with an exclusive and longstanding sexual and social preference for children (Common Type 1)
- Offender whose offenses are seen as a shift or regression from a higher, adult level of psychosexual adaptation, typically in response to stress (Common Type 2).
- Offender who is a psychopath or sociopath with very poor social skills and who turns to children largely because they are easy to exploit—not because they are preferred or even desired partners (Common Type 3)

The most historically important of these hypothetical subtypes are the “fixated” and the “regressed” (Common Types 1 and 2, respectively). Implicit or explicit in the various systems that attempted to define fixated and regressed types was an assessment of achieved level of social competence. In addition to being described as having more intense pedophilic interest, fixated offenders were also typically differentiated from regressed offenders by marital status, number and quality of age-appropriate heterosexual relationships, and achieved educational and occupational levels. The fixated child molester was hypothesized to have a negligible history of dating or peer interaction in adolescence and adulthood, and, if married, the quality of his relationship was considered to be poor.

Regressed offenders, in contrast, were described as more likely to have been married and to have developed appropriate heterosexual relationships prior to their “regressive” sexual offenses. Thus, the construct of social competence was clearly involved in the distinction between fixated and regressed types, but, when empirically tested (Conte, 1985) this distinction was found to be flawed. Results showed that the two groups were not homogeneous. Indeed, social and interpersonal competence were found to be independent of fixation (Finkelhor & Araj, 1986).

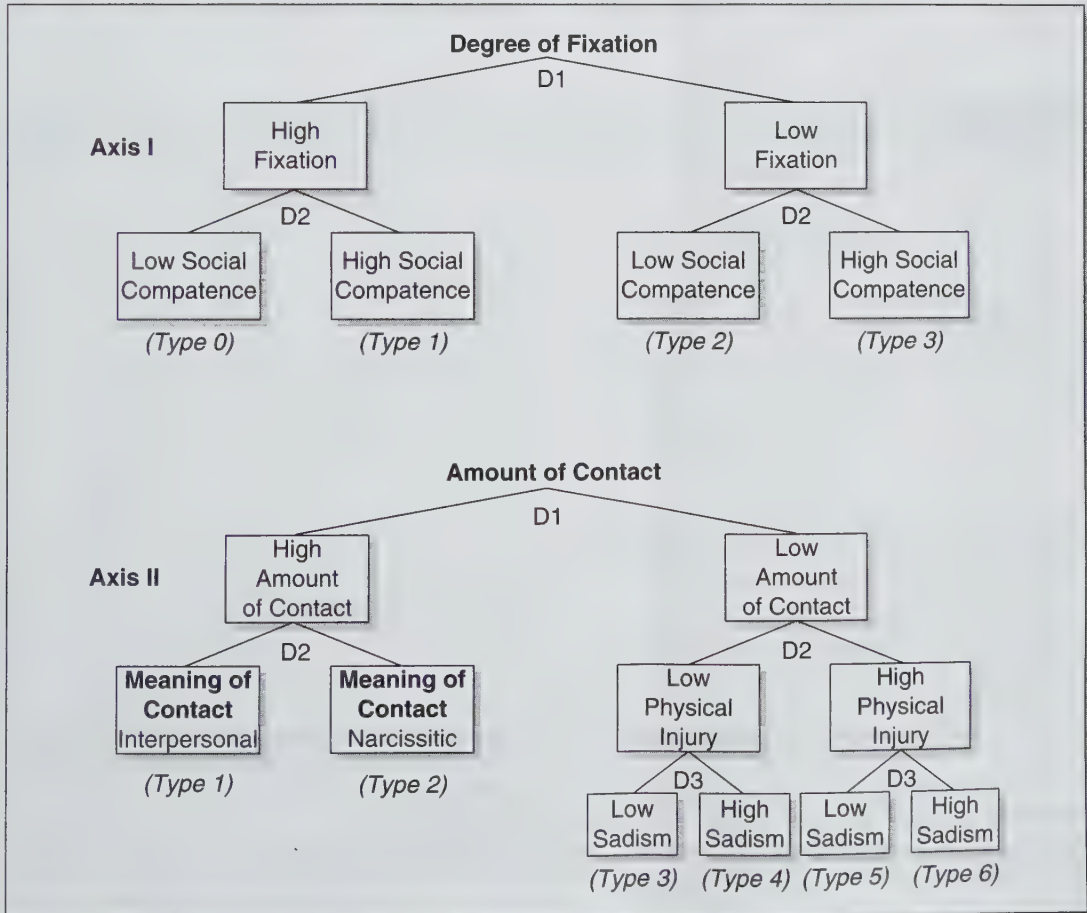
**The MTC:CM3 model.** To meet the need for a clearly operationalized, reliable, valid taxonomic system for child molesters, researchers at the Massachusetts Treatment Center (MTC) for Sexually Dangerous Persons developed MTC:CM3, a two-axis typology (see Exhibit 11.1). On Axis 1, fixation and social competence are completely independent dimensions, and each has distinct developmental antecedents and adult adaptations (Knight, Carter, & Prentky, 1989). The concept

of regression was dropped in developing MTC:CM3, and a newly defined fixation dimension (i.e., “intensity of pedophilic interest”) was crossed with a dimension of social competence, yielding four independent types:

- High fixation, low social competence (Type 0)
- High fixation, high social competence (Type 1)
- Low fixation, low social competence (Type 2)
- Low fixation, high social competence (Type 3)

### Exhibit 11.1

Flow Design of the Decision Process for Classifying Child Molesters on Axis I and Axis II of MTC:CM3



A new behavioral dimension ("amount of contact with children") was added on a separate coordinate (Axis II) and became a powerful discriminator with respect to re-offense risk. In addition, the degree of violence employed by an offender was differentiated into dimensions of physical injury (high/low) and sadism (present/absent), yielding six distinct Axis II subtypes whose hypothetical characteristics are shown in Exhibit 11.2. Exclusive incest offenders were omitted in the design of MTC:CM3, including such offenders in this system would require considerable reconceptualization and revision. Although further revision of MTC:CM3, including integration of Axis I (fixation and social competence) and Axis II (amount of contact with children, degree of injury to victim, and sadism), is necessary, validity studies

conducted thus far clearly support the primary structural changes in this model (Knight, 1989, 1992; Prentky et al., 1997).

### Course and prognosis among child molesters.

Among child molesters, both the course (progression of symptoms associated with the condition) and the prognosis (forecast of the probable course and likelihood of recovery) vary considerably. For example, onset ranges from early adolescence to middle adulthood (as in the case of some exclusive incest offenders). The prognosis ranges from cases of lifelong, intractable pedophilic interest that is resistant to treatment to isolated instances of incest in adults with a sexual preference for peers, ample remorse and victim empathy, and a high likelihood of "recovery."

**Exhibit 11.2** Hypothetical Profiles of MTC:CM3 Axis II Types

|                                     | <i>Interpersonal<br/>(Type 1)</i>                | <i>Narcissistic<br/>(Type 2)</i> | <i>Exploitative<br/>(Type 3)</i> | <i>Muted<br/>Sadistic<br/>(Type 4)</i> | <i>Nonsadistic<br/>Aggressive<br/>(Type 5)</i> | <i>Sadistic<br/>(Type 6)</i> |
|-------------------------------------|--------------------------------------------------|----------------------------------|----------------------------------|----------------------------------------|------------------------------------------------|------------------------------|
| Amount of Contact With Children     | High                                             | High                             | Low                              | Low                                    | Low                                            | Low                          |
| Sexual Acts                         | Fondling, Caressing, Frottage, (Non-phallic sex) | Phallic Non-sadistic sex         | Phallic Non-sadistic sex         | Sodomy "Sham" sadism <sup>a</sup>      | Phallic Non-sadistic sex                       | Sadism                       |
| Relationship of Offender to Victim  | Known                                            | Known or Stranger                | Stranger                         | Stranger                               | Stranger                                       | Stranger                     |
| Amount of Physical Injury to Victim | Low                                              | Low                              | Instrumental <sup>b</sup>        | Instrumental <sup>b</sup>              | High                                           | High                         |
| Amount of Planning in Offenses      | High <sup>c</sup>                                | Moderate                         | Low                              | Moderate                               | Low                                            | High                         |

<sup>a</sup>"Sham" sadism implies behaviors or reported fantasies that reflect sadism without the high victim injury present in Type 6.

<sup>b</sup>Instrumental aggression Implies only enough force to gain victim compliance.

<sup>c</sup>Interpersonal types know their victims and may spend a considerable amount of time "grooming" them (setting them up), but the offenses often appear to be unplanned or spontaneous.



## Clinical Management of Offenders

**Treatment.** Over the past decade, the provision of therapeutic services for sex offenders has increased significantly. A 1994 survey reported 710 adult and 684 juvenile treatment programs (Longo, Bird, Stevenson, & Fiske, 1995) up from 1985 survey results that showed 297 adult and 346 juvenile treatment programs (Knopp, Rosenberg, & Stevenson, 1986). Broadly speaking, sex offender treatment programs employ four approaches:

- Evocative therapy focuses on (1) helping offenders to understand the causes and motivations leading to sexually deviant and coercive behavior and (2) increasing their empathy for the victims of sexual assault. This approach may include individual, group, couples/marital, and family therapy. Group therapy may be eclectic or issue focused (i.e., specialty groups may target substance abuse, adult children of alcoholics, victim empathy, victim survivors, social skills/assertiveness training, black awareness, gay identity, or Vietnam veterans).
- Cognitive behavior therapy focuses on sexual assault cycles and techniques that interrupt those cycles; altering the beliefs, fantasies, and rationalizations that justify and perpetuate sexually aggressive behavior; and controlling and managing anger. Studies of relapse prevention, the most commonly employed cognitive behavioral model, report that, for child molesters, the most frequently identified experiences prior to committing an offense were planning the offense (73 percent of sample) and low victim empathy (71 percent of sample) (Pithers, 1990; Pithers, Martin, & Cumming, 1989).
- Psychoeducation groups or classes use a more didactic approach to remedy deficits in social and interpersonal skills; they teach anger management techniques, principles of relapse prevention and a range of topics that includes human sexuality, dating and communication skills, and myths about sexuality and relationships.
- Pharmacological treatment focuses on reducing sexual arousability and the frequency of deviant sexual fantasies through the use of anti-androgen and antidepressant medication.

These approaches are not mutually exclusive, and the ideal treatment program (yet to be identified) would employ combinations of them. State-of-the-art intervention at this point (cognitive behavior therapy and, when appropriate, medication) can effectively reduce re-offense rates. For example, recidivism rates for new sexual offenses by child molesters treated under the cognitive behavior therapy model, with a focus on relapse prevention, were 4.6 percent in a 3-year follow-up study (Marques et al., 1993) and 3 percent in a 6-year follow-up study (Pithers & Cumming, 1989). The non-volunteer control group in the 3-year follow-up had a sexual recidivism rate of 8.2 percent, yielding an apparent treatment effect of 3.6 percent.

When these failure rates are compared to those for Years 3 and 5 in the MTC study . . . of sex offenders who did not receive cognitive-behavior therapy, the presumptive effectiveness of treatment in reducing the probability of sexual re-offense is between 7 and 15 percent. A recent meta-analysis of 12 sex offender treatment studies ( $N = 1,313$ ) found that the overall recidivism rate for untreated sex offenders was 27 percent, while for treated offenders it was 19 percent—an apparent treatment effect of 8 percent (Hall, 1995). These statistics suggest that treatment can reduce child molester recidivism. The wide variability in study findings on re-offense rates of both treated and untreated offenders, however, makes efforts to find optimal treatment interventions as problematic as efforts to assess and predict recidivism.

### Community-based maintenance and control.

The vast majority of sex offenders are released eventually. Thus, community-based clinical management and control of child molesters are indispensable parts of any rehabilitation program if public safety is to be ensured. An effective community-based maintenance program for child molesters should include the following components:

- Coordination by highly trained and well-supervised parole agents and probation officers who carry small caseloads (15 to 20 offenders) to ensure intensive surveillance/supervision

- Mandatory treatment by therapists trained and supervised in cognitive behavioral theory with sex offenders; this is especially critical for adjustment and maintenance
- Evaluation for medication
- Proper monitoring and supervision of vocational, social, recreational, and leisure activities
- Confidential notification of local police departments and/or the district attorney's office.

Registration with the criminal justice system is a widely practiced, reasonable procedure that should be considered a part of an offender's aftercare plan. Community notification, however, is an untested management technique—that has at least as many potential problems as benefits—and must be empirically evaluated. Indeed, the general notification of laypersons outside the criminal justice system may increase, rather than decrease, the risk of recidivism by placing extreme pressure on the offender; examples of stressors include threats of bodily harm, termination of employment, on-the-job harassment, and forced instability of residence.

Continuity of treatment is considered a critical factor in managing sex offenders. Maintenance is forever, and relapse prevention never ends. Community-based clinical management must be supportive, vigilant, and informed by current wisdom about maximally effective maintenance strategies.

### SECTION 3. RE-OFFENSE RISK

#### Dispositional Decisions

Recidivism rates are highly variable, making it impossible to draw any reliable conclusions about re-offense among child molesters as a group. Most recent studies have been conducted in order to evaluate treatment efficacy; consequently, little is known about recidivism independent of some treatment intervention. Moreover, variations in recidivism rates associated with different treatment programs are difficult to interpret. [Comparing] recidivism rates across

studies is confounded by [a number of factors]. These include differences in the statutes and sentencing and parole guidelines among jurisdictions; duration of exposure (i.e., time in the community, where the child molester is at liberty to re-offend); offender characteristics; treatment-related variables (including differential attrition rates, program integrity, and amount of treatment); amount and quality of post-treatment supervision; and many other factors.

The criminal justice system is responsible for certain discretionary decisions concerning sex offenders, most of which rest on a presumption about an individual offender's dangerousness or re-offense risk. Examples of decisions driven by underlying assumptions about the probability of recidivism include

- whether to leave an offender in the community on probation,
- whether to parole an offender and, if so, the level/duration of supervision needed,
- whether to recommend compulsory treatment,
- whether to require registration with the police, and
- whether to notify the community.

From a forensic standpoint, potential dangerousness is a question central to the disposition of sex offenders. Yet there is no reliable body of empirically derived data that can inform and guide decision making about re-offense risk—primarily because of methodological differences in existing studies. . . .

#### Predictors of Sexual Recidivism

Although ample evidence exists to demonstrate the predictive superiority of statistical (actuarial) risk assessment methods over clinical judgment, few concerted efforts have been made to develop and empirically test actuarial prediction devices for sexual offenders. The one obvious exception is the work of investigators in Canada, who have focused on psychopathy, measures of prior criminal history, and phallometric assessment to predict sexual recidivism

(Quinsey et al., 1995). A recent study on risk assessment among extrafamilial child molesters included three of the dimensions used in MTC:CM3 (fixation, social competence, and amount of contact with children). Study researchers argued that the MTC:CM3 assessment of fixation—a behavioral measure of the strength of an offender's pedophilic interest—may serve as a viable substitute for phallometry, which is intrusive and much more expensive (Prentky et al., 1997).

#### **Risk assessment study of extrafamilial offenders.**

The predictive value of a rationally derived composite of variables for assessing re-offense risk, based on archival data (prison and criminal records), was tested in a follow-up study of extrafamilial child molesters who had been discharged from the [MTC] over a period of 25 years. The sample of 111 represents 96.5 percent ( $N = 115$ ) of all child molesters discharged between 1960 and 1984.

Data reveal differential predictive accuracy depending on the type of criminal behavior being examined. Three variables—degree of sexual preoccupation with children (fixation), paraphilias (fetishism, transvestism, and promiscuity), and number of prior sexual offenses predicted sexual recidivism, while those variables that reflect impulsive, antisocial behavior predicted recidivism for nonsexual crimes involving physical contact with a victim and violent (sexual and nonsexual) crimes.

Unlike other recent studies (e.g., Hanson, Steffy, & Gauthier, 1993), this study found no evidence for the utility of alcohol history, social competence, and sex of child-victim as predictors of re-offense. In the case of victim sex, one explanation for these inconsistencies may be due to sampling differences. The sample of child molesters examined in this study had an average of three known sexual offenses prior to release. This sample had a higher base rate probability of re-offense than would likely be observed in an unscreened sample of child molesters recruited from the general prison population. Among child

molesters who are at higher risk to re-offend, the victim's sex may be less important to accurate prediction than such factors as degree of sexual preoccupation with children and impulsivity.

**Predictive accuracy.** The variables associated with re-offense risk among child molesters that were examined for discriminant validity had reasonable predictive accuracy with regard to both sexual and nonsexual re-offending; overall predictive accuracy was approximately 75 percent. The results of this study are sample-specific and may not be generalizable. The potential uniqueness of this sample is suggested by the study's failure to find any predictive efficacy for the victim-sex variable.

Although risk assessment procedures that rely exclusively on archival data may never achieve the efficiency of much more time-intensive procedures—such as the penile plethysmograph or a comprehensive interview that assesses psychopathy (e.g., *The Hare Psychopathy Checklist-Revised, PCL-R*) (Hare, 1991)—the distinct advantages of an archival scale include its ease of use (i.e., it does not require the compliance or even the presence of the offender), cost efficiency, and relatively high reliability. Despite these presumptive advantages, the ability of such an archivally based procedure to reasonably discriminate across samples remains to be demonstrated.

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## **CONCLUSION**

Sexual offenders constitute the one category of dangerous criminals most subject to either special commitment statutes or ad hoc discretionary and dispositional decisions. These laws and the decisions that they require are often based on assumptions about sex offenders that are, at best, misleading and, at worst, erroneous. Given the serious concerns about sex offenders within the criminal justice system and society at large,



the need for valid diagnostic and assessment tools is urgent. Indeed, the most formidable task is to develop empirically corroborated estimates of sexual re-offense probabilities for different subgroups of sex offenders under standardized operational conditions.

Practitioners, researchers, and legislators should be guided by moderation, clear vision, and empirical evidence. Over the years, many laws governing sex offenders have been enacted and later repealed (Carter & Prentky, 1993; Grubin & Prentky, 1993). Two timely examples of presumably well intentioned but problematic legislation are the much-discussed community notification laws and the new California law requiring repeat sex offenders to choose between "chemical castration" (i.e., treatment with anti-androgenic medication) or surgical castration. The California statute poses difficulties on several counts:

- From an ethical standpoint, mandating either an intrusive, irreversible surgical procedure or treatment with a drug that the U.S. Food and Drug Administration has not approved for use with sex offenders is highly questionable.
- From a practical standpoint, sex offenders cannot be relied on to comply with a drug regimen to which they have not consented and from which they cannot withdraw. Moreover, the apparently compliant offender can easily circumvent the effects of the drugs or the surgery by buying testosterone (steroids) on the street.
- From an empirical standpoint, the law makes the invalid assumption that all sex offenders are motivated by uncontrollable sexual urges. Chemical reduction of testosterone is appropriate for some, but not all, child molesters; when medication is used, it must be included as one component of a treatment plan that includes

therapy. It is critical to keep in mind, however, that surgical or chemical reduction of testosterone will not, by itself, solve the problem of child molestation.

Reducing the risk of recidivism among sex offenders is a problem for which no easy answers or shortcuts exist. Treatment provided in prison must be continued after offenders are released into the community. Reintegration is especially problematic for child molesters. Detailed after-care plans, orchestrated by well-trained and supervised parole agents and probation officers, are essential to reducing re-offense risk and should include consideration of the vocational, psychotherapeutic, pharmacological, social, and recreational needs of the offender.

Clearly, the most compelling motive for treating child molesters is the reduction in victimization rates that is presumed to result. Society resists treating sexual offenders, however, because to do so is perceived as a humane response to intolerable behavior. If treatment can be demonstrated to reduce the probability of re-offense, then working on the development and refinement of treatment methods and procedures is an essential secondary intervention.

The criminal justice community faces difficult, but not insuperable, challenges as it moves to balance the right of the community to be protected with the rights of offenders. If those professionals who deal with the victims and perpetrators of child molestation are willing to harness their collective energy, pull in a common direction, and speak with a single firm voice, properly informed laws can be enacted that will better control child molesters and make communities safer for children.

## WHAT BIOSOCIAL CRIMINOLOGY OFFERS CRIMINOLOGY\*

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“**N**ew methods, new questions, more research, better careers.” Such an advertisement could read as enticing scholars to join the ranks of a new research paradigm. Of course, scholars are rarely moved by such grandiose statements, and to date, no paradigm has actively recruited researchers. But in thinking about what biosocial criminology has to offer criminology, we were drawn immediately to these possibilities. Imagine criminology not wholly reliant on secondary data; on survey methodology; or on the multitude of tired, worn-out theories. Imagine criminology where a reliance on abstraction was replaced by a reliance on the measurement of directly observable phenomena. Imagine criminology where replication was valued and where research findings were translated into practical, concrete policy applications. Imagine criminology as a truly interdisciplinary science.

Sound impossible? Given the institutionalization of many of our theories and methods, it may be, but it does not have to be so. Paradigm shifts occur when a critical mass of scholars alter their thinking (Kuhn, 1962). These shifts can emerge out of recent discoveries but more frequently emerge when scholars, recognizing the limitations and contradictions of the current paradigm, become attracted to the excitement of ideas offered by a new or evolving paradigm. We believe the time is ripe for a paradigm shift in criminology and, hence, take the unusual step of publicly recruiting criminologists into a different way of thinking about research into criminal behavior. In so doing, we run the risk of alienating those whose ideas we disagree with, those firmly grounded in traditional disciplinary perspectives, and those who remain uninformed about biology. These are the risks, also outlined

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by Kuhn (1962), that disciplines must undertake if they are to remain intellectually vibrant and relevant. It is time, at least in our minds, to create the tension necessary to stimulate a broader debate concerning the vibrancy, legitimacy, and relevancy of traditional criminology.

So, what does a biosocial paradigm offer criminology? In the following pages, we enumerate several offerings associated with biosocial criminology, including intellectual excitement, new methodological techniques, increased theoretical specificity, a renewed look at individual differences, and suggestions for effective policies based on the scientific research on healthy human development.

## DISCOVERY IS EXCITING

The first offering, and likely the most important, is intellectual excitement. As the name implies, the biosocial paradigm integrates, where appropriate, scientific findings from various hard sciences that fall under the broader umbrella of biology. These sciences may include neurology, psychiatry, genetics, and evolutionary psychology, to name only a few. Anyone who has read contemporary biological and genetic accounts of human behavior understands that a revolution in science is occurring in these fields. Almost daily, new discoveries are reported, discoveries in the truest sense of the word, linking some aspect of human biology to behavior. Sophisticated imaging devices, genome-wide scans of genetic architecture, and highly precise measurements of physiological functioning have shed new light on human traits, capacities, and behaviors. It is exciting to be part of a scientific movement and equally exciting to discover aspects of human functioning.

We maintain that this aspect of biosocial research is one of the most important, even if it is one of the least scientific, reasons to advance a biosocial paradigm. From a utilitarian viewpoint, scientific careers are built around publishing research. Criminology is no different. Yet, it is our view and the view of other criminologists

that too much of criminology is derivative if not entirely redundant. On a personal level, it is difficult to remain excited about publishing another study on an outdated theory, or reading yet another study on Hirschi's (1969) four social bonds, or reading another debate on the causal nature of delinquent peer networks. Whereas the reasons are likely numerous, we suggest that few scholars remain active researchers over the courses of their careers in part because standard sociological criminology is boring.

Scholars, by their very nature, love puzzles. They love to figure out complex relationships and discover how processes work. Biosocial criminology provides a new and unique set of puzzles and thus can encourage new and exciting ideas. Take, for example, research on maternal smoking and its association with antisocial behavior. Criminologists have known for some time that there is a significant link between the two (Brennan, Grekin, & Mednick, 1999; Fergusson, Woodward, & Horwood, 1998; Rasanen et al., 1999). However, studies also clearly reveal that not all fetuses are uniformly harmed by exposure to cigarette smoke (Pratt, McGloin, & Fearn, 2006). How can this be?

Because the biosocial paradigm incorporates findings and methodologies from a number of sciences, answers to these puzzles emerge. A recent study by Maughan, Taylor, Caspi, and Moffitt (2004) found that approximately 50% of the effects of maternal cigarette smoking during pregnancy on child conduct problems at ages 5 and 7 years old were accounted for by shared genetic factors. Not surprisingly, antisocial women were far more likely to smoke during pregnancy and were significantly more likely to produce antisocial offspring (Gibson & Tibbetts, 1998). The deleterious effect of maternal cigarette smoking, however, was not fully accounted for by shared genetic factors, suggesting that in utero exposure to cigarette smoke plays some type of causal role in compounding the risk for future misbehavior of the child (Pratt et al., 2006). Further studies, however, have revealed that genes that control the metabolism of drugs, genes that control the removal of foreign particles



from our bodies (glutathione S transferase), and genes involved in neurotransmission strongly modify the effects of in utero exposure to cigarette smoke (Wakschlag et al., 2009).

Part of solving the puzzle involved the incorporation of findings from the genetic sciences. Genetic variation makes children either more or less at risk when exposed to maternal cigarette smoke. Individuals with allelic combinations considered to be risk alleles and who are exposed in utero to cigarette smoke are more strongly affected than are those without the risk alleles (Kahn, Khoury, Nichols, & Lanphear, 2003). In part because of the concilience of knowledge, research on the link between maternal cigarette smoking and offspring development has advanced rapidly. In short order, it may be possible to identify mothers and their offspring most at risk for the deleterious effects associated with cigarette smoking and to intervene to help both. Had these researchers not been versed in biology, human development, and sociology, their questions, methods, and findings may not have borne fruit.

## **BIOSOCIAL CRIMINOLOGY INCORPORATES ADVANCED METHODOLOGIES**

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Standard social scientific methodologies (SSSM) are the norm in criminological research. As applied to the study of families, SSSMs usually involve assessing one child per family and one parent—almost always the mother. Criminologists then correlate the information garnered from these two sources, inferring similar patterns of covariances between other children and their parents within the home. This methodology has led to broad, sweeping statements about the effects parents have on their children. Parents, for example, who are “warm and restrictive” are said to produce children who are better behaved and who have fewer psychological problems than parents who are “authoritarian” or “permissive” (Patterson, 1976).

Unfortunately, when other children within the same home are examined, the validity of these broad statements falls flat. Further research has

found tremendous behavioral variability between children within the same home exposed to the same parenting styles. Constants, of course, cannot predict variability. Clearly, something is amiss with SSSMs. That “something” is genes. Numerous behavioral genetic studies have shown that aggressive behaviors are highly heritable, with heritability estimates hovering between 50% and 85% (Coccaro, Bergeman, Kavoussi, & Seroczynski, 1997; Dionne, Tremblay, Boivin, Laplante, & Pérusse, 2003; Eley, Lichtenstein, & Stevenson, 1999; Finkel & McGue, 1997; Hudziak, Rudiger, Neale, Heath, & Todd, 2000; Vernon, McCarthy, Johnson, Jang, & Harris, 1999). Research designs that exclude genetic influences cannot recognize the substantial across-individual variability within homes and thus may have led to many erroneous conclusions about the influence parents have on the development of their children.

No research design is perfect, but designs that systematically skew results should be called into question. In this illustration, we point out that these designs systematically exclude the potential influence of genetic factors. A common type of research design in behavioral genetics, however, involves the use of twins and is referred to as the classical twin design. This type of design allows for the estimation of environmental and genetic influences and has been employed extensively in a variety of disciplines.

Behavioral genetic methodologies capitalize on variation within and across genetically related individuals. Because of this, behavioral genetic designs allow for the estimation of genetic, shared, and nonshared environmental effects. Genetic influences are reflected in heritability estimates. These estimates quantify the degree to which variation in a trait or behavior is accounted for by genetic factors. Hundreds of studies have revealed that genetic influences are omnipotent—that is, genes are entangled in virtually every aspect of human development and behavior (Plomin, 1990).

Shared environmental influences are those that make children growing up in the same family more alike. These types of influences, such as

socioeconomic status and neighborhood conditions, are believed to exert the same effect on children living within the home. These effects promote behavioral similarities between individuals within families while highlighting the differences between individuals across families. Nonshared environmental influences include experiences and life events unique to each individual within the home, such as different peer networks, different extracurricular activities, and different parental treatment. These influences make individuals from the same home different from one another (Neale & Cardon, 1992). Research has shown that nonshared environmental factors play a more important role in explaining variation in antisocial and criminal behaviors compared to shared experiences between siblings. A meta-analysis conducted by Rhee and Waldman (2002) looked at 51 twin and adoption studies to estimate the degree to which genetic and environmental factors influence antisocial behavior. Their results revealed that the 42%, 16%, and 42% of the variance in antisocial behavior was attributed to genetics (i.e., additive and nonadditive), shared environmental factors, and nonshared environmental factors, respectively. Although measurement error is tangled up in the estimate of nonshared environment (Eaves, 1982; Plomin, DeFries, McClearn, & Rutter, 1997), it is apparent that nonshared experiences have a larger impact on behavior compared to shared environmental factors. As Plomin (1990) stated, small differences in experiences can have large effects on behavior.

Behavioral genetic research designs are one way to study antisocial behavior from a biosocial perspective. Another research technique often used in biosocial criminology involves the examination of specific genetic and environmental conditions that interact to increase the likelihood of antisocial behavioral expression. Biosocial criminologists are often interested in examining how genes interact with an environment to produce behavior. Let's go back to our example of physical maltreatment and later aggressive behaviors. Whereas research shows a correlation between these two variables, not all children who have

been abused go on to display antisocial behaviors later in life (Stevenson, 1999). Why do some individuals who experience maltreatment grow up to display antisocial behaviors and others do not? Biosocial criminology is the perfect framework in which to answer these types of questions.

One of the first criminological studies to provide evidence for gene-environment interactions was published by Caspi and his colleagues (2002). They found that a functional polymorphism in the metabolizing enzyme monoamine oxidase A (MAOA) interacted with physical maltreatment to produce antisocial behavior. Specifically, individuals with low MAOA activity who experienced maltreatment were more likely to exhibit antisocial behaviors compared to those individuals with high levels of MAOA activity who experienced maltreatment. Their study provided graphic evidence that experience, such as physical maltreatment, is genetically modified. With the continued methodological advancements made in behavioral genetics, several new and exciting research questions on the effects of genes and environment on antisocial behavior are waiting to be answered.

### **BIOSOCIAL CRIMINOLOGY OFFERS INCREASED THEORETICAL SPECIFICITY**

Students of criminal conduct face a daunting task. Unfortunately, we speak not of understanding the etiology of antisocial behavior but of the wading through of the multiple theories of crime. There are control, strain, conflict, feminist, peacemaking, radical, structural, process, integrated, life-course, learning, rational choice, and even convict theories of criminal behavior—to name just a few. Indeed, a quick perusal of several introductory criminology textbooks documents easily the coverage of 60 or more theories of criminal conduct (Lilly, Cullen, & Ball, 2007). With this much theoretical baggage, it is difficult to make an argument that the science of criminology is advancing in any clear direction.

Walsh and Ellis (2004) argued that theoretical excess is an indicator of several disciplinary



problems. First, theoretical excess is a sign of an immature discipline—that is, a discipline that has not gained enough scientific data to make firm statements as to underlying etiological processes. Criminology, for example, remains unable to explain its core correlates of crime, such as sex and age. Many of the explanations for these correlates, especially being male, border on the ludicrous. Second, excessive, fragmented theorizing tends to emerge when the disciplined thinking required of scientific pursuit has not been valued or prioritized. Without scientific reasoning as the core value, “theoretical imagination” is allowed to run amok. This has clearly been the case with several “perspectives” that have conjured up explanations of criminal involvement that simply cannot be true. Feminist and postmodern “perspectives,” for example, have pushed criminology even further from strict scientific reasoning, and their advocates have trumpeted this with adulation. Finally, a quasi-science can say little about how to effectively reduce or to manage antisocial conduct, and what little it can say has to be suspect.

Biosocial criminology, if embraced, offers a paradigm shift that could fundamentally alter the study of criminal conduct. The focus is not on theory construction but on the accumulation of reproducible knowledge through systematic hypothesis testing. The scientific enterprise typically involves rejecting unsupported hypotheses and the theories that bind them. Moreover, repeated tests of core postulates under varying conditions allows for the construction, over time, of a body of knowledge. Certainly, as patterns emerge, theories are likely to develop and the overall way that researchers study criminal behavior would undoubtedly change. This could be accomplished in at least four ways:

First, because biosocial criminology draws on a large body of advanced, technical knowledge about human genetics and biological processes, it could provide the benchmarks necessary to finally reject theories that deviate from known mechanical processes. As an illustration, we again point to the incontrovertible evidence linking male sex status with a range of externalizing

symptoms and disorders. Research in sex differences in brain functioning and structure, in hormone regulation, and in neurotransmission has uncovered a range of sex difference that have the potential to explain differential behavioral adaptations, cognitive orientations and abilities, and emotional dynamics not shared equally between males and females (Geary, 1998; Rhodes & Rubin, 1999). At a minimum, these findings should dispel the myth that males and females are the same. Beyond the obvious, however, it is exactly these types of “hard science” findings that could be used as a benchmark for increasing theoretical validity.

Second, and just as important, criminological theories that currently enjoy a modicum of empirical support could be better specified if they incorporated knowledge from the biological sciences (Walsh, 2002; Wright & Beaver, 2005). Obvious examples include Gottfredson and Hirschi’s (1990) theory of low self-control, Akers’s (1985) social learning theory, and Agnew’s (1992) general strain theory. Each of these theories could benefit from being linked the underlying core theoretical constructs—self-control, learning, and responsivity to stress and strain—to their obvious biological substrates. Self-control, for example, is known to be housed in the frontal cortex of the brain and to be part of a larger constellation of “executive functions.” Learning, by definition, is a biochemical process involving the storage and retrieval of information encoded throughout the brain but especially in the hippocampus. And individually variable responses to stress and negative life events have been studied meticulously through animal models, through experimental designs, and through complex brain imaging.

Third, a biosocial paradigm offers researchers the ability to fill in the gaps. Take, for example, studies that reveal a net reduction in antisocial behavior after criminally involved males marry conforming females (Laub, Nagin, & Sampson, 1998; Warr, 1998). The causal mechanisms responsible for the reduction in male offending have been subject to much speculation and depend wholly on the theoretical orientation of



the researchers. The marriage-crime reduction effect has been blamed on reductions in peer associations (Warr, 1998) and reductions in criminal opportunities (Laub & Sampson, 2003), or conversely it has been blamed on increases in social support (Cullen, 1994) and increases in informal social control (Laub et al., 1998; Sampson & Laub, 1993).

The biosocial paradigm helps to answer important gaps in these studies. The fact that most criminal males do not marry prosocial females when they do marry earns a mere footnote in most studies, but it is revealing from a biosocial framework. Assortative mating and sexual selection have strong evolutionary overtones and has been subject to numerous cross-cultural investigations. First, assortative mating means that rather than randomly choosing a mate individuals tend to choose sexual partners that are similar to themselves on a variety of physical, cognitive, and personality traits. This is also referred to as active gene-environment interactions, and studies have found that individuals tend to self-select themselves into particular environments. For example, antisocial males tend to gravitate toward other antisocial females and vice versa (Caspi & Herbener, 1990; Quinton, Pickles, Maughan, & Rutter, 1993), thereby promoting the expression of their antisocial behaviors. Second, there is a special form of natural selection, referred to as sexual selection, that ensures the survival of certain characteristics over time. As we have already pointed out, men commit more crimes, especially violent acts, than women do. From an evolutionary perspective, female mating preferences may help to explain this relationship. According to Ellis's (2003) neuroandrogenic evolutionary theory, women are more likely to mate with men who are able to compete for resources for them and their children. For males, this has the effect of encouraging them to aggressively compete with other males to procure resources and increase their chances of being chosen by a female as a sexual partner. This aggressive form of competitiveness is then passed on in future generations, thereby increasingly its prevalence in the male population.

Similarly, behavioral genetic research has revealed moderate to substantial genetic influences on the likelihood to marry. A recent study by Johnson, McGue, Krueger, and Bouchard (2004) examined the genetic influence on marriage and found heritability estimates of 0.72 and 0.66 for women and men, respectively. Molecular genetic studies have found that specific genes interact with marriage to further reduce offending. For example, Beaver et al. (2008a) found that interactions between marriage and three genetic polymorphisms (i.e., DRD2, DRD4, and MAO) predicted desistance from delinquent activities in a sample of men. Moreover, marriage to a nondeviant spouse has also been linked to reductions in male testosterone levels and has been found to reduce genetic proclivities toward antisocial behavior (Booth & Dabbs, 1993). In this illustration, the biosocial paradigm replaces speculation about social processes with knowledge of how social events differentially affect human males.

Finally, many theories of criminal conduct make broad, sweeping statements about the causes of crime. This is in part because of a focus on aggregate or between-group differences. As an illustration, consider research on neighborhoods, a concept full of definitional ambiguity. Theoretically, neighborhoods affect criminal behavior because they structure exposure to criminogenic risk factors. Exactly how these processes function and which variables are prioritized over others is a matter of theoretical detail not necessary here. What is important is the idea that some neighborhoods contain more risk factors than others do and hence have higher crime rates. Although this level of explanation may be suitable for aggregate studies of crime rates, inevitably the question to be asked next is why some individuals in those neighborhoods, indeed maybe even a majority of individuals, who were exposed to the full battery of risk factors, did not turn to crime.

A biosocial paradigm that vertically integrates knowledge from progressively broader levels can replace this theoretical silence. A core problem with between-neighborhood, between-family, or

between-class studies is that they overlook human variation. In biosocial criminology, however, human variation in response to similar environmental stimuli is the rule, not the exception. Known as reactive gene–environment interactions, individuals exposed to the same environment, indeed the same environmental event, cognitively process the event differentially, emotionally process the event differentially, and store information from the event differentially. Say, for example, two individuals are bumped into at a party; one interprets the event as an accident and reacts with understanding, but the other perceives the act as intentional and disrespectful and subsequently reacts with aggression. It is the story of the three blind men touching different parts of the same elephant and coming to varying conclusions retold.

Brain imaging research into empathic responses in conduct disordered (CD) adolescents is revealing in this regard. Decety[, Michalska, Akitsuki, and Lahey] (2009) displayed visual images of individuals in painful and nonpainful situations to CD youth and to a matched control group. They also displayed images of painful situations caused by another person or that were accidental. Functional magnetic resonance imaging (fMRI) was used to measure regional brain activation. In each test, the brains of CD youth responded differently than the brains of control youth. When viewing someone in pain, regions in the brains of CD youth associated with pleasure were activated, and when viewing images of a person whose pain was intentionally inflicted by another person, the brains of CD youth again showed substantially different patterns of activation compared to controls. When pain was intentionally inflicted, strong connections between the amygdala and the prefrontal cortex materialized in control youth, indicative of a normative empathic response. These connections did not materialize in CD youth. The moral of the study is that CD youth neurologically respond in an atypical way to images of others in pain and to images of others in pain intentionally inflicted by another.

Going back to the neighborhood example, it is clear from ethnographic evidence that certain

people in “bad” neighborhoods are attracted to the violence offered by street culture. These individuals report little empathy for their victims, relish the control and torment they exert over others, and generally lead highly chaotic and highly antisocial lives (Copes, Hochstetler, & Williams, 2008; Wright & Decker, 1997). Still, others in the same neighborhood are repulsed by the violence and by the human degradation they encounter (Anderson, 1999; Shover, 1996). Incorporating an understanding of Decety et al.’s (2009) research specifically, and biosocial research generally, helps to explain varying reactions to human suffering and better specifies how contextual events differentially affect individuals in high-crime neighborhoods.

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## **BIOSOCIAL CRIMINOLOGY ACKNOWLEDGES AND ILLUMINATES INDIVIDUAL DIFFERENCES**

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Scholars who study intervention programs consistently emphasize the importance of the black box of correctional programming (Latessa, Cullen, & Gendreau, 2002). The black box refers to those intrainervention program variables that tend to have substantial effects on the overall operation of the program and, ultimately, on intervention outcomes. These influences, such as the quality and motivation of staff and the actual amount of time dedicated to service delivery, are at the heart of program integrity and appear to be the primary stumbling blocks to cross-site reproduction of effective programs (Latessa & Holsinger, 1998; Matthews, Hubbard, & Latessa, 2001).

To carry the analogy forward, purely social theories of criminal behavior frequently do not account for, or in most cases even recognize, the black box within individuals (DeLisi, Wright, Vaughn, & Beaver, 2009). This has been a matter of much debate in sociology where critics have rightfully pointed out that many social theories rely on an oversocialized conception of man (Wrong, 1961). Criminology, with its roots firmly



embedded in sociology, suffers many of the same fundamental problems. Many criminologists still, despite tremendous evidence to the contrary, deny the pathology of offenders and simply overlook or ignore the individual characteristics that differentiate offenders from nonoffenders. This naturally leads to questionable policy initiatives, such as deincarceration (Clear, 2007).

Looking at the data, however, is revealing. One of the most consistent and least recognized findings in criminology has to do with the distribution of criminal behavior across individuals. In dataset after dataset, the distribution of involvement in serious criminal behavior is skewed heavily to the right. This distribution conveys important information. First, the distribution of offending shows that the vast majority of individuals, usually more than 90% of a sample, report never engaging in a serious criminal act. Given this, it seems reasonable to believe that the base rate for serious offending in the population approximates zero. In other words, prosocial behavior, or at least the absence of criminal behavior, is normative.

Second, the distribution of offending reveals that individuals who depart substantially from zero are rare but account for the majority of all part one and part two index offenses (DeLisi, 2005; Wolfgang, Figlio, & Sellin, 1972). Data from the Cincinnati Violence Reduction Initiative, a project modeled after the well-known Boston Gun Project, is instructive. Engel[, Baker, Skubak Tillyer, Eck, and Dunham] (2008), with the assistance of criminal justice professionals, identified 748 highly active offenders. Their analyses of this group found that less than 1% of the population of citizens living in Cincinnati were responsible for 74% of all homicides, that the average active offender generated 35 juvenile and adult charges, that the average active offender had 7.4 felony arrest charges, that 91% had prior arrests for felony charges, and that one third had 10 or more felony arrest charges. All of these offenders were free on the streets.

Clearly, these individuals depart significantly from normative behavioral trajectories. Aside from their extensive arrest histories, these individuals likely differ in fundamental ways from

normal individuals. They are, for example, significantly more likely to have limited impulse control (Grasmick, Tittle, Bursik, & Arneklev, 1993), more likely to have a below-average IQ (Hirschi & Hindelang, 1977), more likely to see the world as a hostile and negative place (Walters, 2006), and more likely to employ a range of criminal thinking errors that justify their behavior and help to maintain their criminal lifestyle (Samenow, 1984). These individual differences and many others have powerful effects on the life course opportunities of individuals. Moreover, many of these individual differences have strong genetic underpinnings. Self-control, IQ, and anti-social behaviors, for example, have been found to be some of the most heritable human characteristics studied to date (Beaver, Wright, DeLisi, & Vaughn, 2008b; Plomin & Rende, 1991; Rhee & Waldman, 2002). Other human traits that distinguish offenders from nonoffenders or that distinguish recidivistic offenders from temporally limited offenders have also been found to have substantial genetic influences (Rutter, 2008).

The point is that human differences are at the heart of the biosocial paradigm. Understanding first and foremost the origins of human differences presents criminologists with many research opportunities. Beyond this, understanding how individual differences play out in context—that is, in the daily interactions between people and social institutions—presents many more important questions in need of answers. In essence, relaxing the view of the oversocialized man necessarily draws attention to the distributional aspects of human traits and behaviors and calls for research that incorporates the vertical integration of individual and environmental sources of variance.

### **BIOSOCIAL CRIMINOLOGY OFFERS EFFECTIVE POLICY BASED ON KNOWLEDGE OF HUMAN DEVELOPMENT**

Criminologists have long bemoaned their limited political and policy influence (Clear, 2007), and many critics of biosocial criminology are quick to assume that policies based on biosocial



research would lead to harsh and unsettling intervention techniques. It is our view and that of other biosocial criminologists that the policy recommendations derived from biosocial research have the potential of substantially reducing antisocial behaviors because they are based on the scientific research on healthy human development. These policies focus on the environment and on individuals at different stages of development.

At the neighborhood level, for example, findings from biosocial criminology would support policies to remove environmental toxins. For example, lead absorption has been found to adversely affect the healthy development of the brain and is associated with lower IQ (Barth et al., 2002; Dietrich, Succop, Berger, Hammond, & Bornschein, 1991), problems with self-regulation (Needleman, McFarland, Ness, Fienberg, & Tobin, 2002), psychopathy (Wright, Boisvert, & Vaske, 2009), delinquency in adolescence (Bellinger, Leviton, Alfred, & Rabinowitz, 1994; Mendelsohn et al., 1998; Needleman, Riess, Tobin, Biesecker, & Greenhouse, 1996; Needleman et al., 2002), and criminality in adulthood (Wright, Dietrich, Ris, Hornung, & Wessel, 2008). Lead exposure is highly concentrated in the inner cities where the buildings are old, run-down, and replete with lead-based paint. Initiatives that limit lead exposure in inner cities have the potential to reduce harm.

Prenatal intervention programs also emerge as important mechanisms founded on an understanding of healthy human development. Pregnant women who smoke, drink, or use other forms of drugs can cause irreversible damage to their children. Some women are simply unaware of the harmful effects that they are imposing on their child by ingesting these substances. Studies have shown that simply educating pregnant women about these adverse effects can effectively reduce their rate of use (Gebauer, Kwo, Haynes, & Wewers, 1998).

One effective prevention program that targets biosocial-related risk factors is the Nursing Family Partnership program. This program aids unmarried pregnant teens living in poverty by providing them with prenatal and perinatal care.

An evaluation of the effectiveness of the program revealed that during the pregnancy Nursing Family Partnership participants smoked fewer cigarettes, had better diets, had fewer kidney infections, and after the baby was born, they were less likely to abuse and neglect their child compared to the control group. In turn, the children of Nursing Family Partnership mothers were less likely to run away; were less involved in cigarette smoking, alcohol consumption, and drug use; had fewer sexual partners; and had fewer arrests and convictions compared to the control group's children (Eckenrode et al., 2000; Olds et al., 1998, 1999). Overall, by targeting the known risk factors derived from biosocial research, children of unmarried teens living in poverty were better adjusted behaviorally.

After the child is born, there should be continued care provided to at-risk families. These services might include continued medical care, mental health screening, parenting classes, drug counseling, or any other program focused on healthy child development such as universal preschool. The Perry Preschool Project, for example, has been shown to be an effective early intervention program that targets biosocial risk factors. This program offered children from lower socioeconomic status, with IQ scores ranging from 60 to 88, the opportunity to receive 2 years of intensive preschool. A review of the program revealed that children who received 2 years of preschool had fewer arrests and were more likely to be employed during adolescence compared to youths with the same IQ who did not attend preschool. Whereas IQ was marginally affected by the program, it was the child's level of educational achievement that was the most important factor related to later delinquency in adolescence (Berrueta-Clement, Schweinhart, Barrett, Epstein, & Weikart, 1984).

Biosocial criminology can also influence how the system treats offenders. For example, Beaver (2009) proposed that treatment programs not only consider an offender's criminogenic risk factors but also their level of genetic risk. As mentioned, several genetic polymorphisms are considered risk factors for a variety of behavioral problems. Knowing an individual's levels of

genetic risk would help to create an individualized treatment plan that could increase the offenders' chances of living a productive and prosocial life. A recent study by Bakermans-Kranenburg[, Van Ijzendoorn, Pijlman, Mesman, and Juffer] (2008) examined whether children respond differently to an intervention program based on genetic differences. Their results reveal that parenting classes aimed at improving maternal sensitivity and discipline lead to decreased levels of externalizing behaviors only in children with the 7R allele for DRD4. This study provides evidence that genetic factors may influence the effectiveness of treatment efforts.

In conclusion, we believe that it is time for a paradigm shift in criminology, and we are confident that a biosocial perspective is the answer. Biosocial criminology not only offers new methods, new questions, and new opportunities for scientific research but it also provides the necessary framework in which to create policies

targeted at changing both the environment and the individual. This growing segment of criminology has the potential of substantially changing the way people think about and study criminal behavior. For the discipline to advance, researchers must use a multidisciplinary approach that incorporates knowledge and research from other scientific disciplines such as psychiatry, neurology, genetics, and evolutionary psychology. These fields of study are equally concerned with healthy human development and offer insight on how to avoid the development and continuance of antisocial behaviors. We encourage all graduate students, faculty, and criminologists who are curious about the nature of antisocial behavior to consider the endless possibilities that biosocial criminology has to offer criminology. Together, we can advance criminology from a budding perspective into a scientific discipline with the real potential of reducing criminality across the life course.

## UNIT 4

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# LEGAL PSYCHOLOGY



## INTRODUCTION AND COMMENTARY

**M**ental health professionals can have interactions with criminal and civil courts at virtually every stage of court proceedings. We most often think of them as testifying as experts in criminal or civil trials, but they are even more likely to be involved pretrial, such as evaluating defendants, other litigants, or witnesses for competency. Additionally, their expertise is often sought at the sentencing phase of criminal trials. They participate in numerous other court-related contexts, such as aiding in the preparation of witnesses, helping attorneys select jurors, assessing an individual's capacity to make a will, or evaluating plaintiffs in an age or sex discrimination suit.

The readings in this section represent both cutting-edge research in legal psychology and tasks that are so often performed by legal and consulting psychologists. These include interviewing children, assessing defendants and offenders, and testifying in court.

Saul M. Kassir, a psychologist who has conducted extensive research on confessions, begins his article with the sobering statement that confessions are fallible. He then discusses five myths about confessions, including one that the innocent cannot be induced to confess if police are using legal and noncoercive tactics. Kassir disputes this and other myths by citing evidence from social and legal psychology. He also discusses the deceptive (but legal) ploys that police interrogators can use to persuade people to confess to crimes they did not commit, such as minimizing

the seriousness of the crime or pretending that they have incriminating evidence against the individual. The article includes many accounts of actual cases and is replete with gems of information that will surely surprise many readers.

Next, Graham F. Wagstaff writes about the fascinating topic of hypnosis, which most researchers no longer refer to as a state or a trance. Rather, it is more accurate to see people under hypnosis as being relaxed, playing a role, or complying with directions. The author discounts many of the stereotypes associated with hypnosis—e.g., that hypnotized individuals lose control of their behavior. Misconceptions about hypnosis have led some courts to be skeptical of its use and, in some jurisdictions, evidence obtained under hypnosis is banned outrightly. Nevertheless, Wagstaff notes that the social and cognitive processes used in hypnosis—such as asking open-ended questions, encouraging rapport building and relaxation, eye closure, and not interrupting the interviewee—can be helpful in police interviews of victims or witnesses.

One of the most complex and controversial practice areas for forensic psychologists is the child custody evaluation. It is such a potential minefield that the American Psychological Association (1994) has developed guidelines specifically for this purpose. As a result, it is generally believed that the quality of child custody evaluations has improved. The reading by James N. Bow and Paul Boxer focuses on one aspect of child custody evaluations, the appraisal

of possible domestic violence. Not infrequently, one or both of the parents seeking custody alleges violence on the part of the opposing parent. On the basis of their survey of custody evaluators, the authors conclude that the 115 clinicians in their sample were knowledgeable about domestic violence and were conscientious about obtaining information from a variety of sources. However, they tended not to use specialized questionnaires or instruments specifically designed to assess the risk of domestic violence. Although the article ends on a positive note, the authors emphasize that problems do exist and offer suggestions for continuing improvement of these important evaluations.

In the next article, forensic psychologist Marc Sageman comments on the skills needed for conducting psychological assessments and communicating their results effectively to the courts. Sageman offers a clearly written general overview, emphasizing the importance of focusing on the legal question that is at issue and addressing one's testimony to the right audience. The author also reminds us that forensic psychologists are not always independent experts. They are often retained by one side or the other in a dispute and consequently are expected to conform their written reports and their testimony to the strategy of the retaining attorney.

In the final article in this section, psychologist Connie M. Tang reviews basic psychological research that informs forensic practice with young children. Tang's article is relevant to interviews conducted by attorneys, judges, social workers,

and psychologists and psychiatrists, as well as police officers. As she notes, there exists a large body of psychological research on language and conceptual development in young children. For example, she discusses research on the value of open-ended "wh" questions (who, what, when, where, why) as opposed to yes/no questions and research on the ability of pre-schoolers to weave conceptual scripts and understand symbols. Interviewer-aided recall is also discussed. The article includes guidelines for determining whether and how to interview young children.

As a group, the readings in this section remind forensic psychologists and other mental health practitioners who interact with the courts to remain informed about developments in their profession and to exercise caution in their interpretations and their use of assessment methods. They also must be continually aware of and familiar with the psychological and criminal justice research that is relevant to the courtroom, such as the research on police interrogations, eyewitness testimony, domestic violence, and risk assessment. As increasingly more psychologists participate in courtroom proceedings, guidelines and standards of practice become more necessary. In fact, many jurisdictions today require that forensic experts who testify in court be certified as such. Finally, as legal professionals like judges and lawyers become more sophisticated about psychological principles and research, they also may demand more accountability on the part of the mental health professions and ask more probing questions in their cross examinations.

## CONFESSION EVIDENCE

### *Commonsense Myths and Misconceptions\**

SAUL M. KASSIN

In criminal law, confession evidence is common, potent, and highly regarded. Hence, it is said, "The introduction of a confession makes the other aspects of a trial in court superfluous" (McCormick, 1972, p. 316). Yet confessions are fallible. Contrary to the widespread belief that normal people do not confess to crimes they did not commit, the pages of American history, reaching back to the Salem witch trials of 1692, betray large numbers of men and women who were wrongfully prosecuted, convicted, imprisoned, and sometimes sentenced to death, on the basis of false confessions (for reviews, see Drizin & Leo, 2004; Gudjonsson, 1992, 2003; Kassin, 1997, 2005, 2008; Kassin & Gudjonsson, 2004; Kassin & Wrightsman, 1985; Lassiter, 2004).

Confessions have been proven false in a number of ways, for instance, when it turns out that no crime was committed, the real perpetrator is found, or the confessor's involvement was physically impossible. Whatever the mechanism,

although the prevalence rate is unknown, false confessions occur with some degree of regularity. In Europe, 12% of prisoners, 3% to 4% of college students, and 1% to 2% of older university students reported that they have confessed to crimes they did not commit (Gudjonsson, 2003). In North America, police investigators recently estimated that 4.78% of innocent people confess during interrogation (Kassin et al., 2007). Within the recent population of postconviction DNA cases, roughly 25% contained confessions in evidence—a sample that represents the tip of a much larger iceberg (Drizin & Leo, 2004; Gross, Jacoby, Matheson, Montgomery, & Patel, 2005; Scheck, Neufeld, & Dwyer, 2000).

Throughout the criminal justice system, confession evidence is met with naïve and uncritical acceptance. Often, however, this complacency is unfounded and—I would argue—buttressed by five myths: (a) Police can identify guilty suspects for interrogation, and exclude innocents, through

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an interview process that alleges to distinguish between truth tellers and liars. (b) People facing interrogation are protected by their constitutional rights to silence and to counsel. (c) Innocent people cannot be induced to confess by the use of legal and noncoercive interrogation tactics. (d) Relying on some combination of intuition and corroboration, police, prosecutors, judges, and juries can distinguish true and false confessions. (e) For coerced confessions that are erroneously admitted at trial, appellate courts can reasonably determine whether the error was harmless.

### MYTH 1: TRAINED INTERVIEWERS CAN DETECT TRUTH AND DECEPTION

During the course of an investigation, detectives identify suspects for interrogation. Sometimes, their identification is reasonably based on witnesses, informants, or other extrinsic evidence. Often, however, it is based on a clinical hunch formed during a preinterrogation interview. In *Criminal Interrogations and Confessions*, an influential manual on interrogation first published in 1962 and now in its fourth edition, Inbau, Reid, Buckley, and Jayne (2001) advised police to ask 16 special behavior-provoking questions (e.g., “Do you know who did take the money?” “What do you think should happen to the person who took the money?”) and to observe changes in the suspect’s verbal and nonverbal behavior (e.g., gaze, posture, fidgety movements) to divine truth and deception. For a person under suspicion, an investigator’s first impression is critical because it determines whether he or she is interrogated or sent home.

Based on a single published study, Inbau et al. (2001) claimed that training in the Reid technique produces an exceedingly high level (85%) of accuracy. Yet the data cited are limited and grossly out of step with basic science. In that study, Horvath, Jayne, and Buckley (1994) selected 60 interview tapes from the Reid collection, the ground truths of which could not be established with certainty. They edited the tapes,

showed these edited tapes to four experienced in-house staff members of John E. Reid and Associates, and concluded from their judgments that the Reid technique produced high levels of accuracy (no comparison group of untrained evaluators was included). Yet in laboratories all over the world, research has consistently shown that most commonsense behavioral cues touted by the Reid technique—such as gaze aversion, frozen posture, slouching, and fidgeting—are not empirically diagnostic of truth and deception (DePaulo et al., 2003). Therefore, it is not terribly surprising that laypeople on average are only 54% accurate; that training produces little improvement compared with naïve control groups; and that police investigators, judges, psychiatrists, customs inspectors, and other so-called experts perform only slightly better, at all (for recent reviews, see Bond & DePaulo, 2006; Vrij, 2008a).

In studies specifically designed to test the Reid technique, the results are no more encouraging. Vrij, Mann, and Fisher (2006) had some individuals, but not others, commit mock crime they were motivated to deny. All participants were then interviewed using Inbau et al.’s (2001) interview protocol. The results showed that responses to the behavior-provoking questions did not significantly distinguish the liars and truth tellers in the predicted manner (e.g., the liars were not more anxious). In principle, it is reasonable to expect that special questions can be developed that would discriminate between truthful and deceptive suspects. Of potential relevance is recent research indicating that innocent people are more likely than perpetrators to waive their rights to silence, to counsel, and to a lineup—cooperative acts, such as a willingness to undergo a polygraph, physical examination, or house search, that may betray a naïve phenomenology of innocence (Kassin, 2005). At present, however, there is no empirical support for the diagnostic value of the questions that are currently used. There is also no evidence to support the behavioral symptoms that investigators are trained to use. For example, Kassin and

Fong (1999) randomly trained some college students, but not others, in the use of behavioral cues cited by the aforementioned Reid technique. All students then watched videotaped interviews of mock suspects, some of whom committed one of four mock crimes and of others who did not. On questioning, all suspects denied their involvement. As in the typical non-forensic laboratory experiment, observers were generally unable to differentiate between the two groups of suspects. Moreover, those who underwent training were significantly less accurate, more confident, and more biased toward seeing deception. Using these same taped interviews, Meissner and Kassin (2002) next tested samples of experienced police detectives and found that they exhibited these same tendencies. Other research as well suggests that police tend to make prejudgments of guilt, with confidence, that are frequently in error (e.g., Elaad, 2003; Garrido, Masip, & Herrero, 2004; Leach, Talwar, Lee, Bala, & Lindsay, 2004).

Let me be clear regarding the myth that is exposed by this research. Studies show that current approaches to lie detection—which presume that lying arouses stress that leaks out in observable behavioral symptoms—do not work. However, it may be possible to improve human lie detection through other approaches. For example, Hartwig, Granhag, Strömwall, and Vrij (2005) found that interviewers make more accurate judgments by withholding crime details while questioning suspects, a strategy that traps guilty liars in discernible inconsistencies when these facts are later disclosed. Interviewers who are trained in this Strategic Disclosure technique thus become more accurate in their judgments (Hartwig, Granhag, Strömwall, & Kronkvist, 2006). In a second line of research, Vrij, Fisher, Mann, and Leal (2006) theorized that lying is more effortful than telling the truth, so interviewers should tax a suspect's cognitive load and attend to cues that betray effort. Hence, when interviewers had respondents recount their stories in reverse chronological order, they became more

accurate in their ability to distinguish between truthful and deceptive accounts (Vrij et al., 2008).

## MYTH 2: MIRANDA PROTECTS THE ACCUSED FROM INTERROGATION

Suspects who are targeted for interrogation can invoke a powerful safeguard designed to protect all citizens. In *Miranda v. Arizona* (1966), the U.S. Supreme Court ruled that police must inform all suspects in custody of their constitutional rights to silence and to counsel. Statements taken without this warning—and a waiver that is made voluntarily, knowingly, and intelligently—are not admissible in court. A number of subsequent rulings carved out exceptions to this rule and limited the consequences for noncompliance, leading some legal scholars to question whether police are free to disregard *Miranda* (Clymer, 2002; W. S. White, 2003). In two recent decisions, however, the Supreme Court has affirmed the basic requirement (*Dickerson v. United States*, 2000; *Missouri v. Seibert*, 2004).

Over the years, the *Miranda* ritual has served law enforcement interests well. Assuming that suspects comprehend their rights (often an issue among juveniles and those who are mentally retarded; see Oberlander & Goldstein, 2001), the warning and waiver requirement serves as a measure of voluntariness, a criterion for the admissibility of a confession. Interestingly, it appears that approximately four out of five suspects waive their rights and submit to questioning—both in the United States (Leo, 1996a; see Leo & White, 1999) and in Great Britain (Baldwin, 1993; Moston, Stephenson, & Williamson, 1992; Softley, 1980). There are many possible reasons for the high waiver rate. For example, some suspects do not fully comprehend their rights; others believe, accurately or erroneously, that a waiver serves their interests; and police have learned strategically how to elicit waivers.

As to the assumption that *Miranda* protects the accused, it is instructive that some people (quite likely the wrong suspects from a crime

control perspective) utilize the benefits of that protection more than others. Paralleling a result previously observed in Great Britain, Leo (1996a) found that individuals with no prior felony record are more likely to waive their rights than those with a history of criminal justice experience. As recidivism tendencies suggest the base rate proposition that first timers are less likely to commit crimes, this difference suggests the hypothesis that innocent people in particular tend to waive their rights. Kassin and Norwick (2004) tested this hypothesis in a controlled laboratory setting. Seventy-two participants who were guilty or innocent of a mock theft of \$100 were apprehended for investigation. Motivated to avoid further commitments of time without compensation, they were confronted by a neutral, sympathetic, or hostile male detective who sought a waiver of their *Miranda* rights. Overall, 58% of all participants signed an agreement to waive their rights. Notably, those who were innocent did so far more often than those who were guilty—by a margin of 81% to 36%. This decision-making tendency was so strong that 67% of innocents signed the waiver even when approached by a hostile, closed-minded detective who asserted, “I know you did this and I don’t want to hear any lies!” When asked afterward to explain their decisions, most said that they waived their rights because they were innocent, did nothing wrong, and had nothing to hide or fear.

Consistent with the results of naturalistic research, these findings suggest that people have a naïve faith in the power of innocence to set them free. This phenomenology was evident in the classic case of Peter Reilly, an 18-year-old who falsely confessed to the murder of his mother. When asked years later why he did not invoke his *Miranda* rights, Reilly said, “My state of mind was that I hadn’t done anything wrong and I felt that only a criminal really needed an attorney, and this was all going to come out in the wash” (Connery, 1996, p. 93). Innocence may lead innocents to forgo other important safeguards as well. Consider the case of Kirk

Bloodsworth, the first death row inmate to be exonerated by DNA. In 1985, based on eyewitness identifications, Bloodsworth was convicted for raping and murdering a 9-year-old girl. He was exonerated by DNA 8 years later and ultimately vindicated when the true perpetrator was identified. [On] the day of his arrest, Bloodsworth was warned that there would be cameras present and was asked whether he wanted to cover his head with a blanket. He refused, saying he did nothing wrong and was not going to hide, even though potential witnesses might see him on TV (Junkin, 2004).

### MYTH 3: PEOPLE DO NOT CONFESS TO CRIMES THEY DID NOT COMMIT

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Built on case law, which has largely prohibited the use of egregious third-degree tactics, modern American police interrogation is a psychologically oriented process of influence (for a historical overview, see Leo, 2004). To guard the integrity of the criminal justice system, to protect citizens against violations of due process, and to minimize the risk that innocent people would confess to crimes they did not commit, federal and state courts in the United States have established guidelines for the admission of confession evidence. Although there is no simple litmus test (*Culombe v. Connecticut*, 1961, p. 601), a confession is typically excluded if it was elicited by physical force; deprivation of food, sleep, or other biological needs; threats of punishment or harm; promises of immunity or leniency; or without proper notification to the suspect of his or her *Miranda* rights (see Grano, 1993; Kamisar, LaFave, Israel, & King, 2003; Mueller & Kirkpatrick, 1995; Wigmore, 1970).

Police employ a number of tactics in the interrogation room (see Kassin et al., 2007; Leo, 1996b). The most influential approach is described in Inbau et al.’s (2001) *Criminal Interrogation and Confessions*. In the so-called Reid technique described in this manual, investigators are advised to isolate the suspect in a small,



private room, which increases his or her anxiety and incentive to escape. A nine-step process then ensues in which an interrogator employs both negative and positive incentives—on one hand, confronting the suspect with accusations of guilt, assertions that may be bolstered by evidence, real or manufactured, and refusing to accept denial; on the other hand, offering sympathy and moral justification, thereby minimizing the crime and leading suspects to see confession as an expedient means of escape.

The courts have long assumed that normally functioning adults would not confess to crimes they did not commit if properly Mirandized and exposed only to techniques deemed legally noncoercive—not physical force, deprivation, threats, or explicit promises. Within the population of known wrongful convictions, however, are numerous false confessions that judges did not suppress and appellate courts did not overturn (Drizin & Leo, 2004; Gross et al., 2005). These cases suggest that certain aspects of interrogation, not prohibited by the courts, put innocent people at risk (e.g., courts have set no time limits on interrogation; whereas most sessions last for an hour or two, the average interrogation lasted 16.3 [hours] in a sample of false confession cases; see Drizin & Leo, 2004).

There are two forms of trickery and deception, both lawful interrogation tactics, that can put innocent people at risk. One concerns the use of minimization, the process by which a sympathetic investigator normalizes and minimizes the crime in question by suggesting to the suspect that it was spontaneous, provoked, drug induced, peer pressured, an accident, or otherwise morally justified. By design, minimization tactics lead people to infer that they will be treated with leniency if they confess, even when no explicit promises are made (Kassin & McNall, 1991). In the laboratory, this tactic led 18% of innocent college students to confess that they cheated on an experimental problem that they were supposed to solve without assistance—a possible violation of the university honor code (Russano, Meissner, Narchet, & Kassin, 2005). Although more work is needed to compare the different alternative

themes and the conditions under which this tactic puts innocent people at risk, it appears that minimization—by communicating leniency through a process of pragmatic implication—may induce confessions from innocent suspects who are beleaguered and feel trapped.

A second very troubling aspect of interrogation is the false evidence ploy by which interrogators confront suspects with allegedly incontrovertible but false evidence of their guilt, such as a fingerprint, blood, or hair sample, accomplice confession, eyewitness identification, or failed polygraph. In one investigation, for example, a detective told 17-year-old Marty Tankleff—whom he accused of murdering his parents in the absence of any evidence—that his hair was found on his mother, that a humidity test indicated he had showered (hence, the lack of blood on him), and that his hospitalized father had emerged from his coma to say that Marty was his assailant: all lies. The polygraph in particular is often used for this purpose. Although the polygraph is best known for its use as a lie-detector test, posttest failure feedback is used to pressure suspects, producing false confessions from Marcellius Bradford, Jeffrey Deskovic, Byron Halsey, John Kogut, and countless other innocent confessors (for descriptions of these cases, visit the Innocence Project Web site at <http://innocenceproject.org/>). The prestigious National Research Council, Committee to Review the Scientific Evidence on the Polygraph (2003) has thus warned of polygraph-induced false confessions.

The power of false evidence to produce these effects is not surprising in light of the fact that people who know they are innocent may agree to confess as an act of compliance when they perceive that there is strong evidence against them, a belief that induces a state of despair and an urgent need of escape. To the extent that a suspect is vulnerable to manipulation (by virtue of youth, naiveté, stress, exhaustion, cognitive impairment, or drugs) and the false evidence is disclosed as a credible if not incontrovertible fact (e.g., physical or scientific evidence, testimony from a trusted source), the unwary suspect may

even come to internalize the belief that he or she committed the crime without awareness, a belief change that is sometimes accompanied by false memories (for reviews, see Gudjonsson, 2003; Kassin, 2007).

The false evidence ploy has been sanctioned by the U.S. Supreme Court (*Frazier v. Cupp*, 1969). Yet empirical research warns of the risk. In surveys, actual suspects report that the reason they confessed is that they perceived themselves to be trapped by the weight of evidence (Gudjonsson & Sigurdsson, 1999; Moston et al., 1992). Testing a causal hypothesis, laboratory experiments have added that false evidence leads innocent people to confess to prohibited acts they did not commit. For example, Kassin and Kiechel (1996) accused college students typing on a keyboard of causing the computer to crash by pressing a key they were instructed to avoid. Despite their innocence and initial denials, participants were asked to sign a confession. In some sessions but not others, a confederate said she witnessed the participants hit the forbidden key. This false evidence nearly doubled the number of students who signed a written confession, from 48% to 94%. Follow-up studies have replicated the effect even when the confession was said to bear a financial consequence or future commitment of time (e.g., Horselenberg, Merckelbach, & Josephs, 2003; Redlich & Goodman, 2003).

Even if counterintuitive to laypeople, none of these results is terribly surprising from a psychological standpoint. Across the 100-plus-year history of basic psychology, the general point is clear: Misinformation renders people vulnerable to manipulation from a host of influences. To cite but a few highly recognized classics in the field, experiments have shown that presentations of false information—via confederates, witnesses, counterfeit test results, bogus norms, false physiological feedback, and the like—can substantially alter people's visual perceptions and judgments (Asch, 1956; Sherif, 1936), beliefs (Anderson, Lepper, & Ross, 1980), behaviors (Rosenthal & Jacobson, 1968), emotional states (Schachter & Singer, 1962), feelings of physical

attraction (Valins, 1966), self-assessments (Crocker, Voelkl, Testa, & Major, 1991), memories for observed and experienced events (Loftus, 1997, 2004), and even certain medical outcomes, as seen in numerous studies of the well-known placebo effect (Brown, 1998). American courts permit the false evidence ploy on the assumption that it does not induce false confessions, but scientific evidence of human malleability to influence in the face of misinformation is broad and pervasive. There is no reason to believe that innocents inside an interrogation room are immune to this effect.

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#### MYTH 4: "I'D KNOW A FALSE CONFESSION IF I SAW ONE"

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One might argue that even if innocent people are judged deceptive and harshly interrogated, even if they naïvely waive their rights, and even if they are induced to confess under pressure, these problems are tolerable if the resulting false confessions are detected and corrected by authorities. With regard to the decision making of prosecutors, judges, and juries, this presumed safety net is built on an assumption: "I'd know a false confession if I saw one."

Research on the impact of confessions throughout the criminal justice system is not encouraging on this front. Mock jury studies show that confessions have more impact than other potent forms of evidence and that people do not fully discount confessions even when they are judged to be coerced and even when it is logically and legally appropriate to do so (Kassin & Neumann, 1997; Kassin & Wrightsman, 1980). For example, Kassin and Sukel (1997) presented mock jurors with one of three versions of a murder trial transcript. In a low-pressure version, the defendant was said to have confessed to police immediately on questioning. In a high-pressure version, participants read that the suspect was in pain and interrogated aggressively by a detective who waved his gun in a menacing manner. A control version contained no confession in evidence. Presented with the



high-pressure confession, participants appeared to respond in the legally prescribed manner. They judged the statement to be involuntary and said it did not influence their decisions. Yet when it came to the all-important measure of verdicts, this confession significantly increased the conviction rate. This increase occurred even in a condition in which individuals were specifically admonished to disregard confessions they found to be coerced. This point concerning the power of confession evidence is bolstered by archival analyses of actual cases. When proven false, confessors pled not guilty and proceeded to trial; the jury conviction rates ranged from 73% (Leo & Ofshe, 1998) to 81% (Drizin & Leo, 2004). These figures led Drizin and Leo (2004) to describe confessions as “inherently prejudicial and highly damaging to a defendant, even if it is the product of coercive interrogation, even if it is supported by no other evidence, and even if it is ultimately proven false beyond any reasonable doubt” (p. 959).

There are three reasons for pessimism about the extent to which people can identify as false the confessions of innocent suspects. First, generalized common sense leads us to trust confessions the way we trust other behaviors that counter self-interest. Over the years, and across a wide range of contexts, social psychologists have found that social perceivers fall prey to the fundamental attribution error, that is, they tend to make dispositional attributions for a person's actions, taking behavior at face value, while neglecting the role of situational factors (Jones, 1990; Ross, 1977). Gilbert and Malone (1995) offered several explanations for this bias, the most compelling of which is that people draw quick and relatively automatic dispositional inferences from behavior and then fail to adjust or correct for the presence of situational constraints. Common sense further compels the belief that people present themselves in self-serving fashion and that self-destructive behaviors, such as false confessions, must be particularly diagnostic. Reasonably, most people believe that they would never confess to a crime they did not commit, and they cannot imagine the circumstances under which others would do so.

A second reason for concern is that people are typically not adept at deception detection. We saw earlier that neither laypeople nor professionals accurately distinguish truths from lies. But are false confessions easier to spot than other nontruthful statements? Kassin, Meissner, and Norwick (2005) examined this question in a study on the performance of police investigators and laypeople. First, male prison inmates in a state correctional facility were recruited to take part in a pair of videotaped interviews. Each inmate was asked to confess to the crime for which he was in prison. Each free narrative was then followed by a standardized list of questions concerning who, what, when, where, how, and other details. In a second interview, each inmate was asked to concoct a confession to a crime he did not commit. Using this procedure, we created a videotape that depicted 10 different inmates, each giving a single true or false confession to one of five crimes: aggravated assault, armed robbery, burglary, breaking and entering, and automobile theft. The tape was shown to college students and police investigators, two thirds of whom had attended special training in interviewing and interrogation. Results showed that police relative to the students were significantly less accurate but more confident and more likely to commit false positive errors, that is, trusting the false confessions. These findings suggest that training and experience systematically reduce judgment accuracy—which is not surprising, as many of the behavioral cues that typically form part of the basis for training (e.g., gaze aversion, posture, grooming gestures) are not statistically correlated with truth telling or deception (DePaulo et al., 2003).

There is a third reason to distrust the assumption that “I’d know a false confession if I saw one”: Police-induced false confessions often contain content cues presumed to be associated with truthfulness. In many documented false confessions, the statements ultimately presented in court were thus persuasive and compelling. Often they contained not merely an admission of guilt but vivid details about the crime, the scene, and the victim that became known to the



innocent suspect through leading questions, photographs, visits to the crime scene, and other secondhand sources invisible to the naïve observer. To further complicate matters, many false confessions state not just what they allegedly did, and how they did it, but why—as they self-report on revenge, jealousy, financial desperation, capitulation to peer pressure, and other prototypical motives for crime. Sometimes they add apologies and expressions of remorse. In some cases, innocent suspects correct minor errors that appear in the written statements that are derived from them, suggesting that they had read, understood, and verified the contents. To the naïve spectator, such statements appear to be voluntary, textured with detail, and the product of personal experience. Uninformed, however, this spectator mistakes illusion for reality, not realizing that the taped confession is like a Hollywood drama—scripted in accordance with the police theory of the case, rehearsed during hours of unrecorded questioning, directed by the questioner, and ultimately enacted on paper, tape, or camera by the suspect.

Let me illustrate the point. Promoting the Reid technique, Inbau et al. (2001) recommended that interrogators insert minor errors into written confessions so that the suspect will spot them, correct them, and initial the changes. The goal is to increase the perceived credibility of the statement and make it difficult for the defendant to disclaim it in court. Because only perpetrators can spot such errors, this technique appears to have diagnostic potential. However, Inbau et al. advised that to play it safe, “the investigator should keep the errors in mind and raise a question about them in the event the suspect neglects to do so” (p. 384). Similarly, they advised detectives to collect personal history facts known only to the offender. “For instance, the suspect may be asked to give the name of the grade school he attended, the place or hospital in which he was born, or other similar information” (p. 383). Of course, for the innocent suspect, the insertion of neutral, crime-irrelevant biographical details from his or her own life has no diagnostic value. Like the error correction device, it

creates an illusion of credibility regardless of whether the confessor is guilty or innocent.

### MYTH 5: IT IS POSSIBLE TO DETERMINE WHETHER A CONFESSION ERROR WAS HARMLESS

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In cases involving a contested confession, a preliminary suppression hearing is held in which the judge determines the voluntariness and admissibility of this statement. Until fairly recently, and in recognition of the power of confession evidence, convictions were automatically reversed whenever an appeals court found that the judge had erroneously admitted a coerced confession into evidence. In *Arizona v. Fulminante* (1991), however, the U.S. Supreme Court broke new ground. In that case, Oreste Fulminante was convicted, at least in part on the basis of a confession. The defendant claimed that the confession was coerced, but it was presented at trial and he was found guilty and sentenced to death. On appeal, the Supreme Court agreed that Fulminante’s confession was coerced and erroneously admitted into evidence. By a 5 to 4 margin, however, the court stated that in certain situations (e.g., when a confession is cumulative or other evidence is sufficient), the error may be deemed harmless. Refusing to afford unique treatment to confessions, the court argued that the “admission of an involuntary confession is a ‘trial error’ similar in both degree and kind to the erroneous admission of other types of evidence” (p. 1265).

Many legal scholars have criticized Fulminante on constitutional grounds (Ogletree, 1991) on the belief that it will encourage police coercion (Kamisar, 1995) and on the argument that appeals court judges are cognitively ill-equipped to mentally set aside the confession and objectively gauge the strength of the evidence and, hence, the cumulative or harmless nature of the confession in dispute (Hirsch, 2007). Discussing the pernicious effects of tunnel vision, for example, Findley and Scott (2006) have argued that appellate courts tend to define errors as prejudicial or harmless on

the basis of their personal judgments of the defendant's guilt—not their assessments of whether the error contributed to the jury's verdict. If the evidence in question is a confession, appellate judges will likely presume the defendant's guilt. Following a voluminous body of research on cognitive confirmation biases, one would thus expect them unwittingly to notice hypothesis confirmatory evidence (Snyder & Swann, 1978b; Wason, 1960) and overlook, discount, assimilate, or criticize new information that contradicts their guilty expectations (e.g., Asch & Zukier, 1984; Ask & Granhag, 2007; Darley & Gross, 1983; for a review, see Nickerson, 1998)—all enabling the perseverance of beliefs even after they have been discredited (Anderson et al., 1980).

Further complicating a harmless error analysis is that confessions, even if seriously flawed, can empower and derive power from other weak evidence. DNA exoneration cases reveal that many hotly contested confessions were accompanied by junk science, jailhouse snitches, testimony about the defendant's demeanor on arrest, and other evidence of questionable probative value. In the infamous Central Park jogger case, the confessions were supplemented by microscopic hair analysis suggesting (incorrectly, it turned out) that one of the exonerated defendants had hair on his shirt that was consistent with the jogger's hair. Often the backup evidence consists of testimony concerning the confessor's lack of emotionality at the time of arrest and interrogation (e.g., Michael Crowe, Peter Reilly, and Gary Gauger were described as calm after the murder of a loved one).

Testing the hypothesis that a highly flawed confession increases people's guilty judgments when paired with nondiagnostic testimony concerning the confessor's demeanor, Ray and Kassin (2007) presented participants with a summary of a New York case involving 17-year-old Marty Tankleff who was convicted of killing his parents. Tankleff was convicted on the basis of a confession handwritten by police hours after he discovered his parents' bodies, after detectives egregiously lied about evidence and even though Tankleff ultimately refused to sign the confession. Participants read one of four versions of the case: (a) a baseline control version, (b) a demeanor

version in which two detectives testified that the defendant was unemotional at the time, (c) a confession version that contained the statement Tankleff allegedly gave to police, and (d) a dual-evidence version that contained both the demeanor and the confession evidence. Compared with the baseline version, which yielded a guilty judgment rate of 53%, the flawed confession increased convictions slightly to 69%, and the demeanor testimony had no effect whatsoever at 48%. Yet when the two items were combined, the conviction rate was significantly boosted to 88%. Suggesting, "Where there's smoke there must be fire," results showed that when two impotent items of evidence were combined, their impact was fatal. In cases with confessions, there is yet another potential problem not visible to an appellate court: That additional inculpatory evidence may have appeared in the trial record—or exculpatory evidence may have disappeared—precisely because of the confession itself. This phenomenon occurred in the case against Pennsylvania defendant Barry Laughman, whose confession to rape and murder was flatly contradicted by serological evidence (he had Type B blood, yet the semen found in the victim was from a Type A secretor). Based on his confession, the state forensic chemist went on to concoct four theories, none grounded in science, to explain away the mismatch and ensure his conviction. Sixteen years later, Laughman was set free (<http://www.innocenceproject.org>).

Recent empirical research confirms that confessions may taint other evidence. In one study, Dror and Charlton (2006) presented five experienced fingerprint experts with pairs of prints—one from a crime scene, the other from the suspect—from prior cases in which they had judged the prints to be matches or exclusions. The prints were accompanied by no added information, the fact that the suspect had confessed (suggesting a match) or the fact that the suspect was in police custody at the time the crime was committed (suggesting an exclusion). The misinformation produced a change in 17% of the original, previously correct decisions (see also Dror, Peron, Hind, & Charlton, 2005). In a second study, Hasel and Kassin (1998)



staged a theft and obtained photographic identification decisions from a large number of eyewitnesses who were present. One week later, individual witnesses were informed that the person they had identified denied guilt, or that he confessed, or that a specific other lineup member had confessed. In response to this disclosure, many witnesses went on to change their initial identifications when given the opportunity to do so—selecting the confessor and increasing their confidence in that decision. Among those who had failed to make an initial correct identification, half went on to do so when told of a confession.

## OVERCOMING CONFESSION MYTHS

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The history of wrongful convictions, including the current generation of postconviction DNA exonerations, reveals a number of problems with confession evidence. Specifically, and in contrast to commonly held beliefs, research suggests that police cannot accurately identify suspects for interrogation through special interviews allegedly designed to distinguish between truth and deception; that suspects in a custodial interrogation waive the protections afforded by their constitutional rights to silence and to counsel; that certain legal but highly deceptive interrogation tactics put innocents at risk to confess to crimes they did not commit; that prosecutors, judges, and juries, relying on some combination of intuition and corroboration, tend to believe these false confessions; and, finally, that when coerced confessions are erroneously admitted at trial, appellate courts can reasonably determine whether the error was harmless or prejudicial. There are two mechanisms by which the courts can overcome the myths that envelop confession evidence. One involves a more active use of psychological science as a basis for expert testimony, amicus briefs, and other forms of consultation. In *United States v. Belyea* (2005), the defendant confessed to the theft of a firearm after being terrified into thinking that the weapon was used in a murder, that his fingerprints were on it, and that he could avoid jail by cooperating (the confession contradicted subsequently discovered key details of the crime). The defendant moved to

introduce expert trial testimony on false confessions, but the district court rejected this motion because “Jurors [already] know people lie.” Belyea was convicted, but the U.S. Court of Appeals for the Fourth Circuit overturned the verdict, noting that the law requires a nuanced analysis of whether expert testimony would be useful in a particular case. Astutely, this court argued that although jurors know in general that people lie, they may not know that certain people under certain conditions will be judged to be liars and then confess under interrogation to crimes they did not commit. In this court’s opinion, “The phenomenon of false confessions is counter-intuitive and is not necessarily explained by the general proposition that ‘jurors know people lie’” (*United States v. Belyea*, 2005, p. 10).

A second mechanism is to ensure that prosecutors, defense lawyers, judges, and juries can observe the process by which confessions are produced. In Great Britain, the Police and Criminal Evidence Act of 1984 (Home Office, 1985), which became effective in January 1986, mandated that all custodial sessions be taped in their entirety. In the United States, several states presently have mandatory videotaping requirements, although the practice is found elsewhere as well on a voluntary basis. There are many advantages to a videotaping policy (e.g., the presence of a camera should deter interrogators from using coercive tactics; disable frivolous defense claims of coercion; and provide a full and accurate record of the transaction, a common source of dispute in courts). For the purpose of this article, the following hypothesis presents itself: that a mandatory videotaping policy will enlighten prosecutors and defense attorneys and increase the fact-finding accuracy of judges (in ruling on voluntariness, they will observe firsthand the suspect’s physical and mental state, the conditions of interrogation, and the tactics that were used) and juries (in rendering a verdict, they will observe not only how the statements were taken but from whom the crime details, if accurate, originated). Indeed, the most effective way to correct the misconceptions widely held about confessions is to record for firsthand observation the processes by which they were obtained.



# HYPNOSIS AND THE LAW

## *Examining the Stereotypes\**

GRAHAM F. WAGSTAFF

A large volume of research from countries including Britain, Germany, the United States, and Australia indicates that a popular image of a hypnotic participant is still that of a person in a “trance state,” possessed of unusual powers, under the control of the hypnotist, with little awareness of what is going on (Daglish & Wright, 1991; Green, Page, Rasekhy, Johnson, & Bernhardt, 2006; Johnson & Hauck, 1999; McConkey & Jupp, 1986; Wagstaff & Dockar, 1985; Wilson, Greene, & Loftus, 1986). If there is any truth in such stereotypes, it is perhaps not surprising that the paths of hypnosis and law have crossed so often. For example, if hypnotized individuals are under the control of the hypnotist and are unaware of what is happening to them, then presumably they can be made to offend against their wills or become unwitting victims of crime and abuse. Also, if they are not in control of their

actions, maybe people can be induced to tell the truth with hypnosis. Another popular stereotype of hypnosis is that it can be used to contact the unconscious mind and uncover hidden memories. If this is so, then hypnosis obviously has potential for helping witnesses recover important material during police investigations. But how accurate are these views? To address this question, it is useful first to look briefly at some general theoretical issues in modern hypnosis.

### THE STATE VERSUS NONSTATE DEBATE

Although hypnosis has traditionally been construed as an altered state or trance, this conception of hypnosis has long been a source of controversy (Barber, 1969; Barber, Spanos, & Chaves, 1974; British Psychological Society, 2001; Heap, Oakley,

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& Brown, 2004; Kirsch & Lynn, 1995; Sheehan & Perry, 1976; Wagstaff, 1981, 2004). Modern supporters of the "state" school continue to argue that central to the concept of hypnosis are alterations in the participant's psychological and/or physiological state or condition (see, for example, Bowers, 1983; Gruzeliier, 2000; Hilgard, 1986, 1991; Killeen & Nash, 2003; Woody & Bowers, 1994; Woody & Farvolden, 1998). However, although supporters of the sociocognitive or cognitive behavioral view also acknowledge that alterations in subjective experiences are core phenomena in the study of hypnosis, they reject the traditional notion of hypnosis as an altered state as misleading. Instead, the latter contend that various hypnotic phenomena, including changes in subjective experience, are best described and explained in terms of interactions between more mundane psychological processes, such as imagination, relaxation, role enactment, compliance, conformity, attention, attitudes, and expectancies (see, for example, Coe & Sarbin, 1991; Kirsch, 1991; Lynn, 1992; Lynn & Rhue, 1991a; Spanos, 1991; Spanos & Chaves, 1989; Wagstaff, 1981, 1991, 2004). From this perspective, a hypnotized person is not someone who has fallen into a special altered psychological or physiological state but someone who is actively thinking and imagining along with, and responding to, suggestions and instructions delivered in a context defined as hypnosis. One result of debate on this issue is that terms such as "state" and "trance" tend to be less popular in definitions of hypnosis than they used to be; for example, although discussed, the concept of hypnosis as a state is not actually central to the definitions of hypnosis put forward by the American Psychological Association, Division of Psychological Hypnosis (1994; Green, Barabasz, Barrett, & Montgomery, 2005) or the British Psychological Society (2001). Instead, it has become more common to refer to hypnosis not as a special state or condition but as a procedure or set of procedures. For example, hypnosis can be described as a set of procedures in which an individual receives (more or less any) instructions or suggestions to imagine and think about certain ideas, set in a context defined or labeled as hypnosis.

However, although the issue of whether hypnosis is best construed as an altered state remains unresolved, research in this area has done much to dispel the myth of the hypnotic participant as a passive automaton possessed of transcendent powers. For instance, a variety of evidence indicates that hypnotic participants tend to be active cognizing agents rather than passive responders, that much hypnotic behavior is comparatively easy to simulate, and that suitably instructed and motivated nonhypnotic control groups can equal and sometimes surpass the hypnotic groups on a variety of performance measures including cognitive capacities, feats of strength and endurance, and pain tolerance (see, for example, Barber, 1969; Barber et al., 1974; Lynn & Rhue, 1991a; Spanos, 1991, 1992; Spanos & Chaves, 1989; Wagstaff, 1981, 2004). Moreover, a variety of research has indicated that participants' descriptions of the experience of being hypnotized are indistinguishable from those of participants who have undergone, for example, relaxation training or instructions in the use of imagery (Barber et al., 1974; Kirsch, Mobayed, Council, & Kenny, 1992). Nevertheless, although the research evidence and the opinions of many researchers and theorists in the academic community appear to run counter to many of the traditional stereotypes of hypnosis, these stereotypes clearly persist in the public mind. Why?

## HYPNOSIS AND PSEUDOSCIENCE

Perry (1992) asserted that the media perpetuate the popular stereotypes of hypnosis because of their commitment to entertain and to sell their products. Although this may be the case, perhaps equally important if not more important is the fact that hypnosis has long been associated with, and described in terms of, some very influential pseudoscientific rhetoric.

Since the early days of hypnosis, many investigators and commentators have preferred to take a range of ostensibly fantastic hypnotic phenomena (including X-ray vision, regression to childhood and past lives, catalepsy, posthypnotic

amnesia, and positive and negative hallucinations) at face value and to explain them by reference to special states and processes (such as magnetism, lucid sleep, monoideism, artificial somnambulism, and dissociation) rather than seriously entertain and systematically investigate more mundane explanations of the effects they claim to have demonstrated (Barber, 1969; Barber et al., 1974; Spanos, 1991, 1992; Spanos & Chaves, 1989; Wagstaff, 1981, 1998). The legacy of this tradition is still very much with us; hence, terms such as "hypnotic trance," "hypnotic and waking states," and "dissociative states" remain in common use (see, for example, Bowers, 1983; Gruzelier, 2000; Hilgard, 1986, 1991; Killeen & Nash, 2003; Woody & Bowers, 1994; Woody & Farvolden, 1998). Arguably, the more recent application of neuroscientific techniques to the investigation of hypnotic phenomena continues some elements of this tradition. Hence, the past two decades have seen the emergence of numerous reports allegedly demonstrating neurophysiological correlates of the hypnotic state, described in ever more complex anatomical and physiological jargon but without due emphasis on, or systematic consideration of, the range of more mundane social and cognitive processes that might account for these kinds of changes in the brain (Wagstaff, 1998, 2000, 2004). It is perhaps, therefore, not really surprising that there continues to be a mismatch between the image of hypnosis perceived by often confused media and the public and the views of those conducting research in the area.

To illustrate some of these issues as they apply in the legal arena, and the possible advantages of construing hypnosis in terms of normal social and cognitive processes, let us consider the two major points of contact between hypnosis and the law identified earlier: the use of hypnosis as a coercive tool and the use of hypnosis as a memory enhancement procedure.

## HYPNOTIC COERCION IN REAL LIFE

Can hypnotized persons be induced to commit immoral, criminal, or self-injurious acts of which they would normally be incapable? Although this

question is an old one in the hypnosis literature, in practice, claims that people have unwittingly been hypnotized into committing criminal acts are rare and have generally been treated with skepticism (Barber, 1969; Conn, 1972; Udolf, 1983; Wolberg, 1972). For example, Wolberg (1972) wrote,

Dr. Jacob H. Conn . . . read widely through one hundred and fifty years of medical literature and case histories and found no proof of a single violent crime committed under hypnosis. . . . Each subject could have committed the crime of which he was accused without the formality of hypnosis. (p. 279)

One of the most famous cases of supposed coercion is that of Palle Hardrup in 1951 (Reiter, 1958). According to the standard account, Hardrup committed two bank robberies in Copenhagen, during which he shot dead two bank tellers. At the trial, evidence was presented to the effect that he had been under the influence of hypnosis at the time and was, therefore, not responsible for his actions. He was subsequently released, whereas his hypnotist, who had been a close friend, was given a life sentence. However, Hardrup was subsequently committed to an institution for the insane, where he changed his story, stating that the hypnotist had never hypnotized him. Summarizing cases—including the Hardrup case—Barber (1969) made the following points:

Two facts stand out: a) prior to the supposed introduction of hypnosis a close relationship had existed between the subject and the hypnotist; b) the relationship extended over a lengthy period of time, and involved strong emotional ties. . . . If hypnosis played a role in these cases, this role may have consisted in providing the subject with a rationale for justifying his behavior to himself and others. (p. 202)

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Rather more common are claims that victims have been reduced by hypnosis to helpless hypnotic automata and subjected to sexual assault without their consent and/or knowledge; some of



these appear to have received more sympathetic consideration by the courts (Wagstaff, 1999a). The obvious difficulty with real-life situations, however, is that it is impossible to distinguish the effects of hypnosis from other causal factors that may have influenced the behaviors in question. For example, in addition to personal relationships and other motivational factors that may have existed prior to any sessions of hypnosis, the hypnotic situation itself involves strong social demands. By consenting to engage in hypnosis, the participant places himself or herself in a social situation in which he or she has tacitly agreed to trust the hypnotist and do what is instructed or suggested (Orne, 1962, 1970; Wagstaff, 1981). This is especially so when the context is defined as therapeutic; in such situations, as in counseling and psychotherapy generally, clients can develop a very powerful emotional bond with their therapists. Such situations are ripe for abuse, especially when the abuse is initially disguised by relaxation techniques; for example, in some cases, offenders have engaged in sexual assault having introduced the inappropriate physical contact as a relaxing hypnotherapeutic massage.

Because of the difficulties involved in controlling for these factors, researchers have turned to experimental methods to try to test the coercive powers of hypnosis.

## HYPNOTIC COERCION IN THE LABORATORY

A few early reports claimed that hypnotized persons can be made to perform acts that are immoral or harmful to either themselves or others; such acts have included indecent exposure, picking up a dangerous snake, throwing acid at the experimenter, minor thefts, and verbal attacks. However, a number of reviewers of these studies have concluded that the notion of a hypnotic state is not necessary to explain these effects; rather, they occurred because either, contrary to outward appearances, participants perceived the situation to be safe or they

considered that someone else would take responsibility for their actions (Barber, 1961, 1969; Coe, Kobayashi, & Howard, 1972, 1973; Orne & Evans, 1965; Udolf, 1983).

For example, Rowland (1939) and Young (1952) found that a majority of "deeply hypnotized" participants would attempt to pick up a dangerous snake and throw acid at the experimenter, whereas they generally refused to do this in the "waking state." However, Orne and Evans (1965) found that both hypnotic participants and participants instructed to simulate hypnosis would attempt to pick up a dangerous snake, plunge their hands into a beaker of concentrated nitric acid, and throw the acid at the experimenter when given emphatic suggestions to do so. Significantly, whereas five of six participants carried out the acts when hypnotized, only two of the same participants carried out the acts when not hypnotized; however, all six nonhypnotic simulators carried out the tasks.

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Further evidence against the idea that hypnosis has a special coercive influence comes from a study by Wagstaff, Green, and Somers (1997). They hypothesized that the stereotype of the hypnotic automaton, out of control of his or her actions, would be more likely to be endorsed by those inexperienced in hypnosis than those who had experienced hypnosis—the rationale being that the latter would know from firsthand experience that hypnosis is not a state of automatism. Accordingly, in this study, two groups—one given an experience of hypnosis, the other not—were given a transcript of a court trial in which the defendant had committed a crime but claimed that he had done so against his will because he had been hypnotized. Of the experimental group who had not been hypnotized, many were willing to find him innocent. However, among those who had previously had an experience of hypnosis, not one was willing to find him innocent (i.e., none accepted the defense of automatism).

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## **AUTOMATISM, INVOLUNTARINESS, AND DURESS**

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Many researchers put considerable stress on the fact that hypnotic participants often report their responses as occurring involuntarily. Indeed, this has been construed by some as one of the defining features of hypnosis (Bowers, 1983; Orne, 1966). However, as many commentators have emphasized, the fact that hypnotic behaviors may sometimes be experienced as involuntary does not mean that the participants have lost control of these behaviors (see, for example, Gorassini, 1999; Kihlstrom, 2004; Lynn, Rhue, & Weekes, 1990; Wagstaff, 2004). For instance, in response to an ideomotor suggestion such as arm lowering ("your arm is getting heavy"), good hypnotic participants may become absorbed in imagery designed to make their arms feel heavy, or when moving their arms, they may focus attention away from thoughts such as "I am moving my arm." As a consequence, the movement may be experienced as involuntary, but this does not mean that they have lost control of their behavior and cannot disengage from the process. Indeed, a variety of evidence shows that hypnotized participants will readily modify, resist, and even oppose responding to suggestions if the social demands indicate that responding is no longer required or appropriate (Kihlstrom, 2004; Lynn, Nash, Rhue, Frauman, & Sweeney, 1984; Silva & Kirsch, 1987; Spanos, 1986, 1991, 1992; Spanos & Chaves, 1989; Spanos, Cobb, & Gorassini, 1985; Wagstaff, 1981, 2004).

Nevertheless, it should also be emphasized that even if hypnotic automatism is excluded as a key variable in legal cases where the abuse of hypnosis is alleged, this should not stop us from examining alternative causes. As noted earlier, an unscrupulous hypnotist (such as an unscrupulous doctor or counselor) can use a variety of factors to induce submission, including trust, rapport, relaxation, fear of embarrassment, ambiguity, and physical manipulation. In English law, a distinction is made between the concept of "compulsion" or

"duress"—as when, for instance, an action was performed under threat, in obedience to orders, under marital coercion, or to avert a greater evil—and "automatism"—as when, for instance, an action was performed without awareness or as the result of a spasm (Curzon, 1980). Given the evidence, it would perhaps make more sense in such cases for investigators to pay attention more to the elements of the hypnotic situation that might be relevant to the concept of compulsion or duress rather than automatism.

## **HYPNOSIS, TRUTH TELLING, AND FAKING**

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Given the broad agreement that hypnotized individuals do not lose control of their behavior, it is not surprising that the issue of whether a person can lie under hypnosis seems to have been settled for some time now. The general opinion among researchers is that participants are capable of lying when hypnotized (see, for example, American Medical Association, 1986; Anderton, 1986; Orne, 1971; Orne, Soskis, Dinges, & Orne, 1984; Reiser, 1980; Udolf, 1983). In an experimental investigation of this issue, Sheehan and Statham (1988) suggested that highly hypnotizable participants may find it more difficult to lie under hypnosis because, having developed a rapport with the hypnotist, they may subsequently find that deceiving the hypnotist creates conflict. However, this interpretation was based on the response of a single participant; moreover, it suggests that it is not the induction of hypnosis, *per se*, that is responsible for any difficulty in lying but the social relationship established between the hypnotist and the participant. In a further study, in which group induction of hypnosis was used (i.e., rapport was minimized), Sheehan and Statham found that participants of high hypnotizability (i.e., those who had had a firsthand experience of hypnosis) were no more likely than low hypnotizables (who had not experienced hypnosis) to endorse the opinion that lying is possible under hypnosis.

In regard to faking hypnosis itself, there are indications that statistically, at a group level, participants instructed to simulate hypnosis can be

detected because they tend to show exaggerated behavior and respond like very highly hypnotically susceptible participants (Martin & Lynn, 1996; Wagstaff, 1981, 2004). For example, Martin and Lynn (1996) devised a Hypnotic Simulation Index, which measures the extent to which participants report extreme experiences (including simply how “deeply hypnotized” they were). They showed that a 10-item version of the Hypnotic Simulation Index successfully discriminated reals from simulators (low hypnotizables instructed to simulate an “excellent” hypnotic participant) for 96% of the sample. The simulators tended to report more extreme experiences. Significantly, however, a standard hypnotic susceptibility test also successfully classified 76% of the sample. Such results fit well with the view put forward by Wagstaff (1991, 2004) and Spanos (1992) that participants who provide extreme scores on hypnotic susceptibility measures (hypnotic “virtuosos”) are those most likely to be complying or exaggerating their responses. However, an alternative view is that those simulating the role of an excellent hypnotic participant are actually indistinguishable from the small percentage of participants who tend to become the most profoundly hypnotized. We also do not know how well the Hypnotic Simulation Index would perform in detecting someone not attempting to simulate an excellent hypnotic participant.

Thus, although the results using the Hypnotic Simulation Index seem promising, for the present, beyond the grounds of common sense (for instance, a drunk laughing and giggling while purporting to be hypnotized is unlikely to be taken seriously) and other more general techniques to detect lying (such as the polygraph; but see Iacono, 2008a), there is no reliable measure that can tell us whether a particular individual is “faking hypnosis” (for further discussion, see Wagstaff, 1999a).

## HYPNOSIS AND MEMORY FACILITATION

The view that hypnosis does not induce a state of automatism could be seen as good news for those wishing to promote the use of hypnosis as a memory enhancement tool; nevertheless, the

evidence for the use of hypnosis in this role has also been the source of some controversy. In the late 1970s and early 1980s, a number of reports indicated that hypnosis was being used quite extensively as a memory enhancement procedure by the police in a number of countries (for example, Haward, 1988; Haward & Ashworth, 1980; Hibbard & Worrington, 1981; Kleinhauz, Horowitz, & Tobin, 1977; Reiser, 1980). However, although memory facilitation effects with hypnosis have occasionally been reported in laboratory experiments and in the field (for example, Geiselman, Fisher, MacKinnon, & Holland, 1985; Hibbard & Worrington, 1981; Ready, Bothwell, & Brigham, 1997; Reiser, 1980), there now seems to be a fairly overwhelming body of experimental evidence to indicate that hypnotic procedures do not improve the accuracy of memory (as determined by the proportion of correct to incorrect responses) to a level greater than that achievable in motivated nonhypnotic conditions (for reviews, see Erdelyi, 1994; Kebbell & Wagstaff, 1998; McConkey & Sheehan, 1996; O’Connell, Shor, & Orne, 1970; Sanders & Simmons, 1983; Smith, 1983; Steblay & Bothwell, 1994; Wagstaff, 1984, 1989, 1999a, 1999b; Webert, 2003).

In an important overview of the relevant literature on memory facilitation with hypnosis, Erdelyi (1994) found that in some cases hypnosis did result in increases in correct responses; however, when they occurred, increases in correct responses with hypnosis were more or less confined to situations that require free recall of high-sense materials (filmed crimes, staged incidents, etc.). Significantly also, in such cases, hypnosis also tended to increase the number of incorrect responses such that overall accuracy, as determined by the proportion of correct to incorrect responses, was not improved. In fact, sometimes the increase in incorrect responses was such that overall accuracy deteriorated (see, for example, Dinges et al., 1992; Dywan & Bowers, 1983). Research also suggests that hypnosis may encourage witnesses to incorporate more misleading information into their reports and to be more confident in their reports generally, regardless of accuracy, resulting in a false confidence effect (McConkey & Sheehan, 1996; Scoboria, Mazzoni, Kirsch, & Milling, 2002; Sheehan &



Tilden, 1983; Spanos, Quigley, Gwynn, Glatt, & Perlini, 1991; Wagstaff, Brunas-Wagstaff, Knapton, et al., 2004).

Because of the potential problem of memory errors with hypnosis, there has been a tendency for some authorities to change their emphasis. Hence, instead of viewing hypnosis as a potentially valuable tool for uncovering accurate memories, they consider it to be a liability (Diamond, 1980; Orne, 1979; Webert, 2003). Indeed, as a result of expert evidence on this subject, in the United States, in the majority of states in which the issue has come to court, a per se exclusion rule has been applied such that victims and witnesses who have been interviewed with hypnosis have been banned from giving evidence in court (Webert, 2003). However, it has been found necessary to exclude defendants from this ban, as this would affect the defendant's constitutional right to testify and call witnesses on his or her behalf.

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The exact extent to which hypnotically induced pseudomemories are reversible, or can be reduced by warnings, has been a matter of some controversy (Green, Lynn, & Malinoski, 1998). Research using a range of more forensically relevant items suggests that the extent to which hypnotically created pseudomemories are reversible depends crucially on participants' perceptions about how their disavowals are likely to be evaluated by others (Spanos, Gwynn, Comer, Baltruweit, & de Groh, 1989). It seems, therefore, that in the short term, and for some participants at least, pseudomemories attributable to the influence of hypnotic procedures are more likely to reflect reporting biases rather than permanent memory distortions. It can also be noted that memory inaccuracies are more likely to occur as a result of factors such as leading questions than the induction of hypnosis per se (Scoboria et al., 2002).

Notwithstanding the bulk of the laboratory evidence, it is significant that some experts have continued to argue that hypnosis can usefully improve memory, and police in a number of countries have continued to use hypnosis for memory enhancement purposes (see, for example,

McConkey & Sheehan, 1996; Vingoe, 1995; Wagstaff, 1999a, 1999b). The main reason for this is that despite the experimental findings, a number of anecdotal cases have allegedly shown hypnosis to be effective in this role. One of the most famous cases is that in the *United States of Beck v. Norris* (see Webert, 2003). In this case—which occurred in 1986, before the widespread adoption of the per se exclusion rule—five witnesses who underwent hypnosis produced a new composite sketch of the suspect. This was later independently verified as the defendant and led to a successful conviction. But why should case studies of the effects of hypnotic interviewing look so much more impressive than the experimental research findings?

Again, if we consider hypnosis in terms of normal social and cognitive processes, a number of explanations emerge. For example, in the field, there are a number of techniques that so-called hypnoinvestigators have employed in forensic investigations that might produce better results than routine police interrogation (Wagstaff, 1982a, 1982b). Techniques used by hypnoinvestigators have included sympathetic nonauthoritarian interrogators who establish trust and rapport, repeated testing, and techniques to provide memory retrieval cues, such as role-playing, picture drawing, recalling in different orders, and hypnotic revivication or context reinstatement (i.e., reporting everything, including thoughts and feelings). In addition, hypnoinvestigators have tended to be more skilled at avoiding problems associated with standard police interviewing (Wagstaff, 1999b). For example, police interviewers frequently interrupt the witnesses. Such interruptions may disrupt concentration, impairing the ability to remember information, and result in short responses that may exclude important details. Most police interviewers also rely heavily on the use of closed questions (such as "Was he wearing a hat?") rather than open-ended ones (such as "Describe your attacker"). Closed questions tend to result in short, truncated answers, and the only information elicited is that which is requested. In contrast, the procedures employed by hypnoinvestigators encourage less interruption and give the witness an

opportunity to elaborate freely when giving his or her account.

Because of this, attempts have been made to direct the police toward nonhypnotic means of memory enhancement that share the kinds of techniques developed by hypnoinvestigators (Wagstaff, 1982a, 1982b, 1999a, 1999b). The most popular of these is the cognitive interview, which uses techniques such as rapport building; open, "report everything" instructions; focused attention; and context reinstatement (Fisher & Geiselman, 1992). When the comparison has been made, similar memory enhancement has been shown with both the cognitive and hypnotic interviews (Geiselman et al., 1985). However, because of the practical problems associated with the use of hypnosis, the cognitive interview has generally displaced hypnosis as the preferred mode of memory facilitation in police investigations in the United Kingdom and United States. For example, although the cognitive interview can sometimes also produce an increase in both correct and incorrect information, there is no actual reduction in accuracy as determined by the proportion of correct to incorrect responses (Kohnken, Milne, Bull, & Memon, 1999). Nevertheless, experience in the field suggests that cognitive interviewing is time-consuming in terms of not only time spent interviewing the witness but also training the police interviewers. Moreover, because of their complexity, officers often do not adhere to the specified procedures (Kebbell, Milne, & Wagstaff, 1999; Kebbell & Wagstaff, 1999). Significantly, Geiselman et al. (1985) found that although similar memory enhancement was shown with both cognitive and hypnotic interview techniques, the latter took less time to conduct. Consequently, rather than dismissing the notion of hypnotic memory enhancement altogether, there may be merit in reexamining components of hypnotic interviewing that may be useful in their own right and may not require excessive time and training to administer (Wagstaff, Brunas-Wagstaff, Cole, & Wheatcroft, 2004; Wagstaff, Brunas-Wagstaff, Knapton, et al., 2004; Wagstaff, Cole, Wheatcroft, Marshall, & Barsby, 2007).

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## CONCLUSION

Contrary to popular public opinion, the research evidence suggests that hypnosis procedures do not make people into helpless automata. Hypnosis is not a truth serum, and it is not a magical way of contacting the unconscious and uncovering lost memories. Indeed, by endorsing and promoting the popular stereotypes of hypnosis, many hypnosis practitioners have effectively been hoisted with their own petard; that is, by describing hypnosis as a special trance or brain state, they may have unwittingly laid themselves open to accusations of abuse allegedly committed while their victims were unaware of what was happening to them and/or unable to resist. Moreover, by emphasizing the unique properties of hypnosis to access hidden memories, they may have encouraged the creation of pseudomemories and thereby the demise of hypnosis as a memory facilitation technique.

To counter misconceptions about hypnosis, the obvious message is that experts in the area of hypnosis should be more sensitive to problems of misinterpretation. For example, instead of describing hypnosis with references to traditional concepts such as the hypnotic trance or altered state of awareness, academic researchers, clinicians, and other practitioners perhaps should adopt an approach that uses concepts and terminology that relate hypnotic phenomena more to everyday behavior and experience—such as attention, concentration, and imagination. Such an approach might also encourage experts to be more open-minded about hypnosis. For example, the evidence clearly suggests that memory enhancement procedures explicitly labeled as hypnosis should be used with caution, and it makes sense to recommend that the police use the cognitive interview and other procedures such as meditation, context reinstatement, and eye closure instead. But it does not follow that investigative hypnosis is so dangerous that it should be banned outright as an investigative technique and that anyone who has previously been hypnotized should be banned from testifying, as a matter of routine. Indeed, the procedures adopted in hypnotic investigative interviewing may yet provide a rich source of ideas and techniques that may benefit forensic interviewing in the future.

## ASSESSING ALLEGATIONS OF DOMESTIC VIOLENCE IN CHILD CUSTODY EVALUATIONS\*

JAMES N. BOW

PAUL BOXER

**B**ecause of the complexity of custody disputes, the court is increasingly relying on expert testimony in child custody cases. Child custody evaluators are faced with a complicated task (Bow & Quinnell, 2001). This task can be made even more difficult when allegations of domestic violence by one or both parents are involved. Domestic violence in the context of child custody evaluation has been receiving increased attention in recent years, most likely because of certain legislative initiatives, judicial decision making, and enhanced public awareness. As a result, child custody evaluators are conducting an increased number of evaluations involving this issue. Custody evaluations involving allegations of domestic violence hold special challenges for evaluators because of the alleged

secrecy of the parties and the frequent lack of adequate investigation and documentation to support or refute the allegations. Variations in the empirical research base of domestic violence coupled with varying legal statutes (Lemon, 2000), and definitions lend an additional level of complexity to these evaluations.

A child custody evaluator's opinion about alleged domestic violence can have a profound impact on the ultimate custody decision. Thus, it is important to quantify and clarify the procedures followed by custody evaluators in constructing such an opinion. As prior studies of custody evaluation practices have indicated, such evaluations are typically quite comprehensive in nature, even without any special attention called to allegations of domestic violence

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(Bow & Quinell, 2001, 2002). The current study was designed to examine the ways in which custody evaluators handle the critical issue of domestic violence allegations.

## **DOMESTIC VIOLENCE: THE VEIL OF SECRECY**

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In custody disputes, the legal system often becomes a symbolic background for the continuation of the domestic violence. Child support, visitation, and custody all become major issues of control for the perpetrator. This is particularly true, as more than two thirds of states have passed laws authorizing joint custody (Pagelow, 1993) unless evidence indicates otherwise. Perpetrators often use intimidation and harassment, and children become pawns in the legal process. Allegations and counter-allegations are common. Perpetrators of domestic violence are masters at denying, minimizing, and blaming the victim. They are also good at projecting a non-abusive image (Bancroft & Silverman, 2002), meaning they can present to the court and evaluator as calm, loving, and sensitive. The absence of a single psychological profile of the perpetrator or victim of domestic violence (American Psychological Association [APA], 1996; Guyer, 2000), along with the lack of adequate documentation of domestic violence in most cases, makes it difficult for the evaluator to ascertain the veracity of the allegation.

It can thus be quite problematic for custody evaluators to confirm the status of perpetrators. Recent improvements in documentation by law enforcement agencies, along with arrests, should assist in substantiating incidents of domestic violence. Prior to the 1980s, police departments wrote policies discouraging arrests in these cases (Lemon, 1999) as well as requiring the official documentation of police contacts. Currently, at least 24 states have mandatory arrest statutes when police are called for domestic violence (Austin, 2001). These steps have assisted in verifying incidents of domestic violence reported to the police. Even so, only a very small percentage of domestic

violence incidents are ever reported (Harway & Hansen, 1994). Therefore, in most cases, direct verification is lacking, which complicates the assessment process for the child custody evaluator.

## **CURRENT STATUS OF THE EMPIRICAL RESEARCH ON DOMESTIC VIOLENCE**

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The overall prevalence rate of marital violence between partners is about 12% (Austin, 2000). However, in high-conflict and/or entrenched custody cases, the rate is significantly higher with estimates in the 72% to 80% range (Johnston & Roseby, 1997; Newmark, Hartell, & Salem, 1995). There is also an increased risk around the time of the marital separation (APA, 1996; Pagelow, 1993).

Domestic violence in marital situations (i.e., marital or family violence) involves many dimensions including physical, sexual, property, and/or psychological violence, which range on a continuum in severity from mild to severe. It is important to note that no single definition of family violence is established or agreed upon by researchers (APA, 1996). Furthermore, much research has focused on samples drawn from clinical and domestic violence shelter samples. Generalizing from these samples is ill advised (Straus, 1990), although it is often done. In child custody cases, domestic violence research has been performed primarily by Hanks (1992), Johnston and her colleagues (Johnston & Campbell, 1993; Johnston & Roseby, 1997), and Newmark et al. (1995). In particular, Johnston and colleagues have provided the most comprehensive typology of interparental violence and its detrimental impact on children.

Domestic violence affects families in a variety of ways. First, it creates serious concerns about the safety and welfare of the victim and children. Second, children who witness domestic violence are at high risk for emotional and behavioral problems (Dalton, 1999; Holden, Geffner, & Jouriles, 1998; Johnston & Roseby, 1997). Third, children in such situations are at high risk for child abuse (Dalton, 1999; Lemon, 1999). Fourth,

a history of domestic violence predicts a poor prognosis for parenting cooperation (Austin, 2000). Therefore, a thorough and accurate assessment of this area is critical, even if it is not alleged or identified as an initial concern.

Another critical issue for child custody evaluators is the possibility of interactive (e.g., bidirectional) or female-initiated violence. The vast majority of research in the past has focused on male-initiated violence. However, some research using community samples indicates the presence of wife-to-husband assaults at roughly the same rate as husband-to-wife assaults (Straus, 1990; Straus & Gelles, 1988). Then again, the injury rate for wives is about six times greater than that for husbands (Straus, 1993) because of the greater physical size and strength of men. As a result, there is a greater chance that injuries to wives will be documented. Johnston and Campbell's (1993) typology of inter-parental violence in contested custody cases included interactive and female-initiated categories. Furthermore, 16% of the arrests for domestic violence in California in 1998 were women (Clifford's report as cited by Austin, 2001). Consequently, interactive or female-initiated violence cannot be dismissed and must be considered in the assessment process.

## DOMESTIC VIOLENCE IN THE LEGAL ARENA

Recent concerns about domestic violence and its detrimental impact on the family have resulted in legislative action. The overwhelming majority of states currently have statutes that require the court to consider domestic violence in all custody determinations, and 14 states have adopted statutes creating a presumption against awarding custody to a perpetrator of domestic violence (Lemon, 2000). Professional associations such as the American Bar Association and the APA have taken strong positions against granting custody to perpetrators (APA, 1996). Consequently, a finding of domestic violence has a substantial impact on custody determination.

Given the high stakes, some parents might use false allegations of domestic violence to a strategic

advantage in custody disputes. Stahl (1994) noted a rapid rise in such allegations in the late 1980s and early 1990s. Domestic violence allegations can be a powerful weapon to limit or deny custody and/or visitation in a vindictive manner. Custody evaluators should thus be aware of this possibility. This is especially important because judges tend to award primary physical custody to the parent who made the allegation of spousal abuse, even if the other parent's actions were not substantiated (Sorensen et al., 1995).

## Determining Practice Standards

Child custody evaluations involving allegations of domestic violence are clearly challenging and complex with many factors that need to be investigated. Bancroft and Silverman (2002), Dalton (1999), Jaffe and Geffner (1998), and Walker and Edwall (1987) have harshly criticized such evaluations. Criticism of child custody evaluators has focused on the following: (a) lack of basic knowledge about the domestic violence field, (b) failure to use collateral sources and record review, (c) over reliance on psychological testing, (d) failure to consider domestic violence as a major issue in custody determination by assuming that the allegations are exaggerated or fabricated, and (e) evaluators having a severe bias in favor of male perpetrators. Bancroft and Silverman (2002) claimed there is an urgent need to establish oversight and review of child custody evaluators. However, formal research on the practices and procedures for child custody evaluations involving domestic violence is lacking. Nevertheless, one state—California—requires custody evaluators to take training in domestic violence issues for court appointment.

The APA (1994) and the Association for Family and Conciliation Courts (AFCC) (1994) have developed child custody guidelines that outline preparatory and procedural steps to follow. Although not mandatory, the guidelines set parameters for professional practice in the custody evaluation field. Both guidelines mention that evaluators should have expertise in the specific area assessed (e.g., domestic violence); otherwise, additional supervision, consultation, and/or

specialized knowledge or training should be sought. Neither set of guidelines offer specific procedural steps for assessing domestic violence. Also, only a few authors have specifically addressed procedures to use in assessing domestic violence allegations in custody evaluations (Austin, 2000, 2001; Stahl, 1999; Walker & Edwall, 1987).

Austin (2000, 2001) discussed a risk assessment approach within a clinical–forensic–scientific paradigm. His approach shows great promise and is comprehensive in nature. He also outlined a 6-factor test of credibility, which includes objective verification, pattern of abuse complaints, corroboration by credible others, absence of disconfirming verbal reports by credible third parties, psychological profile and past history of abusive behavior by the alleged perpetrator of marital violence, and psychological status of the alleged victimized spouse. Still, there are currently no studies documenting the actual practices of evaluators involved in child custody evaluations with domestic violence allegations.

The purpose of the present study was to assess the status of child custody evaluations involving allegations of domestic violence. Four major areas were addressed: (a) training in the domestic violence area, (b) the nature and types of abuse referred for such evaluations, (c) practices and procedures utilized, and (d) types of custody/visitation arrangements and interventions recommended by evaluators. It is hoped that this information will inform practice and help mental health professionals better meet the needs of children, parents, and the judicial system.

## METHOD

### Identification of Participants

Names of doctoral-level psychologists were obtained through public access forensic referral lists, Internet searches of clinical and forensic psychologists who specialize in child custody work, and Friend of the Court (FOC) nominations. A list of master's-level child custody evaluators was obtained from the Association of

Family, Court, and Community Professionals. Overall, 348 potential participants were identified.

### Instrument

A comprehensive, six-page survey was developed after a thorough review of the child custody and domestic violence literature. The following areas were assessed: demographic information of the evaluator, specific training in the area of domestic violence, nature and types of domestic violence cases referred for child custody evaluations, practices and procedures used in such cases, victim characteristics that support domestic violence, importance of different risk factors in the assessment of the perpetrator, and types of interventions and recommendations typically used. A copy of the survey may be obtained by contacting the first author.

### Procedure

Each potential participant was sent a packet of information including a letter outlining the purpose of the study, an informed-consent sheet, a blank survey form, a request form for results, and a stamped return envelope. The blank survey forms for doctoral- and master's-level child custody evaluators were almost identical except the doctoral-level form asked for additional credentialing information and the master's-level form inquired about tests requested or given. The latter was necessary because some of the master's level evaluators were social workers that do not administer tests but might request testing. Potential participants were informed that all data would be coded, analyzed, and reported on a group basis to protect individual confidentiality.

Potential participants were requested to complete anonymously and return the survey. If they no longer performed child custody evaluations or evaluations involving domestic violence, they were asked to return the blank survey indicating so. Results of the study were promised to those who returned an enclosed request form or e-mailed the first author requesting such information. Approximately 1 month later, reminder letters were mailed.



A total of 148 surveys were returned (43%). Of these, 115 were usable surveys—that is, completed by master's- or doctoral-level professionals currently performing child custody evaluations involving domestic violence allegations. Twenty-four blank surveys were returned indicating that recipients no longer performed custody work or declined custody evaluations involving domestic violence; 1 survey was incomplete and 8 were undeliverable.

## Demographics of Participants

The gender of respondents was almost equal, with 52% female and 48% male. Almost all were Caucasian (97%), with 3% Hispanic. Sixty-eight percent were doctoral-level psychologists, 16% were master's-level psychologists or counselors, and 16% were master's-level social workers. One person from each of the latter two groups was also an attorney. The overwhelming majority worked in private practice (80%) followed by court clinics (11%). The remaining worked in other settings such as universities or community mental-health clinics. Forty-eight percent practiced in an urban area and 44% in a suburban setting, with only 8% working in rural areas. Respondents were represented from 33 states, including Washington, D.C., with the following regional distribution: 31% West, 19% South, 27% Midwest, and 23% East. Professional experience averaged 22.09 years in the clinical area ( $SD = 7.74$ ) and 13.84 years in the child custody area ( $SD = 7.48$ ). The median number of evaluations completed by respondents in their career was 150. It is important to note that this sample was a highly experienced group of child custody evaluators working mostly in private practice in an urban area. Therefore, the findings may not represent the full spectrum of custody evaluators.

## RESULTS

### Training in Domestic Violence

The majority of respondents (68.2%) reported taking no graduate courses addressing domestic violence. The primary method for learning about

domestic violence was through seminars (median = 4 seminars) and reading books and articles (median = 18 articles/books), although there was much variability ( $M = 7.38$  seminars,  $SD = 10.25$ ;  $M = 43.28$  articles/books,  $SD = 78.20$ ). Only 4.5% of respondents did not attend any seminars, and only 2.7% read fewer than 3 articles/books on the topic. Some respondents also indicated that they taught courses/seminars and/or had written articles on domestic violence.

## Type and Nature of Referrals

Respondents reported that almost all child custody referrals were court ordered (93.24%). On average, they reported that 37% of their child custody referrals involved allegations of domestic violence. Forty-six percent of the cases involved domestic violence related to the separation, whereas 29% were episodic (i.e., occurring intermittently during the marriage) and 24% were enduring and chronic in nature. In terms of the alleged perpetrator, the following pattern was reported: 51% male instigator; 17% bidirectional, mostly male; 14% bidirectional, mutual; 11% female instigator; and 7% bidirectional, mostly female. Table [15.1] shows the specific types and frequency of domestic violence allegations. Emotional/verbal abuse, physical aggression, and coercion/threats were most common. In terms of physical aggression, respondents were asked to rate the severity. Fifty-one percent rated it as mild (e.g., threw something, pushed, or grabbed), 33% as moderate (e.g., slapped, bit, or kicked), and 16% as severe (e.g., hit with fist, choked, or threatened with a weapon).

## Practices and Procedures Used

Table [15.2] displays the frequency of procedures typically used by respondents in these evaluations along with the average time allotted and value of each in the decision-making process. Multiple methods of data collection were indicated with almost all respondents using the following procedures: history gathering with each

**Table 15.1** Specific Types and Frequency of Domestic Violence Allegations

| Type                              | Frequency Ratings |      |      |      |      |      |      |
|-----------------------------------|-------------------|------|------|------|------|------|------|
|                                   | 1                 | 2    | 3    | 4    | 5    | M    | SD   |
| Emotional-verbal abuse            | 0                 | 3.5  | 9.6  | 19.3 | 67.5 | 4.51 | 0.82 |
| Physical aggression               | 0                 | 9.6  | 18.4 | 43.0 | 28.9 | 3.91 | 0.93 |
| Coercion-threats                  | 1.0               | 7.1  | 27.4 | 31.0 | 33.6 | 3.89 | 0.99 |
| Controlling finances <sup>a</sup> | 1.0               | 17.0 | 25.9 | 45.5 | 10.7 | 3.48 | 0.93 |
| Destruction of property           | 2.6               | 21.1 | 33.3 | 35.1 | 7.9  | 3.25 | 0.96 |
| Isolation                         | 7.1               | 29.2 | 18.6 | 31.0 | 14.2 | 3.16 | 1.20 |
| Stalking                          | 6.3               | 62.5 | 17.9 | 10.7 | 2.7  | 2.41 | 0.87 |
| Forced sex                        | 9.6               | 57.0 | 21.1 | 10.5 | 1.8  | 2.38 | 0.87 |
| Kidnapping children               | 23.5              | 66.1 | 4.3  | 4.3  | 1.7  | 1.95 | 0.78 |

Note: Value was rated on a Likert-type scale from 1 (*never*) to 5 (*almost always*). Numbers in frequency rating categories indicate the percentage of respondents indicating that value.

a. Refers to the overcontrol of finances or economic abuse as described by Harway and Hansen (1994).

parent, interview with each child, parent-child observations, review of police and medical documents, and collateral contact with therapist(s). Psychological testing was used by three-quarters of the respondents. It is important to note that a portion of the sample involved social workers that did not administer or request testing. Conjoint sessions were infrequently used. As expected, the most time-intensive procedure was the interview with each parent. Much time was also spent reviewing police and medical documents. In terms of decision making, the greatest value was placed on the interview with the father and interview with the child along with the father-child observation. Next was the interview with the mother and mother-child observation. Police and medical documents were also seen as having high value. Interestingly, psychological testing of the parents and child was in the lower tier for value in decision making.

Only 30% of respondents indicated that they administered specialized questionnaires, instruments, or tests pertaining to domestic violence.

Twenty-nine percent of these respondents indicated they developed their own questionnaires, 20% used the Spousal Assault Risk Assessment Guide (SARA), 15% used the Psychopathy Checklist-Revised [PCL-R], 11% gave the HCR-20: Assessing Risk of Violence, 9% gave the Conflict Tactics Scale, and 9% used the Child Abuse Potential Inventory.

Respondents were asked to list the top three signs, symptoms, or characteristics that support the contention of domestic violence during the assessment of the victim. Sixty percent of the respondents listed classic battered traits/signs such as shame and guilt, fear of perpetrator, low self-esteem, financial vulnerability, or inability to leave the relationship. Thirty-seven percent identified physical injuries or medical problems; 31% reported independent confirmation of domestic violence by eyewitness report, records, photos, or conviction; 28% identified the credibility and consistency of the report; and 21% listed Axis I symptoms such as depression, anxiety, or posttraumatic stress disorder.

**Table 15.2** Average Usage Rate, Time Allotted, and Decision-Making Value of Procedures Used in Child Custody Evaluations Involving Domestic Violence Allegations

| <i>Specific Procedure</i>                     | <i>% Using Procedure</i> | <i>M Hours</i> | <i>SD</i> | <i>M Weight in Decision Making</i> | <i>SD</i> |
|-----------------------------------------------|--------------------------|----------------|-----------|------------------------------------|-----------|
| Interview/history with mother                 | 100                      | 3.49           | 1.72      | 4.46                               | 1.06      |
| Interview with each child                     | 100                      | 1.95           | 1.08      | 4.60                               | 1.02      |
| Interview/history with father                 | 99.0                     | 3.49           | 1.72      | 4.61                               | 1.08      |
| Mother-child observation                      | 98.2                     | 1.54           | 1.06      | 4.43                               | 1.11      |
| Father-child observation                      | 98.2                     | 1.56           | 1.06      | 4.46                               | 1.07      |
| Review of police documents                    | 97.3                     | 1.26           | 0.80      | 4.40                               | 1.07      |
| Review of medical documents                   | 95.5                     | 1.54           | 0.95      | 4.25                               | 1.13      |
| Collateral contact with therapist             | 94.6                     | 1.35           | 0.88      | 4.22                               | 1.14      |
| Collateral contact with physician             | 83.0                     | 0.90           | 0.54      | 3.91                               | 1.21      |
| Collateral contact with neighbors and friends | 77.5                     | 1.68           | 1.41      | 3.35                               | 1.10      |
| Psychological testing of father               | 75.9                     | 3.25           | 1.93      | 3.98                               | 1.15      |
| Psychological testing of mother               | 75.0                     | 3.25           | 1.95      | 3.93                               | 1.18      |
| Psychological testing of children             | 49.1                     | 1.95           | 1.25      | 3.65                               | 1.25      |
| Conjoint session with both parents            | 25.0                     | 2.10           | 1.20      | 3.71                               | 1.46      |

Note: Weight in decision making was rated on a Likert-type scale from 1 (*none*) to 6 (*great*) for those that used the procedure.

Respondents rated on a 6-point Likert-type scale (1 = *none* to 6 = *great*) the value of different risk factors in the evaluation of the alleged perpetrator and importance in the decision-making process.... All factors, except for IQ, received a mean rating above 4. Drug usage, past use of weapons, ability to accept responsibility, power and control issues/attitudes, access to weapons, and past history of criminal behavior received the highest ratings.

### Impact of Domestic Violence and Interventions/Recommendations

Of those respondents that offered an opinion on the veracity of the allegation (90%), a contention

of domestic violence was supported in an average of 57% of the cases. In these cases, 76% of respondents claimed it greatly or extremely affected their recommendations. For a single perpetrator, respondents recommended sole legal/physical custody with the victim in 50% of cases and joint legal custody with primary physical custody with the victim in 39% of cases.

In cases involving bidirectional (mutual) domestic violence, there was much greater variability in custody/visitation recommendations. On average, respondents recommended joint legal custody with primary custody with the mother in 29% of the cases, joint legal and physical custody (50/50) in 18% of the cases, sole legal/physical custody with the mother in 16% of the cases, joint legal custody with primary custody with the father



in 14% of the cases, third-party custody in 10% of the cases, and sole legal/physical custody with the father in 8% of the cases.

When parenting time was recommended for the perpetrator, on average, respondents reported that 40% of the cases involved supervised visits, 24% involved limited visitation, and 5% involved no visitation. The remaining 31% of cases involved regular visitations with no restrictions. When supervised visitation was proposed, respondents recommended a visitation center 40% of the time. The next most common places were a neutral party's place (15%), relative of the perpetrator (13%), and relative of the victim (12%).

Respondents also rated the frequency of recommended interventions on a Likert-type scale from 1 (never) to 5 (almost always). Individual therapy for parties and children, domestic violence groups for the perpetrator, and parenting classes were most recommended (means > 4.0). Therapy for the perpetrator received the highest frequency rating ( $M = 4.63$ ,  $SD = 0.69$ ). Family therapy and the involvement of special masters or Guardians Ad Litem were less often recommended (means < 3.0), and mediation received the lowest rating ( $M = 2.28$ ,  $SD = 1.19$ ).

On average, respondents claimed that custody evaluations involving domestic violence took 23.9 hours to complete plus 11.5 hours for the report with a timeframe of 9.9 weeks. Respondents also reported, on average, that 25% of these cases required testimony in court.

## DISCUSSION

Even in the absence of a custody dispute, domestic violence can have a serious negative influence on the physical and psychological well being of children and adolescents exposed to it. Thus, it is critical for custody evaluators to assess the presence and impact of domestic violence regardless of whether it was raised as a specific issue at referral. Child custody evaluators have been harshly criticized in the past for their assessment of domestic violence allegations (Bancroft & Silverman, 2002; Dalton, 1999; Jaffe & Geffner, 1998). This criticism

raises a concern that needs to be further explored, because domestic violence is an increasingly common allegation in child custody disputes. This study was conducted to assess the status of practice in this area.

In terms of training in domestic violence, only a minority of respondents had taken graduates courses addressing this topic. However, this is expected considering that the vast majority of respondents attended graduate school more than 20 years ago when there was less focus, awareness, and research on domestic violence. In the present study, seminars and reading articles and books were the most common training methods, but there was wide variability among the respondents in the number of seminars attended and articles and books read. Only a small number of respondents (< 5%) had done neither. The vast majority had attended numerous seminars and read many articles and/or books. Therefore, as a group, they had basic exposure to the topic and were far from uninformed, contrary to common criticism.

Respondents reported using multiple methods of data collection in evaluating domestic violence allegations in child custody cases such as interviews with each parent, interviews with each child, parent-child observations, documentation review, collateral contacts, and psychological testing as stressed in child custody guidelines (APA, 1994; AFCC, 1994). All procedures involved as much time or more time than in typical custody evaluations as found by Bow and Quinell (2001). Furthermore, the total time involved (procedures plus report = 35.4 hrs) was significantly more than the time spent on the typical child custody evaluation (24.5 to 28.5 hours; Bow & Quinell, 2001). Therefore, child custody evaluations involving domestic violence appear to be more time intensive than the typical child custody evaluation.

Parent-child observations were almost universally used by all evaluators. It is important to note that there is no empirical support that an observation of a child and parent will help accurately differentiate a perpetrator from a non-perpetrator, although it may provide information about attachment, parenting style, and comfort level.

Bancroft and Silverman's (2002) criticism that child custody evaluators fail to use collateral sources and record review was not supported. Respondents almost universally reported utilizing these procedures. They also reported spending considerable time contacting collateral sources and reviewing police and medical reports. Further, they rated the latter two in the upper tier in the decision-making process.

Psychological tests were administered or requested by the majority of respondents. The types of tests utilized compared favorably with typical child custody evaluations as found by Quinnell and Bow (2001). However, the average weight of psychological testing in the decision-making process was rated relatively low. Consequently, there is no indication that respondents are overvaluing or over-relying on psychological tests. One pertinent criticism might be that they are underutilizing specialized instruments for assessing domestic violence. Less than one third acknowledged using specialized questionnaires, instruments, or tests. Of this group, 29% of respondents developed their own, which may not be legally defensible. The latter issue is also applicable for published instruments and tests that lack adequate validity and reliability. Useful, empirically derived instruments, such as the SARA (Kropp, Hart, Webster, & Eaves, 1999) and Conflict Tactics Scales (Straus, 1979; Straus, Hamby, Boney-McCoy, & Sugarman, 1996) need to be utilized more in these cases.

Although respondents indicated much value in assessing risk factors for alleged perpetrators, few of them actually used risk management inventories. However, this might reflect appropriate caution given that many of these inventories (e.g., Psychopathy Checklist) were normed on criminal or institutional populations that may not represent the perpetrator.

Only a few respondents reported using a comprehensive domestic violence model in the assessment process such as Austin's (2001) violence risk assessment. This model incorporates different components such as interview data, psychological testing, collateral information, special domestic violence instruments such as

the SARA, and evaluation of static (resistant to change overtime) and dynamic (situational and changeable overtime) factors. This integrative model may have much applicability, but it requires empirical validation.

Respondents in this study reported that 37% of their child custody referrals involved allegations of domestic violence, which is higher than the prevalence rate of marital violence (12%; Austin, 2000) but significantly lower than researchers have found in high-conflict and/or entrenched custody disputes (72% to 80%; Johnston & Roseby, 1997; Newmark et al., 1995). In regard to the alleged perpetrator, 51% were reported to be male, 38% were bidirectional, and 11% were female. The latter two figures affirm that bidirectional and female-instigated complaints are made and need to be appropriately investigated.

In 57% of the cases, respondents supported the contention of domestic violence. In those cases, 76% of respondents claimed it greatly or extremely affected their recommendation. This finding supports previous research that found child custody evaluators rated domestic violence as one of the top factors in custody decision making (Bow & Quinnell, 2001).

In cases involving a single perpetrator, 89% of respondents reported recommending physical custody to the victim thereby supporting the trend that preference should be given to the non-violent parent whenever possible. Further, it was recommended by the respondents that the perpetrator's visitation be supervised, limited, or terminated in 69% of cases. Last, the most commonly recommended intervention was therapy for the perpetrator. These findings are fervently contrary to the contention that child evaluators do not take this issue seriously in custody determination. Also, there is no evidence of an evaluator bias in favor of the perpetrator.

In terms of interventions, as expected, family therapy and mediation were seldom recommended. Both interventions are intimidating for victims of domestic violence along with being unsafe. Most professionals argue against mediation in these cases (Hart, 1990; Jaffe & Geffner, 1998; Pagelow, 1993). Regardless, many states

mandate mediation in contested custody and visitation disputes. Guyer (2000) also noted that family therapy is not the treatment of choice because of safety concerns and lack of attribution of responsibility to the perpetrator. A recommendation that was seldom used, but may have great utility, is a special master and/or case manager. This person, appointed by the court, acts as a go-between and assists in coordinating the parenting plan to hopefully help parents to resolve conflictive issues.

## CONCLUSION

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Although child custody evaluators are often criticized for their work in the domestic violence area, the findings of this study fail to support

such an assertion. In general, evaluators reported adequate training in the field. Their custody procedures closely adhered to child custody guidelines, and the amount of time delegated for many procedures exceeded the typical child custody evaluation. A review of documents (e.g., police and medical reports) and collateral contacts were seen as valuable components in the evaluation process. Psychological testing was used, but respondents did not overvalue it in the decision-making process. However, the vast majority of respondents underutilized valid and reliable domestic violence instruments and questionnaires. Such instruments and questionnaires might be an asset in the evaluation process. In those cases that respondents supported a contention of domestic violence, it significantly affected custody recommendations.



## THREE TYPES OF SKILLS FOR EFFECTIVE FORENSIC PSYCHOLOGICAL ASSESSMENTS\*

MARC SAGEMAN

**F**orensic work is becoming very popular among psychologists. Interesting stories, challenging problems, high pay, and involvement in high-drama litigation are temptations too difficult to resist for most. On the surface, the professions of psychology and the law both deal with behavior. This similarity conceals real differences in their practice and respective incentives. Clinical work is a cooperative, nonjudgmental enterprise in which rapport and alliance with the client is the rule. The client has little incentive to be deceptive, for appropriate treatment depends on accurate information. The legal process, on the other hand, is an adversarial system of conflict resolution. One party claims one thing; another disputes it. Eventually, fact finders may dismiss, find little merit in, or award significant damages in a civil suit or mete out punishment for or exonerate a criminal defendant. The dramatic nature of these resolutions provides

strong incentives for clients to try consciously or unconsciously to influence these outcomes.

Some of these disputes involve subtle questions about psychological science that are "beyond the ken of the laity." Psychologists are then invited to assist the trier of fact to understand the evidence or to determine a fact at issue. Forensic psychology is the application of the science of psychology to legal questions. Psychologists venturing into the legal arena must understand that they are simply guests in someone else's house. The host makes up all the rules and uses their contributions as he or she sees fit. The forensic psychologist's role is but a small part of the process of litigation. One of the main rules to remember is that psychologists never win or lose cases; lawyers do. It is the attorney's case, which consists of gathering the evidence, filing multiple motions, presenting the theory of the case, and refuting the adversarial theory. Over the years,

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I have learned to be humble; juries are not much swayed one way or another by expert testimony. Although psychologists' contributions are small in each specific litigated case, in the aggregate, they have much more to offer, framing the arguments in any issue and influencing appellate opinions through their arguments.

What is specific about the subspecialty of forensic psychology? Nothing prevents regular psychologists from practicing in a forensic setting. Many such generalists do a fine job despite the lack of specific training in forensic psychology. They intuitively understand what is asked of them and their professional acumen and sagacity guides them appropriately. However, most may fall short of the ideals of a competent forensic psychologist because of a lack of skills specific to the forensic arena that must be mastered to become an effective practitioner. These skills fall into three general categories that make a forensic assessment different from a regular clinical evaluation. First, such assessment must be relevant to and specifically address the specific legal question raised rather than generate a diagnosis. Second, it requires the special attention to evidence and the ability to reconstruct the past or predict the future; this is not usually demanded in the course of a clinical evaluation. Finally, the opinions from the evaluation must be persuasive to the appropriate audience, often an appropriate trier of fact, to assist in the resolution of the case at hand.

## KNOWLEDGE OF LEGAL ISSUES REQUIRING PSYCHOLOGICAL EXPERTISE

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### Criminal Responsibility

To effectively assist the trier of fact on some subtle issue of psychology and law, a psychologist must understand the exact nature of the legal issue at hand. This does not mean going to law school, but it does mean that the psychologist must be familiar with the specific wording of the issues addressed in the specific jurisdiction where the litigation takes place. The U.S. legal system is a maze of jurisdictions that intersect,

each with its own laws and legal precedents. Unlike the universal nature of science, the law is parochial; rules and precedents in one jurisdiction are usually different from those in another. For instance, people in Philadelphia, Pennsylvania, are subject to Pennsylvania and federal laws. They can be and often are different. For example, an insanity defense in state court must abide by the 1843 [M'Naughten] Rule, whereas in federal court, it is ruled by the 1984 Federal Insanity Defense Reform Act. Both rules have little in common with clinical mental disorders.

The best approach is for the psychologist to work closely with the retaining attorney to learn the specific language to address in the report. It might be useful to ask for the latest legal opinions when interpreting this language to ensure that one is addressing the relevant legal issue. Otherwise, good forensic work will be totally useless if the judge throws out the report and does not allow the proffered testimony because the report is not relevant to the issues under litigation.

For instance, some psychologists equate criminal insanity or lack of criminal competency with a severe mental disorder. This is not the case. Insanity is a legal concept and not a medical or psychological term. Criminal responsibility is about the mental state of the defendant at the time of the crime, not at the time of the examination, which takes place much later than the crime. The fact that a defendant is suffering from a mental disorder at the time of the examination may or may not be relevant to the legal question about the state of mind at the time of the crime. Incarceration is depressing, and the mental state at the time of the evaluation may be much worse than it was during the crime. The opposite may also be true. The defendant might have been manic at the time of the crime but under good medical control at the time of the evaluation.

A defendant may have been legally and temporarily insane at the time of the alleged crime but still carry no current *Diagnostic and Statistical Manual of Mental Disorders (DSM)* Axis I diagnosis. The defendant may have been involuntarily intoxicated at the time of the crime, which

would be an exculpatory factor, or the defendant may have been suffering from what used to be called paradoxical intoxication (no longer in the *DSM* but still present in the *International Classification of Diseases [ICD-10]* under the diagnosis of pathological intoxication [F10.07]). Jurisdictions vary in their treatment of voluntary intoxication as a contribution to the commission of a crime. In some states, it may be considered diminished capacity, converting first-degree to third-degree murder. In others, it may not be raised in the guilt phase of a trial, but it may come in later in the penalty phase as a mitigating factor.

Antisocial personality disorder is not deemed to be a mental illness in criminal cases. This is as it should be. Five of the seven criteria required for its diagnosis involve criminal behavior. To turn around and argue that this criminal behavior is the result of a condition defined by such behavior is to lapse into solipsism. Criminal law wisely sidesteps this vicious cycle by removing this diagnosis as a possible exculpatory or mitigating factor in a crime.

## Competencies: Civil and Criminal

Legal competencies have their specific definitions and a forensic psychologist must know and address their exact wording in the law to help the layperson decide a legal dispute. In the law, competency is defined as the capacity or potential for the mental functioning required in a decision specific manner and to understand and carry out certain tasks of decision making. It is presumed to be present unless a court rules otherwise. A specific incompetence means that a mental illness is causing a defect in judgment in the specific area in question. Competence is not a general function; it is issue specific. There are many competencies, each with its own legal definition. Starting with civil competencies, testamentary capacity (competency to write a will) requires that one understands the nature of a will, knows the extent of one's "bounty" and who the "natural heirs or natural objects of one's bounty" are and has some appreciation of one's relationship to family members and the effect of the will on

others. "Insane delusions" invalidate a will as might "undue influences"—that is, pressures applied unfairly by a person with the intent of benefiting from that pressure in terms of the will.

Contractual competence means that one understands the nature, terms, and effects of a particular transaction. Lack of such competence, which must be the result of illness and not simple ignorance, may invalidate the contract. This competence requires greater decision-making capacity than testamentary capacity because of the adversarial nature of contracts. Occasionally, challenges to competency to marry, which requires one to understand the nature of the marriage relationship and the duties and obligations involved, arise in cases where family members are opposed to the marriage of their kin with moderate mental retardation, who might not be able to live with another person with the same condition.

There are many types of competencies in criminal cases. The most common is the competency to stand trial. Unlike criminal responsibility, which deals with past state of mind, this is the defendant's present ability to understand the nature and consequences of the proceedings and to assist in the defense. Mental illness may negate this competency. Its lack may be temporary, as in the case of an unmedicated defendant with schizophrenia, or permanent, as in the case of a defendant with moderate or more severe mental retardation.

Various other criminal competencies stress different elements of the criminal process. For instance, the competency to confess is the knowing, intelligent, and voluntary waiver of one's *Miranda* rights (*Miranda v. Arizona*, 1966). Only police coercion, but not psychosis (e.g., confessing from a command from God), may result in the suppression of one's confession. As psychologists are rarely present to evaluate a defendant's competency to confess at the time of the confession, they must assess the defendant's competency to waive *Miranda* rights in retrospect, as a reconstruction of the defendant's state of mind at the time.

In terms of other criminal competencies, the competency to plead guilty involves the waiver



of one's rights of appeal, for pleading guilty resolves the criminal dispute with finality, whereas a jury verdict can be appealed on various grounds of unfairness. Here, a psychologist often has the luxury to evaluate the defendant at the time of the plea, and this is, therefore, a current competency. The competency to wave counsel is no greater or different from *Dusky* (*Dusky v. U.S.*, 1960). Finally, the competency to be executed rests on understanding the reason for this punishment. This has generated many controversies. Insanity and mental retardation are bars to execution.

### LINKING MENTAL STATES WITH THE LEGAL ISSUE IN QUESTION

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The law often requires the linkage between a mental state and a specific legal issue. In criminal cases, diagnosing a severe mental disorder is only half of the work. The other half is linking this mental disorder to the defendant's behavior at the time of the alleged crime. This is done through an examination of this behavior based on a careful consideration of the evidence. This cannot be based solely on the defendant's self-report because of its self-serving quality. The psychologist must weigh the available objective evidence of the defendant's behavior around the time of the alleged crime. Was there any evidence of psychosis or of goal-directed behavior, such as escaping detection or apprehension, or bizarre acting out just prior to or after the acts? To justify linkage, the mental state at the time of the crime had to be a substantial contributing factor to the commission of the crime. Only careful reasoning, taking into account the totality of the evidence in a case combined with the clinical findings of psychopathology, will assist lay fact finders when much of the knowledge about abnormal behavior is beyond their ken.

Similarly, in civil cases, a mishap must have been a substantial contributing factor to the mental damages. This involves knowing the mental health of the plaintiff prior to the mishap and comparing it to the plaintiff's mental health after

the mishap. The subtraction of the latter from the former is the extent of the damages incurred. This assessment of the plaintiff's prior state of health requires a careful search of the evidentiary documents predating the mishap. The tendency to blame all of one's troubles on a specific incident is ubiquitous. It may even be a universal heuristic error. It provides a concise and understandable narrative for one's problems and removes one's responsibility for them. Without having to impute any cynicism, this is naturally very common among plaintiffs. Defense attorneys try to deny or minimize the impact of a specific incident under litigation in terms of mental damages. Forensic experts must strive toward not only a fair assessment of the damage but also its causation.

To show liability, the expert must analyze the nature of the event and show that it may reasonably have led to the claimed damages. For instance, cursing an employee at work does not cause schizophrenia or substance dependence. It may create a hostile environment, but this should not be stretched too far to postulate the emergence of a severe mental disorder. Although some experts have submitted reports to this effect, the courts are rightly skeptical of these arguments. The few times that they have been accepted are more likely the result of a fact finder's desire to punish outrageous behavior than a true acceptance of such opinions, which are just hooks on which to hang despicable civil defendants.

### SKILLS REQUIRED BY THE DEMANDS OF THE LEGAL SYSTEM

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A second general type of skill required of forensic psychologists is that which is demanded by the nature of the legal questions at hand. As previously mentioned, incentives are very different in clinical and forensic evaluations and the competent forensic psychologist must always keep them in mind. It is crucial to corroborate the information provided and keep a modicum of neutrality in the proceedings. Many questions

from the law involve reconstruction of past events and prediction of the future. The forensic psychologist must keep abreast of new techniques in both fields.

## Gathering Complete Information

Forensic psychology opinions must be based on complete information. A forensic expert needs to have the soul of a detective to ferret out all the available information on which to render an opinion, within any reasonable degree of psychological certainty, on the legal questions before him or her. It is of the utmost importance to gather the most comprehensive information on the litigant, including past medical and mental health records, previous neuropsychological testing, occupational history, depositions, all legal testimonies, diaries (if available), and contemporary pictures and/or videos. The standard for a mental health expert is to review all the available evidence before seeing the subject of a forensic examination, especially if retained by the opposite side. Usually, in this case, the expert has only one opportunity to examine the subject. The expert should, therefore, have all the facts in mind to ask about discrepancies in the records or between the subject's narrative in the face-to-face evaluation and the records. This is more than simple courtesy, for there might be an explanation that does not have a sinister meaning and might have a significant impact on the opinion. It is important to consider and comment on potentially inconsistent evidence rather than ignore it. It could discredit an otherwise good report if some of the inconsistent facts are ignored without explanation. It is far more effective to defuse a potentially refuting piece of evidence in the report than face ridicule on the witness stand when the cross-examining attorney brings it up. The psychologist will appear to have something to hide, and the credibility of the report and testimony will suffer accordingly. The witness, effectively neutralized, will be unable to advance the case of the retaining attorney.

Credibility is the expert's most important asset in court. An expert assessment derived

from all available evidence is far more accurate and credible than one derived solely from self-report. If the records imply the existence of other records, the expert needs to inform the retaining attorney and insist that they be obtained through subpoena, court orders, or other legal means if necessary. The more thorough the review of the evidence, the greater is the credibility of the expert. Lawyers, judges, and jurors are not mental health experts. They do not understand how diagnoses are made, records are written, or treatment is performed. They rely on the expert to educate them. But attorneys take formal courses on evidence, and laypeople have an intuitive understanding of how poor evidence produces poor opinions.

Failure to consider all the evidence may also be a cause of action to sue an expert witness for malpractice. In most jurisdictions, experts have immunity for their testimony. However, if the method to reach their opinion falls below the usual standards of practice, which include relying on all the available evidence, and this faulty method costs the retaining party a case that might have been won or reduces the compensation, then the psychologist is at strong risk of being successfully sued for malpractice. In these litigious times, this will become more common as more psychologists enter this field.

## Striving for Neutrality

Clinical psychologists are accustomed to forming alliances and taking an advocacy role where their clients are concerned. The law, however, is interested in the truth and hopes that retained experts may help in reaching it. Ethics, professional integrity, and the demands of the law compel experts to tell the truth. This means that they must abandon the advocacy role, strive for neutrality, and let the evidence speak for itself as much as possible. It is ethically appropriate to refuse to testify as an expert witness for one's client. The allegiance built into the therapeutic relationship is not compatible with the neutrality demanded by the courts. This does not prevent the clinician from testifying as a fact witness on

behalf of the client. But “wearing two hats” as a fact and expert witness is ethically incompatible and clinically imprudent. Words said in court could easily backfire in the therapeutic context. Similarly, the temptation to unconsciously please the retaining attorney is sometimes difficult to resist. Nevertheless, it must be resisted as much as possible. On a related issue, one must maintain a healthy dose of skepticism in a forensic setting and not simply accept transparently self-serving self-reports. When inconsistency arises among contemporaneous evidence in the forms of documents or multiple testimonies, fact finders generally trust evidence closer in time to the events in question than later accounts. So should the forensic psychologist.

Distortions of the past are common in self-reports. These do not have to be intentional, as human memory is fallible. Narrative truth as opposed to historical truth is useful in the therapeutic setting. But the law is interested only in the historical truth. Tests results also need to be interpreted within their contexts. It is possible to “fake bad” on tests, and the temptation to do so is strong in both civil cases (to increase the monetary award) and criminal cases (to avoid punishment). . . . It is important in forensic reports and testimony to separate interpretation from facts, which should be presented as clearly as possible. The psychologist can then present an argument supporting the interpretation based on the facts. The trend in the law is for judges and appellate courts to become more interested in the process of reaching an opinion than in the actual opinion itself. If the process is valid and passes the peer-review test, then the opinion on which it is based can be admissible in a court of law. If it is reached with a poor foundation, it can be challenged and the proffered testimony can be ruled inadmissible.

## **Reconstructing the Past**

Many of the demands put to forensic psychologists have to do with reconstruction of the past. This is not as commonsensical as it seems. The law often asks psychologists to reconstruct

the past and opine about a state of mind in the past or establish liability between a mishap and present damages. This is a difficult process in all circumstances.

When I review the medical records and depositions in preparation for the personal examination, I necessarily develop a mental portrait of the litigant in my mind. The documents often include the best documented evidence, such as detailed clinical evaluations and sometimes lengthy and complete mental health treatment notes.

The face-to-face examination always surprises me; the litigant is different in some significant way from the constructed image. I suspect that this is generally true for other examiners as well. These experiences are very sobering. Reconstruction of the past based on extrapolation of current evidence should be done with a great deal of caution and humility about our ability to do so. Psychohistorical studies of people that one did not even have the opportunity to evaluate personally must be viewed with skepticism. Yet this is what the forensic psychologist is asked to do in psychological autopsies, as when trying to answer whether someone committed suicide or was the victim of an accident. This is of great interest to the heirs and life insurance companies.

As with other aspects of an expert’s opinion, reconstruction of a state of mind should be based on all the evidence available. Some evidence is more helpful than other. Most helpful is evidence providing a “direct window” into the mind, evidence such as diaries, contemporaneous records as opposed to retrospective accounts, job evaluations, depositions of other witnesses, witnessed overt behavior, and understanding the context of the past. Even with the best information, psychologists can fall prey to some common fallacies of interpretation. One known to all psychologists is the fundamental error of attribution, discounting contextual factors accounting for behavior and imputing it instead to a permanent characteristic of an individual. But there are many other errors of interpretations based on logical fallacies that psychologists are not aware of. Anyone considering a career in forensic psychology should read a good text warning professional historians about



such traps. One of the classical texts is David Hackett Fischer's (1970) *Historians' Fallacies*.

## PREDICTING THE FUTURE

Sometimes, forensic psychologists are asked the opposite—that is, to predict the future. The law often requires a mental health expert to predict the future, especially in regard to the prognosis of a condition (extent of damage) or the prediction of violence (civil commitment and discharge from mental health hospitals, death penalty sentencing phase in some states, and waiver to adult court in juvenile cases). Unlike the reconstruction of the past, there are more methodological guidelines for predicting the future. Such reports can be vulnerable to *Daubert* or *Frye* challenges (*Daubert v. Merrel Dow*, 1993; *Frye v. U.S.*, 1923) if they cannot represent a valid use of scientific methodology.

One valid method of prediction is Bayesian probability. This requires knowledge of base rates in an appropriate comparison group and prospective studies. Unfortunately, most of the psychological literature is based on retrospective studies, which are not useful in Bayesian probability. It behooves the forensic psychologist to become familiar with the few long-term prospective databases that are still ongoing. One involves the Grant study, namely a cohort of privileged boys who attended Harvard in the early 1940s (Vaillant, 1977, 1993). A second is the Boston Juvenile Study, which involved juvenile boys in Boston in the study of California school prodigies, a group of privileged boys and girls (Terman & Oden, 1947). The last study is the Children of Kauai Study, involving the cohort born on that island in 1950 (Werner & Smith, 1982, 1992). These studies are very sobering in terms of damage claims. They show strong resilience to adversity and resistance to descent into criminality. The contrast between prospective and retrospective studies is striking. Perhaps it may be the result of the biases of memory.

Bayesian probability runs into the problem of low base rates in many psychological predictions,

such as homicide or suicide. To counter this problem, some researchers have started to use case detection of low probability events based on signal detection theory and receiver operator characteristics analysis (Sweets, Dawes, & Monahan, 2000). This involves more sophisticated methodology and more data than Bayesian probability.

A third methodology is a sophisticated stochastic model used in the recent MacArthur Study of Mental Disorder and Violence (Monahan et al., 2001). This is far too complicated to carry out by one person and requires computer technology and software that the authors of the study have promised to release shortly.

If the courts are serious about enforcing the precedents set forth by *Frye* and *Daubert*, the forensic psychologist will need to become familiar with and use the [previously discussed] methods of prediction. However, at present, it seems that courts will be happy to simply accept an expert's opinion based on experience and training, for it is better than anything a layperson can provide. In most cases, the courts will rely on cross-examination and allow juries to decide rather than dismiss proffered testimony on the basis of inadequate methodology. Litigation about the [previously discussed] methods is generally confined to high-profile cases involving a famous person or a large amount of money.

## Practice Skills

Forensic psychology is not only an academic subspecialty but also a practice. The task of the forensic psychologists is not over when they reach an opinion on a specific issue. In many ways, it could be the beginning of their role in the litigation process. The forensic psychologist does not work in a vacuum but within a very delicate context of litigation that is full of pitfalls and loopholes. Litigation is a pragmatic process that tries to resolve complex issues within a reasonable time and with reasonable results. Although I previously warned that forensic psychologists' input in the whole process is not determinative, it can still have a significant impact on the process. Many issues are not decided on merit but rather

on certain games that lawyers play. This knowledge of the practice of forensic psychology comes under the large set of skills that I have labeled “practice skills.” For those who are considering expanding their forensic practice, I would strongly recommend reading some of the good pragmatic introductions to the field, such as Brodsky’s (1991) classic *Testifying in Court* and the Group for the Advancement of Psychiatry’s (1991) *The Mental Health Professional and the Legal System*.

There are many possible roles for a forensic psychologist. Being a potential expert witness is only one of them. The litigation process usually starts when lawyers are confronted with an issue outside of their area of expertise. In civil cases, this includes a plaintiff claiming damages directly linked to an incident. Here, it is common for the plaintiff’s lawyer to refer the plaintiff to a forensic psychologist for evaluation of the claims before he or she agrees to take on the case. The attorney is interested in finding out the merits of the case as well as the potential difficulties associated with the case. Like a psychologist, once an attorney accepts a case, the client cannot simply be abandoned, and the attorney will be responsible for unexpected costs. Attorneys working on a strict contingency fee do not get paid if they lose the case; they may also lose money if the awards do not cover the costs. So taking on a case is a risk, and plaintiff attorneys like to hedge their bets by asking for a preliminary opinion. This is not a full fledged opinion because collateral documents are not yet available for scrutiny. In criminal cases, defense attorneys may want to know whether their clients are competent to proceed or whether there might be some type of mental health defense justifying, excusing, or mitigating the alleged crime. Attorneys may want a preliminary opinion before investing resources in pursuit of such a defense.

Another role for forensic psychologists is similar to [those discussed]. It consists of acting as a consultant to attorneys to help them develop a theory regarding the case. This is the overall narrative that will eventually be presented to the fact finder. This consulting role may or may

not involve face-to-face evaluation of the litigant. This may involve a review of the raw neuropsychological data without actual testing. If acting as a consultant, it is important to clarify one’s role and not act in a dual capacity. The role of the consultant is not to seek the truth but to help attorneys further their case. Sometimes, these two goals conflict, and it must be clear from the start what the role of the consultant is in a specific case.

### **Supporting the Retaining Attorney’s Overall Strategy**

Attorneys will use a retained expert only if it furthers their theory of the case. Whereas the expert is supposed to tell the truth, an attorney is supposed to defend the client with the utmost zeal. Again, these two roles conflict and, in the end, it is the attorney’s case. Attorneys will use the expert’s opinion only if it significantly helps their case. A competent psychologist must have a good rapport with the retaining attorney. After the evaluation, psychologists should call the attorneys and inform them as to the general turn of their opinion. This is more than mere courtesy. Attorneys may not want a written report, which may become discoverable to the other side, if the proffered opinion does not advance their case. If the attorney gives the go-ahead for the report, the psychologist should ask what the attorney’s overall strategy of the case is, as this is important in the drafting of the report.

In many cases, attorneys want to use the report to force a settlement. In this case, they want the report to be as detailed and compelling as possible. The downside of this strategy is that if a settlement is not reached, the report will provide the other side with the theory of the case and allow better preparation to counter it at trial. It will also provide the opposite attorney with a lot of material for cross examination of the psychologist. Even in cases headed for trial, some attorneys prefer a long comprehensive report, believing that because the report includes everything, there will be little to cross-examine the expert on.



Many attorneys proceeding to trial would prefer a minimalist report. They would rather keep the other side guessing as to the proffered testimony and not allow their opponent much time to prepare for cross-examination. The downside here is that if some aspects of the proffered testimony are not within the “four corners” of the report, they may not be admitted at trial. The crucial point is that the expert and the attorney must communicate effectively so that the expert understands the attorney’s strategy for the case and the attorney understands the strengths and weaknesses of the report style.

This does not mean that the expert’s opinion should be affected by the attorney’s preferred presentation style. It is the attorney’s case, not the psychologist’s, and as long as there is no change in the evidentiary basis or in the resulting opinion, it is fine to allow the attorney to have an input in the presentation of the report. The psychologist must feel comfortable with the suggested style, or it will show in court.

### **Addressing One’s Testimony to the Right Audience**

Legal conflicts are decided by many different types of [fact] finders who constitute different audiences that must be addressed differently. These audiences vary: lay juries in state or federal district courts, drawing from different segments of the population; judges in bench hearings; appellate courts in appeals from lower courts; lawyers in arbitration hearings; masters in various courts; or insurance company adjudicators. Unlike clinical practice, where one can simply provide one’s opinion to the client, a report or testimony is addressed to such a specific audience. Forensic psychology is not simply an academic subject. It is a practice leading to serious and immediate results. A carefully reached opinion will amount to little if it does not persuade the appropriate audience. This involves certain communicative skills. Actually very little is known about how most of these audiences reach their decision. Legal mythology as propagated in law

reviews is rife with examples of legal reasoning based on “logic” and legal precedents.

Appellate opinions and some important lower court decisions are disseminated and articulate the reasoning behind these opinions. I strongly suspect that they are just rationalizations of opinions reached on public policy grounds that are dressed in legal language. A prime example is the U.S. Supreme Court decision regarding the results of the 2000 presidential election that happened to fall perfectly along party lines. The odds of this happening simply by chance or by adherence to logic are very small. The research on how decisions are reached in the legal arena is based on jury verdicts, mostly through retrospective interviews or through mock trials. Juries are just as susceptible to presentation style (similar to good bedside manners) as to substantive argument. There is evidence that they view even civil cases as morality tales, providing an anchor to the determination of damage awards. Jury behavior is an exciting new field that merges the subspecialty of forensic psychology with social psychology (but it cannot be fully addressed in a journal focusing on assessment).

Despite our lack of formal knowledge of what type of information a given audience finds persuasive, it is still very important to address one’s testimony to the right audience. Its presentation depends on the target audience. There are two types of expert testimony, namely, depositions and live testimony at a trial, arbitration, or similar setting. A deposition is an opportunity for the opposing attorney to find out the essence of the proffered testimony. One can be as sophisticated as one wants in a deposition. Remember that many attorneys will try to trip up an expert at trial by showing some inconsistency between a deposition testimony and live testimony. Often, the apparently contradictory quotation is taken out of context. While on the stand, take your time, read it in context, and explain away the apparent contradiction. This gives you added credibility.

In live testimony, the expert is speaking directly to the fact finder when responding to questions from attorneys from both sides. It is important for the expert to adjust the presentation



to the level of sophistication of the target audience. If this is a bench trial—that is, a trial before a judge—assume that the judge is a sophisticated layperson, and you can be as sophisticated as you want on the stand. Indeed, talking down to a judge may be irritating and perhaps prejudice the judge against your testimony.

A jury is usually less sophisticated than a judge. When testifying before a jury, use simple words, translate complex concepts into simple ones, and try to use simple phrases to convey the essence of your testimony. Also, take the time to explain any term you use that the jury might not understand. Do not do that before a judge, however, because the judge can interrupt you and ask you to clarify your statements.

Communication skills are crucial on the witness stand. Many jurors respond better to definite statements than to those that are too nuanced, even if more accurate. Such statements may make the expert appear too wishy-washy and hesitant about the knowledge. It is a sad truth that juries, like television audiences, fall prey to positive sound bites. One must balance effective delivery with scientific accuracy. It is an art mastered by only a select few.

## **Deferring to the Prerogative of the Fact Finder**

The conventional advice for experts is not to answer the ultimate legal question. This is wise counsel, but it is not always observed by lawyers and judges, who often specifically ask experts about the ultimate issue. I often do not provide an opinion on the ultimate issue but, instead, address the exact wording of the legal text guiding that issue. It is for the fact finder to make the extra step. If a judge asks me point blank about a specific issue, I will answer within the limitations of my evaluation. However, there are two issues that experts must be careful of in terms of addressing the ultimate issue.

The legal profession is very jealous of its turf, especially in regard to its function as fact finder. Experts may sometimes believe that they know the facts better than lay people; however, any intrusion into this legal prerogative will be contested, if not in lower courts, definitely in appellate courts. One of these crucial prerogatives is the notion that the fact finder alone is allowed to determine the truth value of a witness. Any psychological testimony implying that a witness is or is not truthful will be challenged on such ground, despite the fact that there is a burgeoning scientific literature on the ability of witnesses to remember events or faces. A psychologist might be allowed to testify as to the state of scientific knowledge on this topic in general, but the testimony will not be allowed to veer into territory concerning the credibility of a specific witness. Any hint in that direction may result in a mistrial.

The ultimate issue on criminal responsibility in a homicide case is another fact-finder prerogative that the mental health expert must respect absolutely. The expert may opine as to the existence of a severe mental illness at the time of the commission of the crime and testify as to the contribution of this illness to the commission of the crime but then must stop there and go no further. The last step, to decide whether the defendant was sane or insane at the time, is strictly for the fact finder to determine. Any misstep here again may result in a mistrial.

Psychologists must master the three types of skills covered above before they become competent forensic psychologists. These skills range from academic knowledge about common questions that the law asks of psychologists to certain practical evaluative skills uncommon in the usual practice of psychology to pragmatic, strategic, and tactical skills involved in the actual practice of forensic psychology. A growing body of literature addressing these skills is becoming the basis of a new subspecialty of psychology. The sophistication of these articles in the present issue attests to its emergent maturity.

## DEVELOPMENTALLY SENSITIVE FORENSIC INTERVIEWING OF PRESCHOOL CHILDREN

### *Some Guidelines Drawn From Basic Psychological Research\**

CONNIE M. TANG

**H**istorically, the U.S. court system has treated children's testimony with suspicion. Young children, in particular, are believed to be incompetent witnesses because of concerns over their memory limitations, linguistic immaturity, and conceptual underdevelopment. Thanks to empirical research in the past decades showing that children, even preschoolers, can be competent witnesses, children are now allowed to testify in court. To examine how basic psychological research, like more applied research, can also inform public policy in the forensic interviewing of preschool children, the present article will first selectively review some basic psychological research on preschool children's memory

development, language development, and conceptual development. Then, based on this review, the article will generate some guidelines for forensic interviewers of preschool children, such as police officers, attorneys, judges, and social workers. Finally, this article will point out directions for future research.

There is an extremely large body of research on the forensic interviewing of children. These research studies were mostly applied in nature, simulating various circumstances that might occur in forensic settings. For example, during forensic interviewing, children can be repeatedly or suggestively interviewed, and they can be interviewed by more or less supportive interviewers.

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A large number of studies have thereby used the paradigm of exposing children to the target event and then interviewing them repeatedly, suggestively, and conducting the interviewing using interviewers of varied levels of support. These applied studies have been very informative, [s]hedding light on interviewing techniques that should be used and techniques that should be avoided. A number of reviews (e.g., Goodman & Shaaf, 1997; Quas, Goodman, Ghatti, & Redlich, 2000; Saywitz, Goodman, & Lyon, 2002) have summarized many of these studies. Relying on this literature, London (2001) generated a series of guidelines for police officers when interviewing children. Using the same empirical base, Poole and Lamb (1998) have also written a guidebook for professionals who routinely conduct investigative interviews of children. Because young children were found to be particularly susceptible to interviewer suggestion relative to older children and adults (see a review by Bruck & Ceci, 1999), much research effort has also focused on the suggestibility of young children, emphasizing the importance of not asking leading or suggestive questions when conducting forensic interviews (see reviews by Ceci, Bruck, & Battin, 2000; Davis, 1998; Saywitz & Lyon, 2002).

Despite the number of reviews and guidelines that have already been compiled on the forensic interviewing of children, the present article fills a void in the literature by focusing on the forensic interviewing of preschool children (i.e., approximately between ages 3 and 5). Although guidelines for interviewing children in general can certainly apply to preschool children, preschoolers may be particularly challenging to interview because of their very young age and increased vulnerability to suggestion. Therefore, the topic of interviewing preschool children is worthy of special attention. Because of this review's special focus on preschool children, there is an absence of recent work with children of this particular age group on certain topics; in these instances, older but relevant work will be reviewed. The present article also adds to the literature by emphasizing basic psychological

research. Although extant reviews have mostly summarized empirical studies of an applied nature, in which the main purpose was to investigate various interviewing strategies, more basic psychological research, where the focus is broader, can also contribute to our understanding of young children's capabilities as witnesses. With the [previously given] considerations in mind, let us turn to some basic psychological research on young children's memory, language, and conceptual development.

## MEMORY DEVELOPMENT

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For a long time, the phenomenon of "childhood amnesia," where adults cannot usually recall events that occur prior to 3.5 to 4 years of age, has been attributed primarily to poor memory early in development (Eacott, 1999; Fivush & Nelson, 2004; Hayne, 2004). However, empirical research would find that although adults experience "childhood amnesia," young children are often able to recall events experienced in the first few years of life (Fivush, Haden, & Adam, 1995; MacDonald & Hayne, 1996). For example, Fivush et al. (1995) repeatedly interviewed preschoolers about several personally experienced events when the children were at 40, 46, 58, and 70 months of age. Even when interviewed at 40 months, children's narratives were quite coherent, although older children's narratives were even more coherent. Children's recall of past events was also remarkably stable over long delays, such that recall at 70 months for events that occurred prior to 40 months was as structured and coherent as recall for more recent events. When the children were re-interviewed at the age of 8 (Fivush & Schwarzmuehler, 1998), they continued to recall these events accurately and with much detail.

There are several caveats to the Fivush et al. (1995) and Fivush and Schwarzmuehler's (1998) studies when applying their findings to the forensic interviewing of young children. First, the repeated interviews in the study might have served as rehearsal opportunities to improve children's



recall. In forensic settings, these rehearsal opportunities may or may not be present. In cases where a child is interviewed multiple times by different interviewers such as parents, teachers, police, social workers, or attorneys, the child has several opportunities to rehearse. Although this is certainly possible, it is also likely that research findings (e.g., see a review by Bruck, Ceci, & Hembrooke, 2002) regarding the negative impact of repeated suggestive interviews on young children's memory will persuade professionals in the field to reduce the number of times each child witness is interviewed. Therefore, children may or may not experience as many interviews in forensic settings as those in the studies conducted by Fivush et al. [1995].

Second, despite using parents as judges, accuracy of these autobiographical recalls could not be ascertained as parents' memory also fades with time. Finally, when researching children's autobiographical recall in naturalistic settings, one cannot know if the children truly remember the past events. They could have constructed the memories based on continued discussions with their parents. As Peterson (2002) observed, although some studies (such as the [one] conducted by Fivush et al. [1995]) found children's long-term autobiographical memory to be robust, other studies found substantial deterioration in children's autobiographical memory as the delay increases. One such study was conducted by Boyer, Barron, and Farrar (1994), which revealed that 3-year-old children failed to show memory of a nine-action event sequence (i.e., "Making Play-Doh spaghetti") that they learned at 20 months of age. Major differences between Fivush et al. (Fivush et al., 1995; Fivush & Schwarzmueeller, 1998) and Boyer et al. (1994) was that children in the Fivush studies were considerably older, that they were interviewed about personally experienced events that were rich in verbal context, and that children were interviewed about events that had occurred when they were much older than 20 months of age. These differences may account for the inconsistencies in research findings.

In summary, keeping these caveats in mind, Fivush et al. (1995) and Fivush and Schwarzmueeller (1998) showcased the possibility for structure

and coherence in middle to older preschool children's recall of personally experienced events. In addition to exhibiting structure and coherence, preschoolers' recall possesses other interesting features as well. In a longitudinal study of children's autobiographical recall between 2.5 and 4 years, Fivush and Hamond (1990) interviewed children at two time points about personally experienced events that were shared with their mothers. The first interview occurred when the children were about 2.5 years old, and the children were interviewed by their mothers. Six weeks later, a stranger interviewed the children for the second interview. Results revealed that children reported more information in the second interview with the stranger than in the first interview with the mother. The authors argued that this could be due to children's understanding of the difference between reminiscing and recounting. When the mother was the interviewer, children might know that the interview was more of a social conversation about shared experiences (reminiscing). When a stranger was the interviewer, children might sense that they needed to provide information (recounting) to the naïve stranger.

Because the interviews were not counterbalanced and the children were older at the second interview, alternative explanations of the [previously given] findings were possible. For instance, the second interview might have generated more information because the first interview served as a rehearsal opportunity for the children. Also, six weeks could have been a long time in a young child's developmental trajectory. Children might have simply developed better verbal skills in the second interview. In a similar study (MacDonald & Hayne, 1996) involving twenty 3- to 4-year-old children during which the children experienced a unique event without the parents present, children still reported a lot more information in an interview with a stranger than in discussions with their parents. If children of this age range indeed understand the difference between reminiscing and recounting, they should have recounted both to their parents and to the stranger, providing their parents and the stranger an equal amount of information. The fact that this was not the case cast doubt on Fivush and Hamond's

(1990) conclusions. Although MacDonald and Hayne (1996) did differ from Fivush and Hammond in that the interview was initiated by the stranger but discussions with parents were initiated by the child. Children in Fivush and Hammond did not initiate the conversations with either. Methodological issues aside, Fivush and Hammond raised the possibility that preschool children may know when to reminisce and when to recount. Alternatively, adult-initiated conversations might encourage more reports from children. Finally, there is the possibility that preschool children will report more information to a stranger than to their parents.

In addition to structure, coherence, and the possible ability to differentiate between reminiscing and recounting, another characteristic of young children's memory development is that their recall can improve a great deal with outside help. Myers and Perlmutter (1978) studied 3- and 4-year-olds' memory capability and found that when recalling toys, retrieval aids that provided realistic setting (such as a doll house with garden and garage) for the target items facilitated children's recall. In forensic settings, although young children are interviewed about objects (or people) that they saw, they are also questioned about behaviors, conversations, and the environment. Myers and Perlmutter's research did not address the question of whether young children's memory for different components of an event calls for different retrieval aids.

Consistent with Myers and Perlmutter (1978), Macklin (1994) also found that visual retrieval aids are helpful to preschoolers. In Macklin's research, eighty 4- to 6-year-old children watched an advertisement for a fictitious cereal. Half of the children who could not recall the cereal's name were presented with a visual retrieval cue (i.e., a cereal box with graphics), and the other half of the children were not given the cue. Children who were exposed to the visual retrieval cue remembered the name of the cereal better than the children without the cue. Kail (1990) theorized that the development of memory in large part is the development of mnemonic strategies. Because preschool children are still in the process of developing mnemonic strategies,

external retrieval aids are especially helpful in improving their recall.

Now that we have some basic idea about how young children remember, let us examine a topic in young children's memory development that is especially important: the recall of trauma. Although Terr (1991) argued that traumatic events tend to be fragmentary or nonexistent, research seems to show otherwise. Reviews of empirical research on children's trauma memory (e.g., Berliner, Hyman, Thomas, & Fitzgerald, 2003; Cordon, Pipe, Sayfan, Melinder, & Goodman, 2004; Fivush, 1998) concurred that despite tending to have less sensory detail and coherence, memories for trauma for the most part resemble those of non-traumatic events. Fivush concluded in her review that traumatic events that occurred before 18 months are not reportable by preschool children. Those that experienced the event between 18 months and 2.5 to 3 years are reported in bits and pieces. For traumatic events occurring after age 2.5 to 3 years, children are able to give coherent accounts of them.

Because children's memories for trauma resemble their memories for other more positive events, retrieval aids should be helpful in assisting children with trauma memory as well. Because of the emotion-laden nature of traumatic events, Liwag and Stein's (1995) study on emotion-related retrieval cues has relevance here. Children between the ages of 3 and 5 participated in this study. Parents were first asked to generate events that occurred in the week or two before the interview in which their children experienced happiness, sadness, anger, and fear. Children recalled these events in four conditions: control, emotional label, emotion face, and emotional reinstatement. In the control condition, children were simply asked to recall the target event. In the emotional label condition, children were asked to generate a verbal label corresponding to their emotional reaction. The emotion face condition additionally required the children to make a face appropriate to the emotion. In the emotional reinstatement condition, children labeled the emotion, made a face that matches the emotion, and were asked to reinstate their original emotion. Children in the emotional



reinstatement condition outperformed children in all other groups in the quantity, quality, and organization of their recall. Emotional reinstatement thus appeared to improve young children's recall through providing them with more associations to the target events.

Although young children's memory development is most relevant for forensic interviewers, young children's language development is another important area for interviewers to become familiar with. Unlike assessing memories using the method of recognition, the method used most often in forensic interviews is verbal recalling. Therefore, children's ability to verbally recall events determines the outcome of a forensic interview. Whether young children will be able to verbally recall what they remember is related to their language development.

## LANGUAGE DEVELOPMENT

The first sign of language is the appearance of babbling, a phenomenon that generally occurs around 6 months (Reich, 1986). It appears that words are understood before they are spoken. After learning about words (lexicon) and word meanings (semantics) in the first 2 years of life, children start to understand sentence structure (syntax) and the context of language use (pragmatics) during the preschool years. Reich (1986) reported that by age 3, children are talking at least as much as adults. In addition, when engaged in conversations with others, preschoolers can speak clearly, use well-formed grammar, and adapt to the listener's perspective. Specifically, Klecan-Aker and Swank (1988) interviewed preschoolers aged 2 to 5 using materials such as toys and pictures. They talked to the children to elicit eight language functions: labeling, description, revision, affirmation/negation, personal, requesting, greetings, and turn taking. The researchers found that appropriate responses increased with age, although leveling off after age 3. All eight language functions were in most preschoolers' repertoire by 3.5 years.

Although 3-year-olds seem to have developed basic conversational skills in Klecan-Aker and Swank's (1988) laboratory, where the primary focus was to elicit language functions, it is important for forensic interviewers to know if 3-year-olds report personally experienced events using the language skills that they possess. Simcock and Hayne's (2002, 2003) research brought light to bear on the issue. Two- to 4-year-old children played a game using the Magic Shrinking Machine and were subsequently interviewed about this experience after delays ranging from 24 [hours] to 1 year. Children's general language skill was assessed at the time of the experience and at the interview. Simcock and Hayne found the following: First, older children recalled better than younger children. Second, children performed better with a shorter delay. The most interesting finding was that children did not once use a word that had not been a part of their productive vocabulary at the time of the game playing in their later verbal recall. In other words, preschool children's verbal recall of events lags behind their verbal abilities. Per Simcock and Hayne (2002), it appears that for preschool children, even after they have obtained basic language skills, their verbal reports of the event might be "frozen in time" (p. 229), reflecting their language ability at the time of the encoding, not retrieval. Therefore, the age and language skills of a child when the target event occurred are important factors to consider when evaluating the child's potential for recalling the experience.

Although preschool children have developed some language skills to be interviewed, all questions do not work equally well with them. Some formats of questions are found to be more problematic for young children than others. Hughes and Grieve (1980) examined 5- and 7-year-olds' response to nonsense questions. They found that when asked bizarre questions in the yes/no format (e.g., "Is milk bigger than water?" and "Is red heavier than yellow?"), children usually responded with "yes" instead of the correct answer of "I don't know." It would thus appear



that children understand the need for a “yes” or “no” answer when asked questions in yes/no format, even though this understanding led them astray in this case. It is possible that young children operate under the assumption that adults always ask meaningful questions, and thus they should provide answers even for bizarre questions. Although this study examined children mostly older than those in the preschool age, there are no theoretical reasons to believe that younger children will not behave similarly.

Peterson and Biggs (1997) included such a group of younger children in their study. They interviewed 2- to 13-year-olds about their emergency room visits. The accuracy of children’s recall was assessed through comparing their responses with those provided by the caregivers and information on the hospital records. Mirroring the Hughes and Grieve (1980) study, 2-, 3-, and 4-year-old children had a particular difficulty with yes/no questions relative to 9- and 13-year-olds: Although they seemed fairly accurate when answering yes/no questions with “yes,” they were only correct about half of the time when they answered yes/no questions with the response “no.” Along the same line, Myers et al. (2003) conducted two experiments with 3-year-old children on their memory of a physical examination. Using a recognition-based interview consisting of all yes/no questions, Myers et al. found a high rate of false alarms (answering yes when the correct answer was no) among the children, leading the researchers to conclude that young children’s answers to yes/no questions need to be interpreted with great caution.

Unlike yes/no questions, forced-choice questions clearly stating both options provide children the flexibility to choose. Siegal and Peterson (1998) conducted a series of three experiments with children between the ages of 3 and 5. Participants learned different stories concerning a bear that lied about a piece of bread’s contact with bugs or made an honest mistake about the bread’s contamination or was negligent when making the mistake. Instead of using yes/no questions (e.g., “Did the bear lie?”) or forced-choice

questions with the alternative term mistake unstated (e.g., “Did the bear lie or not?”), Siegal and Peterson employed forced-choice questions clearly stating both options (i.e., “Did the bear lie or make a mistake?”). This question format enabled most children, including the 3-year-olds, to distinguish between a lie and a mistake. More remarkably, most 3-year-olds even distinguished between an honest mistake and a negligent mistake. A previous study (Siegal & Peterson, 1996) using the question “Did the bear lie or not?” found most children between the ages of 3 and 5 unable to distinguish between a lie and a mistake: They tended to respond that the bear lied. It is possible that because the alternative of making a “mistake” was not stated in the question, children were drawn by the suggested answer of lying. In other words, the term or not in the question “Did the bear lie or not?” might not represent a true alternative to “lie.” Although you can change all yes/no questions into forced-choice questions by adding the phrase or not (e.g., “Did the bear make a mistake or not?” “Was it Johnny or not?”), these type of forced-choice questions in actuality resemble yes/no questions even as they assume the appearance of forced-choice questions. Therefore, it is best for forced-choice questions to stress all possible options. Siegal and Peterson’s studies demonstrated the importance of providing true options to young children when using forced-choice questions.

To compare yes/no questions with *wh* questions (questions that often start with “who,” “what,” “when,” “where,” and “why” and are a form of open-ended questions), Peterson, Dowden, and Tobin (1999) recruited 3- to 5-year-olds to individually participate in an artwork-making activity with experimenters. Children were then interviewed a week later with 18 questions. The questions covered the content areas of action, person, and environment. The error rate was 30% for yes/no questions and 15% for *wh* questions. When the 50% chance for correct answers in the yes/no questions was taken into consideration, the above difference became even bigger. Not only were *wh* questions superior to yes/no questions in

reducing errors, *wh* questions also enabled preschool children to acknowledge their ignorance by responding with "I don't know" when answering some inquiries. "I don't know" was seldom elicited by *yes/no* questions even if it was the correct response, mirroring Hughes and Grieve's (1980) study on nonsense questions.

In addition to *wh* questions, other open-ended questions include invitations (e.g., "Tell me more about that."). The strengths of *wh* questions and invitations were highlighted in Sternberg et al.'s (1996) applied research interviewing 4- to 12-year-old children who reported sexual abuse. Invitations were found to produce more detailed reports than other forms of questions. Invitations or *wh* questions also elicited more relevant details from children who experienced multiple incidents of abuse. To summarize, research suggests that invitations and *wh* questions are superior to *yes/no* questions when interviewing preschool children, whereas forced-choice questions fall somewhere in between. Although memory development and language development build a foundation for the forensic interviewing of young children, conceptual development is the underlying component to both developments. Now we will turn our attention to young children's conceptual development.

## CONCEPTUAL DEVELOPMENT

Thanks to the work of giants such as Swiss psychologist Jean Piaget, we now know that children are not miniature adults. Instead, young children think in very different ways from adults. Young children's understanding of scripts, symbols, and knowledge acquisition has direct relevance to the practices of forensic interview. According to Flavell, Miller, and Miller (1993), scripts are generalized and abstract event representations. Scripts have also been defined as cognitive frameworks for events, which are memories about what usually or typically occurs in a particular situation (Santrock, 2005). For example, a script about going to the supermarket will likely include taking a shopping cart, selecting merchandises, putting

the purchases in the shopping cart, and paying at the checkout counter.

To examine children's script development, Adam and Worden (1986) interviewed 3- to 4-year-olds and 7- to 8-year-olds to test the hypothesis that memory for script-related information would be poorer than memory for unique information. After hearing stories that contained many scripted items (e.g., brushing teeth, taking a shopping cart, or ordering food from server) and atypical items (e.g., drinking a glass of water, dropping a can of tomatoes on the floor, or chewing on ice cubes) in the scripts of "getting up in the morning," "going to a grocery store," and "going to a restaurant," children were tested in their recognition memory about scripted and atypical items. As predicted, older children performed better, and atypical items were remembered better. There was also an interaction between age and typicality: Although younger and older children did not perform differently for scripted items, older children performed better recognizing atypical items. Therefore, Adam and Worden revealed that preschool children's memory on scripted items could be as good as those of older children. A word of caution about the application of this study to the forensic interviewing of young children is that because children's memory was tested through the method of recognition, it is unknown if changing the assessment method to verbal recall will generate similar results.

We have reasons to believe, however, that changing the memory assessment method from recognition to recall may also find young children remembering scripted items better than atypical items. Low and Durkin (2000) presented 5-, 7-, 9-, and 11-year-old children a TV story either in a scripted version or a jumbled (i.e., out of the usual order of events) version. Before the age of 9, young children recalled the scripted version better than the jumbled version. After 9, children recalled the jumbled version as well as the scripted version. In addition, the younger 5- and 7-year-old children tended to reorder the story units in the jumbled version in

their recall, indicating their automatic use of script information in remembering.

Consequently, it seems that children understand scripts before they understand the atypical aspects of events. They understand the atypical in the context of the typical. Because older children have a firmer understanding about scripts than younger children, they are better able to detect things that are different from the usual. Paradoxically, this more tenuous understanding about scripts sometimes serves the younger children well. Ornstein et al. (1998) arranged for 4- and 6-year-olds to receive a special medical check-up that included or excluded some procedures that are expected (e.g., listening to chest) and some that are unexpected (e.g., asking the child to walk backward). The children were interviewed immediately and after a 12-week delay. Many children mistakenly remembered typical but omitted procedures (i.e., false alarm) at the 12-week interview. Specifically, 42% of the 4-year-olds and 72% of the 6-year-olds made at least one such intrusion. Four-year-olds' less solid script understanding seemed to have enabled them to have less spontaneous intrusions than 6-year-olds.

In addition to scripts, symbols are another important concept relevant to the forensic interviewing of preschool children. Symbols are objects that are used to represent other things.

Preschool children's understanding of symbols has a huge impact on the effectiveness of props and cues as memory retrieval aids. The foregoing section on memory development discussed the importance of using retrieval aids to assist young children's recall. Becoming knowledgeable about young children's understanding of symbols will in turn help forensic interviewers in the selection of the type of retrieval aids that will be most useful.

In a series of four experiments, DeLoache (1991) used scale models and pictures to assess symbolic understanding in 2.5-year-olds. Study 1 found that although only a minority of the 2.5-year-olds was able to find toys in a room based a three-dimensional scale model of the room, a majority of them were able to find the

toys using a photograph of the room. DeLoache theorized that the ability to dual represent (i.e., representing the scale model/photograph as both an object and a symbol) is necessary for these retrieval aids to be used successfully. Because children younger than 3 have yet to develop dual representation, they are unable to benefit from the three-dimensional scale model: The three-dimensional scale model is very salient as an object to young children, and its symbolic function is masked. Photographs, in contrast, are familiar to children as symbols: Even young children have much experience using photos as symbols. Photographs are, therefore, not salient as objects. Because young children only perceive photographs as symbols, there is no need to dual represent to use photographs successfully. The next three experiments found additional support for the dual representation hypothesis, in that as long as there is no need to dual represent, young children can benefit from the use of props and retrieval aids. It should be noted that there is rapid development in children's ability to dual represent, so that by age 3, most children can successfully complete the toy-seeking task using the scale model (DeLoache, 1987).

Overall, however, preschool children do not seem to benefit from three-dimensional scale models such as anatomically detailed dolls even after they have developed dual representation abilities. For instance, DeLoache and Marzolf (1995) interviewed 2.5-, 3-, and 4-year-old children and found that children of this age range were able to report more correct information without, than with, the assistance of an anatomically detailed doll. The authors posited that even after the understanding of dual presentation is developed, children still need to understand the doll-self mapping for the anatomically detailed dolls to be useful. In other words, after knowing that the doll represents their body, children need to know how body parts on the doll map onto their own body parts. The ability to understand the mapping process takes additional time to develop. It can be argued further that when the understanding of dual representation is tenuous,



the anatomically detailed doll might continue to draw attention away from the interview process by presenting as a novel object. The [previously cited] studies taught us the lesson that retrieval aids do not always improve young children's recall. Sometimes, they have the opposite effect. In summary, the weight of the evidence (also see Hungerford, 2005, who reviewed many applied research directly evaluating anatomically detailed dolls) does not support the use of anatomically detailed dolls in the forensic interviewing of preschool children.

Besides scripts and symbols, preschool children's understanding of knowledge acquisition is another area that is relevant to the forensic interviewing process. Preschool children seem to realize that informational access is essential to knowing (e.g., Wimmer, Hogrefe, & Perner, 1988). This might be why children reported more information in recounting than in reminiscing (Fivush & Hammond, 1990): Children might have realized that the naïve interviewer did not have access to the target event and thus did not know. Yet young children still have difficulty sorting out the sources of their knowledge. For example, Gopnik and Graf (1988) found that 3-year-olds were not able to discern whether they saw some objects, were told about the objects, or merely inferred about the objects. Five-year-olds, on the other hand, did not have such difficulty. Taylor, Esbensen, and Bennett (1994) additionally found that children as old as 5 experienced difficulty recognizing that they had just learned something new, instead they claimed to have always known what they had just learned a few minutes ago. In short, preschool children are developing metacognitive awareness, and their difficulty with recognizing the sources of their knowledge might have contributed to their susceptibility to suggestions during forensic interviews (e.g., Quas, Schaaf, Alexander, & Goodman, 2000; Thierry & Spence, 2002; Welch-Ross, 2000). Young children's understanding of knowledge acquisition can be summarized as being fragile during the early preschool years and becoming more solid later in the preschool age.

The [previously described] selective review of basic psychological research relevant to the

forensic interviewing of preschool children has revealed strengths as well as weaknesses in the ability of preschool children as witnesses. Next, we will use this knowledge on child development to generate some guidelines for the forensic interviewing of preschool children.

## **GUIDELINES FOR INTERVIEWING PRESCHOOL CHILDREN**

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When young children are suspected to be victims or eyewitnesses of crimes, forensic interviewers need to make a decision about whether to interview a particular child. Because there are no established guidelines about making this decision, many interviewers make the decision intuitively, often based solely on language abilities: If the child is not verbal, interviewing obviously will not work; if the child is verbal, interviewers often choose to proceed with the interview. From what we know about preschoolers' memory, language, and conceptual development, a few more guidelines can be generated.

We learn from the preceding review that, on average, preschoolers give coherent accounts of personally experienced events, especially for those older than 3 years of age. In addition, around 3, children's mastery of major language functions plateau. Overall, children are able to participate in basic conversations by age 3. Therefore, children 3 years of age and older can and should be interviewed. Yet preschoolers might experience something we would term *language determined memory*, which limits their ability to verbally recall events experienced before age 2. Language determined memory is the phenomenon that young children cannot translate their preverbal memory into later verbal recall during the preschool years (Simcock & Hayne, 2002, 2003). It seems critical that for children to verbally report a past event, the event needs to be encoded verbally. Because children younger than 2 are still in the word-learning stage of language development, they do not encode memory in coherent verbal format such as in sentences. Therefore, although preschoolers

can give fairly good autobiographical recall, they might not be able to coherently report events that occurred before age 2 because of very limited language abilities at that age.

The guidelines for determining whether to interview a preschooler thus follow: First, the child needs to be able to engage in verbal conversations. Second, the child probably needs to be older than 3, although individual differences are to be accommodated. This means that the interviewer may choose to interview a very verbal 2.5-year-old or choose not to interview a 3.5-year-old who is slower in language development. Finally, if the crime occurred after the child is 2 years or older, the child may be able to report the event in coherent sentences. This “older than 3 after 2” principle can be used as a rule of thumb when making decisions about whether to interview a preschooler: Children older than 3 who fell victim to or witnessed a crime after the age of 2 are potentially good information providers. Of course, forensic interviewers should always expect exceptions to the rule because of individual developmental differences among young children.

After deciding to interview a preschooler, the first order of business for forensic interviewers is to elicit accurate information from the child. Because preschool children are particularly susceptible to interviewer suggestion, forensic interviewers need to reduce suggestion in their questions. An effective means of doing so is asking questions in the right format. The earlier review points out that preschool children have a particular difficulty with yes/no questions. As a result, transforming the questions into forced-choice format is recommended. Keep in mind, however, that merely adding “or not” at the end of a yes/no question (i.e., “Did he wear a white shirt or not?”) does not necessarily make the question any better, even though the question now takes the form of a forced-choice question. A forced-choice question that helps children with the accuracy of their reports needs to clearly present both options (i.e., “Did he wear a white shirt or blue shirt?”). To maximize children’s reporting of accurate information, forensic interviewers should

go into the interview with a game plan to include a hierarchy of questions, proceeding in a bottom to top fashion from invitations (e.g., “Tell me about yesterday.”) to wh questions (e.g., “What happened in the supermarket yesterday?”) to forced-choice questions stating all options (e.g., “Did he wear a white shirt, a blue shirt, or a red shirt?”) and to yes/no questions (e.g., “Did he wear a white shirt?”). Because question formats near the top of the hierarchy tend to be more suggestive, forensic interviewers should use invitations and wh questions liberally. Forced-choice questions with choices clearly stated can be used sparingly. Yes/no questions should be avoided if possible.

Despite the best of efforts, interviewers sometimes have to fall back on forced-choice and yes/no questions to extract necessary details. In preparation for these instances, interviewers should let preschool children know that it is okay to say “I don’t know” when appropriate. In addition to permitting children to say “I don’t know,” interviewers should also explain the reasons why saying “I don’t know” is okay. Although most preschool children have made the connection between access to information and knowledge at this age, the understanding is still tenuous. Let young children know that because the interviewer was not present when the event occurred, the interviewer does not know what happened. Only the children have the correct information. In addition, even the children themselves might not have answers to all questions or remember everything. Therefore, it is perfectly acceptable to say “I don’t know.”

After ascertaining the accuracy of children’s reports as much as possible, the next important task for forensic interviewers is to help young children give as complete a recall as possible. Interviewers can increase the amount of information children provide by admitting or even emphasizing ignorance. Preschool children may be able to recount instead of reminisce when speaking with a naïve interviewer. Also, keep in mind that interviewer-initiated conversations and stranger interviewers are associated with a greater amount of recall. By initiating conversations through questioning and by reminding children that the interviewer is ignorant, a forensic interviewer

increases the chance of extracting the greatest amount of information from children.

Although young children are weaker than older children and adults in all aspects of memory, their weakness in retrieval strategies stands out the most. Therefore, it is important that some kind of interviewer-aided recall takes place for preschool children to provide the most amount of information. One such aid is emotional reinstatement, considering that experiencing or witnessing a crime is often emotion laden. Emotional reinstatement is done first by asking children to label the feelings they had while experiencing the emotional event. Then ask children to make a face that matches the emotion label. Finally, ask children to act like they are feeling just like they were when the event occurred. Despite the beneficial effects of emotional reinstatement on preschoolers' recall, forensic interviewers should be cautious about employing this technique. Because negative emotions such as anxiety and fear are often associated with witnessing or being a victim of crime, emotional reinstatement runs the risk of reintroducing those negative emotions to children. As a result, the need for complete information must be balanced against the need to protect children's emotional welfare.

Another effective retrieval aid interviewers can use to maximize the amount of recall by preschoolers is scripts. Preschool children have started to understand scripts. However, they do not always use scripts spontaneously or effectively. Interviewers can provide scripts as a structure to probe children's memory. For example, interviewers can first talk to children about what usually happens when they go to the supermarket. Then, interviewers can probe for memory on the day in question when children went to the supermarket. Having the script as a background, preschool children are better able to recall what happened that was different from the usual chain of events.

What kinds of retrieval aids are useful and how to use these retrieval aids without the accompanying drawbacks present continual challenge for future research. In addition, researchers need to conduct basic as well as applied research exploring individual differences in children's memory, language, and conceptual development. It is quite conceivable that one day research will enable forensic interviewers to use different retrieval aids with different children to optimize each child's recall on a case-by-case basis.



# UNIT 5

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## VICTIMOLOGY AND VICTIM SERVICES

## INTRODUCTION AND COMMENTARY

Services to victims and research focusing on victims of crime have only recently been recognized as important components of forensic psychology. Yet many psychologists are more likely to come into contact with victims than with offenders. Forensic psychologists evaluate and treat crime victims, testify about the effects of their experience in both criminal and civil courts, and train law enforcement officers on effective approaches to interviewing them. Death notification, informing individuals of the sudden death of a loved one, is another example of their many tasks. The articles in this section help us better understand the prevalence as well as the psychological effects of victimization.

The first article, by Sarah E. Ullman, is an update of her 1987 article reviewing the empirical literature on rape avoidance. Ullman focuses on both effective and ineffective strategies that a potential victim may adopt when confronted by an attacker. She also discusses risky situations, the role of alcohol, and victim/offender relationships, and she offers crucial and sensible advice with regard to rapist typologies. In an interesting section on barriers to resistance, Ullman highlights social psychological factors that lead some women *not* to resist, including fear and the perception of stigmatization.

The reading by Bonnie S. Fisher and her colleagues reports on findings from a national random sample of female college students, the extent

to which they have been sexually victimized, and information on whether they reported their victimization. Whereas the great majority did not report the crime to police or college officials, three fourths of the respondents indicated they had told *someone*, usually a friend rather than a family member or mental health worker. While not a surprising finding, it leads the authors to discuss implications for college and university officials as well as treatment providers. The article also includes an interesting discussion on the differences between feminist and conservative interpretations of the results of this study.

A different form of self-reported victimization—antigay violence—is highlighted in the article written by Kristen Kuehnle and Anne Sullivan. Bias or hatred of an individual or group because of their sexual orientation is the second most frequent form of hate or bias crimes following those motivated by racial hatred. In this descriptive study, the authors report on the characteristics of 241 incidents of violence against gays, lesbians, or transgendered individuals. In contrast to past research on victimization, the typical victim of antigay violence was not a young African American male but rather an older male or transgendered individual, Latino, or White. The authors also report where the victimizations occurred, relationships between victims and offenders, and whether the victims reported the incidents to police and sought medical attention.

In recent years, some researchers have been paying more attention to “covictims” of homicide and other violent crimes. These are individuals who are deeply affected by the crime but have been largely ignored by researchers and the criminal justice system. Covictims are generally believed to be relatives or close friends of the primary victim, but workplace colleagues, the individual who discovers a brutal homicide, or even the officers who investigate it may be covictims as well. The last reading in this section reminds us that the family or close friends of the perpetrator also may experience this secondary victimization. Sarah Eschholz and her fellow researchers conducted interviews with family members of individuals tried for murder. Eschholz and her colleagues found that these family members were extremely sympathetic to the crime victims and their

families. However, relatives of the offenders also experienced significant psychological trauma. The article highlights the importance of restorative justice, an approach that addresses the need to make communities whole again after crimes have been committed.

As a group, these readings sensitize us to the psychological effects of victimization and possible relationships between and among various forms of victimization. Although the selections focus on violent victimization, readers should be aware that researchers are beginning to pay more attention to the psychological effects of nonviolent victimization, such as fraud or burglary. While the harm resulting from these offenses does not tend to be physical in nature, victims of these offenses often feel vulnerable, helpless, and cynical about persons and institutions in which they had trust.



## A 10-YEAR UPDATE OF “REVIEW AND CRITIQUE OF EMPIRICAL STUDIES OF RAPE AVOIDANCE”\*

SARAH E. ULLMAN

To understand women's resistance to rape in contemporary society, it is important to understand the historical and legal context of the phenomenon of women's resistance to rape. Resistance strategies refer to verbal and physical actions that women may engage in when confronted by potential rapists. Historically, women were held responsible for resisting rape to the utmost according to English common law, which is the basis of contemporary rape laws that have evolved in the United States. Rape has been defined as vaginal penetration of a female against her will by force or threat of force without her consent. The FBI continues to define rape in this way, although legal definitions in many states have been broadened in recent years. The traditional definition emerged from the fact that historically, women were the legal property of their

fathers and husbands, and rape was considered a crime against a man's property (i.e., his wife or daughter), which was damaged or spoiled by the offense. Resistance, especially physical resistance, was considered evidence of non-consent. Injuries suffered in the struggle were expected to corroborate women's complaint that the sexual activity was indeed nonconsensual (i.e., rape). Although rape laws have been reformed and legal standards expecting victim resistance have been loosened in most states, victims are often still expected to resist so that others believe that sexual activity was indeed without their consent. Police and prosecutors still use evidence regarding victim's use of resistance as a way to support the credibility of rape claims (Abarbanel, 1986). The expectation that women resist serves to hold women responsible for controlling male sexual

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aggression and contributes to victim blaming in cases of rape.

The early study of the causes of crime victimization by victimologist Menachem Amir (1971) is reflected in his theory of victim precipitation, which states that at least some rapes are the result of behaviors engaged in by victims that led to or precipitated their attacks.

In the 1970s, second-wave feminists attacked this theory for blaming victims (Russell, 1975) and decried the poor treatment of rape victims by criminal justice and medical systems (Bevacqua, 2000). Except for cases where women were raped by strangers in circumstances resulting in excessive injuries (seen as proof that the sexual activity was forced) with no morally questionable behavior on their part (e.g., being out in public at night, drinking, and so forth), rape victims were considered less than innocent in their own attacks. Few women (typically less than 10%) reported attacks to police, and this remains true today (Bachman, 1998; Fisher, Daigle, Cullen, & Turner, 2003). Two thirds of rapes are committed by men known to their victims, according to large-scale epidemiological studies (Kilpatrick, Edmunds, & Seymour, 1992; Tjaden & Thoennes, 2000b) that show most rapes do not fit the stranger stereotype.

Because rape was defined as a crime committed mostly by strangers until the mid-1980s, most rape prevention efforts were focused on telling women to restrict their behavior (e.g., refrain from going out at night, wearing revealing clothing, or drinking). Although this advice has been criticized for restricting women's freedom and full participation in society, it is still recommended in some self-help books and by some police officers. Advice to women to restrict their behavior is also supported by lifestyle and routine activities theories of victimization, which posit that one's risk of being victimized results from being out at night in places where situational opportunities, vulnerable targets, and motivated offenders come together without capable guardians to protect potential victims (see Meier & Miethe, 1993, for a review). These theories assume that most crime is committed by strangers or

people who do not know each other well, outside, at night, in public places. However, we now know that most violent crime is committed by people known to each other and very often in the home. This is especially true of rape and other violence against women (Bachman, 1994). Police traditionally warned women not to fight back if attacked by a rapist. They were instead told to play along or try to talk their way out of rapes (Storaska, 1975)—strategies that subsequent research shows to be ineffective (Ullman, 1997).

Despite contemporary awareness of the high prevalence of date rape and acquaintance rape, first revealed by Mary Koss's (1985) national survey of college students in the [mid-1980s] and followed by other community-wide prevalence surveys showing that most rapes occur between intimates and acquaintances (Fisher, Cullen, & Turner, 2000; Tjaden & Thoennes, 2000a, 2000b), victims are still disbelieved, stigmatized, and held responsible for their attacks (Ullman, 1999a). These negative reactions are harmful to women's psychological functioning and may lead to or reinforce their own self-blame for being raped (Ullman, Townsend, Filipas, & Starzynski, 2007).

In response to this problem, rape prevention programs have been developed, many of which are in college settings, but they focus mostly on increasing knowledge about rape and changing attitudes that are believed to contribute to rape, such as rape myths, which are false beliefs about rape (e.g., women who dress in provocative clothing are asking to be raped). Although rape-supportive attitudes are held by many in society, there is no evidence that prevention programs can effectively change these attitudes over long periods of time or that changing these attitudes will necessarily lead to less rape (Anderson & Whiston, 2005; Brecklin & Forde, 2001; Flores & Hartlaub, 1998; Sochting, Fairbrother, & Koch, 2004). On the other hand, research consistently shows that certain resistance strategies can be used by women to avoid rapes, implying that prevention programs should focus on teaching women effective resistance methods to protect themselves.

## IMPACT OF RAPE: COSTS AND BENEFITS OF RESISTANCE

Resistance and rape avoidance are important because research shows that women who have experienced a completed rape have poorer mental health, such as more depression, anxiety, suicidal ideation, and suicide attempts, than women experiencing attempted rape (Kilpatrick, Saunders, Amick-McMullan, & Best, 1989; Ullman & Brecklin, 2002; Ullman & Siegel, 1993). Furthermore, sexual assaults of a more severe nature are related to poorer physical health outcomes, ranging from acute physical injuries, to immediate postassault acute health problems, to increased risk of developing chronic medical conditions (Golding, 1999; Koss & Heslet, 1992; Ullman & Brecklin, 2003; Ullman & Siegel, 1995). In addition, women's risks of contracting sexually transmitted diseases or becoming pregnant are higher if they suffer completed rapes. Therefore, reducing completed rapes may reduce victims' health problems and associated medical care costs. Some evidence suggests women feel better about themselves and less depressed if they resist rape, even if they are unable to avoid rape completion (Bart & O'Brien, 1985). Because costs to individual women and society are greater when more rapes are completed, any efforts to reduce completed rapes are important. Of course, concurrent prevention efforts must focus on men who are the primary perpetrators of rapes and on stopping rape from ever occurring. Unfortunately, effective prevention programs have yet to be identified that reduce male perpetration. Therefore, "risk reduction" programs that teach women facts about rape, risky situations, and effective resistance are needed. At the same time, rape prevention programs that target men can be developed and evaluated.

## RAPE RESISTANCE STRATEGIES

Many women try to resist verbally and physically aggressive assailants in one or more ways. Research shows that using more resistance strategies and

resisting immediately are related to avoiding completed rape (Ullman, 1997). Different types of resistance are related to different odds of suffering completed rape and physical injuries. Furthermore, assailants' assault tactics occur in varying circumstances that differentially constrain women's options for resistance. Research shows that attacks at night, with weapons, and in indoor and/or isolated locations are related to rape completion (Ullman, 1997). However, victim resistance may lead to avoiding rape, even in such circumstances, and must be examined in detail, paying close attention to relationship contexts and alcohol/substance use, which can affect women's ability and willingness to resist as well as the perceived efficacy of resistance.

*Effective Strategies.* A number of studies find that several active resistance strategies are effective for avoiding rape without increasing risk of physical injury. Forceful physical resistance fighting refers to physical actions women use against their attackers, including biting, scratching, [h]itting, using a weapon, and martial arts or other physical self-defense techniques. These strategies are not commonly used by victims in rape situations, with studies showing only approximately 20% to 25% of women using these types of forceful physical resistance. Studies of police-reported rapes (Zoucha-Jensen & Coyne, 1993) and unreported rapes identified in the National Crime Victimization Survey (NCVS; Clay-Warner, 2002) continue to show that women who fight back forcefully are more likely to avoid completed rape (see Ullman, 1997, for review).

Despite this positive news, some researchers have expressed concern that women who physically fight back forcefully, in particular, in response to rape may sustain more physical injuries by increasing the offender's use of violence against them in the attack (Prentky, Burgess, & Carter, 1986). Unfortunately, most studies showing that women's physical fighting is related to more physical injury still fail to take into account whether the women were already being physically attacked when they resisted. This is important



because of the possibility that the offender's initial physical attack was the determinant of victim injury. The sequencing of offender violence and victim resistance in relation to assault outcomes must be assessed to draw accurate conclusions about the effects of resistance on attack outcomes. Results are misleading when simple correlations of victim resistance with assault outcome are performed, without regard for when the resistance occurs during the attack.

Specifically, positive correlations of forceful fighting by victims with physical injury appear to be spurious, resulting from the fact that victims were being more violently attacked in these situations before they resisted. When the sequence of attack-resistance-injury has been taken into account, studies show that fighting leads to less completed rape and no increase or decrease in physical injury (Quinsey & Upfold, 1985; Ullman, 1998; Ullman & Knight, 1992). It is clear that these different results have important implications for rape avoidance advice given to women who must weigh the options and potential consequences of resistance in deciding how to respond to an attack. Most important, women should be encouraged (if they are able and so choose) to resist rape (especially by men who are physically attacking them) with forceful strategies, including fighting, known to increase their chances of avoiding completed rape.

Nonforceful physical resistance strategies used by women against attackers include fleeing, guarding one's body with one's arms, struggling, and so forth. Most research continues to find that women using these forms of physical resistance are more likely to avoid completed rape and no more or less likely to be physically injured. Recent evidence supports the efficacy of physical resistance. Clay-Warner's (2002) recent study of NCVS data show that a variable combining nonforceful and forceful forms of physical resistance (as contrasted with verbal resistance) was related to avoiding rape, controlling for situational factors and other resistance strategies in a logistic regression.

Forceful verbal resistance refers to strong verbal responses such as screaming, yelling, and

swearing at the attacker. These are effective strategies for avoiding rape, particularly in response to offenders using verbal threats (Ullman, 1997, 1998). However, a study of NCVS data, without sequence information, shows that physical resistance was more effective than verbal resistance for avoiding rape (Clay-Warner, 2002). Clay-Warner (2002) concluded that forceful verbal resistance was ineffective in a logistic regression analysis controlling for assault characteristics and other resistance strategies. This study constitutes a more conservative test of the efficacy of resistance strategies.

*Ineffective Strategies.* Nonforceful verbal resistance strategies include verbal responses of pleading, crying, and reasoning (e.g., trying to talk the offender out of rape). All are related to greater odds of rape completion. Not resisting, sometimes also called "immobility" or freezing, also is related to completed rape. Nevertheless, women are sometimes unable to resist rape if taken by surprise or if they freeze when confronted by an attacker. Recent studies using NCVS data (Clay-Warner, 2002) and police data (Scott & Beaman, 2004) continue to confirm this finding. Not resisting the offender is related to greater odds of experiencing completed rape, but it is unrelated to physical injury (Ullman, 1997).

*Summary.* In summary, fighting, fleeing, and screaming/yelling are all associated with decreased odds of completed rape. It is possible that verbal resistance is less effective than physical resistance, but without sequence information, this is unclear. Furthermore, these effective strategies do not appear to increase the odds of physical injury in studies that examine the sequence of offender attack, victim resistance, and injury/rape outcomes. Thus, research suggests that women should not be told to refrain from resisting as this increases their odds of experiencing completed rape. Research on resistance strategies continues to support the efficacy of forceful resistance, especially physical resistance, for avoiding rape. Clay-Warner's (2002) research shows that the efficacy of resistance strategies changes when

controls for use of multiple resistance strategies and situational factors are included in multivariate analyses. Specifically, resistance may not have different effects according to situational factors. This is an important advance compared to prior studies. However, more work is needed with different samples to replicate these findings and to consider the sequence of attack-resistance on assault outcomes.

More research is needed about what resistance works in which situations, but thus far, it still appears that resistance needs to be as forceful as the offender's attack and to match the type of strategy used by the attacker. In other words, if a woman is threatened, screaming may be enough to avoid rape, whereas if she is physically attacked, she may need to fight to be able to escape. Studies typically show that women do respond with verbal resistance to verbal threats and physical resistance to physical attacks (Golding, Siegel, Sorenson, Burnam, & Stein, 1989; Ullman, 1998; Ullman & Knight, 1992). Recent studies of acquaintance rape confirm this pattern of results (Macy, Nurius, & Norris, 2006) previously documented in stranger rapes. Research on resistance and self-defense training also supports more qualitative work showing that formal self-defense training enhances women's psychological well-being and belief they can avoid rape (McCaughey, 1997). Some data suggest that such training can help women avoid rapes, but rigorous evaluations have yet to be done (see Brecklin, 2008, for a review of self-defense training studies).

Despite the fact that resistance can help women to avoid rape, this should not be taken to mean that they must resist rape or that it is their fault if they are unable to stop it. Although it should not be women's responsibility to avoid rape, society and the legal system still expect women to do so (Estrich, 1987). Because of this expectation, advising women to resist may reinforce society's expectation that women must resist and that they are to blame if they do not. On the other hand, women need to be told what works and then be free to choose how they want to respond. Failing to inform them about how to

avoid rape makes it less likely they will resist because of fear or belief they cannot avoid rape. The result can be less resistance and more completed rape with its negative consequences. Teaching women that resistance works and how to actually resist or use self-defense may not always be sufficient for helping them avoid completed rapes, however. There are other barriers to resistance, discussed later, especially with men whom women know well or with whom they are in a relationship. In addition, various situational and contextual factors affect rape resistance.

### SITUATIONAL FACTORS AFFECTING RAPE RESISTANCE

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Situational factors are characteristics of the attack itself and/or contextual factors surrounding the scene of an assault. Many situational factors are associated with whether women are likely to avoid completed rape and physical injuries. These factors include whether there is a social situation surrounding the assault, such as a party or bar environment. Another factor is the prerape behavior of victims and offenders. For instance, drinking by offenders and victims prior to attack may affect both women's likelihood of being attacked and the assault outcomes. The victim-offender relationship refers to whether the victim knew the offender prior to the attack and the nature of that relationship (e.g., stranger, nonromantic acquaintance, romantic acquaintance, [or] husband/lover) and may also affect the outcome of rape.

Other characteristics of the attack, such as whether a weapon is involved, where the attack takes place, the time of day, and whether environmental intervention occurs (e.g., presence of other people or factors that might intervene or otherwise deter the assailant from continuing an attack), affect whether rape is likely to be completed as well as the physical injuries women experience. Finally, some have argued that the type of rapist committing the attack may affect women's ability to avoid rape.



*Risky Situations.* Few studies examine the efficacy of resistance across situations, although Clay-Warner's (2002) recent study of NCVS data suggests that effectiveness of resistance strategies does not vary across most assault situations. More research is needed on the efficacy of specific resistance strategies in different assault situations because type of resistance may vary by assault characteristics (Clay-Warner, 2003).

• Certain places and situations may put women at a greater risk of rape and affect their ability to effectively resist an attacker. Criminologists have tried to explain individuals' risk of violent crime with lifestyle and routine activities theories of victimization (Meier & Miethe, 1993). According to these theories, one's risk of being victimized can be explained by the convergence of several factors: risky situations, suitable targets, motivated offenders, and an absence of capable guardians. For example, a young woman drinking alone in a bar who meets a sexually aggressive man may face a higher risk of sexual victimization. These theories have traditionally been useful for explaining risk of violent stranger victimization, which is typically associated with engaging in activities outdoors, at night, with delinquent peers. Therefore, they may help to explain women's risk of stranger rape. However, because different contexts and relationship factors characterize attacks by acquaintances and intimate partners, different theories (or modifications of existing theories) may be needed to understand risk and avoidance of sexual assault by known men.

Rapes by acquaintances and intimates often occur indoors, in isolated locations, and sometimes are part of a series of attacks by the same perpetrator (e.g., in cases of intimate partner rape). Research also shows additional factors are related to risk of acquaintance rape, such as women initiating dates, men paying for dates, use of alcohol or drugs by one or both parties, and women going to men's homes (Muehlenhard & Linton, 1987). A recent study of college women shows that women who had been victimized in the past, drank more alcohol, had multiple sexual partners, had poor psychological

adjustment, and experienced insecurity about relationships with men were more likely to report being sexually victimized at a follow-up assessment (Greene & Navarro, 1998).

Bars appear to be quite risky settings for women because they are more likely to be both physically and sexually attacked in and around these contexts (Parks & Miller, 1997). Just being in a bar, regardless of how much one has been drinking, appears to put one at greater risk of being targeted by sexually aggressive men, according to research on women who frequent bars (Parks & Zetes-Zanatta, 1999). This finding is consistent with experimental research, which shows that people view drinking victims as legitimate targets of sexual aggression and hold them more responsible for their own assaults (Abbey, Ross, McDuffie, & McAuslan, 1996).

Fraternity and sports participation may be associated with increased risk of sexual assault (Koss & Dinero, 1988; Koss & Gaines, 1993). Current research, however, is unable to answer whether fraternity members or college athletes are more likely than other men to commit sexual aggression either alone or in groups (Frintner & Robinson, 1993; Humphrey & Kahn, 2000; Koss & Cleveland, 1996). It is possible that behaviors often associated with these groups are in fact what predict sexual aggression. A recent study of college men shows that greater problematic alcohol use and adherence to masculinity norms supportive of violence against women were associated with self-reported sexual aggression but not with athletic involvement (Locke & Mahalik, 2005).

Rapes committed by more than one man (e.g., gang rapes) appear to be more violent in nature, and women are less able to avoid completed rape and other sexual acts in these cases than in single-offender rapes (Ullman, 1999b; Ullman, 2007). More research is needed on potentially high-risk populations, such as fraternities and sports teams. Foubert's (2000) empirical study evaluating actual sexually aggressive behavior of fraternity men is the only such study to have been published. Fraternity men participating in a



rape prevention program were less accepting of rape myths and said they were less likely to commit rape 7 months after program completion. However, there was no decline in how much sexually coercive behavior they admitted to committing after the prevention program compared with those not receiving the program.

*Environmental/bystander intervention.* Environmental interventions are persons, events, and noises that interrupt assaults in progress and appear to facilitate rape avoidance by allowing victims a chance to escape (Bart & O'Brien, 1985; Ullman & Knight, 1991). Few studies of rape avoidance have examined the impact of environmental interventions or presence of bystanders on rape avoidance. Clay-Warner (2002) found that the presence of bystanders was associated with avoiding rape in the NCVS, as it was in two studies in Ullman's (1997) review. Recently, Banyard, Plante, and Moynihan (2004) argued that prevention messages should be targeted to community members to increase their willingness to take an active role in prevention training and intervening in rape situations.

*Drinking by offenders and victims.* Men and women who drink heavily have an increased risk of perpetrating or being victimized by sexual assault, respectively (see Ullman, 2003, for a review). This suggests that interventions to reduce drinking-related assaults may need to address abusive drinking in general. The role that alcohol plays in actual rape attacks is unclear, but drinking is involved in up to one half to two thirds of all sexual assaults (including stranger and known offenders). Alcohol's presence does not necessarily mean that it is a causal factor in the occurrence of rapes or in the resulting injuries offenders inflict on their victims. For example, drinking before an assault is correlated with other factors also related to the rape outcome, such as social situations in which victim and offender are less acquainted with each other (e.g., parties, bars). It may be these risky social contexts, and not the drinking itself, that confer sexual assault risk. Recent research involving

both college and community samples indicates that both victim and offender drinking are associated with more completed rapes. Victims who have been drinking may be less able to effectively resist rapes on a behavioral level (Harrington & Leitenberg, 1994; Scott & Beaman, 2004; Ullman, Karabatsos, & Koss, 1999). However, other social-psychological barriers to resisting rape have been reported by women, including fear of rejection by the man and/or one's peer network, embarrassment, and perceiving that one is too intoxicated to escape even if one resists (Norris, Nurius, & Dimeff, 1996). Recent studies of college women also suggest that women who drink blame themselves more, both of which are associated with tonic immobility and less effective resistance (Macy et al., 2006; Nurius, Norris, Macy, & Huang, 2004), although these are cross-sectional retrospective data. It is possible that women who drink resist assault less, which leads to greater self-blame and possibly greater rape completion.

Current research on the relationship of drinking and outcomes of sexual assaults is inconsistent. Offender drinking has been thought to decrease men's inhibitions against using violence, which could translate into more severe assault outcomes (e.g., completed rape, physical injuries) to women. This disinhibition theory of alcohol-related violence is based on experimental evidence showing that men who drink engage in more aggression in laboratory settings (see Bushman & Cooper, 1990, for a review). Furthermore, representative sample studies show that offender drinking is related to more victim physical injury in sexual assault incidents (Martin & Bachman, 1998). Recent studies of college students and National Crime Survey data show that rapists' use of violence is related to more rape completion when offenders are not drinking (Cleveland, Koss, & Lyons, 1999; Ullman & Brecklin, 2000). Instead of drinking and physical aggression having a synergistic (combined) effect, they may be independent strategies used by offenders to complete rapes (Cleveland, Koss, & Lyons, 1999), because each one is more predictive of physical injury in the absence of the

other (Ullman & Brecklin, 2000). If victims perceive their attackers to be drunk and fear they are out of control and may become more violent, they therefore may decide not to resist. Alternatively, offenders who get their victims drunk may impair their ability to resist, whereas offenders may need to use more violence to complete rape if drinking is not involved. Drinking is more common in assaults occurring with less well-known offenders and in unplanned social situations, but some research shows more severe sexual victimization of college women in unplanned social situations and in cases where offenders were not drinking (Abbey et al., 1996; Brecklin & Ullman, 2001; Ullman et al., 1999).

It is clear that drinking is associated with the outcomes of sexual assaults, but more research is needed to understand the role of drinking in the physical injury experienced by women, not just the rape outcome, which is examined in most studies. Alcohol abuse prevention efforts are clearly integral to prevention of alcohol-related sexual assaults, and more research is needed on the role of drinking in different assault contexts so that specific information about alcohol's role in sexual assaults can be integrated into prevention programs. Two conclusions may be drawn from current research in relation to drinking and rape. First, it should not be assumed that drinking prior to assault causes offenders to become more violent and complete more rapes. Sex offender researchers have argued that drinking is unlikely to cause someone not otherwise predisposed to sexual aggression to commit rape (Seto & Barbaree, 1995). Second, women's drinking in and of itself should not be assumed to increase their risk of sexual victimization. National studies show that rapes where only offenders were drinking (as opposed to both victim and offender) were related to greater rape completion (Brecklin & Ullman, 2002) and victim injury (Ullman & Brecklin, 2000), suggesting a greater role of offender, not victim, drinking in assault outcomes. Although drinking appears to put women at greater risk of completed rape, this may be because of other situational, behavioral, and social-psychological factors not yet completely understood.

*Victim-offender relationship.* At least two thirds of rapes are committed by men known to the victim (Kilpatrick et al., 1992; Tjaden & Thoennes, 2000a, 2000b). A woman's relationship to the attacker prior to the assault is related to the rape outcome. There is some inconsistency as to whether resistance is more or less effective in response to strangers or known men, but women appear to be more likely to avoid stranger rapes (Ullman, 1997; Ullman, Filipas, Townsend, & Starzynski, 2006), probably because they are more willing to resist these attackers (Martin & Bachman, 1998). Most research shows that women resist much less when attacked by known perpetrators, but their resistance is equally effective for avoiding rape completion in these cases. The fact that women are less predisposed to resist attacks by known men makes them much more vulnerable to completed sexual assaults, particularly by intimate partners (Ullman & Siegel, 1993). Although Koss (1985) found that all victims were equally likely to physically resist rapes in a college population, other studies show less physical resistance to intimates than to stranger and acquaintance assailants (Clay-Warner, 2002; Scott & Beaman, 2004; Ullman & Siegel, 1993).

Approximately 25% to 30% of rapes are perpetrated by intimate partners (Mahoney & Williams, 1998). A significant proportion of domestic violence situations also involve sexual assaults, which may be repeated within an intimate relationship and are obviously much more difficult for victims to avoid. Married women reported not resisting assaults by their husbands because they felt it was their duty to submit, feared resisting would make husbands more violent, wanted to protect their children, knew from past experience that resistance was useless, or did not feel psychologically and physically trained to fight (Finkelhor & Yllo, 1985). It is clear that preventing rape in intimate relationships may require dealing with chronically violent men who repeatedly assault their partners in marital, cohabiting, or dating relationships (Bergen, 1996). Resisting rapes by intimate partners is likely to be more difficult, and some women



find that ending their relationships may be the only way to stop sexual assault by partners. More research is needed on how women avoid rape by men they know and whether specific resistance strategies differ in effectiveness for different types of known offenders. Research suggests that forceful resistance strategies can enhance women's ability to avoid completed rape by both known and stranger assailants.

*Weapons.* Another factor that may affect women's ability to resist and avoid rape is whether a weapon is involved. Fortunately, few rapes involve weapons (less than 11%) according to recent national data (Bachman, 1998). This is especially true of rapes by known attackers. Offenders who display weapons to their victims are more likely to complete rape, but evidence is mixed about whether offenders with weapons are more likely to injure their victims (see Ullman, 2002). Victims attacked with weapons are more likely to develop posttraumatic stress disorder because of fear they might have been killed during the attack (Kilpatrick et al., 1989). Even when offenders have weapons, the physical injury they inflict tends to be minor, and completion of the rape itself is usually the most serious outcome for victims. Only about one third of sexual assault victims sustain injuries, usually of a minor nature, such as cuts, bruises, and scratches (Ullman, 1997).

Fortunately, resistance appears to be just as effective for avoiding rape by armed assailants (Ullman, 1997). Rapists appear to use weapons to inhibit victim resistance, not to cause gratuitous injuries. Victims are more likely to be injured by rapists carrying nonlethal weapons of convenience (e.g., sticks, stones) than lethal weapons, possibly because victims resist less when confronted with lethal weapons. However, some data suggest that victims respond with more physical resistance to assailants bearing weapons in police-reported cases (Scott & Beaman, 2004). If victims have weapons, they are less likely to be raped (Kleck & Sayles, 1990; Quigley, 1989), but few women have weapons ready to use in situations involving men they

know and trust, who commit the majority of sexual assaults. More research is needed to understand the role of different types of weapons in rapes. Specifically, information is needed about how different types of resistance strategies used by women may vary in effectiveness in response to offenders with different types of weapons. Clay-Warner (2002) examined this issue in NCVS data and found no effect of physical resistance in assaults with weapons, whereas physical resistance was related to less completed rape in attacks without weapons. This may temper our prior conclusion (Ullman, 1997) that women can successfully avoid completed rape, even by offenders bearing weapons (by using forceful resistance). Although it does appear that women may be more likely to avoid rape if they have a weapon themselves (Kleck & Sayles, 1990), more research is needed on this issue. Unfortunately, no research using sequence data examines the role of weapons in relationship to subsequent victim resistance and injury outcomes of rapes, including Clay-Warner, so this issue is unresolved.

*Rapist type.* Researchers have identified different types of rapists that differ according to various psychological and behavioral characteristics (Knight, 1999). There is little research examining whether women's resistance may vary in effectiveness to attacks by different types of rapists. This issue may be of concern if certain types of rapists (e.g., sadists) are more likely to respond to victim resistance with increased physical violence, as some have warned. The only study of resistance using an empirically validated rapist typology (e.g., classification system for typing offenders) shows no differences in the effectiveness of women's different resistance strategies for avoiding rape and injury according to rapist type (Ullman & Knight, 1995). More research is needed, but concerns that sadistic rapists or other specific rapist types (e.g., pervasively angry, opportunistic, nonsadistic sexual, vindictive) will inflict more injury on victims who forcefully resist (Prentky et al., 1986) remain unfounded to date. The most



important factor affecting the amount of injury to victims is how much violence offenders use during the attack. Fortunately, this is an observable behavior that does not require women to figure out the type of rapist attacking them before deciding how or whether to resist. Until research shows otherwise, women should not be discouraged from resisting rape based on fears that offenders will respond with increased violence.

### **BARRIERS TO RESISTANCE: SOCIAL- PSYCHOLOGICAL FACTORS AND VICTIMIZATION HISTORY**

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Teaching women what resistance strategies are effective and how to use these strategies may not be enough to help them avoid rape, especially by known men. Various social-psychological barriers exist for women in dating situations that may need to be addressed in high school and college women, including embarrassment and fear of peer group rejection for resisting men's sexual aggression (Norris et al., 1996). These barriers may also be rooted in gender role socialization that encourages women to put the needs of others, especially men, above their own needs. Because society holds women responsible for rape and often blames them for men's sexually aggressive behavior, many women deny they have been raped and will not label themselves as rape victims (Koss, 1985). Because of this, they may internalize self-blame for experiences that make them feel victimized but for which costs of acknowledgment are too high. Women report that they perceive they face low personal risk for sexual aggression from acquaintances and low preparedness to protect themselves against this threat (Nurius, 2000). Therefore, to develop effective resistance efforts, more research is needed on factors shaping risk perceptions and how these factors influence women's risk reduction and self-protection behaviors. Gidycz, McNamara, and Edwards (2006) reviewed the literature on women's risk perception and sexual assault and concluded

that although women generally underestimate their risk, relative to peers, of being assaulted, it is not clear from existing studies that they have deficits in their ability to perceive risk. Even women with prior victimization histories can detect risk, sometimes as well or better than nonvictimized women, but they show different behavioral responses to sexual assault situations, namely, less assertive responding.

Concerns about rejection by men, embarrassment at how others might negatively judge their resistance (e.g., by blaming women for asking for it), and fears of being stigmatized by friends or peers affect women's decisions of how to respond to acquaintance sexual aggression. Women's fears of negative reactions from others are well founded, as they often receive negative social reactions (e.g., blame, stigma, controlling responses, egocentric responses, disbelief) when disclosing sexual assaults (Ullman, 1999a). These social concerns may override their ability to recognize danger and take action in acquaintance rape situations. In addition, drinking may lead women to focus on cues concerning positive aspects of social situations, such as having fun and meeting men, instead of potential danger cues.

In a study of acquaintance sexual assault, Nurius, Norris, Young, Graham, and Gaylord (2000) found that college women were more likely to respond assertively to a man's sexual aggression when he used physical force, when she was concerned about injury, when she was not concerned about preserving the relationship, and when she felt angry and confident. On the other hand, women used diplomatic responses when the man used verbal coercion, when she was self-conscious of her responses, and when she felt sadder and less angry. These findings suggest that risk reduction interventions need to address women's emotional responses to sexual assault situations and that increasing women's confidence may help them actively resist sexual aggression, as suggested by self-defense experts. Another study of 415 college women assaulted by acquaintances shows that women who were less concerned about the offender's judgment,

engaged in less self-blame, and had greater resentment were more likely to use more resistance (Nurius et al., 2004). Using structural equation modeling, this study also shows that women's alcohol use was related to greater self-blame for rape, which was associated with more immobility and diplomatic responding. However, alcohol use was not related to complete immobility but instead to attempts to verbally negotiate out of sexual assault. These results suggest a complex relationship of alcohol use, social cognitive responses, and resistance to acquaintance sexual assault.

Only one study evaluates whether addressing social-psychological barriers in a prevention program reduces risk of sexual victimization in college women. Breitenbecher and Scarce (2001) gave a treatment group a 90-minute educational program that included information about sexual assault prevalence, rape myths, sex role socialization, and rape as an act of power. A component was added to build skills in sexual communication to teach women effective verbal and behavioral responses to sexual assault after imagining the emotions and thoughts they would expect in such a situation. The treatment group showed no reduction in sexual assault risk compared to a control group of women at a 7-month follow-up. In addition, knowledge about sexual assault, dating behaviors, sexual communication, and perception of risk were unaffected by participating in the program. Possible reasons that victimization was not reduced include small sample size, the fact that one-shot interventions may be inadequate, and the program's lack of actual physical training in resistance/self-defense to sexual assault. In summary, social-psychological barriers may affect women's ability to resist sexual victimization and may need to be addressed in risk reduction efforts. More research is needed to determine whether efforts to reduce these barriers in women can lower their risk of being attacked and help them to avoid completed rapes once attacked. Educating women about these barriers may help them to become more aware of and less influenced by internal barriers to their own self-protection and resistance during attacks.

Although awareness of barriers is likely an important target for prevention, another study of 212 college women (Macy et al., 2006) finds that outcomes of acquaintance rapes are affected by not only assailant behavior and victim responses but also women's emotions and appraisals. Macy et al. (2006) concluded that reducing self-blame was needed. Self-blame was higher for victims who were drinking prior to assault and led to less victim resistance and poorer psychological aftermath. In addition, the authors suggested training women to detect threat and be aware of perpetrator tactics (e.g., isolating women, giving them drinks), to use effective resistance strategies, and to understand how their expectancies, behaviors, and prior victimization histories may affect their decisions about resistance. In particular, women with prior victimization histories appear to be more likely to use passive resistance strategies and less likely to use active resistance strategies than nonvictimized women (Norris et al., 1996). However, in the same study (Macy et al., 2006), victimization history was unrelated to resistance when assailant actions were in the model. Thus, multiple factors must be considered to understand women's ability and willingness to resist acquaintance rape.

## SELF-DEFENSE TRAINING

Teaching women how to defend themselves has long been part of feminists' efforts to help empower women to avoid rape. Although no published empirical evaluations of the efficacy of self-defense training exist, anecdotal data suggest that this type of training helps women thwart future assaults. Self-defense training has beneficial psychological effects such as increased confidence, assertiveness, perceived control of one's life, self-efficacy, and increased mastery of actual physical skills. In a controlled experimental study, Ozer and Bandura (1990) found that women trained in physical self-defense skills had enhanced efficacy and coping, decreased perceived vulnerability to assault, increased freedom of action, and decreased avoidance behaviors.



Gidycz, Rich, Orchowski, King, and Miller (2006) evaluated a sexual assault risk reduction program that included a physical self-defense component using random assignment to program or a wait-list control group. Although women receiving the program had increased protective behaviors during a 6-month follow-up, there were no differences between women receiving the program and the control group in rates of sexual victimization, assertive communication, or self-efficacy. The authors suggested that the lack of a significant effect of this program on sexual victimization rates may have been because of greater awareness and labeling of sexual assault by program participants, sharing of information between women in the two groups, and lack of a powerful enough program.

Feminists argue that self-defense training empowers women and girls to overcome passive female gender role socialization that encourages them both to be out of touch with their bodies and to perceive themselves as too weak to protect themselves from men's violence (McCaughey, 1997). This socialization may explain women's fear of sexual assault in contemporary American society that leads them to restrict their behavior to avoid rape. Self-defense educators first try to help women to overcome their fear of hurting the attacker, their aversion to using violence, and feelings that they do not deserve to protect themselves. These social-psychological factors impede women from seeing themselves as active agents capable of protecting themselves and thwarting attacks. Mastering physical self-defense techniques appears to help women overcome these barriers and feel efficacious (Hollander, 2004). According to self-defense instructors, child sexual abuse survivors may have an especially difficult time defending themselves and overcoming these barriers. This may be why they are more likely to be revictimized (e.g., raped again) as adults and also may explain the ineffectiveness of current rape prevention programs with previously victimized women (Hanson & Gidycz, 1993). Although more research is needed to evaluate self-defense training, rape intervention programs need to provide access to

self-defense training for women, given consistent research showing that forceful verbal and physical resistance enhance rape avoidance.

## RAPE PREVENTION PROGRAMS

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Although many rape prevention programs exist, most focus on changing attitudes such as rape myths or increasing women's self-efficacy (Anderson & Whiston, 2005; Brecklin & Forde, 2001; Flores & Hartlaub, 1998), with the rationale that decreasing rape-supportive attitudes may reduce rape. Little evidence shows that programs are effective in altering rape-related attitudes over time, and it is unclear whether changing attitudes will reduce rape. A review of studies of rape intervention programs for college students finds little change in rape myth attitudes as the follow-up time of assessment increased, less effectiveness for mixed-sex than single-sex programs, and less effectiveness of unpublished program evaluations (e.g., doctoral dissertations) than published evaluations (Brecklin & Forde, 2001). Other meta-analytic reviews of prevention programs with a variety of outcome measures reach similar conclusions (Anderson & Whiston, 2005; Flores & Hartlaub, 1998), and none show evidence of reduction in risk of rape. In one of the few published studies to date assessing future victimization risk, Hanson and Gidycz (1993) found a decrease in rates of sexual assault victimization during the course of a 9-week period in college women without a prior history of sexual assault exposed to a risk reduction program that included discussion of self-defense strategies and risky dating behaviors. However, two subsequent evaluations of similar sexual assault education prevention programs found no reduction in sexual assault risk at follow-up, regardless of sexual assault history (Breitenbecher & Gidycz, 1998; Breitenbecher & Scarce, 1999).

Because women's vulnerability to rape is heavily determined by situational factors that increase their proximity to motivated offenders, focusing on women's personality characteristics



or backgrounds is unlikely to effectively reduce rape. Most studies reveal that victims are indistinguishable from nonvictims on attitudinal variables such as sex role beliefs, rape myth acceptance, acceptance of interpersonal violence, and adversarial sexual beliefs. Furthermore, Lonsway's (1996) review of rape prevention education programs concludes that sexuality education is not adequate for changing rape-related attitudes if it does not explicitly address sexual violence and that programs may be more effective if they discuss women's roles and status in society. More recently, some have argued that risk reduction programs should focus more on teaching women self-defense or resistance strategy training because changing attitudes may not reduce rape (Rozee & Koss, 2001; Ullman, 2002).

Some feminists have expressed valid concerns that interventions targeting women that either teach self-defense or educate them about effective resistance strategies hold women responsible for rape prevention. However, as long as males commit rape, women and girls should be given information and training in effective methods of self-protection. Women also need access to knowledge about risky situations and behaviors, just as society helps people protect themselves from other public health threats such as HIV infection. This type of education can be done without holding women responsible or blaming them for being assaulted. In addition, education and training about resistance can empower women by presenting this information in the context of programs about gender role socialization and social-psychological barriers to self-protection. Most experts believe that a two-pronged approach is needed to prevent rape: risk reduction programs for women and prevention programs for men (Gidycz, Dowdall, & Marioni, 2002; Rozee & Koss, 2001). Because programs targeting men and women separately may be more effective, information targeted to men and women should be somewhat different, although possibly not completely different. For example, women need to know about risky situations, perpetrator characteristics, and effective resistance strategies,

including actual self-defense training, such as Model Mugging or other self-defense training programs. Men need to be taught what rape is (e.g., definition, rape myths, impact of rape) and how to interact with women respectfully without ignoring their needs or refusals of sexual advances. Men also need to know that drinking is not an excuse for rape and that getting a woman drunk and having sex with her actually constitutes rape. Both men and women may benefit from information about rape statistics, gender role attitudes and socialization, and rape myths.

Most rape prevention programs do not focus on teaching women about risky situations, effective resistance strategies, and actual self-defense training. Few rape prevention program evaluations examine whether participants actually have a reduced risk of future victimization or perpetration in the future. Without such evaluations, we do not know whether existing rape prevention programs actually work. Unfortunately, the few programs that have assessed this outcome have mostly failed to show reductions in victimization risk. The two programs that showed some efficacy during brief follow-up periods did not work for all women (e.g., women with a history of previous victimization; Hanson & Gidycz, 1993) or still showed high revictimization rates among program participants (Marx, Calhoun, Wilson, & Meyerson, 2001). Finally, other studies fail to replicate these results (Breitenbecher & Gidycz, 1998; Breitenbecher & Scarce, 1999). It is important to note that these programs typically include various components, including education about rape prevalence, rape myths and attitudes, characteristics of victims and offenders, how to label sexually coercive behavior, risky situations, safe dating behaviors, how to resist rape, effects of rape on women, and local resources for victims (see Gidycz et al., 2002, for a review). When evaluations do show positive effects, it is not clear which program components are producing changes in participants. Educating women about risky situations and behaviors, including effective resistance, is likely to be important

and is included in some of these programs. The overall ineffectiveness of these programs in reducing future victimization suggests that actual rape resistance and/or self-defense training is needed, especially because women with self-defense training before rape are more likely to say their resistance helped thwart the attack (Brecklin & Ullman, 2005).

Risk reduction programs typically try to keep women from ever being attacked by advising them to restrict their behavior by avoiding risky situations. Unfortunately, many women are attacked by men they know in situations they thought were safe, but they can still be empowered to thwart these attacks. Although society and even feminists may feel uncomfortable teaching women resistance strategies and self-defense, such intervention is needed. Effective resistance strategies of screaming, fighting, and fleeing should be taught to women in educational programs that include practical self-defense training. Evaluation of self-defense classes is needed to see if they help women avoid future rapes and improve their overall psychological well-being. Self-defense classes should be available for women in college and high school, and community programs providing self-defense training should be funded for women in the general population. Such risk reduction efforts will of course not stop rapists from selecting weaker targets, but they may help to reduce completed rapes for women who are attacked. Such programs also can show that society supports women's efforts to defend themselves against this crime. Interventions with women should address social-psychological barriers such as embarrassment, fear of social rejection by peers, and beliefs they are unable to resist rape or unworthy of being free from sexual assault. Evaluations of rape intervention programs for women are needed to see if components like self-defense training and education about risk reduction and social-psychological barriers are effective. Studies should include long-term follow-up assessments to determine whether positive attitude changes persist and whether future risk of actual victimization is reduced.

Risk reduction programs should be tailored to women with different victimization histories, such as child and adolescent sexual assault. A risk reduction program focused on discussion of self-defense strategies and risky dating behaviors decreased subsequent sexual victimization, but not for previously victimized women (Hanson & Gidycz, 1993). A subsequent multisite evaluation of a risk reduction program (Gidycz et al., 1998) shows that women victimized during a 2-month follow-up interval had a reduced risk of sexual revictimization at a 6-month follow-up. These results suggest that among women who had previously experienced a sexual assault, those who had the program were better able to use it. Another study of 66 college women with a history of sexual victimization (Marx et al., 2001) expands on a risk reduction program of Hanson and Gidycz (1993); it finds no differences in rates of sexual assault revictimization between program participants and a control group after 2 months but less completed rape for program participants. Changes in women, such as decreased self-competence or increased self-blame after an assault in adolescence, both of which are related to later revictimization, could be targeted in intervention programs with previously victimized women and may be particularly affected by self-defense training. Future research must identify consequences of being victimized that lead to higher risk of future completed rape to develop intervention programs tailored to these women's needs.

Arguing for resistance and self-defense training based on extant empirical results does not mean that women are responsible for rape prevention, which is a pitfall of interventions aimed at women. However, there is a distinction between prevention that restricts women's freedom (e.g., telling them to not go out at night or to not drink alcohol) and prevention that enhances women's freedom (e.g., providing information about risk, teaching self-defense skills). Failing to provide empirical information about effective resistance strategies and training in self-defense techniques allows men to continue completing more rapes of women, which causes serious psychological and

physical harm. Rapists admit planning their attacks and looking for easy targets. Thus, women who act assertively can thwart them by resisting attack. Assailants may be surprised when women actively resist, as they may expect women to submit. Educators should help women to identify barriers to their own self-protection, such as feelings of unworthiness, and help them to define men's sexual aggression as wrong and the responsibility of men, not women.

Other prevention strategies in addition to risk reduction efforts with women are needed. The recommendation by Banyard et al. (2004) that we integrate bystanders into community-based prevention of rape is one such idea. Efforts are needed to develop such programs and evaluate whether community members can be encouraged

to intervene to prevent sexual assault. Engaging the community in broader efforts to collectively prevent rape can avoid putting the sole burden of avoiding rape on potential victims. Primary prevention programs targeting males are also needed to reduce sexual aggression and can be integrated with other antiviolenence prevention programming by focusing on generalized aggression and sex role socialization. Until effective rape prevention with boys and men is identified and implemented, intervention efforts are needed with women. Fortunately, research shows that women can effectively resist and avoid rapes, which provides evidence that risk reduction programs should focus on teaching women about risky situations, effective resistance strategies, and formal self-defense training.



# REPORTING SEXUAL VICTIMIZATION TO THE POLICE AND OTHERS

## *Results From a National-Level Study of College Women\**

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Figures have revealed that the majority of female rape and sexual assault victims are between the ages of 16 and 24 (Rennison, 1999). It is not surprising, then, that considerable attention has been given to the sexual victimization of college women. Existing research has shown that college women are at an elevated risk for victimization. Studies have estimated that between 8% and 35% of female students are

victims of sexual offenses during their college years (DeKeseredy & Schwartz, 1998; Fisher, Sloan, Cullen, & Lu, 1998; Koss, Gidycz, & Wisniewski, 1987).

Despite the prevalence of sexual offenses, a large proportion of victims did not report their sexual victimization to the police or to other authorities (Tjaden & Thoennes, 2000a). Results from the National Crime Victimization Survey

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(NCVS) have consistently shown that rape and sexual assault have been the most widely under-reported violent crimes. In fact, the 1999 NCVS results revealed that only 28.3% of these crimes were reported to the police (Rennison, 1999). Notably, other research has provided even lower estimates of reporting (Bachman, 1998; ... Tjaden & Thoennes, 2000a)....

Because of the extent of non-reporting, research has attempted to uncover the factors that affect the likelihood that sexual victimization will be reported to officials. Studies have discovered that demographic characteristics of victims are correlated with the likelihood of reporting victimization incidents (Bachman, 1998; Gartner & Macmillan, 1995; Lizotte, 1985; Pino & Meier, 1999). For example, older women were more likely to report their sexual victimization to the police than were younger victims (Gartner & Macmillan, 1995). Research has also revealed that reporting to police or law enforcement is shaped by incident-related characteristics and contexts (see, e.g., Bachman, 1998; . . .). Analyses of these incident factors have suggested that crime seriousness, victim-offender relationship, location of the offense, and the consumption of alcohol account for some of the variation in reporting. That is, offenses that resulted in injury, that involved a weapon, that were perpetrated by unknown assailants, and that occurred in unfamiliar places were the most likely to be disclosed to the police.

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## REASONS FOR NOT REPORTING

An analysis of the literature on reporting revealed that crime victims most often reported when they felt reporting would result in a positive outcome (Dukes & Mattley, 1977; Laub, 1981). That is, victims' belief that reporting will enable the police to catch offenders was often cited as an important motivator for reporting crime (Laub, 1981). Victims of sexual victimization, on the

other hand, most often failed to report based on both the circumstances of the crime and on the psychological beliefs and fears of the woman herself. Coupled with the fact that sexual victimization is especially likely to be unreported to police, particular attention has been paid to these factors in hopes of discovering why such serious crimes go undisclosed.

It is thought that most crime victims do not feel responsible for their victimization; however, research has shown that rape victims tend to blame themselves for being raped. This self-blame tended to occur when victims were under the influence of alcohol at the time of the incidents and when they perceived that their own actions led to them being sexually victimized. Furthermore, when victims thought that these actions would be judged negatively by others, they were likely to internalize blame (see Finkelton & Oswalt, 1995). This self-blame due to victims' own actions is particularly salient when it is considered that alcohol consumption is often involved in sexual victimization (Koss et al., 1987) and has been reported as a method by which assailants obtain nonconsensual intercourse (Pitts & Schwartz, 1993).

In addition to incident-specific reasons, other research has uncovered psychological factors that influence reporting of sexual victimization. Some victims may have feared retaliation by offenders if they reported the incident to the police. If the victims knew the offenders, then it would have been possible they feared additional victimization resulting from reporting (Bachman, 1998; Greenfeld et al., 1998; . . .). ...

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## FACTORS RELATED TO VICTIM REPORTING

*Seriousness of the incidents.* Although all victims of sexual victimization suffer some form of harm, some crimes are more serious in nature

and cause more physical and/or psychological harm. Research has shown that those incidents that involved the highest degree of injury were more likely to come to the attention of the police (Bachman, 1998; Felson, Messner, & Hoskin, 1999...). Other aspects of criminal events that have influenced the seriousness of the incidents are presence of weapons, threats or use of force, completion of rape, and monetary losses (Gartner & Macmillan, 1995; Orcutt & Faison, 1988). In a study of 897 women who reported experiencing victimization, Gartner and Macmillan (1995) found that harm, economic loss, and use of a weapon together explained approximately 15% of the variation in reporting to police. In light of this finding, it has been suggested that victims are most likely to report when they perceive their victimization to be serious in nature (Greenberg & Ruback, 1992).

*Victim-offender relationships.* One of the most widely researched areas of influence concerning reporting of sexual victimization involves the effect of the victim-offender relationship. In general, victims have been less likely to report incidents to the police when offenders were relatives, intimates, or acquaintances than when crimes were perpetrated by strangers (Gartner & Macmillan, 1995; Pino & Meier, 1999...). Consistent with the general victimization-reporting research, reporting sexual assaults was seen as more appropriate when offenders were strangers than victims' boyfriends (Ruback, Menard, Outlaw, & Shaffer, 1999).

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*Victim characteristics.* Research has revealed that demographic characteristics of victims were related to reporting sexual victimization to the police. Similar to the reporting of other crimes, older victims of sexual offenses were more likely than were younger victims to report to the police (Gartner & Macmillan, 1995). Income level, education level, and race of victims also appeared to affect the reporting of sexual victimization.

Thus, an analysis of NCVS rape data from 1979 to 1987 has shown that income was negatively related to reporting (Pino & Meier, 1999). A similar relationship has been found for education level: The more educated a woman was, the less likely she was to report being raped to the police (Lizotte, 1985).

The effect of the interracial nature of incidents has also been found to predict reporting to the police. Lizotte (1985), for example, reported that when offenders were African American and victims were Caucasian, victims were less likely to report the assault or rape to the police. Contradictory evidence, however, exists regarding the relationship between race and reporting of sexual victimization. Although some research has found that Caucasian women are most likely to report (Feldman-Summers & Ashworth, 1981), other studies have concluded that reporting was more likely when victims were African American (Bachman, 1998). Other research, however, has suggested that minority women were less likely to report rape to the police, evidence that those groups that have been historically distrustful of the police were less likely to see reporting to them as a desirable alternative (Feldman-Summers & Ashworth, 1981).

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## REPORTING TO OTHERS

Although it is well documented that sexual victimization has been likely to go unreported to the police, these incidents of victimization may have been disclosed to persons outside of the criminal justice system. In fact, research suggests that both juveniles and adults were more likely to tell authorities other than the police following incidents of violent victimization when the incidents occurred at school (Finkelhor & Ormrod, 1999). This pattern of disclosure was similar for victims of sexual offenses (see Koss et al. 1987). Thus, Pitts and Schwartz (1993) found that more than three fourths of rape victims tell someone, typically a



female friend, about their experience. Similarly, other research has found that the majority of persons who were sexually victimized confided in a friend; however, few told family members or health or social work professionals (Dunn, Vail-Smith, & Knight, 1999; Golding, Siegel, Sorenson, Burnam, & Stein, 1989). A separate study on the factors that influence potential rape victims to report incidents found that women were more likely to tell their husbands, boyfriends, or other intimates than the police about their experience (Feldman-Summers & Ashworth, 1981).

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## RESEARCH STRATEGY

This study attempted to build on the existing literature in several ways. First, this study analyzed national-level data with detailed measures to uncover sexual victimization-reporting practices by college women. Although research exists on college victimization, few studies have examined data from national samples in the United States. Perhaps the most notable national study of sexual victimization of college women was conducted during the mid 1980s by Koss et al. (1987). Despite substantively extending the literature, numerous changes in postsecondary education have occurred since Koss et al.'s 20-year-old study was done in the early 1980s. For example, enrollment of women in college and universities has significantly increased during the past decade (U.S. Department of Education, 1993). Moreover, the changing social context and legal requirements mandated at these institutions may have altered the likelihood of women reporting their victimization on self-report surveys and to campus authorities (see Fisher, Hartman, Cullen, & Turner, [1999]). To address these issues, this study used current national-level data to investigate the reporting of sexual victimization incidents by female college students.

A second advance this study attempted to make was methodological. This study has built

on the methodological work done by Koss et al. (1987) and advances made by Kilpatrick[, Edmunds, & Seymour] (1992) and Tjaden and Thoennes (2000a, 2000b). ... [W]e have extended their work by employing a two-stage measurement strategy used by the NCVS.

Third, few studies have examined the likelihood of reporting across multiple forms of sexual victimization. Most research has focused on the reporting of attempted or completed rapes (Bachman, 1998; Williams, 1984). Research that has employed a wider conceptualization of sexual victimization is limited and has focused on all adult women rather than on college women (see Gartner & Macmillan, 1995; Kilpatrick et al., 1989). To effectively measure reporting of a broad range of sexual victimization, this study measured incidents ranging from rape to sexual harassment, including attempted, threatened, and completed acts.

Fourth, as noted, studies have identified how characteristics of offenders, victims, and incidents influence reporting of sexual victimization. Few studies, however, have focused simultaneously on more than one of these categories of predictors or have explored the impact of multiple factors within each category. For example, studies rarely have included, in a single analysis, detailed information concerning victimization incidents and individual measures of victim and offender characteristics. To fill this void, this study used specific incident level information for each victimization and measured incident characteristics and individual factors to assess the determinants of reporting.

Fifth, the majority of previous research examined the extent of and the factors that affect reporting of sexual victimization to the police. This study investigated reporting to police as well as reporting to campus officials and to third parties. In doing so, we were able to investigate the extent to which sexual victimization incidents are reported to people other than the police. Furthermore, we explored how determinants of reporting vary according to whether incidents are disclosed to the police, campus authorities, or other people known to victims.

Finally, the results of this study have implications for the ongoing debate between feminist and conservative scholars over the extent to which sexual victimization is a problem that warrants intervention. Accordingly, the closing sections of this article discuss the salience of the findings for these competing perspectives.

## METHOD

### Sampling Design

The results reported in this study are part of a larger project, the National College Women Sexual Victimization study. Using computer-aided telephone interviews, professionally trained female interviewers administered the survey to a national-level sample of 4,446 female college students enrolled at 233 selected postsecondary institutions during the spring of 1997. Institutions were selected using a probability proportionate to the size of the female enrollment to ensure there was an adequate number of female students from which to randomly select to meet the needed sample size. Of the total institutions selected, there were 194 four-year schools and 39 two-year schools. Female students were then randomly selected within each institution included in the project. The response rate was 85.6% (for a detailed description, see Fisher, Cullen, & Turner, 2000).

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### Dependent Variables

Three measures of reporting were used in the analysis to determine if respondents decided to disclose an incident. First, respondents were asked if they or someone else reported the incidents to any police agency. If the incident was reported to any police agency, they were then asked to which police agency they reported. Police agencies included on-campus police

or security departments, off-campus local or city police, county sheriff, or state police. This variable was labeled *reporting to any police agency*.

In addition, reporting to others was measured by asking if they told anyone else other than or in addition to the police about the incident. If they did report the incident to a third party, respondents were then asked whom they told. The second measure, reporting to at least one campus authority, was created using this information. Campus authorities included campus law enforcement, residence hall advisors, deans, professors, other college authorities, and on-campus bosses, employers, or supervisors. The third measure employed was reporting to at least one person other than a police agency or a campus authority.... These categories were not mutually exclusive because respondents could have indicated they told more than one type of person. For example, respondents could have told their parents and a friend about their experience.

### Independent Variables

Incidents, offenders, victims, and contextual characteristics were operationalized to measure their possible influences on victims' decisions to report their sexual victimization.

*Incident characteristics.* For our analysis, the following four types of sexual victimization were employed: (a) rape, (b) sexual coercion, (c) sexual contact, and (d) threats. Each of these types, with the exception of threats, includes completed and attempted acts. We recognize that not all of the incidents defined as sexual victimization would qualify as criminal acts.... The seriousness of incidents was measured with the following three variables: (a) if respondents suffered any injury, (b) the presence of a weapon, and (c) if victims considered the incident to be rape. [See Table 19.1 for data on additional characteristics associated with each type of sexual victimization.]

**Table 19.1** Descriptive Characteristics of the Incidents

| <i>Descriptive Characteristics of the Incidents of Sexual Victimization</i> | %    | <i>n</i> |
|-----------------------------------------------------------------------------|------|----------|
| Incident characteristics                                                    |      |          |
| Type of sexual victimization                                                |      |          |
| Rape                                                                        | 11.9 | 157      |
| Sexual coercion                                                             | 16.8 | 221      |
| Sexual contact                                                              | 54.9 | 723      |
| Threats <sup>a</sup>                                                        | 16.5 | 217      |
| Seriousness                                                                 |      |          |
| Injury                                                                      |      |          |
| Yes                                                                         | 5.5  | 73       |
| No <sup>a</sup>                                                             | 94.5 | 1243     |
| Presence of a weapon                                                        |      |          |
| Yes                                                                         | 1.7  | 22       |
| No <sup>a</sup>                                                             | 98.3 | 1292     |
| Victims considered incident rape                                            |      |          |
| Yes                                                                         | 6.3  | 82       |
| No <sup>a</sup>                                                             | 93.7 | 1222     |
| Offender characteristics                                                    |      |          |
| Victim–offender relationships                                               |      |          |
| Known others <sup>b</sup>                                                   | 7.5  | 99       |
| Current or ex-intimates <sup>c</sup>                                        | 12.6 | 165      |
| Strangers                                                                   | 20.9 | 274      |
| Fellow students <sup>d</sup>                                                | 27.8 | 365      |
| Friends <sup>a,e</sup>                                                      | 31.3 | 411      |
| Offender–victim race/ethnicity                                              |      |          |
| Different                                                                   | 20.8 | 272      |
| Same <sup>a</sup>                                                           | 79.2 | 1037     |
| Victim characteristics                                                      |      |          |
| Age                                                                         |      |          |
| Mean age                                                                    | 21.4 | 1318     |
| Standard deviation                                                          | 3.1  |          |
| Younger than legal drinking age and drinking alcohol at time of incident    |      |          |
| Yes                                                                         | 21.4 | 280      |
| No <sup>a</sup>                                                             | 78.6 | 1030     |

|                                                                                          |      |      |
|------------------------------------------------------------------------------------------|------|------|
| Race/ethnicities                                                                         |      |      |
| African American non-Hispanic                                                            | 5.0  | 66   |
| Latina or Hispanic                                                                       | 6.8  | 90   |
| Other non-Hispanic <sup>a</sup>                                                          | 3.6  | 47   |
| White non-Hispanic <sup>a</sup>                                                          | 84.6 | 1112 |
| Family classes                                                                           |      |      |
| Upper class                                                                              | 9.2  | 121  |
| Upper middle class                                                                       | 41.1 | 541  |
| Middle class                                                                             | 36.6 | 482  |
| Working class                                                                            | 12.1 | 159  |
| Poor                                                                                     | 1.0  | 13   |
| Contextual characteristics                                                               |      |      |
| Locations                                                                                |      |      |
| Fraternity                                                                               | 6.5  | 85   |
| Campus property                                                                          | 7.8  | 103  |
| Living quarters                                                                          | 38.9 | 511  |
| All other locations <sup>a</sup>                                                         | 46.8 | 616  |
| Drinking alcohol and taking drug behavior                                                |      |      |
| Both offender and victim drank alcohol and/or took drugs prior to incidents <sup>f</sup> | 41.7 | 522  |
| Offender drank alcohol and/or took drugs and victim did not do either                    | 26.9 | 337  |
| Offender did not drink alcohol and/or take drug and victim did either or both            | 1.5  | 19   |
| Neither offender nor victim drank alcohol or took drugs <sup>a</sup>                     | 29.8 | 373  |

- a. Reference group used in the multivariate models.
- b. This category includes professors, teachers, graduate assistants, teaching assistants, employers, supervisors, bosses, coworkers, stepfathers, and other male relatives.
- c. This category includes current and former husbands, boyfriends, or lovers.
- d. This category includes classmates or fellow students.
- e. This category includes friends, roommates, housemates, suitemates, or acquaintances.
- f. The categorization is based on victims' responses to questions about their behavior prior to the incidents and their perceptions of the offenders' behavior.



*Offender characteristics.* Research has consistently reported that characteristics of offenders may affect decisions to report. To take these types of characteristics into account, we included the following two measures: (a) the victim–offender relationship and (b) whether victims’ race/ethnicity was different or the same as offenders’ race/ethnicity. The victim–offender relationship was measured using the following five categories: (a) current or ex-intimates, (b) fellow students, (c) known others, (d) strangers, and (e) friends.

*Victim characteristics.* A set of four independent variables measured the individual characteristics of victims. Consistent with previous victimization research, the demographic characteristics included age of the respondents and their race/ethnicity. A third victim characteristic, family class—measured by asking respondents to identify their class of origin while growing up—was included. Recent work by Ruback et al. (1999) has suggested that being under the legal drinking age and drinking alcohol (underage drinker) may influence victims’ decisions to report to the police. Hence, our fourth measure, victims drinking alcohol and being under the legal drinking age when incidents took place, was also included in the analysis.

*Contextual characteristics.* Studies have reported that both offender use and victim use of alcohol and/or drugs prior to or at the time of the incidents may affect victims’ decisions to report incidents (Pitts & Schwartz, 1993; Ruback et al., 1999). To measure the context of incidents, we employed two variables. First, because sexual victimization can transpire in various places, we included a contextual measure of the locations of the incidents. The following four locations were used in our analysis: (a) in living quarters, (b) at a fraternity, (c) on campus property but not in living quarters, and (d) all other locations. Second, we included a measure of alcohol and/or drug use on the part of victims and offenders. We included a measure that took into account if both offenders and victims drank alcohol and/or took

drugs prior to the incidents, if one did and the other one did not, and if neither did.

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## Descriptive Characteristics of the Incidents

As a prelude to exploring the reporting behavior of the victims in the sample, we present the characteristics of the sexual victimization incidents, offenders, victims, and context in Table [19.1]. As seen in this table, some of the incident-level characteristics exhibited much variation, whereas other characteristics did not....

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## RESULTS

Tables [19.2] and [19.3] present the descriptive information on victims’ decisions to report the incidents. As Table [19.2] reveals, a very low percentage of victims (2.1%) reported their victimization to the police and 4.0% reported their victimization to campus authorities. Among on-campus incidents, just more than 5% were reported to campus authorities.

A cross-tabulation of the data showed that all the incidents that were reported to any police agencies were also disclosed to someone else. This is also the case for all the incidents reported to any campus authorities because all the incidents reported to any campus authorities were also disclosed to someone else (see the last two rows of Table [19.2]).

[As can be seen from] Table [19.3], the results indicate that even among completed and attempted rapes, fewer than 5% were reported to the police and an even lower percentage were reported to campus authorities. Reports for most other forms of sexual victimization ranged from none to very few of the incidents being reported to the police or campus authorities. Reports to officials of threats of rape and of sexual contact

**Table 19.2** Victims' Decisions to Report Incidents to Officials and Disclose Incidents to Someone Other Than Police or Campus Authorities

| <i>Victims' Decision</i>                                                                  | <i>%</i>         | <i>n</i> |
|-------------------------------------------------------------------------------------------|------------------|----------|
| Reported to officials                                                                     |                  |          |
| Reported to any police agencies                                                           | 2.1 <sup>a</sup> | 27       |
| Reported to any campus authorities                                                        | 4.0              | 37       |
| On-campus incidents only                                                                  | 5.3              | 27       |
| Victims disclosed incident to people other than police or campus authorities <sup>b</sup> | 69.9             | 919      |
| Victims disclosed incident to                                                             |                  |          |
| Friends <sup>c</sup>                                                                      | 87.9             | 808      |
| Family members <sup>d</sup>                                                               | 10.0             | 92       |
| Intimates <sup>e</sup>                                                                    | 8.3              | 76       |
| Other persons <sup>f</sup>                                                                | 3.3              | 30       |
| Other authority figures <sup>g</sup>                                                      | 1.7              | 16       |
| Counseling services <sup>h</sup>                                                          | 1.0              | 9        |
| Reported to any police agencies and disclosed to someone else                             | 2.1              | 27       |
| Reported to any campus authorities and disclosed to someone else                          | 4.0              | 37       |

a. The percentages refer to telling at least one person in the specific category.

b. Percentage may exceed 100 as respondents could give multiple responses as to whom they told. Each specific category includes telling at least one type of person who was included in that category.

c. Category includes friends, roommates, suitemates, or housemates.

d. Category includes parent, parents, or family members other than parents.

e. Category includes husbands, boyfriends, or partners.

f. Category refers to other nonspecified persons.

g. Category includes off-campus employers, bosses, or supervisors.

h. Category includes women's programs or services, victims' services hotline, clergy, rabbi, or other spiritual leaders.

with force did climb to about 10% of the incidents, but the small number of incidents involved made the percentages potentially prone to substantial fluctuation, with only a couple of incidents being reported.

In contrast, although victims were unlikely to report incidents to formal officials, they tell others about their victimization experiences. Thus, in about 70% of the incidents, victims disclosed their victimization to someone other than the police. Most often, this person was a friend (in 87.9% of

these incidents). Family members and current intimates were the second and third most cited people to be told, but they were contacted in only 10% and 8.3% of the incidents, respectively. As seen in Table [19.3], the percentages of incidents reported to someone other than police and/or campus authorities differed by type of victimization. To illustrate, a larger percentage of sexual contact incidents were told to someone else compared with the other three types of sexual victimization (74.1% compared with 66.2%, 62.9%, and 65.9%).

**Table 19.3** Type of Victimization Reported to Any Police Agencies and/or Campus Authorities and Whether Told to Someone Other Than Police and/or Campus Authorities

| Type of Victimization | Reported to Any Police Agencies |      | Reported to Any Campus Authorities |      | Told to Someone Other Than Police and/or Campus Authorities |       |
|-----------------------|---------------------------------|------|------------------------------------|------|-------------------------------------------------------------|-------|
|                       | %                               | (n)  | %                                  | (n)  | %                                                           | (n)   |
| Rape                  | 4.5                             | (7)  | 3.2                                | (5)  | 66.2                                                        | (104) |
| Sexual coercion       | 0.0                             | (0)  | .9                                 | (2)  | 62.9                                                        | (139) |
| Sexual contact        | 1.4                             | (10) | 2.8                                | (20) | 74.1                                                        | (533) |
| Threats               | 4.6                             | (10) | 4.6                                | (10) | 65.9                                                        | (143) |
| Totals                | 2.1                             | (27) | 2.8                                | (37) | 69.9                                                        | (919) |

It is relevant that for completed and attempted rapes, approximately two thirds of the incidents were reported to someone else. Again, this was a large proportion in comparison with the percentage of incidents disclosed to the police, which was fewer than 5% for both rape categories. This pattern was evident across all the types of victimization. Again, Tables [19.2] and [19.3] reveal that most college women who are sexually victimized do not report their victimization either to the police or to campus authorities. . . . [T]he reasons for not reporting to law enforcement officials [were] explored by types of victimization. By far, the most frequently given responses for not reporting were incident related reasons. Across all victimization categories, in 81.7% of the incidents, college women stated they failed to report incidents to the police because the events were not serious enough. In 42.1% of the incidents, respondents did not disclose the events to the police because they were not sure a crime or harm was intended. In approximately 30% of the incidents, respondents believed the police would not think the incidents were serious enough, whereas in about 20% of the incidents, women stated that the police would not want to be bothered and/ or that they lacked proof the incidents happened. Beyond incident and criminal justice

characteristics, in approximately 20% of the incidents, women expressed a reluctance to report incidents because they did not want their families (18.3%) or other people to know about their victimization (20.9%). And in 19% of the incidents, respondents said they did not report the incidents because they were afraid of reprisals by their assailants or other people.

Although some variation was present, the general pattern of reasons given for not reporting to the police was fairly consistent across types of victimization. Still, there were some tendencies in the reasons given for not reporting rape incidents that may warrant attention. Similar to other victimization categories, the reason most frequently given for not reporting was that the incidents were not serious enough. In contrast, victims of completed and/or attempted rape were more likely to link their failure to report to not wanting family members and others to know of the victimization (38.9% of the incidents), not having proof of the incidents (36.9%), and being fearful of reprisals (32.9%). For these three reasons, the totals across all victimization incidents were, respectively, about 20%, 23.2%, and 19%. . . .

Victimization characteristics significantly affected the probability that incidents were reported to any police. First, similar to past



studies, reporting to the police was more likely when the incidents were more serious (i.e., weapons were present or the victims defined the events as rape). Second, sexual contacts but not rapes were less likely than were threats of sexual victimization to be reported to the police.

Offender and victim characteristics played significant roles in determining the likelihood that victimization was reported to the police. First, incidents involving strangers were more likely to be reported than were those involving friends. Second, incidents in which the race/ethnicity of offenders and victims was not the same were more likely to be reported to the police than were incidents in which race/ethnicity was the same. Third, supportive of Bachman's (1998) results, incidents in which victims were African American students were more likely to be reported to the police than were those incidents involving White non-Hispanics or students of other races/ethnicities.

A contextual characteristic of the incidents was also important. The analysis revealed that incidents on campus property were more likely to be reported to the police than were those that occurred off campus.

The more serious incidents were significantly more likely to be reported to campus authorities (e.g., incidents that involved injuries or in which weapons were present). Victim-offender relationships were also salient as to the probability of incidents having been reported to any campus authorities. Compared with when offenders were friends, victims were more likely to report incidents in which the assailants were either strangers or known others (i.e., someone they knew but who was not a fellow student or a current or ex-intimate).

Victim characteristics were significant in decreasing the likelihood that incidents were reported to any campus authorities. Incidents involving younger and lower family class victims were significantly less likely to be reported to any campus authorities.

Two contextual characteristics of the incidents had significant impacts on reporting to campus authorities. As could be expected,

incidents that happened on campus property were more likely to be reported to campus authorities. If both offenders and victims were drinking or had taken drugs, the incident was less likely to be reported to campus authorities.

As for reporting to someone other than police or campus authorities, victims' decisions to disclose their incidents were more likely for sexual contacts, when they sustained injuries, and when the offenders were known others. Notably, in contrast with the finding for campus authorities, they were more likely to tell someone of their victimization if their assailants and/or they had been drinking or taking drugs prior to the incidents.

Across all three types of victimization, it was difficult to discern any factors that clearly prompted victims' decisions to report. Reporting to the police seems structured more by the characteristics that may make the victimization seem more believable to law enforcement officials: That is, the sexual victimization involved demonstrable evidence that the incident had taken place (e.g., injury) and was committed by a stranger. As for the other forms of reporting to campus authorities and someone other than the police (mainly friends), key factors were (a) whether any injuries occurred, (b) victim-offender relationship, and (c) whether alcohol and/or drugs were present. The precise impact of these factors on the two types of reporting, however, was not always consistent.

## DISCUSSION

Similar to previous research, only a low percentage of college women who were sexually victimized reported these incidents to the police. Even when the offense involved was a completed or attempted rape, supportive of Koss et al.'s (1987) findings, fewer than 1 in 20 incidents was brought to the attention of law enforcement officials. As we noted previously, not all of the incidents defined as sexual victimization would qualify as criminal acts. Even so, regardless of where one might draw the line in defining

victimization as criminal, the findings of this study do not change: Incidents, including rapes, are not reported to the police or to campus authorities but are reported to others. Consistent with previous research, including the literature on classic rapes (Estrich, 1987; Williams, 1984), there was a tendency for sexual victimization to be reported to police when incidents involved the presence of weapons, were committed by strangers, and took place on campus but outside living quarters. Again, these features are likely to serve as *prima facie* evidence that women were sexually victimized and thus provide confidence that a report to enforcement officials would be seen as believable. In contrast, the presence of alcohol and/or drugs made the reporting of incidents less likely, perhaps because victims perceived that their use of these substances would diminish their credibility. Finally, victims' definition of incidents as rape also increased the probability of reporting incidents to officials.

Still, the central point is that respondents refrained from contacting the police about most of their incidents of victimization. Furthermore, women in our sample also were reluctant to involve campus authorities. These authorities were notified in only 2.8% of all incidents of victimization and in 3.2% of all rapes. Why is there such a low reporting of sexual victimization incidents to the police and to campus authorities?

A feminist perspective might suggest that the extremely low proportion of incidents reported cannot be attributed simply to the general low reporting by college students of criminal events. In fact, as noted previously, college women report victimization by other violent crimes at a much higher level (Fisher & Cullen, 1999). Instead, feminists would likely maintain that patriarchal influences in society, including on college campuses, provide barriers to reporting. In our data on rape incidents, for example, one third to 40% of the sample stated they did not report incidents to the police because they lacked proof that the incident happened, were afraid of reprisals, and did not want their families or other people to know about their victimization.

Reasons such as these suggest that sexual assault victims believed that proof beyond their testimony was needed to secure police action, that they would not be protected if they disclosed their assailants' identities, and that a sexual victimization was something sufficiently embarrassing or shameful that it should even be kept from their families. Our study does not have data on whether victims experienced self-blame, but the finding that alcohol limits reporting is consistent with the possibility that this may have had some influence. As noted, there is some evidence that when victims consume alcohol, they may perceive that they have contributed to their own sexual victimization. In a feminist view, however, such cognitions are a reflection of sexist cultural beliefs that create a context conducive to the continued victimization of women by men. Notably, in 7 of 10 incidents, alcohol and/or drugs were present.

The findings of our study, however, also might be interpreted by conservative commentators as reinforcing their view that most events reported as sexual victimization on surveys such as Koss et al.'s (1987) and ours are not really victimization (see Gilbert, 1997; Roiphe, 1993). In this conservative perspective, feminists are portrayed as advocacy researchers who employ survey methods that count as rape and sexual assault events that supposed victims do not define as criminal. Either implicitly or explicitly, ideology is held to trump science, with conservatives accusing feminists of interpreting shaky survey findings as showing definitively that the sexual victimization of women by men is not rare but widespread. The feminist political agenda, according to critics, is to use such claims to reinforce the notion that patriarchy's influence is extensive and in need of radical change. The real effects, say the critics, are that advocacy research creates unwarranted fears among college women, encourages women to view themselves as oppressed, increases gender conflict, and creates sexual turmoil in intimate relationships (Gilbert, 1995, 1997).

In our data, conservatives would likely use one finding to support their position that the

sexual victimization of college students is overstated: In 8 of 10 incidents, respondents stated they did not report their victimization to the police because it was not serious enough. Even for rape, this reason was given for 7 of 10 incidents. The implication of these data is obvious: If college women, arguably a bright and privileged group, did not define the incidents in question as serious, then perhaps their failure to report matters to the police reflected a rational decision that nothing of consequence really occurred. In this view, the study's methodology manufactured sexual victimization that, revealingly, the women themselves perceived as non-serious and at worst as men acting badly, not criminally.

Three considerations lead us to question the conservatives' interpretation. First, a salient research issue is what students mean when they define incidents as not serious enough to report. For conservatives, the phrase *not serious* is taken in a strictly literal sense as meaning that the incidents were unimportant. For feminists, however, such a response may merely indicate a false consciousness expressed by women acculturated to see their victimization as somehow acceptable. It may also reflect a rational assessment in which female victims decide that reporting coerced sexuality is not worth turning in fellow students when such an act may incur negative reactions from their peers and no real action from the criminal justice system. That is, the events may be appraised as lacking seriousness not according to an objective standard but relative to what reporting the incidents actually entails. In any case, before definitive interpretations can be ventured, detailed qualitative studies need to be undertaken of women's cognitive understandings of sexual victimization incidents.

Second, conservative critics often question the methodological rigor of sexual victimization studies, with the endpoint being that the estimates produced by this research are artifacts of faulty measurement strategies. We cannot claim that our study is beyond reproach, but its design was formulated to ensure that incidents would only count as victimization when respondents

answered detailed questions in the incident report. That is, we did not merely rely on behaviorally specific questions to determine whether victimization transpired but confirmed or disconfirmed its occurrence through the incident report. Accordingly, it is unlikely that the events counted as victimization in our study did not really happen or that they are the inventions of distraught women. In short, we believe that we are on fairly firm ground in maintaining that most incidents, including those that legally satisfy the definition of rape, are not reported to police or campus authorities.

Third and perhaps most important, our data show that approximately 7 in 10 sexual victimization incidents apparently are not treated as trivial but are serious enough for college women to tell others about what happened to them. In the case of rape incidents, for example, there is about a 60 percentage point difference between the percentage of rapes reported to the police or to campus authorities and the percentage told to others. Although not definitive, findings such as these suggest that women counted as victims by our methodology did, in fact, experience sexual victimization that could have been but were not reported to law enforcement and school officials.

These findings also suggest that we need systematic research into why victims of sexual assault, including rape, do not tell the police but do tell those in their social circles about what happened to them. We suspect that one profitable line of research will be to investigate more fully how the context surrounding victimization affects how women interpret not only what happened to them but also what represents appropriate responses on their part. Most of the incidents reported by respondents in our study involved assailants that women knew, occurred when offenders and/or victims had been drinking or taking drugs, and were often located in living quarters. Sexual victimization that occur in such contexts may leave women burdened and in need of support from friends. But such contexts may, in a number of ways, make turning to authorities unappealing. Thus, when women are



alone and drinking with men in private residences, typically late at night, it is difficult to prove not only that an assault was perpetrated but also that consent was not given. Furthermore, in those circumstances, women not only may engage in self-blame but also may be unsure as to whether their assailants had the criminal intent to rape or assault. In contrast, because the victimization was real and disturbing, victims sought out help from friends and fellow students. In short, they handle the incidents informally, not formally.

Finally, college officials wishing to address the larger problem of the sexual victimization of female students might gain one important lesson from this research: Although officials are informed about only a fraction of incidents,

many students on their campuses might have victimization incidents disclosed to them. We know relatively little about how disclosure of victimization affects recipients of this information and about whether these students should lend informal support, urge victims to seek counseling, and/or encourage victims to seek legal solutions by reporting the incidents to the police and campus authorities. Regardless, future research that explores these matters in more detail is needed. In an applied domain, it would also seem prudent for campus officials charged with administering sexual assault awareness programs to provide the general population of students with guidance as to what steps they should take when sexual victimization is reported to them.

## PATTERNS OF ANTI-GAY VIOLENCE

### *An Analysis of Incident Characteristics and Victim Reporting\**

KRISTEN KUEHNLE

ANNE SULLIVAN

**A**lthough the past decade saw a burgeoning of research investigating various aspects of victimization, few studies examined the factors related to anti-gay victimization. This research brings together available information on [anti-gay] victimization to gain an understanding about the type and extent of [anti-gay] incidents and the reporting practices of the victims.

A rich body of research presently exists on the nature and extent of criminal victimization in the general population. Studies have shown that the risk of victimization varies across different demographic groups (Cohen & Felson,

1979; Garofalo & Martin, 1993; Laub, 1997; Maxfield, 1989). For example, the risk of victimization is greater for males. Men are more likely than women to be victims of personal crimes such as robbery and assault. Similarly, young people between the ages of 16 and 24 face a much higher risk of becoming victims than do older members of society (Garofalo & Martin, 1993; Laub, 1997). Likewise, significant racial differences exist in the risk of victimization. African Americans are much more likely to be victims of crime than members of other groups.

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These findings suggest that what people do, where they go, and who they associate with affect their likelihood of victimization (Cohen & Felson, 1979; Garofalo & Martin, 1993; ... Laub, 1997; ...). In other words, rather than being a random event, victimization appears to be a function of the risks associated with a person's lifestyle and routine activities. Specifically, the risk of victimization is greater for males, African Americans, and young people because their activities take them into public places at night, which increases their exposure to criminals....

Another frequently examined aspect of victimization is the reporting of crimes to the police. Although crime reporting is relatively independent of the demographic characteristics of victims (Block & Block, 1980; Green, 1981; Skogan, 1984), crimes committed by relatives, friends, and lovers are less likely to be reported to the police (Skogan, 1984). Whether an offense was completed or only attempted and whether there was injury or financial loss are also strong determinants of victim reporting.... Specifically, violent crimes involving injury or weapons are most likely to be reported to the police (Laub, 1997).

Historically, hate crimes have been underreported in the United States. Several studies have found that lesbians and gays are reluctant to report hate crimes to the police (Berrill & Herek, 1992; Comstock, 1989; Finn & McNeil, 1987; Gross, Aurand, & Addessa, 1988; Morgen & Grossman, 1988). Specifically, many gays and lesbians believe that the police will treat them with indifference and insensitivity if they report a hate crime. Hence, many gays and lesbians do not report hate crimes to the police for fear of an unsympathetic or even hostile response (Berrill, 1992...).

Research has also found that gay males experience more extreme levels of physical violence than lesbians. Males are also more likely to be victimized in public, including gay-identified areas, whereas females are more often victimized in or near their homes (Aurand, Addessa, & Bush, 1985; Comstock, 1989; Gross et al., 1988). A few studies have analyzed racial and/or ethnic differences in anti-gay victimization. Comstock (1989) found that gay

men and lesbians of color experience higher rates of anti-gay violence than Whites.

This descriptive study investigates anti-gay victimization and reporting practices. An analysis of victims and incidents and reporting practices was conducted to examine whether victimization patterns and reporting practices are similar to those evidenced in prior research.

## METHOD

This non-experimental study includes a descriptive analysis of victim reports and examines the following questions:

1. Is anti-gay victimization similar to previous research on victimization, with differences in gender identity, race, and age?
2. Does lifestyle activity, such as location and the type of victim-offender relationship, affect the type of incident?
3. Is there a difference between unreported and reported incidents?
4. Are victim or incident characteristics a factor in reporting practices?

## Sample

Because underreporting often occurs in formal arrest records, self-reported incidents were used for this analysis. Self-reports of victimization also present methodological difficulties; however, they can provide insight into the hidden data regarding certain types of crime. This non-probability convenience sample consisted of self-reported incidents to a victim program in a large northeastern city from January 1995 through September 1998.

## Procedure

When a victim reports an incident, the agency obtains information about the victim, the offender, the incident, the criminal justice response, and the referral services. An intake worker records this data on a standardized form.



The selection criteria for inclusion in this analysis were as follows:

1. The self-reported incident met the legal criteria to be considered a criminal act in the state.
2. The victim's gender identity was male, female, or transgendered or the individual was perceived to be gay, lesbian, or transgendered.
3. The victim was 18 years of age or older.
4. The incident had a bias motive.
5. No other motives, such as domestic violence or race, were involved.

## Research Hypotheses

The following were the hypotheses guiding the research.

Hypothesis 1: Differences will exist between gender identity, race, and age in types of offenses.

Hypothesis 2: Differences will exist between gender identity and incident characteristics.

Hypothesis 3: Victim characteristics will affect reporting practices.

Hypothesis 4: Incident characteristics will affect reporting practices.

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## Sample Characteristics

A total of 241 incidents were included in the analysis. Table [20.1] provides a description of the demographic characteristics. Gender identity was 74.2% male, 21.6% were female, and 4.1% were transgendered. About 94.1% of the females were lesbian, and 5.9% were bisexual; 94.9% of the males were gay, 4% were bisexual, and 1.2% were heterosexual. All of the transgendered people were male to female.

Almost 75% of the sample was 30 years of age or older. About 6.3% were in the 18-to-22 age group; 19.2% were between 23 and 29 years of age, 60.3% were between 30 and 44 years of age, and 14.3% were 45 years of age or older.

**Table 20.1** Sample Characteristics

|                    | <i>n</i>       | <i>Percentage</i> |                                        | <i>n</i>       | <i>Percentage</i> |
|--------------------|----------------|-------------------|----------------------------------------|----------------|-------------------|
| Gender identity    |                |                   | Relative/family                        | 2              | 1                 |
| Female             | 52             | 21.6              | Roommate                               | 1              | <1                |
| Male               | 179            | 74.2              | Law enforcement/<br>security personnel | 27             | 12.4              |
| Transgendered      | 10             | 4.1               | Service provider                       | 11             | 5.9               |
|                    | <i>n</i> = 241 |                   | Stranger                               | 97             | 44.5              |
|                    |                |                   | Other                                  | 1              | <1                |
|                    |                |                   |                                        | <i>n</i> = 218 |                   |
| Sexual orientation |                |                   |                                        |                |                   |
| Female             |                |                   | Offenses                               |                |                   |
| Lesbian            | 48             | 94.1              | Serious personal                       | 119            | 49.4              |
| Bisexual           | 3              | 5.9               | Other personal                         | 95             | 39.4              |

|                              | <i>n</i>       | <i>Percentage</i> |                       | <i>n</i>       | <i>Percentage</i> |
|------------------------------|----------------|-------------------|-----------------------|----------------|-------------------|
| Male                         |                |                   | Serious property      | 3              | 1.2               |
| Gay                          | 167            | 94.9              | Unjustified arrest    | 7              | 2.9               |
| Bisexual                     | 7              | 4                 | Vandalism             | 17             | 7.3               |
| Heterosexual                 | 2              | 1.2               |                       |                |                   |
|                              |                |                   |                       | <i>n</i> = 241 |                   |
| Age                          |                |                   | Reporting practices   |                |                   |
| 18 to 22                     | 14             | 6.3               | Reported              | 186            | 77.2              |
| 23 to 29                     | 43             | 19.2              | Not reported          | 55             | 22.8              |
| 30 to 44                     | 135            | 60.3              |                       |                |                   |
| 45+                          | 32             | 14.3              |                       |                |                   |
|                              | <i>n</i> = 224 |                   |                       | <i>n</i> = 241 |                   |
| Race                         |                |                   | Medical attention     |                |                   |
| African American             | 13             | 5.6               | Not received          | 186            | 77.8              |
| Latino/a                     | 12             | 5.2               | Outpatient            | 43             | 18                |
| White                        | 199            | 83.6              | Hospitalization       | 7              | 2.9               |
| Other                        | 14             | 6                 | Death                 | 3              | 1.3               |
|                              | <i>n</i> = 238 |                   |                       | <i>n</i> = 239 |                   |
| Income                       |                |                   | Site                  |                |                   |
| Less than \$18,000           | 120            | 59                | Police area           | 3              | 1.3               |
| \$18,000 to \$28,000         | 30             | 15                | Private residence     | 66             | 27.8              |
| \$28,000 or more             | 53             | 26                | Public transportation | 19             | 8                 |
|                              | <i>n</i> = 203 |                   | Street area           | 71             | 30                |
| Victim-offender relationship |                |                   | Workplace             | 14             | 5.9               |
| Acquaintance/friend          | 12             | 5.5               | Public accommodation  | 29             | 12.2              |
| Employer/coworker            | 11             | 5                 | Cruising area         | 19             | 8                 |
| Landlord/neighbor/tenant     | 44             | 20.2              | School                | 3              | 1.3               |
| Ex-lover                     | 5              | 2.3               | GLBT area             | 11             | 4.6               |
| Pickup                       | 6              | 2.6               | Other                 | 2              | < 1               |
|                              |                |                   |                       | <i>n</i> = 237 |                   |

About 84% of the sample was White, 5% were Latino/a, and nearly 6% were African American. Almost 4% fell into the “other” category, which included Asian, Native American, Pacific Islander, and unidentified groups.

Almost 45% of the sample was victimized by a stranger. In relationships that could be considered more intimate, ex-lovers were offenders in 2.3% of incidents, families in 1%, roommates in less than 1%, and pickups in 2.6%. About 5.5% of the victims had a social relationship with the offender, such as acquaintance or friend, whereas 5% were involved in a workplace relationship with the offender. Another 20.2% of the offenders were residential, that is, landlord, tenant, or neighbor. About 12.4% were victimized by law enforcement/security personnel, with 5.9% being victimized by a service provider.

Nearly 50% of the incidents were serious personal offenses, whereas 39.4% were other personal offenses. About 1% of the incidents were serious property offenses. Vandalism made up about 7.3% of the offenses, and unjustified arrest made up almost 3% of the cases. Out of the total number of incidents, 77.2% were reported to the police, which is higher than the rate found in earlier research (Berrill & Herek, 1992; Comstock, 1989; ...).

Medical attention was not received in nearly 78% of the incidents. About 18% required outpatient medical attention. About 3% required hospitalization, and slightly more than 1% resulted in death.

Most incidents occurred in street areas or private residences. More than a quarter took place in a private residence, and 30% occurred in the street. About 12% occurred in public accommodations such as restaurants. About 8% occurred on public transportation, 5.9% in the workplace, 8% in cruising areas, 4.6% in a GLBT area, 1.3% at school, and 1.3% in police precinct, jail, or car.

## FINDINGS

### Victimization Patterns

The cross-tabulation analysis suggested some trends in these self-reported victimizations (see Table [20.2]). Generally, the victimizations involved actions against people, either serious or other personal offenses, rather than property offenses. The incidents against males (55.3%) and against transgendered people (70%) were more serious in type of alleged offenses than the incidents against females (25%). More than one

**Table 20.2** Gender Identity, Age, and Race by Type of Offense

| Type of Offense    | Gender Identity |      |                |      |               |    |
|--------------------|-----------------|------|----------------|------|---------------|----|
|                    | Female          |      | Male           |      | Transgendered |    |
|                    | <i>n</i>        | %    | <i>n</i>       | %    | <i>n</i>      | %  |
| Serious personal   | 13              | 25   | 98             | 55.3 | 7             | 70 |
| Other personal     | 28              | 53.8 | 62             | 35.2 | 3             | 30 |
| Serious property   | 2               | 3.8  | 1              | <1   | 0             |    |
| Vandalism          | 9               | 5    | 9              | 5    | 0             |    |
| Unjustified arrest | 0               |      | 7              | 3.9  | 0             |    |
|                    | <i>n</i> = 52   |      | <i>n</i> = 177 |      | <i>n</i> = 10 |    |



| Type of Offense    | Victim's Age     |      |               |      |                |      |                |      |
|--------------------|------------------|------|---------------|------|----------------|------|----------------|------|
|                    | 18 to 22         |      | 23 to 29      |      | 30 to 44       |      | 45 to 64       |      |
|                    | <i>n</i>         | %    | <i>n</i>      | %    | <i>n</i>       | %    | <i>n</i>       | %    |
| Serious personal   | 7                | 50   | 19            | 44.2 | 68             | 50.4 | 21             | 65.6 |
| Other personal     | 4                | 28.6 | 20            | 46.5 | 53             | 39.8 | 8              | 25   |
| Serious property   | 0                |      | 1             | 2.3  | 2              | 2    | 0              |      |
| Vandalism          | 3                | 21.4 | 2             | 4.6  | 8              | 6    | 2              | 6.3  |
| Unjustified arrest | 0                |      | 1             | 2.3  | 3              | 2.3  | 1              | <1   |
|                    | <i>n</i> = 14    |      | <i>n</i> = 43 |      | <i>n</i> = 134 |      | <i>n</i> = 32  |      |
| Type of Offense    | Race             |      |               |      |                |      |                |      |
|                    | African American |      | Latino/a      |      | Other          |      | White          |      |
|                    | <i>n</i>         | %    | <i>n</i>      | %    | <i>n</i>       | %    | <i>n</i>       | %    |
| Serious personal   | 4                | 33.3 | 8             | 66.7 | 3              | 36   | 100            | 51   |
| Other personal     | 6                | 50   | 2             | 16.7 | 4              | 50   | 76             | 38.6 |
| Serious property   | 1                | 8    | 0             |      | 0              |      | 2              | 1    |
| Vandalism          | 0                |      | 0             |      | 0              |      | 17             | 8.6  |
| Unjustified arrest | 1                | 8.3  | 2             | 16.7 | 1              | 14   | 2              | 1    |
|                    | <i>n</i> = 12    |      | <i>n</i> = 12 |      | <i>n</i> = 8   |      | <i>n</i> = 197 |      |

half of the incidents against females involved less serious personal offenses, such as attempted assault and harassment, in contrast to males (35.2%) and to transgendered people (30%). The comparison between age groups did not yield consistent trends. Older victims between the ages of 46 and 64 were slightly more likely to experience a serious personal offense (66%) in comparison to any other age group. Younger victims (21%) were more likely to experience vandalism than any other age group.

The comparison between race groups suggests some differences. Those individuals who identified themselves as Latino/a were more likely to be victims of an alleged serious personal offense than other race/ethnic groups. A total of 67% of Latino/a victims experienced serious personal offenses in comparison to African Americans (36%), Whites (50%), and other races (33%).

In contrast to past research on criminal victimization in general, these self-reported victims of anti-gay bias crimes were not young African American males. Instead, the victims were older, male or transgendered, and Latino or White. The ethnic/racial differences noted by Comstock (1989) in a similar population continue to be present for this sample.

## Routine Activities and Incident Characteristics

Because the concept of lifestyle is difficult to measure, incident characteristics were used for this analysis. As shown in Table [20.3], some patterns were present in the analysis between gender identity and the site of the incident, the victim-offender relationship, and medical attention.

**Table 20.3** Gender Identity and Incident Characteristics

|                                    | <i>Gender Identity</i> |          |                |          |                      |          |
|------------------------------------|------------------------|----------|----------------|----------|----------------------|----------|
|                                    | <i>Female</i>          |          | <i>Male</i>    |          | <i>Transgendered</i> |          |
|                                    | <i>n</i>               | <i>%</i> | <i>n</i>       | <i>%</i> | <i>n</i>             | <i>%</i> |
| <b>Site</b>                        |                        |          |                |          |                      |          |
| Precinct/jail/car                  | 0                      |          | 3              | 2        | 0                    |          |
| Private residence                  | 19                     | 36       | 42             | 23.5     | 5                    | 50       |
| Public transportation              | 4                      | 8        | 13             | 7        | 2                    | 20       |
| Street/public area                 | 17                     | 32.7     | 53             | 29.6     | 1                    | 10       |
| Workplace                          | 3                      | 5.8      | 11             | 6        | 0                    |          |
| Public accommodations              | 5                      | 9.6      | 22             | 12       | 2                    | 20       |
| Cruising area                      | 0                      |          | 19             | 11       | 0                    |          |
| School                             | 3                      | 5.8      | 2              | 1        | 0                    |          |
| GLBT area                          | 0                      |          | 11             | 6        | 0                    |          |
| Other                              | 1                      | 2        | 3              | 2        | 0                    |          |
|                                    | <i>n</i> = 52          |          | <i>n</i> = 179 |          | <i>n</i> = 10        |          |
| <b>Relationship</b>                |                        |          |                |          |                      |          |
| Acquaintance/friend                | 3                      | 7.3      | 8              | 4.8      | 1                    | 10       |
| Employer/coworker                  | 2                      | 4.9      | 9              | 5.4      | 0                    |          |
| Landlord neighbor/tenant           | 10                     | 24.4     | 31             | 18.6     | 3                    | 30       |
| Ex-lover                           | 2                      | 4.9      | 3              | 1.8      | 0                    |          |
| Pickup                             | 1                      | 2.4      | 3              | 1.8      | 2                    | 20       |
| Relative/family                    | 1                      | 2.4      | 1              | <1       | 0                    |          |
| Roommate                           | 1                      | 2.4      | 0              |          | 0                    |          |
| Law enforcement/security personnel | 2                      | 4.9      | 24             | 14.4     | 1                    | 10       |
| Service provider                   | 0                      |          | 10             | 6        | 1                    | 10       |
| Stranger                           | 17                     | 41.5     | 78             | 46.7     | 2                    | 20       |
| Other                              | 1                      | 2.4      | 0              |          | 0                    |          |
|                                    | <i>n</i> = 40          |          | <i>n</i> = 167 |          | <i>n</i> = 10        |          |

|                   | Gender Identity |    |                |      |               |      |
|-------------------|-----------------|----|----------------|------|---------------|------|
|                   | Female          |    | Male           |      | Transgendered |      |
|                   | <i>n</i>        | %  | <i>n</i>       | %    | <i>n</i>      | %    |
| Medical attention |                 |    |                |      |               |      |
| Not received      | 47              | 90 | 134            | 75.3 | 6             | 66.7 |
| Outpatient        | 5               | 10 | 37             | 21   | 1             | 11.1 |
| Hospitalization   | 0               |    | 7              | 4    | 0             |      |
| Death             | 0               |    | 0              |      | 2             | 22.2 |
|                   | <i>n</i> = 52   |    | <i>n</i> = 178 |      | <i>n</i> = 9  |      |

Findings regarding the site of the incidents were similar to previous research (Aurand et al., 1985; Comstock, 1989; Gross et al., 1988), in that males were the only gender identity to be victimized in cruising areas and [gay, lesbian, bisexual, and transgendered] (GLBT) areas. About 50% of transgendered people reported victimizations in a private residence, compared to 36.5% of females and 23.5% of males. Both females and males were similar in reporting more victimizations in the street than did transgendered people (10%).

The relationship between the victim and offender displayed variation between gender identities. Strangers were more likely to be reported as the alleged offenders in 41.5% of the incidents with females and 46.7% with males, compared to 20% with transgendered people. Transgendered victimizations (20%) were more likely to involve a pickup than victimizations of males (1.8%) or females (2.4%).

This analysis raises questions about the combined effects of location and the victim-offender relationship. Are transgendered people more likely to be victimized in a private residence by someone they met socially there? And are strangers more likely to victimize males and females in more public areas such as the street, public transportation, or GLBT areas, as well as cruising areas for males?

Gender identity may be a factor in the seriousness of the injury. Generally, medical attention was not received for reported injuries. Females were less likely to receive medical attention than males and transgendered people. However, transgendered people had a significantly higher percentage of deaths than males or females. In particular, 22% of the incidents involving transgendered victims resulted in death compared to 2% of incidents involving lesbians and none involving gays.

## REPORTING PRACTICES TO POLICE

### Reported and Non-Reported Incidents

Initially, reported and non-reported incidents were compared to identify basic differences between the two.... Gender identity of the victim and the victim-offender relationship were similar for both reported and non-reported incidents. Some slight differences were present in medical attention and in type of offense. In non-reported incidents, medical attention was less likely to be received. Specifically, medical attention was not received in 91% of non-reported incidents, compared to 74% of the reported incidents.



## Reporting Factors

Treating reporting practices as an outcome, several variables were used as predictors: namely, gender identity, race, medical attention, and type of offense.... The findings provide some support to prior research showing that crime severity and extent of injury are strong determinants of victim reporting (Block & Block, 1980; Green, 1981; Skogan, ..., 1984). In this sample, gender identity did not appear to affect reporting practices, and this finding is similar to previous research on demographic characteristics (Block & Block, 1980; Green, 1981; Skogan, 1984). One difference in this study, however, was that race did appear to affect reporting practices. Latinos were less likely to report than other groups. About 33% of Latino/as did not report incidents, compared to 15% of African Americans, 23% of Whites, and 22% of other races.

Medical attention also appeared to be a factor in reporting. All of the incidents involving hospitalization and death were reported. Similarly, 88% of the incidents involving outpatient care were reported. This reporting, however, may reflect mandated reporting by other individuals, such as medical personnel or law enforcement.

The type of offense seems to affect reporting. About 81% of serious personal offenses were reported. Likewise, all incidents involving serious property damage were reported. Victims may be motivated to report serious property damage for insurance purposes. These findings are consistent with prior research showing a positive relationship between financial loss and reporting (Block & Block, 1980; Green, 1981; Skogan . . . , 1984).

## SUMMARY

Several victimization patterns were present and warrant further investigation. Nearly half of these anti-gay incidents were serious personal offenses, including murder, robbery, sexual assault, and assault with and without a weapon. Gender identity may have an effect on both the

seriousness of the offense and the extent of medical attention. In particular, transgendered individuals were more likely to sustain serious personal injuries, such as hospitalization and death. Race and ethnicity may also be factors in the likelihood of victimization. Specifically, Latino/as were more likely to suffer a serious personal crime than members of other racial/ethnic groups.

Differences were also found when gender identity and lifestyles were analyzed. Transgendered people were more often victimized in private residences, either by someone in their immediate residential area or by a pickup. Females also experienced victimization in private residences or in the street by someone in their neighborhood or a stranger. In contrast, males were victimized by a stranger in the street, in GLBT areas, or in cruising areas.

In this study, a larger percentage of victims reported incidents to the police, compared to previous research. Three characteristics appear to be linked to reporting practices: being Latino/a, receiving medical attention, and the type of offender. Latino/as were less likely to report their victimization to the police. When they did have contact with the police, Latino/as were more likely to be arrested. Incidents involving medical attention were more likely to be reported, which may be a function of mandatory reporting requirements for medical personnel. In addition, insurance may play a role in reporting to the police, because 100% of serious property crimes were reported.

## DISCUSSION

This descriptive analysis, although preliminary, provides insight into bias crimes against lesbians, gays, and transgendered individuals and those perceived to be of same-sex orientation. There are, however, some methodological limitations associated with the use of victim reports. For example, these incident reports were collected through a hotline, and there is a high turnover rate for intake workers. This could affect

accuracy and consistency in completion of intake forms. In addition, there was no way to confirm whether all of these events actually occurred by cross-referencing police reports. Moreover, some victims did not wish to reveal characteristics about themselves or their assailants.

Despite these limitations, this descriptive study provides a basis for understanding various dimensions of anti-gay hate crimes. Moreover, there were some notable similarities with previous research. Specifically, offenders were more likely to be strangers, acquaintances, friends, or pickups. Likewise, incident reporting was affected by the extent of injury and financial loss. Differences from past research were also found. In particular, victims were as likely to report an incident involving a landlord, friend, and acquaintance as an incident involving a stranger.

The present analysis also found additional characteristics that appear to affect victimization. Latinos and transgendered people were more likely to be victims of serious personal offenses. Our within-group analysis found some support for routine activities theory. For example, females were more likely to be victimized in or around a private residence by a stranger, landlord, tenant, or friend. Males were more likely to be victimized in public by a stranger, followed by a landlord or tenant. Like females, transgendered people were most likely to be victimized in a private residence, but the incident was more likely to involve an acquaintance, friend, or pickup. In terms of offenses, males and transgendered people were more likely to be victims of serious personal offenses, whereas females were more likely to be victims of less serious personal offenses.

Gender differences in the amount of serious personal victimization may result from women in general being more cautious in their routine activities. Prior research has shown that lesbians report higher levels of fear of anti-gay violence (Gross et al., 1988). As a result, lesbians may modify their behavior to protect themselves from victimization. For instance, lesbians may avoid holding hands or hugging more openly in public, whereas gays may be more demonstrative.

## CONCLUSION

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This non-experimental descriptive study provides results that partly support prior research on victimization and reporting practices and also presents a broader perspective by examining hate crimes committed against gays, lesbians, and transgendered individuals. Gays and transgendered people were more likely than lesbians to be victims of serious personal offenses. Reporting these incidents to police varied by race, the victim-offender relationship, the type of offense, and the injury.

Although these findings should be treated as preliminary, they have implications. For example, Latinos were the least likely to report a hate crime to the police. Latinos may be less inclined to report because of cultural barriers. Victim advocates need to become familiar with these cultural barriers to encourage more Latinos to report hate crimes to the police. In addition, future research should expand on the present study by examining the routine activities of lesbians, gays, and transgendered people to determine if the risk of victimization is related to lifestyle.

## OFFENDERS' FAMILY MEMBERS' RESPONSES TO CAPITAL CRIMES

### *The Need for Restorative Justice Initiatives\**

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**D**iscussions about the death penalty usually focus on either retributive justice or deterrence, both of which have long theoretical histories in the areas of crime and punishment. Restorative justice is rarely mentioned in the context of death penalty discussions, because in many ways the death penalty is antithetical to restorative justice, defying many of its underlying assumptions (Radelet & Borg, 2000). In death penalty cases, the victim is deceased and the state is seeking to execute the offender, both of whom normally form the core of the restorative

justice community. In addition, family members of offenders and victims (although often allowed to testify in court) are placed in a setting where they become opponents in an adversarial process. This discourages recognition of harm to all involved and healing among victims' family members, offenders' family members, and the community.

This study examines the much-neglected topic of offenders' families in capital cases, with the expectation that as Justice Thurgood Marshall stated, "Death is different." Family members

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\*This article appeared in *Homicide Studies* (May 2003), Vol. 7, No. 2, pp. 154–181. We have deleted sections on retributive and deterrence models as well as many of the qualitative comments from the results section.



of offenders in capital cases have to deal with the possibility that their loved one may be sentenced to death and die at the hands of the state. Impending death is arguably different from life in prison. This possibility adds salience to the trials and terms of prison visitations that are not faced in noncapital crimes. Throughout the article, we highlight many instances in which family members deal with this burden and mention the added stress and feeling of responsibility because of the possibility of the death penalty. The purpose of the article is to describe how families cope with a loved one convicted of capital murder and how communities respond to these families. This article begins with a brief overview of both retributive justice and deterrence as they apply to the death penalty and then shifts toward the need for restorative justice. The theoretical premises of this argument are explored using interviews with 19 family members of individuals tried for capital crimes.

The restorative justice movement and the victims' rights movement focus attention on the extreme devastation that is common to victims' family members (civictims) because of homicide. Offenders' family members also experience trauma and hardship following a homicide but have not been the focus of these movements. Victims' and offenders' family members experience intense trauma in capital cases (Freeman, Shaffer, & Smith, 1996), and these families receive little social service outreach or resources from formal organizations (Moriarty, Jerin, & Pelfry, 1998; Spungen, 1998).

Interaction with criminal justice personnel and processes can be quite distressing to civictims. Negative treatment of victims and civictims has been coined secondary victimization (Williams, 1984) and is defined as "a prolonged and compounded consequence of certain crimes; it results from negative, judgmental attitudes (and behaviors) directed toward the victim, [which results] in a lack of support, perhaps even condemnation and/or alienation of the victim" (p. 67). Secondary victimization initially described the treatment of rape victims in court cases (Madigan & Gamble, 1991), but recently it has been expanded to

include responses from the criminal justice system and media to families of homicide victims (Mawby & Walklate, 1995; Rock, 1998; Spungen, 1998). Police and court personnel commonly keep personal property of the victims as evidence, withhold information about case status, and suggest that the victim contributed to his or her own death (Pasternack, 1995; Tomaz & McGillis, 1997). As Rock (1998) explained, a family's alienation during the criminal justice process "constitutes one of the most potent symbolic assaults suffered by families in the wake of murder" (p. 76). Homicide civictims describe their contact with the criminal justice system as frustrating and protracted (Redmond, 1996).

Offenders' families also lack social services and are rarely examined in research (King & Norgard, 1999; Smykla, 1987; Vandiver, 1989). The few studies that include offenders' family members suggest that trauma experienced by these individuals stems from three sources. First, the effect of the offense and trial [is as follows]: Families often are ostracized, experience psychiatric and physical symptomology, hold profound guilt, and lack social service supports (Beck, Blackwell, Leonard, & Mears, 2003; King & Norgard, 1999; Smykla, 1987). Second, most offenders in capital cases have a history of early childhood trauma, including physical and sexual abuse and maltreatment, or chronic neglect (Andrews, 1991; Haney, 1995), and therefore their family members may be similarly suffering from this environment. This often comes up during the sentencing phase of the trial, where family violence and abuse is discussed as a mitigating factor for a death sentence (Haney, 1995; Vandiver, 1998). Finally, families are traumatized by the knowledge of an impending execution and the execution itself. The offender's family is in a constant state of anxiety and suspense, and their frustration is intensified by their knowledge of the racial and economic bias evidenced in capital sentencing (Radelet & Vandiver, 1983; Vandiver, 1998).

Despite a dramatic increase in restorative justice research and practice in the past 20 years, few restorative justice programs exist that attempt

to apply this model to capital cases (Radelet & Vandiver, 1983; Smykla, 1987; Umbreit & Vos, 2000; Vandiver, 1989, 1998). Only four studies have explored restorative justice in the context of extremely violent offenses (Flaten, 1996; Roberts, 1995; Umbreit, 1989), and only one focused on capital cases (Umbreit & Vos, 2000).

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## RESTORATIVE JUSTICE MODEL

Restorative justice is based on the premise that crime (whether it be property or violent) creates a rift in the community in which it occurs. The most directly affected individuals are victims, offenders, and their respective families, but the social fabric of a community also suffers when a crime occurs (Bazemore & Pranis, 1997; Bazemore & Umbreit, 1995; Kurki, 1999; Northey, 1994; Schiff, 1998; Zehr, 1985). Individuals who live in communities that suffer from a crime problem (or where a particularly heinous crime has occurred) often lose trust in each other and their public officials and suffer from heightened fear and anxiety (Liska & Baccaglini, 1990; Perkins & Taylor, 1996; Williams & Dickinson, 1993). Lack of trust and fear of crime may, in turn, lead to a relaxing of social ties and create social disorganization (Kelling & Coles, 1996).

Unlike the retributive or deterrence models, the restorative justice model seeks to "engage key stakeholders" in the criminal justice process through the process of "conflict transformation" (Zehr, 1985). This process (a) provides for the needs of victims and their families, (b) addresses safety and quality-of-life issues in communities damaged by offenses, (c) offers punishment/treatment for the offender while maintaining community safety, and (d) provides mediation and reconciliation for those involved (Bazemore & Pranis, 1997; Bazemore & Umbreit, 1995; Kurki, 1999; Northey, 1994; Schiff, 1998; Zehr, 1985).

The restorative justice approach acknowledges that involvement with the criminal justice system often creates additional disorder in the

lives of victims' and offenders' families (as well as community members) and can exacerbate the crime problem by not addressing the roots of the crime problem (Clear & Rose, 1998). Restorative justice seeks to involve all stakeholders in conflict resolution (Umbreit, 1998) and build social capital that leads to crime prevention within families and communities.

Restorative justice encompasses a range of practices. Along this continuum, restorative justice can completely replace the traditional judicial procedure, allow a case to return to court if the process breaks down or the involved parties cannot reach an agreement, or be used to supplement the traditional justice system (Braithwaite, 2002; Umbreit & Vos, 2000). Although restorative justice is a developing academic theory of how to deal with the crime problem, it is also a social movement with roots in different traditions and practices of several different cultures (Hadley, 2001; Van Ness & Strong, 2002). Therefore, there is no one restorative justice model that encompasses all aspects of this movement but rather several related practices that are based on basic restorative justice principles. As a result, our research (and much of the research in the field) is grounded theory work, where researchers attempt to grow the theory and expand its utility by developing the practice of restorative justice and applying the theory to new populations.

One of the goals of restorative justice is to bring harmed parties together in the presence of the offender. This encounter "is greatly restricted in conventional criminal justice proceedings by rules of evidence, practical considerations, and the dominance of professional attorneys who speak on behalf of their clients" (Launay & Murray, 1989; Van Ness & Strong, 2002, p. 56). Nils Christie (1977) argued that in our present criminal justice system, the state has stolen the role of victim from the wronged party. This theft denies the victim (and related covictims) the process of working through the harm. Telling one's story and expressing the pain caused by the crime and having victimization validated often serves to foster the healing process for crime victims. Tutu's (1999) description of the truth and reconciliation



process in South Africa, which used the restorative justice model, exemplifies this point:

Many who came to the commission attested afterward to the fact that they had found relief, and experienced healing, just through the process of telling their story. The acceptance, the affirmation, the acknowledgement that they had indeed suffered was cathartic for them. (p. 165)

In most restorative justice models, regardless of the form they take, parties to the original criminal event verbally share their respective roles in the crime and are allowed to take back ownership of the original dispute. Victim-offender mediation models usually focus on the victim and offender. Family group counseling (FGC) opens up this process to include family members of victims, offenders, and community stakeholders. Healing circles are modeled after support groups and often bring together individuals harmed by similar crimes. Victim impact panels allow victims to tell their stories to groups of offenders and community members (Bazemore & Umbreit, 1997; Braithwaite, 2002; Umbreit, 1998; Van Ness & Strong, 2002).

Regardless of the form that different restorative justice models take, victims can express their pain, fear, and the extent to which the criminal incident has affected their lives. Offenders have the opportunity to tell their side of the story and express sorrow and contrition. Throughout these encounters, there is an emphasis on holding the offender accountable, reconciling affected parties, and closure (Braithwaite, 2002; Flaten, 1996; Umbreit & Vos, 2000). In addition, all parties are given the opportunity to ask questions and to clarify specifics of the criminal event and the backgrounds of involved parties. These encounters also give victims, offenders, and other stakeholders a chance to ask for forgiveness or grant forgiveness if they feel this is appropriate.

Although several criminological theories (e.g., social disorganization theory, social control theory) stress the importance of community cohesiveness and organization in preventing crime, few studies consider the effect that criminal cases and their outcomes have on the communities in

which they occur (a notable exception is Clear and Rose's [1998] study of the negative effect of incarceration on social capital). If strong communities with high levels of social capital are important ingredients in crime prevention (Bursik, 1988; Coleman, 1988; Hagan, 1994), then corrections policy should consider ways to empower community members by recognizing their critical role in community restoration in the wake of criminal events. Restorative justice—particularly through practices such as family group conferences, healing circles, and victim impact panels—attempts to build social capital among all members of the group including victims, offenders, families, and the larger community (Van Ness & Strong, 2002).

## PAST RESEARCH

Restorative justice is the focus of much current research and correctional policy making, but the majority of these programs do not focus on violent crime. Many researchers, politicians, and representatives of restorative justice programs argued that the utility of restorative justice and mediation is limited to property crimes and less serious violent crimes (Umbreit & Vos, 2000; Van Ness & Strong, 2002). Violent offenders, particularly those committing homicide, are considered beyond the reach of the healing process involved in restorative justice.

The Truth and Reconciliation Committee in South Africa demonstrated the value of applying restorative justice to violent crimes, even offenses that were heinous in nature, for victims, communities, and offenders (Tutu, 1999). Although it is not the point of this article to argue that amnesty should be granted to violent offenders who confess in the United States, we believe that important lessons can be learned from South Africa. Indeed, the few studies conducted in the United States concerning extreme violence and restorative justice have found results very similar to those noted in South Africa (Flaten, 1996; Roberts, 1995; Umbreit, 1989, 1998; Umbreit & Vos, 2000).

Umbreit (1989) explored the applicability of the restorative justice model to crimes of



violence in a series of five case studies involving extremely violent criminals and their victims. The Victim/Offender Reconciliation Program (VORP) model was used to mediate the encounter between the offender and the victim. A professional mediator performed an extensive needs assessment and had private meetings with offenders and victims before the victim-offender encounter. Reactions of offenders and victims varied; however, none of the participants regretted participating in the process. Some of the positive outcomes mentioned by respondents included the opportunity to forgive, a lessening of the intensity of anger felt as a result of the crime, the ability to apologize, moving toward healing and peace, and a sense of involvement among community members.

Flaten's (1996) work describes traditional victim-offender mediation between seven sets of victim(s) and offender(s) of serious crimes. All seven cases involved juveniles and included the crimes of murder, attempted murder, and burglary. Like Umbreit's 1989 study, all participants went through extensive preparation before the mediation sessions. The overwhelming majority of victims and offenders reported satisfaction with the mediation. Specific benefits included aid in the rehabilitation process, a chance to tell one's story and express emotions, a chance to have questions about the crime answered, the personalization of the victim and offender, apology/forgiveness, fear and anger reduction, and healing. All the participants agreed that mediation was appropriate for serious crimes. Roberts (1995), in a study of 22 violent offenders involved in a Victim Offender Mediation Project in Canada, found similar results. Victims and offenders expressed a high level of satisfaction with the encounter, and many victims left feeling they had more control over their lives.

Umbreit and Vos (2000) conducted the only study to date to assess the use of restorative justice on capital cases. Using in-depth case study analysis, the authors looked at the experiences of five individuals (three covictims and two offenders) who participated in victim-offender mediation. Offenders and covictims spent extensive time with a professional mediator before the

encounters took place. Despite the fact that all these cases involved a murder and a death sentence, offenders and covictims reported satisfaction with the process. The experience served to humanize the offenders and covictims and gave both sides a chance to tell their stories and offer accompanying apology/forgiveness if desired. Finally, the encounter was described as healing by all who were involved.

The four studies that have attempted to apply restorative justice practices to serious crimes—particularly violent crimes—have all used mediation models rather than conferencing, healing circles, or impact panels, all of which attempt to incorporate family members and the larger community into the restorative justice process. Given the preliminary success of these studies, we feel it is important to explore additional applications of restorative justice in response to violent crime. Our article uses data to assess the need for restorative justice practices among family members of homicide offenders. The remainder of the article focuses on interviews with these family members. We use this data to

1. determine whether family members of offenders in capital cases often suffer because of the homicide and arrest (which is essential to establish that these individuals are appropriate members of the restorative justice community) and, if so, whether this suffering is aggravated by the judicial process;
2. illuminate feelings of offenders' family members toward victims' family members, and toward the community in which they reside;
3. identify any need for restorative justice in these cases; and
4. provide examples of families who have attempted to practice restorative justice on their own.

## METHOD

Data were collected from 19 family members of men convicted of capital homicide. Individuals were recruited through contacts with 16 defense attorneys in three Southeastern states. The two criteria for participation in the study were that

the family member had maintained a relationship with the offender throughout the trial and its aftermath, and that the victim was not a member of the offender's immediate family. Of the original 21 individuals, 90% (19) contacted agreed to participate in this study. Each participant was paid \$50.00 for his or her time. Fourteen participants were the mother or father of the offender, 1 was an aunt, 1 a grandfather, and 3 were siblings. Fourteen of the participants indicated that they were the primary source of support to the convicted, and of these, 13 were parents and 1 was a sibling. Twelve respondents were White, 6 African American, and 1 Latino.

At the time of the interview, the family members were involved in various stages of capital proceedings. The length of time from the arrest to the interview varied widely among the sample. The longest time between arrest and interview was 19 years and the shortest was 2 years. Seventeen of the individuals were represented at the trial by a public defender, and in one of those cases, a private attorney was also retained; private attorneys represented 2 individuals.

Thirteen of the offenders related to individuals in our sample received death sentences—3 pleaded guilty, thereby avoiding a possible death sentence, and 3 received life without parole because of their trial. Subsequently, 1 of the death sentences was reversed on appeal, and the offender is now serving life without the possibility of parole. Of the remaining 12 men who received a death sentence, 3 were executed. The remaining 9 on death row are in various stages of appeals.

The families in this study may be different from a general sample of families of individuals convicted of capital crimes, because of our reliance on attorney recommendations of family members involved in the offender's case. It is possible that families who do not participate in the offender's trial are significantly different from those who do. Specifically, family members who are not participating in the trial are less likely to be emotionally supportive of the family member. These family members also may not feel the same sense of responsibility for the murder and its aftermath and, therefore, may not be

looking for many of the things offered by restorative justice. Furthermore, individuals who did not get along with the attorneys in their family member's case are not likely to show up in this sample. Therefore, we expect a pro-defense attorney bias in our results.

A semistructured interview protocol was used in conducting interviews with family members. These interviews were not drawn from restorative justice sessions; rather, these interviews were conducted solely for the purpose of data collection. Participants were queried on their interactions with the criminal justice system and their attorneys; their relationships with family, loved ones, and their community; and changes within their lives during the capital proceedings. The shortest interview was 70 minutes and the longest was 3.5 hours. The average length of interview was approximately 2 hours. The interviews were taped and transcribed. The transcriptions were coded and categorized using a variant of Strauss and Corbin's (1990) grounded theory. The 19 interviews were analyzed using a qualitative coding scheme that emphasized themes related to restorative justice. We systematically indexed the interviews (Berg, 1989; Glassner & Berg, 1980) using the following themes: trauma or damage caused by the murder or by the subsequent criminal justice processing of the case, feelings toward and interactions with victims' family members, relationships with the community, and issues relating to restorative justice processes. Interrater reliability yielded a 94% agreement on major themes. Responses were annotated and then reanalyzed to sort the responses based on subthemes within each thematic area that had been identified during the initial coding process.

## FINDINGS

### Offender Family Member Trauma

To establish that offenders' family members are appropriate individuals to include in the restorative justice process, it is necessary to show that they have suffered harm from the

original crime and the ensuing criminal justice process. Throughout our interviews with respondents, we asked several questions about their health and psychological well-being since the murder. From these responses, we found numerous examples of stress, trauma, and symptoms consistent with posttraumatic stress disorder. Although we did not administer the Davidson Trauma Scale, we used it as a reference when coding our qualitative interviews for trauma symptomology. Generally, Davidson (1996) identified three categories of symptoms:

1. Intrusion (characterized by repeated thoughts or dreams about the event[s])
2. Avoidance/numbing (characterized by loss of recall, inability to visit certain people or places associated with the event(s), and withdrawal)
3. Hyperarousal (characterized by inability to sleep, irritability, anger outbursts and difficulty concentrating)

Indications of trauma were frequent in our sample, with all 19 cases showing some of the symptoms and over half of the sample demonstrating evidence of at least two of the three subcategories of trauma.

All respondents described the experience as extremely painful to them and their families. Coping responses to the homicide, the trial, and the sentence varied widely, with some respondents showing tremendous resiliency and other respondents expressing an inability to cope and continuous suffering.

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## Community Responses

Restorative justice recognizes the community as an important stakeholder in criminal events. Communities, through their treatment of families of victims and offenders, can either help restore peace after an event or allow a vicious cycle of violence, feelings of revenge, and division to continue. It was evident from our sample that communities frequently played both of these

roles. A supportive community environment often mitigated the trauma of offenders' family members. Many families specifically emphasized the importance of their religious community and their employers in helping them through this process.

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Individuals confronted with hostility in their communities were more likely to suffer from extreme, prolonged trauma. This hostility often led to fear, anger, shame, and isolation.

My sisters ended up having to leave their church. . . . They were always like pillars of the church. Always giving time and money and everything. In their moment of pain they didn't feel like the church reached out and comforted them. Every time a new trial come. Somebody got a message. Some unusual thing would happen.

In one case, the community response was so negative that two younger siblings had to drop out of high school because their lives were being threatened and school administrators said they could not ensure their safety. In another case, someone defecated on the doorstep of an offender's mother.

Media is another aspect of the community. Media coverage of the crime was frequently framed in terms of good against evil, where the offenders and their families were assumed guilty before the trial began. The media often described the offenders as animals or monsters, symbolically severing the shared human connection between the offender and his or her community. Many family members felt that the media was at the root of the poor treatment they received in the community.

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Media coverage was a continuous reminder of the trauma that both families suffered, and it prevented movement toward closure. In addition, family members rarely felt that their side of the story was told. Instead, they saw the media as sensationalizing the event and twisting the truth to the detriment of victims' and offenders' families.



*Restorative justice.* Throughout our interviews with family members, we noted many instances in which families were trying to do restorative justice on their own—without the help of the legal system. These efforts were oftentimes successful at bringing family members closer to healing and to feeling that they were valued members of their community. As Tutu (1999) stated, “Dealing with the real situation helps to bring real healing” (p. 271). These efforts usually involved finding someone, or a group of people, who were willing to listen to their stories and work with them to progress through the victimization experience to become survivors.

The other thing that helped, and I found this to be very surprising, is talking about it. Not to the point where it becomes an obsession. Another thing I found out too, that people like his friends, that it got worse because they were afraid to say anything to me because they didn't know what to say and what I wanted them to say is what they felt.

Something else that has helped me an awful lot and that's the togetherness. That there is the understanding that you have whenever you attend these conferences [describing a conference for offenders' family members].

Unfortunately, many of these families found that the traditional system of justice impeded their efforts at restorative justice.

Seek someone to understand what you're saying. That would only be someone that's been through it. . . . There is nothing that can make them feel better unless we had a more just system. That would be the only thing: if we had a fair system. They don't work with the family, the criminal justice system doesn't.

Other family members desired restoration but needed help in their journeys. For some, this meant silent coping, others sought out new communities that were willing to help them work through their pain. These new communities were forged through working with counselors, talking with individuals who corresponded with death row inmates, or, in one case, several mothers of death row inmates united to form their own support group.

I would love to be able to talk to her [victim's mother]. That's kind of another thing that doesn't happen a lot, is the interaction between two families. And I think that there should be some way to allow that to happen.

All I can say is that it would be great if there was some type of support system for families because you don't know what you're going through.

I've learned that you can go all the way back down and start all over again. You survive, but you got to make up your mind to do it.

By reaching out, these families are starting to find peace and are better able to support their loved ones in prison and through the death penalty itself, should it come. More significant, most of the respondents agreed to the interview because of a desire to help other families, whether they are victims' or offenders' families.

## CONCLUSION

This qualitative analysis of interviews with 19 family members of individuals convicted of a capital crime clearly evidenced many restorative justice themes and calls for the inclusion of offenders' family members in the restorative justice healing circle. First, family members of offenders experience intense suffering, which is in many ways exacerbated by the criminal justice system and by their treatment within their communities (particularly by the media). These families are in need of healing. To that end, many desired to reach out and connect with victims' family members, their own communities, and to form new communities based on the shared experience of a homicide and a trial. Many family members needed to share their story with others as a part of the healing process. One father described the unresolved feelings of his wife concerning her recently executed son:

We don't have a marker on the grave yet. She just can't put a marker there. But I think if we had that closure.

Restorative justice offers many benefits over solely relying on traditional services, such as

counseling or pastoral care. The respondents in our sample experience murder from both sides. First, they often feel connected to (and in many cases partly responsible for) the original murder, and later they become victims as the state takes the lives of their loved one. The use of healing circles brings offenders' family members together to share their experiences, and family group counseling brings together victims' and offenders' family members, as well as members of the affected community. These opportunities to hear the stories of family and community members from their own perspectives in a safe environment hold tremendous potential for offenders as well as victims' family members. Our preliminary assessment of the findings from this study indicates that only family members who have accepted their family member as guilty are ready for this type of intervention.

The majority of the individuals in our sample believed that their family member had committed a serious crime and deserved to be punished, although all felt the death penalty was not an appropriate punishment. A key element of restorative justice is accountability (Braithwaite, 2002; Umbreit, 1998). These families recognized this without prompting (on the researchers' part) and routinely expressed a desire to relate this, along with a deep sense of sympathy, to the victims' families. Reparation is often coupled with accountability in restorative justice solutions (Braithwaite, 2002; Umbreit, 1998). This issue poses a couple of problems that are unique to murder cases. First, the victim is deceased. Second, many family members of victims are offended by the mention of reparation for murder (Friedman-Barone, 2002). Their loved one is gone, and any repayment may be seen as "blood money." Finally, reparations from an offender facing the death penalty are difficult to obtain because of limited financial resources of most individuals on death row. These problems do not preclude the possibility of symbolic reparation in the form of words, memorials, or community building.

Offenders' family members often feel isolated from their communities because of the murder, the trial, and a sentence of death. Restorative

justice is the only approach that focuses on healing offenders and their family members, victims and their family members, and the community. Family group counseling could potentially bring all these stakeholders together to build stronger communities. This is particularly salient in cases where communities are divided on racial or religious lines following a murder. Although the results indicate a need to continue to explore restorative justice as a means to heal offenders' families, it is important to proceed deliberately in a manner that keeps the needs of victims and community members central to the process. We recognize that these interviews only represent one group in the restorative justice process. To reach true restoration, we have to explore the needs of the victims' families, community members, and offenders. Future research should be directed toward assessing the needs of victims' family members in capital cases, and developing individual healing circles for offenders' and victims' family members separately that could possibly set the stage for family group counseling between offenders' and victims' families in the near future. In addition, during the course of this study we noticed a couple of patterns: Namely, women and men often experience trauma somewhat differently, some families readily sought out the victims' families whereas others did not, and communities often responded differently to offenders' family members, which affected the family members' resiliency in dealing with the capital case. More work is needed to validate these findings and to begin to explain these differences.

Looking at capital crimes through a restorative justice lens allows us to see that the decision between the death sentence and a life sentence is larger than the offender. Much like the death of the original victim, choosing capital punishment means a death in a larger community, which can delay healing and inhibit prevention efforts designed to end violence. Restorative justice asks that all losses be recognized and dealt with in a responsible manner so that humanity is elevated rather than devalued in the process of doing justice.

## UNIT 6

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# CORRECTIONAL PSYCHOLOGY



## INTRODUCTION AND COMMENTARY

**C**orrectional psychology represents a broad landscape of opportunities for researchers and practitioners who operate in both institutional and community settings. Prisons and jails are in need of direct services to inmates, evaluation of programs, assessment for making classification decisions, and training of staff, among many things. In the community, psychologists and other mental health professionals provide a very wide range of services to persons on probation and parole. Additionally, there is a multitude of opportunities in the juvenile equivalents of these adult settings.

In the first reading in this section, Jennifer Boothby and Carl Clements report on a nationwide survey of correctional psychologists working in U.S. state and federal prisons, where the estimated psychologist to inmate ratio is 1:750. The article provides us with a glimpse into their work, such as the types of assessments they conduct and the instruments and treatments they favor. The authors also asked their respondents to tell how their workload was divided and how they would like their time to be allotted. Respondents reported that nearly 30% of their time was spent on administrative tasks, and most wanted less time there and more time for direct treatment of prisoners.

In their article on rehabilitation and reintegration, J. Stephen Wormith and his colleagues review the empirical evidence on effective treatment programs, focusing on programs for substance abusers and sex offenders. The effectiveness of

the former is somewhat better established; particularly promising are prison-based therapeutic communities with follow-up in the community once offenders are released. Cognitive behavioral programs for sex offenders also have promise, as Wormith and his colleagues indicate. The authors also mention the current interest in positive psychology. They note, however, that even if a treatment program has been shown to be effective, problems surrounding program delivery may occur. For example, client motivation and client dropout are crucial issues to be considered. Recognizing that clinicians in corrections often do not have sufficient time to do research and researchers are not necessarily clinicians, the authors call for more collaboration between these two groups. The Wormith et al. article provides an excellent overview of the current landscape of rehabilitation and reintegration as well as recommendations for moving the field of correctional psychology ahead.

Next, Philip Magaletta and his colleagues contribute an article relating to the academic preparation and training of correctional psychologists. Based on a survey of 309 correctional psychologists working in the Federal Bureau of Prisons, Magaletta et al. identify nine core bodies of knowledge that form the heart of their work. The psychologists they surveyed said knowledge about psychopathology was of greatest importance on a daily basis. Furthermore, they said graduate school prepared them for clinical knowledge, but that prison-based knowledge

(e.g., safety issues, confrontation avoidance, managing the mentally ill in segregation) was learned on the job. Interestingly, and in keeping with a narrow definition of forensic psychology, these psychologists did not consider themselves forensic psychologists, but rather psychologists engaged in clinical practice in corrections. Magaletta et al. end by noting that psychologists involved in correctional work must become directly involved in developing and disseminating knowledge specifically relevant to this work.

The past two decades have seen great increases in the number of mentally disordered individuals in jails and prisons; during the same period, scholars have paid increasing attention to the many issues facing women offenders. These two factors merge in the article by Elaine Lord, who served 20 years as the superintendent of a woman's prison. She sketches in vivid detail the behind-bars lives of female offenders with mental health problems and honestly discusses her frustrations as an administrator with limited resources to help them. The author offers valuable insights and perceptive solutions for dealing with this pressing problem but questions society's will to make needed changes.

The great majority of individuals under correctional supervision are not in jails, prisons, or juvenile treatment centers but rather are under community supervision. The last article in this section focuses on community corrections, specifically as it relates to juveniles. Juvenile corrections on the whole is a rapidly developing area for theory, research, and treatment.

One of the most attention-getting community treatment programs for serious juvenile offenders is multisystemic therapy (MST). This approach

provides intensive treatment services to juveniles and their family, with one goal being to preserve the family unit. Willem Martens, however, suggests a number of modifications to MST in the case of some juveniles. For example, he suggests that additional professionals (such as a pediatrician and a neurologist) should be added to the MST team. He also advocates treatment of some youths away from the influence of their families. If all of Martens' recommendations were to be implemented, MST as it was originally conceived would hardly be recognizable. However, integration of some of his suggestions may be warranted. Although multisystemic treatment has received very favorable research reports, there are chinks in its armor, as Wormith and his colleagues remarked in their article in this section.

The articles in this section support the work of correctional psychologists, but they should also prompt questions about the policies of the criminal justice system in which they operate. Psychologists working in correctional settings are often frustrated by such practices as placement of inmates in solitary confinement for long periods or restrictions on visitation with families—considered necessary for safety reasons by prison officials. The plight of the mentally disordered is particularly troubling, in light of their rates of self-injury and assault on other inmates and staff. However, many psychologists find great satisfaction working in correctional facilities or consulting with a variety of correctional agencies. Although the challenges in these settings are often immense, there are numerous opportunities to contribute to significant change in practices and in the lives of individuals.

## A NATIONAL SURVEY OF CORRECTIONAL PSYCHOLOGISTS\*

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CARL B. CLEMENTS

Psychologists have long had distinct roles in the nation's correctional institutions. Their functions have been described as a blend of clinical and community psychology (Milan & Long, 1980). Assessment, treatment, training, and consultation functions take place in an environmental context that, itself, often calls for conflict resolution, program design and evaluation, and attention to stressful conditions. The number of persons incarcerated in the United States grows daily. . . . Also observed has been a substantial increase in the number and percentage of mentally disordered offenders in prison (Bureau of Justice Statistics, 1999c). Both traditional and emerging roles for psychologists are evident in this "growth industry." Though a number of articles have suggested functional models and specific areas of expertise in the application of psychology skills to prisons and offenders (Clements, 1987, 2000; Milan, Chin, & Nguyen, 1999),

a comprehensive survey of actual contemporary practice has been notably absent.

Information with regard to the roles and duties of correctional psychologists has not been examined fully in nearly two decades (Otero, McNally, & Powitzky, 1981). As noted, a number of changes have occurred at the state and federal levels in corrections during the past 20 years. The prison population is booming, sentencing policies have become more severe, and public attitude seems to favor punishment over treatment. How the roles and responsibilities of correctional psychologists may have changed in the context of these trends is not known. In addition to the Otero et al. (1981) report, two other studies are in limited circulation (Bartol, Griffin, & Clark, 1993, cited in Bartol, 1999; Gallagher, Somwaru, & Ben-Porath, 1999). These surveys involved, respectively, the distribution of duties of 120 correctional psychologists and the use of psychological tests in 41 state jurisdictions. In

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the current study, we sought both a larger sample size and greater breadth of inquiry.

## METHOD

### Procedure

Potential survey participants (doctoral psychologists and master's-trained psychology staff) were identified through contacting state corrections commissioners or directors of prison mental health services and comparable administrative officials for the Federal Bureau of Prisons. These individuals were asked to provide either a list of all psychologists working within their system or to designate a contact person who would be responsible for distributing the surveys. Ten state systems (21%) supplied lists of their doctoral and master's level psychology staff, whereas the remaining systems chose to distribute the surveys internally. The different methods of survey distribution did not appear to influence response rates. Based on address lists and numbers of surveys requested by each system, we estimated a potential pool of some 2,000 professionals. Of note, we did not survey psychologists who work in local jails or in state juvenile justice institutions, nor other mental health professionals (e.g., social workers) employed by prison systems.

### Materials

A four-page questionnaire was developed specifically for this study. Survey questions addressed multiple facets of the correctional psychologist's experience. Major topics included (a) demographics, (b) job duties and responsibilities, (c) the provision of mental health services, (d) assessment practices, and (e) training recommendations. Psychologists were encouraged to include their name and address on a detachable sheet to indicate their interest in receiving a brief summary of the survey results. If not already detached, these sheets were separated from the survey on receipt to ensure anonymity of the respondents.

## RESULTS

### Participant Characteristics

Survey respondents included 830 psychologists (estimated response rate = 42%) working in 48 state prison systems (78% of respondents) and the Federal Bureau of Prisons (22%). Generally, the response rate was higher within the federal system and among doctoral-level personnel. Variation in response rate across the 48 state systems was not remarkable. Most respondents (59%) held either a Ph.D. or Psy.D., whereas 37% were master's level graduates. The mean age of respondents was 45 years, and an overwhelming majority (92%) identified themselves as Caucasian. Approximately 62% of respondents were male, and 38% were female.

Although most psychologists working in corrections report having degrees in clinical psychology, this specialization is not uniformly distributed across settings. Approximately 67% of psychologists employed by the Federal Bureau of Prisons have degrees in clinical psychology, and all have doctorates. State correctional systems employ psychologists with master's and doctoral degrees at approximately the same rate, and 49% of these professionals report training in clinical psychology. Table [22.1] provides additional information about training emphasis.

**Table 22.1** Percentage of Correctional Psychologists Reporting Training Emphasis

| <i>Training Emphasis</i>      | <i>Federal<br/>(n = 172)</i> | <i>State<br/>(n = 614)</i> |
|-------------------------------|------------------------------|----------------------------|
| Clinical psychology           | 67                           | 49                         |
| Counseling psychology         | 22                           | 27                         |
| Educational/school psychology | 3                            | 5                          |
| General psychology            | 3                            | 6                          |
| Other                         | 5                            | 11                         |

In recent years, an increasing number of psychologists are employed on a contractual basis by correctional facilities. Many professionals apparently prefer this type of employment as it often enables them to work fewer hours in the prison system and to continue other work activities, such as private practice. Of the survey respondents, 12% indicated that their work was contractual.

Some psychologists responding to this survey were relative novices in corrections; others were long-time career professionals. The average length of employment in corrections was 8 years, but experience ranged from a few months to 38 years. Salary was obviously related to the number of years employed, but psychologists employed for similar lengths of time by federal and state systems earned significantly different salaries. Doctoral-level psychologists employed by the federal system earned an annual income of \$61,800 on average, whereas doctoral-level psychologists employed by state systems averaged approximately \$53,400. In comparison, master's-level staff averaged about \$40,100 in annual income.

Reflecting the gender ratio of America's prisons (93% male), most respondents (82%) reported working only with male offenders. Some (10%) work with both male and female inmates, and only 8% work solely with female offenders. Correctional psychologists appear to work with inmates representing a full range (and usually a combination) of custody levels. These include maximum custody (44%), close custody (23%), medium custody (51%), and minimum custody (30%). It is also of interest that correctional psychologists do not appear to specialize in the treatment of any one type of offender. Few respondents indicated that they provided services aimed at only a single type of inmate or a single problem area (e.g., substance abuse, developmentally disabled, inpatient mental health). Rather, these professionals work with a variety of offenders.

## Job Functions

Correctional psychologists have a wide range of responsibilities within their respective

institutions. They describe a broad distribution of time across many tasks. On average, administrative tasks consume the largest percentage (30%) of work time, whereas direct treatment (26%) and assessment (18%) also occupy a substantial portion of the correctional psychologist's time. Survey respondents, on average, reported relatively little time devoted to research. We also asked how these professionals would prefer to spend their time within these same job categories. . . . [P]sychologists expressed interest in spending much less time on administrative duties. Conversely, they reported a desire to increase the amount of time spent in providing therapy to offenders and in staff training. Similarly, many expressed interest in increasing the amount of time available for research. When asked to list activities they wished they were involved in, 47% included research on their wish list. Even so, the desired amount of time for research remained low (6%), perhaps reflecting the reality of other demands and lack of institutional support.

## Treatment Approaches and Problem Focus

Correctional psychologists spend, on average, one quarter of their time providing therapy to inmates. Respondents were asked to further describe the format of interventions offered to inmates and the theoretical underpinnings of the services provided. Despite the ever increasing number of prisoners needing mental health services, 60% of treatment continues to be provided in an individual format. This allocation of resources exists in the face of an average psychologist to inmate ratio of 1:750. In contrast, respondents indicated spending approximately 18% of therapy time on psycho-educational groups and 15% on process groups. With respect to the theoretical orientations that correctional psychologists use to guide their provision of services, most reported a combination of frameworks. An overwhelming majority (88%) use a cognitive

model. A behavioral orientation was endorsed by 69%, and another 40% employed a rational-emotive approach. Though we did not specifically pose an "eclectic" option, most endorsed one or more secondary theoretical orientations, suggesting an eclectic approach to psychotherapy. Table [22.2] contains additional data on respondents' orientation.

**Table 22.2** Percentage of Respondents Reporting Theoretical Orientations

| <i>Orientation</i>           | <i>Percentage of Respondents</i> |
|------------------------------|----------------------------------|
| Cognitive                    | 88                               |
| Behavioral                   | 69                               |
| Rational-emotive             | 40                               |
| Psychodynamic/psychoanalytic | 23                               |
| Humanistic                   | 19                               |
| Existential                  | 15                               |
| Systems                      | 14                               |
| Other                        | 13                               |

Given the substantial proportion of time correctional psychologists spend evaluating (18%) and treating (26%) prisoners, it becomes important to understand the types of inmate problems typically being addressed. Respondents were asked to list the four inmate problems they most commonly treated. Depression was overwhelmingly cited as the most frequent problem presented by inmates. Eighty percent of psychologists cited depression within the "top four problems." Anger problems were also mentioned by many psychologists (40%). Psychotic symptoms, anxiety, and adjustment issues were frequently mentioned as well. Table [22.3] summarizes these responses.

**Table 22.3** Percentage of Correctional Psychologists Indicating Various Mental Health Problems as One of Four Most Frequent Problems Treated

| <i>Problem</i>             | <i>Percentage of Psychologists</i> |
|----------------------------|------------------------------------|
| Depression                 | 80                                 |
| Anger                      | 40                                 |
| Psychoses                  | 25                                 |
| Anxiety                    | 24                                 |
| Adjustment issues          | 20                                 |
| Personality disorders      | 18                                 |
| Substance abuse            | 17                                 |
| Sexual behavior            | 14                                 |
| Acting out/impulse control | 12                                 |

*Note:* Not all respondents listed four problem areas.

## Assessment Practices

Approximately 65% of respondents indicated that they were involved, to varying degrees, in the psychological assessment of offenders. The types of evaluations described range from intellectual assessment to the assessment of risk (see Table [22.4]). Most typically, however, psychological testing in the prison system is done to assess personality characteristics (42%). A smaller percentage of testing time is spent on intellectual assessment (19%), the evaluation of risk (13%), and symptom assessment (12%). Very little time is devoted to neuropsychological assessment (5%) or behavioral analysis (3%).

Although psychologists reported using a variety of assessment instruments, most continue to rely on very few tests. As might be expected, the Minnesota Multiphasic Personality Inventory (MMPI, MMPI-2) continues to be the most widely used psychological instrument in corrections.



**Table 22.4** Percentage of Correctional Psychologists Reporting Usage of Specific Psychological Tests

| <i>Instrument</i>   | <i>Percentage</i> |
|---------------------|-------------------|
| MMPI                | 87                |
| WAIS                | 69                |
| MCMI                | 30                |
| Bender Gestalt      | 23                |
| Rorschach           | 20                |
| Projective Drawings | 14                |
| BDI/BAI             | 13                |
| PCL-R               | 11                |
| PAI                 | 10                |
| WMS                 | 8                 |
| SIRS                | 7                 |
| TONI                | 6                 |
| Trails A & B        | 6                 |
| MSI                 | 6                 |
| Halstad Reitan      | 5                 |
| Luria Nebraska      | 4                 |
| Slosson             | 3                 |
| LSI                 | <1                |
| V-RAG               | <1                |

*Note:* MMPI = Minnesota Multiphasic Personality Inventory; WAIS = Wechsler Adult Intelligence Scale; MCMI = Millon Clinical Multiaxial Inventory; BDI/BAI = Beck Depression Inventory/Behavior Assessment Inventory; PCL-R = Psychopathy Checklist-Revised; PAI = Personality Assessment Inventory; WMS = Wechsler Memory Scale; SIRS = Structured Interview of Reported Symptoms; TONI = Test of Nonverbal Intelligence; MSI = Multiphasic Sex Inventory; LSI = Level of Service Inventory; V-RAG = Violent Risk Assessment Guide.

Approximately 87% of respondents reported using the MMPI in their clinical work with prisoners. It is probable that many psychologists in corrections do not administer instruments themselves, but rather, use psychological data gathered during the reception and classification process. The MMPI has long been a mainstay of the intake process. Other personality instruments cited by psychologists include the Millon Clinical Multiaxial Inventory (MCMI) (30%), Rorschach (20%), projective drawings (14%), and the Personality Assessment Inventory (10%).

With respect to intellectual assessment, most correctional psychologists use the Wechsler Adult Intelligence Scale (WAIS) (69%). Of those performing neuropsychological evaluations, 23% reported using the Bender-Gestalt. Tests used less frequently by these psychologists included the Wechsler Memory Scale (8%), Trails A&B (6%), the Halstad Reitan (5%), and the Luria Nebraska (4%). Although 13% of respondents described involvement in the assessment of risk, few professionals reported the risk instruments they were using. Of the instruments reported, the Psychopathy Checklist-Revised (PCL-R) was most commonly indicated (11%). The Multiphasic Sex Inventory (MSI) was reported by 6% of respondents engaged in risk assessment, whereas the Level of Supervision Inventory (LSI) was cited by fewer than 1%. It seems that many correctional psychologists rely on instruments such as the MMPI regardless of the referral question.

## Professional Memberships

To gauge their affiliation patterns, respondents were asked to report any national or state membership in psychological organizations. Approximately 43% were members of the American Psychological Association (APA). Membership in divisions of APA was also investigated, with specific attention directed to those divisions that involve some aspect of corrections (Division 18) or forensic issues (Division 41). Only 8% reported membership in an APA division, with 1% belonging to Division 18 and 3% belonging

to Division 41. Similarly, few respondents (7%) belong to the American Association for Correctional Psychology, a group specifically devoted to the issues facing psychologists in corrections.

## Prior Experience and Training Recommendations

Approximately 37% of respondents reported some type of previous forensic or correctional experience prior to employment in corrections. This background differed significantly for those with master's degrees (27%) versus those with doctorate degrees (44%). Doctoral-level psychologists in federal versus state prisons also differed in prior experience. Approximately 63% of those working in federal prisons described some type of previous correctional or forensic experience compared to only 33% of those in state prisons. The majority of those reporting previous training had completed an internship (or rotation) (62%) or practicum (43%) in a correctional setting. Others described corrections-related experience in research (23%), coursework (36%), or independent study (16%).

We solicited opinions about training for those psychologists or graduate students interested in correctional work. Table [22.5] summarizes recommendations made by correctional psychologists currently working in this field. The most frequent preparation recommended for a career in correctional psychology was to undertake an internship or practicum in a prison facility. Many respondents indicated that such experience would not only give students a better idea of the job responsibilities and opportunities but would also clarify what it was like to work with inmates in a security-oriented facility. Other training recommendations frequently cited by respondents include gaining experience in psychological testing, training in the diagnosis and treatment of personality disorders, experience with issues specific to forensic psychology such as the evaluation of competency, and criminal justice or law-related coursework. Clinical skills such as interviewing and diagnosis were mentioned by practically all respondents; therefore, these items were not included in Table [22.5].

**Table 22.5** Percentage of Correctional Psychologists Making Specific Training Recommendations

| <i>Training Recommendation</i>                       | <i>Percentage</i> |
|------------------------------------------------------|-------------------|
| Practicum or internship in a correctional setting    | 30                |
| Training in personality disorders                    | 21                |
| Training in issues related to forensic psychology    | 13                |
| Criminal justice or law-related course work          | 12                |
| Training in assessment                               | 11                |
| Training in the detection of malingering             | 10                |
| Training in crisis intervention                      | 8                 |
| Training in substance abuse evaluation and treatment | 7                 |

## PREDICTIONS FOR THE FUTURE

Respondents were given the opportunity to make predictions about the future of correctional psychology as a career. Although it was clearly evident from reading survey responses to prior questions that these professionals viewed their jobs as important, interesting, and challenging, their predictions about the future were not nearly so optimistic. For example, many expressed concern that the number of available jobs will gradually decrease, despite the growing need for psychological services in corrections. Those with doctorate degrees feared their positions would be lost to master's level professionals, whereas those with master's degrees expressed concern about losing their jobs to social workers. Many (15%) also reported a continuing trend toward administrative duties replacing treatment. It may be that correctional psychologists see their positions turning into managerial or administrative positions, leaving the less well-trained or paraprofessionals to

deliver the majority of treatment. Some respondents (10%) predicted an increasing presence of managed care in corrections, and others (9%) indicated concerns about privatization.

## DISCUSSION AND RECOMMENDATIONS

The authors were gratified by the impressive return rate (42%) for this project. This level of response can be attributed, in part, to the encouragement of chief psychologists and other administrators in prison systems across the United States. We speculate too that eagerness for professional interchange and information were motives for many respondents. Nearly 65% requested a summary of preliminary results. By contrast, correctional psychologists are not heavily involved in national psychology organizations. Beyond membership in the APA (46% of respondents), very few had joined either of the potentially most relevant APA divisions, Psychologists in Public Service (Division 18) or the American Psychology–Law Society (AP–LS) (Division 41). Membership in the American Association for Correctional Psychology (AACP), an affiliate of the American Correctional Association, also was sparse, even though AACP is directly targeted at these professionals. Some respondents requested more information about these organizations, and AACP and AP–LS have recently announced a joint membership initiative to attract correctional psychologists.

A number of differences emerged between our results and those of previous surveys. Several similarities were also noted. In terms of sample size and characteristics, we reached more than 800 respondents, including 172 federal psychologists. Clearly, the number of psychologists employed in corrections has risen dramatically since the survey by Otero et al. (1981). At that time, an estimated 600 master's- and doctorate-level psychologists worked in corrections in the United States and Canada. In contrast, our estimates show that number to have jumped to approximately 2,000 in the United States alone. Even so, this growth rate has not kept pace

with the more-than quadrupling of the number of offenders confined in correctional institutions. Interestingly, the demographics of psychologists working in corrections are largely comparable to those of psychologists working in other areas (Kohout & Wicherski, 1999). An exception is the smaller number of women employed by corrections as compared to other settings.

Despite the growth in absolute numbers of psychologists in corrections, the estimated psychologist-to-inmate ratio (1:750) appears to be approximately half that observed in the early 1980s. The still lower ratio of doctoral-level providers (1:2,000) is even more disturbing. Although the proportion of professional time devoted to treatment has remained steady over the past two decades, the actual amount of service delivered per inmate has obviously shrunk. Commentary supplied by many respondents indicated a growing concern, and potential ethical quandary, with the imbalance of limited resources and escalating demand/need for services. Most wanted to devote more time to intervention. It would not surprise us if some providers felt the frustration reflected in Rice and Harris' (1997) observation that, "the huge problems in changing institutional and bureaucratic routines make implementing (treatment) programs with high integrity extremely difficult" (p. 432).

At the same time, management roles, sometimes called the unseen career path (Kilburg, 1984), have increased since 1981. Today, correctional psychologists spend almost one third of their time in administrative tasks. Interestingly, more involvement in core management was one of the stated wishes of Otero's sample some 20 years ago (Otero et al., 1981). In addition, staff training activities also occupy more time than previously reported. One could argue that these management and training roles serve to extend the impact of psychological perspectives, but a certain irreducible need for assessment and treatment services cannot be finessed by delegating to others or through administering programs. Reflecting this attitude, respondents with administrative duties would, on average, like to see such time cut almost in half. In addition, some



psychologists in corrections would like more time to devote to research, an activity urged by a number of writers (e.g., Andrews & Bonta, 1998; Bartol, 1999). Our observation is that such aspirations are best realized through academic partnerships and system-wide mandates (and support) to conduct evaluation studies. Such conditions are enjoyed more noticeably by our colleagues in Canada (Motiuk, 1999).

Correctional psychologists appear more likely than psychologists in general to endorse cognitive and behavioral orientations as guides to treatment (Milan, Montgomery, & Rogers, 1994). Given the adaptability and relative success of these approaches with offenders (Clements, 1987; Gendreau, 1996; Milan et al., 1999), this finding is encouraging. Among the psychological problems of inmates most commonly dealt with by survey respondents, depression was widely seen and treated, as were anger, anxiety, and adjustment issues. All are amenable to cognitive-behavioral strategies.

Pressed for time and spread so thinly, correctional psychologists nevertheless remain dedicated to one-on-one treatment. Given the daunting number of offenders in need of treatment, the failure to shift toward a framework of group treatment seems like a potentially poor use of important resources. One recent survey of group therapy providers in corrections reports an estimated effectiveness rating of greater than 5 on a 7-point scale in such areas as anger and stress management, adjustment, and cognitive restructuring (Morgan, Winterowd, & Ferrel, 1999). These writers urge the development of treatment manuals and heightened attention to "what works" outcome studies. Though group-based treatments have not been directly tested against individual therapy, those methods finding the most empirical support, cognitive-behavioral interventions (Gendreau & Goggin, 1997), are quite adaptable to group delivery. Ready examples include the aggression replacement training (ART) model developed by Goldstein and colleagues (Goldstein & Glick, 1997; Rokach, 1987), as well as programs that focus on antisocial attitudes and other "criminogenic needs" (Andrews & Bonta, 1998). Based on shrinking

staff resources, creative attempts to expand service capacity through group methods seem fully warranted.

Somewhat puzzling is the relative underemphasis on treating both serious mental illness and substance abuse. Given the growing proportion of mentally disordered offenders in prison—recently estimated at 16% (Bureau of Justice Statistics, 1999a)—it appears either that few resources are being directed toward these individuals or that psychologists are playing a relatively minor role. We know that in some jurisdictions, services for the severely mentally ill are provided under contract and/or within special settings. Perhaps those providers are underrepresented in this survey. By contrast, substance abuse treatment—itsself a major thrust in many prisons (see Inciardi, 1993; Milan et al., 1999)—has historically been the purview of counselors and case workers. Nevertheless, in both of these areas, psychologists clearly have a stake in treatment planning, service delivery, supervision, and program evaluation. There is also a clear need to provide services to incarcerated women whose mental health and health problems are likely to be widespread and diverse (Acoca, 1998; Bureau of Justice Statistics, 1999b). Physical and sexual victimization, parental responsibilities, depression, and patterns of drug use often distinguish women offenders (Conley, 1998). The substantial increase in the number of aging prison inmates also presents a challenge and opportunity for psychologists and other health professionals.

We are also concerned about reported assessment practices. Popularity and tradition aside, one cannot argue that any test, even the revered MMPI—used by 87% of those involved in assessment—is generically applicable to all correctional issues. Increasingly though, for instruments like the MMPI-2 and MCMI, offender norms are available. We did not assess whether these norms were being regularly employed. By contrast, some newer instruments that reportedly aid in the assessment of risk and supervision needs were minimally used. For example, the PCL-R (Hare, 1991) was used by 11% of respondents who assessed offenders. The Level

of Service Inventory-Revised (LSI-R) (Andrews & Bonta, 1995), widely used in Canada, is virtually absent in the United States. These observations are consistent with Gallagher et al. (1999), who report MMPI use at high rates during intake (65% of states) and even higher (96%) for pre-parole evaluations, a logical place for instruments such as the LSI-R. More surprisingly, projective tests (drawings, inkblots) were frequently used in both samples and enjoy an even heightened popularity in prerelease evaluations (Gallagher et al., 1999).

Attracting, recruiting, and retaining qualified professional staff remains a challenge. Recruitment of minority psychologists is especially needed, given the disproportionate representation of African Americans in the U.S. prison population. Although pay scales are now reasonably competitive, training avenues remain limited. However, evidence of growth in the field of psychology and law, including interests and research in corrections, suggests an expanding pipeline of professionals (Bersoff et al., 1997). The doctoral programs that are available are being buttressed by an increasing number of accredited internships with a strong correctional or forensic focus. Several of these are located at correctional institutions and medical centers within the Federal Bureau of Prisons. These and similar state correctional and forensic settings partially address respondents' clear call for practicum and internship training. Assessment skills, personality disorder treatment competencies, and other forensic knowledge are also seen as contributing to the correctional psychologist's role.

To these recommendations, we would add familiarity with newer instruments specifically relevant to offenders, knowledge of cognitive-behavioral (and social learning) treatment paradigms, an orientation to applying skills to the institutional milieu, and a commitment to outcomes

assessment. These recommendations apply to master's level psychology staff as well. Corrections employs more master's than doctoral staff (though the Federal Bureau of Prisons and selected states more exclusively employ doctoral level, licensed psychologists), and their preparation to carry out important assessment and treatment functions should not be left to chance.

In some state institutions, psychologists function as sole practitioners. We suspect that professional isolation and burnout are possible consequences. In addition, the opportunity for supervision and consultation with regard to ethics, case management, or myriad other issues would seem to be sacrificed at these outposts. We recommend that regional systems of professional consultation be established, including, where necessary, employing part-time consultants to enrich the working environment. Indeed, part-time employment in corrections may be a viable model for some who wish to remain connected to community, academia, or mental health agency.

Although this study examines a cross-section of the current roles of correctional psychologists working in state and federal prisons, it does not address similar roles that are being filled by other professionals nor psychologists' presence and functions within the nation's jails, juvenile institutions, and youth detention centers. Our guess is that mental health professionals in these settings are even less well-connected to fellow professionals, especially if they work full-time in remote locations. The task of identifying psychologists who practice in the hundreds of local jails and juvenile facilities in the United States will present a challenge to understanding how their roles might diverge from their prison-based colleagues. As the field of correctional psychology continues to expand, such surveys might enlighten both the profession and future practitioners.

## THE REHABILITATION AND REINTEGRATION OF OFFENDERS

### *The Current Landscape and Some Future Directions for Correctional Psychology\**

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**H**ow far have we advanced in the decade since a special issue of *Criminal Justice and Behavior* commemorated its 20th anniversary (Glenwick, 1996)? At that time, sages of correctional psychology suggested that the place for rehabilitation was well established in corrections, although they also called for

continued efforts in areas such as correctional training and technology transfer (Brodsky, 1996; Gendreau, 1996). The purpose of this article is to assist researchers, clinicians, program developers, and correctional administrators chart a course for continued improvement in the rehabilitation movement by highlighting recent key

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developments and empirical findings in the adult-offender rehabilitation literature. In this context, *rehabilitation* refers to a broad array of psychosocial programs and services that are designed to assist offenders in addressing a range of needs related to their offending behavior and in achieving a more productive and satisfying lifestyle.

Rather than attempt an exhaustive description of 40 years of offender treatment research, our approach has been to conduct a selective review, focusing on the meta-analyses of empirically supported offender treatment programs in general and more specifically on the treatment of substance abuse offenders and sexual offenders. Yet we believe that this review is sufficiently representative that inferences may be made, knowledge may be transferred to practice, and directions may be derived for future research. Furthermore, we are conscious of the “correctional quackery” that is often promoted in the name of a safer society (Gendreau, Goggin, French, & Smith, 2006) and limited our review to empirically supported research.

Correctional treatment planners and service providers must be clear about the objectives of their many and varied interventions. Since 1990, much of the offender treatment literature has focused on the reduction of offenders’ criminal behavior, most commonly measured as recidivism. However, other kinds of services, such as health care, mental health treatment, faith-based programs, and cultural activities, may have different goals and should be evaluated accordingly. Services that engender a greater sense of well-being are a trend in the emerging field of positive psychology (Seligman, Linley, & Joseph, 2004), and services designed to build on client strengths are suggested as an approach worthy of development within corrections. As community reintegration has emerged as a critical adjunct to the treatment of prisoners, special attention is given to prisoner reentry into the community (e.g., Petersilia, 2004).

Although successful reintegration means no return to crime, recidivism is a unified concept without a unifying definition. Definitions have

ranged from re-incarceration for any reason, to an arrest regardless of conviction, to arrest with conviction, to conviction of a new offense (as opposed to a technical violation of parole or probation). Treatment studies have defined recidivism as a return to jail or prison for committing an offense for which the offender had prior treatment (e.g., drug abuse, sexual offense; Beck, 2001) but have seldom considered severity of recidivism as a substitute for the dichotomous approach. Recidivism rates are also time sensitive. Finally, the mode of data collection—self-report versus various official databases—represents another dimension of recidivism. Given these vagaries, further insight about “what works” may have to await the acceptance of a more refined and sensitive outcome measure.

An examination of America’s national average recidivism rate showed that two thirds of offenders released from 15 states in 1994 were re-arrested within 3 years of their release, with the majority being reconvicted and incarcerated for new crimes (U.S. Department of Justice, 2006). Yet an analysis of specific programs paints a different picture about the capacity for success in American corrections. In a review of almost 300 evaluations of correctional programs during 35 years, general cognitive-based programs were estimated to reduce recidivism by 8%, therapeutic communities by 6%, and cognitive-behavioral treatment programs for sex offenders in prison by 15% (Aos, Miller, & Drake, 2006). Clearly, the answer to the question “What works to reduce recidivism?” depends on where and how one looks. To that end, we turn to the general and specific evidence for correctional treatment.

## WHAT DO WE KNOW ABOUT EFFECTIVE CORRECTIONAL INTERVENTION?

The accumulation of knowledge about “what works” in correctional rehabilitation owes a great deal to the approximately 2,000 studies that have addressed this question during the past half century (McGuire, 2002) and to the application of

meta-analytic practices that generate empirically based summaries of this large and diverse research. The extent to which correctional researchers have increasingly chosen meta-analysis as opposed to narrative reviews to summarize their findings is encouraging. Between 1985 and 2005, at least 52 meta-analyses have been conducted on offender treatment (McGuire, 2005), although the majority have been on youth programs. Meta-analysis is replete with methodological complications that can compromise interpretation, including variations in program content, control conditions, offender characteristics, outcome variables, and the wider social context of the intervention (Lösel, 2001). Nonetheless, important inferences can be drawn from this research, and the study of effective correctional treatment has progressed steadily during the past 15 years. At least five important findings have emerged.

First, the overall impact of treatment and program services for offenders has led to an average effect size of about .10 (McGuire, 2002). Second, comparisons between all types of treatment programs and increased sanctions, with a mean effect size of  $-.07$  for the latter (Andrews, Zinger, et al., 1990; Gendreau, Goggin, Cullen, & Andrews, 2001), have consistently favored the former. Third, more detailed analyses of specific treatment characteristics have generated a wide range of effect sizes, ranging from  $-.09$ , indicating a possible negative effect, to  $.38$ , when services adhere to the principles of risk, need, responsivity, and other contextual conditions (Andrews & Bonta, 2003). Collectively, the individual and meta-analytic studies have identified “what works” and offered insights about where (e.g., community-based intervention) and how it is likely to do so (e.g., Andrews, 2001). Fourth, meta-analyses of specific kinds of treatment, such as cognitive-behavioral therapy (Landenberger & Lipsey, 2005; Wilson, Bouffard, & MacKenzie, 2005), and treatments with specific types of offenders, such as substance abuse offenders (Lipton, 1995; Wells-Parker, Bangert-Drowns, McMillen, & Williams, 1995) and sex offenders (Alexander, 1999), have provided direction in terms of “what works for whom.” Finally, an emerging

cost-benefit methodology offers another dimension to traditional meta-analysis and provides insight about the economic benefits of treatment (Aos, Phipps, Barnoski, & Lieb, 2001).

These findings offer specific direction for technology transfer to the field. In particular, the principles of risk, need, and responsivity (Andrews, Bonta, & Hoge, 1990; Andrews, Bonta, & Wormith, 2006) now guide both administrators and clinicians in the selection of clients (i.e., targeting moderate- and high-risk offenders), the kinds of services to provide (i.e., addressing criminogenic needs), and the manner by which services are delivered (i.e., behavioral and cognitive-behavioral programs). The extent to which these principles are followed and treatment integrity is practiced correlates highly with client outcome as measured by recidivism (Andrews & Dowden, 2005; Latessa, 2004). Their importance is profound, as adherence to them determines whether or not the prescribed intervention affects recidivism, regardless of client demographics such as age, gender, and ethnicity (Andrews & Bonta, 2003). These principles also shed light on the pre-Martinson (1974) perspective about the effectiveness of offender treatment, as such services would have known nothing about them.

The proliferation of offender treatment program evaluations and the common inclusion of their results in meta-analysis have taken the corrections community far beyond Martinson’s (1974) article that prompted the statement that “nothing works.” Therefore, clinicians in corrections may feel that the struggle to establish offender treatment among the scientifically accepted list of empirically supported interventions is over. However, this is not the case. Although great advances have been made in our understanding of offender treatment and evidence for its effectiveness abounds (e.g., McGuire, 2002), critics remain suspicious about efforts to intervene in the lives of offenders (e.g., Israel & Chui, 2006; Merrington & Stanley, 2004; Wilkinson, 2005). Furthermore, some chinks have developed in the armor of what have been the “poster children” of offender treatment,



notably cognitive skill training (Cairn, 2006) and multisystemic therapy (Leschied & Cunningham, 2001; Littell, Popa, & Forsythe, 2006) and raise research questions about the client group, the mode of delivery, and the precision of the outcome measure.

Much of the future understanding about correctional intervention is likely to come from moving beyond the simple, but important, treatment–recidivism study to the examination of in-program issues. For example, there is a great deal of latitude for offender services to vary within the parameters of these principles. The concept of program integrity—the extent to which the service being offered conforms to the manner of service intended by the developers of the service—focuses on these variations (Andrews & Dowden, 2005; Lowenkamp, 2004). Second, client resistance and dropout are chronic, non-random problems in correctional treatment (Wormith & Olver, 2002). Clinicians must incorporate strategies, such as pretreatment preparation and motivational interviewing, to minimize client attrition (Miller & Rollnick, 2002), whereas researchers must consider dropouts and treatment failures in their evaluation of correctional treatment to truly understand treatment effects. With this foundation in the general principles of offender intervention, we turn to a sample of specialized offender services to illustrate both achievements and unanswered questions about offender treatment.

## SUBSTANCE ABUSE TREATMENT

Because of the high prevalence of drug abuse among offenders (Mumola, 1999), drug-abuse treatment programs may be the most common form of rehabilitation offered to this population. The most commonly used and thoroughly researched prison-based, psychosocial treatment is the therapeutic community (TC). Originally designed by Maxwell Jones (1962) in response to the traditional medical approach to the treatment of mental health problems, these “open” communities that stress consensus building and two-way

communication between staff and patients and are founded on social learning theory have been applied in numerous correctional environments (Toch, 1980). The philosophy and structure of TC make it a viable form of treatment for drug-abusing offenders, particularly for those whose criminality has resulted in their incarceration (De Leon, 2000; Tims, De Leon, & Jainchill, 1994). Meta-analytic reviews of corrections-based drug treatment found that TC was effective in reducing recidivism for incarcerated substance-abuse offenders with a mean effect size of .14 (Lipton, Pearson, Cleland, & Yee, 2002) and reductions of recidivism ranging between 5.3% and 6.9% (Aos et al., 2006). Five-year outcome studies conducted for prison-based TC programs in Delaware (Martin, Butzin, Saum, & Inciardi, 1999), California (Wexler, Melnick, Lowe, & Peters, 1999), and Texas (Knight, Simpson, & Hiller, 1999) found that offenders who completed both prison TC treatment and aftercare treatment in the community showed significant reductions in recidivism and relapse when compared with untreated controls. In all three studies, aftercare treatment in the community proved critical in helping offenders make the transition from prison to the community and maintain TC gains. Reductions in recidivism and drug use relapse were found to disappear 3 years after release for offenders who completed only the prison-based TC. Five-year outcome data for the programs in Delaware (Inciardi, Martin, & Butzin, 2004) and California (Prendergast, Hall, Wexler, Melnick, & Cao, 2004) found similar results. Although a lack of random assignment makes conclusions questionable (Burdon, Farabee, Prendergast, Messina, & Cartier, 2002), an evaluation of drug-abuse treatment programs within the Federal Bureau of Prisons found that inmates who had completed prison-based treatment and community-based aftercare were significantly less likely to relapse in drug use or recidivate than inmates in a comparison group, even after controlling for individual- and system-level selection factors (Pelissier et al., 2000).

These findings indicate that prison-based TC coupled with aftercare treatment in the community



can reduce both recidivism and relapse into drug use. Prison-based programs can serve to motivate offenders to participate in drug-abuse treatment following release from prison (Wexler, Prendergast, & Melnick, 2004). Findings from the Delaware study indicated that graduates of the institutional TC were more likely to remain in community treatment (Inciardi et al., 2004). Prison treatment may serve more as a preparation for community treatment than as a primary treatment, although it has been shown to reduce prison misconduct (French & Gendreau, 2006; N. P. Langan & Pelissier, 2001). On the other hand, Marlowe (2003) noted that intensive supervision and intermediate sanction programs, by themselves, have not demonstrated a reduction in criminal recidivism or relapse. Educational or drug-awareness sessions have no impact on later drug use or criminal behavior. Boot camps and drug-focused group counseling have also been ineffective (Pearson & Lipton, 1999), and insight- and group process-oriented programs for high-risk offenders are associated with higher rates of drug use and recidivism. Pragmatic, skills-based programs that assist patients to deal with their postrelease environments enhance treatment generalization from the institution to the community.

Although most substance-abuse treatment research has focused on outcome variables related to drug use and recidivism, Simpson (2004) examined treatment-process variables that underlie the responsivity principle. These studies include patient variables (e.g., readiness and motivation for treatment; severity of substance disorder), treatment variables (e.g., engagement in treatment; therapeutic relationship), and variables related to treatment program philosophies and attributes. Early engagement in a program is critical in overcoming offenders' lack of commitment to treatment, and techniques such as early use of motivational interviewing improve program affiliation and treatment retention (Hiller, Knight, & Simpson, 1999).

In sum, treatment-process research is needed to address numerous important questions about service delivery. For example, how do different versions of a commonly identified program vary

in their effectiveness? Taxman and Bouffard (2002) suggested that researchers include a measure of treatment integrity to assess program adherence to its purported model. How do offenders' perceptions of their counselors affect treatment success (e.g., Broome, Knight, Hiller, & Simpson, 1996)? Variables related to treatment counselors are almost nonexistent in the literature. Do offenders' perceptions of their similarity (or dissimilarity) to treatment staff impact treatment engagement? Proponents of the TC model advocate the use of recovering addicts as staff (De Leon, 2000), yet many institutional policies prohibit the hiring of ex-offenders. How do perceptions of their relationships with their clients impact treatment engagement and success? Although therapist-client relationships are important to treatment success, the institutional culture in which programs are embedded often regard relationships with inmates with suspicion (Simpson, 2004). These process-oriented questions are offered so that future research may guide drug treatment providers to achieve maximum treatment effect.

## SEX OFFENDER TREATMENT

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Unlike the growing consensus about what works in the general correctional literature, there is substantial variability in the outcome of individual studies examining treatment effectiveness for sex offenders (e.g., Hanson, Broom, & Stephenson, 2004; Nicholaichuk, Gordon, Gu, & Wong, 2000). Meta-analyses and summative reviews of treatment effectiveness have also demonstrated a range of effect sizes for sex-offender treatment (e.g., Furby, Weinrott, & Blackshaw, 1989; Gallagher, Wilson, Hirschfield, Coggeshall, & MacKenzie, 1999; Hall, 1995; Lösel & Schmucker, 2005). Apparent disparities in treatment effectiveness may reflect improvements in the state of practice, as more recent studies with predominantly cognitive-behavioral treatments show significant effects, whereas older studies, with obsolete or indiscernible treatments, do not (cf. Furby et al., 1989; Hanson et al., 2002). However,

problems inherent in the current literature, such as inadequate documentation and inappropriate handling of treatment dropouts and refusers, make inference about effectiveness difficult (McConaghy, 1999; Rice & Harris, 2003). Consequently, these mixed results of the psychosocial treatment-effectiveness literature have left the field divided about whether, for whom, and how sex-offender treatment works (Marques, 1999).

One of the better designed studies in the adult-sex-offender literature is the Marques, Wiederanders, Day, Nelson, and van Ommeren (2005) randomized clinical trial of an inpatient, cognitive-behavioral relapse-prevention program for incarcerated offenders. This well-designed study failed to support a treatment effect during an 8-year follow-up (Marques et al., 2005). These results have led to speculation about their 1985 version of treatment: the impact of offenders not "getting" relapse prevention; failure to adhere to principles of risk, need, and responsivity; and failure of aftercare to use an interdisciplinary, individualized case-management process. Although such tightly controlled studies are difficult and expensive to conduct (Marshall & Serran, 2000), integrity in research design is necessary to advance the field's understanding of "what works" in sex offender treatment (Craig, Browne, & Stringer, 2003). Methodological suggestions include random assignment, matching on risk, using an incidental design (Marshall & Serran, 2000), determining the type of offender for which treatment works (Craig et al., 2003; Rice & Harris, 2003), using intent-to-treat procedures for dropouts (Lösel & Schmucker, 2005), and investigating mechanisms underlying effectiveness and individual treatment components (Marshall & Serran, 2000; Rice & Harris, 2003).

Despite largely inconclusive results overall, most researchers and clinicians agree that widely used cognitive-behavioral treatments (McGrath, Cumming, & Burchard, 2003) represent the most promising approach to affect sexual recidivism (Craig et al., 2003). Sex-offender treatment providers have also heeded elements of best practice found in general correctional treatment: the risk, need, and responsivity principles. The use of

these principles makes sense given the diversity of sex offenders in treatment (McGrath et al., 2003), varying recidivism risk based on instant offense (Hanson & Bussiere, 1998), limited resources for treatment provision, potential danger of treating low-risk offenders too intensely (Hanson, 2000, as cited in Marques et al., 2005), relevance of criminogenic needs in sexual recidivism (e.g., Hanson & Morton-Bourgon, 2005), and special needs of some offender populations (e.g., those with intellectual limitations; Lambrick & Glaser, 2004). In this regard, Hanson and Morton-Bourgon's (2005) meta-analysis identified a number of dynamic risk factors for sexual recidivism, such as self-regulation problems and employment instability, as well as factors unrelated to sexual recidivism, such as offense denial and a lack of victim empathy. As the latter are common targets of sex-offender treatment (McGrath et al., 2003), future research should examine whether improved "incremental" effectiveness is found for treatments targeting the criminogenic need factors linked to recidivism risk (Hanson & Morton-Bourgon, 2005).

The principles of effective practice have also rejected the "one treatment fits all" approach. For example, the self-regulation model (Ward & Hudson, 1998) describes multiple pathways to offending behaviors, each differentially affecting recidivism risk and approach to treatment (Fisher & Beech, 2005). This model allows for individualized offense cycles and treatment plans. It is congruent with the needs and responsivity principles and is consistent with recent evidence that flexibility in treatment enhances outcome (Marshall, 2005). It also complements findings about the importance of self-regulation to risk of recidivism (Hanson & Morton-Bourgon, 2005). Additional research on the effectiveness of a self-regulation approach to treatment is needed for general and specific offender populations (Keeling & Rose, 2005).

As found with other types of offenders, evidence has begun to mount about the importance of community-based support for sexual offenders following their release from custody (Wilson, Picheca, & Prinzo, 2005). Programs such as



Circles of Support may prove to be particularly important for sexual offenders (Wilson & Prinzo, 2001), but they require more research.

Recent literature has also advocated a more client-responsive, “gentler” approach in the delivery of treatment to sex offenders (Marshall & Serran, 2000). A “good lives” model of treatment focuses on building hope and working cooperatively with offenders to build on their strengths to maximize the effectiveness of treatment (Marshall et al., 2005). Other methods of “positive” treatment delivery such as a motivational enhancement (cf. Miller & Rollnick, 2002) may impact treatment acceptance in resistant offenders and merit further exploration. Self-deterministic approaches to treatment (cf. Sheldon, Williams, & Joiner, 2003) suggest more attention to positive outcomes, such as getting and keeping offenders in treatment. Yet they require close empirical scrutiny to substantiate the current optimism (Carich & Smith, 2006).

We now turn to other approaches of correctional intervention that do not necessarily target criminogenic need or recidivism, at least directly. In particular, “positive psychology” is a paradigm that appears to turn our traditional criminogenic focus on its head.

## **POSITIVE PSYCHOLOGY AND OFFENDER TREATMENT**

The belief that criminal behavior is a product of cognitive, emotional, and mental deficits (e.g., Wilson & Herrnstein, 1985; Yochelson & Samenow, 1976, 1977) has generated numerous models of offender treatment in the past four decades. However, research has indicated that treatment programs based on this belief have had varied success in reducing recidivism. The overlooked question in deficit-based inquiries into offender behavior is What militates against individuals offending in the first place? Exploring offender behavior and interventions from this perspective invites a paradigm shift from a deficit-based model to a strength-based model.

The foundation for this shift can be found in positive psychology.

Positive psychology, as developed by Abraham Maslow and later adopted by Martin Seligman, promotes ideas and principles that facilitate optimal mental and physical health and militate against mental illness and dysfunctional thoughts, feelings, and behaviors (Seligman et al., 2004; Snyder & Lopez, 2001). By studying the cognitive, emotional, and character strengths of happy people and examining concepts such as purpose, productivity, futuremindedness, parenting, empathy, wisdom, and courage, positive psychology has identified variables that may facilitate a more satisfying life. They include satisfying work, helping others, being a good citizen, developing spirituality and integrity, realizing potential, and self-regulating impulses (Seligman, 2004). Thus, the overarching goal of positive psychology is to enable people to live flourishing lives with greater health, well-being, and meaning.

Researchers and clinicians have begun to consider the use of positive psychology in offender treatment. Whereas research has shown that a punitive, fear-based treatment approach focusing on avoiding “bad” behaviors has not been very successful in reducing relapse among sex offenders (e.g., Reitzel, 2006; Yates, 2005), a “good lives” approach has garnered increasing theoretical interest among sex-offender treatment staff (e.g., Ward & Stewart, 2003). In this treatment model, sex offenders are regarded as actively seeking those things that most people desire (e.g., intimacy) but employing inappropriate strategies. Therefore, treatment begins by identifying the life goals the individual desires and helps them work toward achieving such goals. Preliminary research supports this approach (e.g., Webster, 2005). Likewise, the No Free Lunch program promotes a cognitive shift among general offenders, from avoiding failure to achieving success, by presenting fundamental life principles and problem-solving strategies that offenders can use to become optimally successful and applying those strategies and skills to build character, accumulate financial security, ensure healthy living, and encourage life-plan



development. Although much more research is necessary, results for those completing the program in a Wisconsin minimum-security facility are encouraging, with recidivism rates of 3% after 3 years of release.

Concepts such as "flourishing," "a meaningful life," and "offender happiness" are not consistent with the current social and political antipathy toward offenders or with the punitive-retributive model of criminal justice. However, data that reflect the lack of efficacy of our current crime-management system clearly invite a reexamination of that model. Positive psychology may provide a meaningful alternative to traditional modes of offender treatment. However, whether it is more effective than current approaches and whether it represents fundamental or semantic differences from current approaches remains unanswered.

## OFFENDER REINTEGRATION

The Office of Justice Programs (2004) estimated that more than 630,000 offenders were released from federal and state custody in 2004. Because many of these offenders eventually relapse (Langan & Levin, 2002), public attention has focused on the issue of offender reentry (Rakis, 2005), and researchers have suggested factors that must be addressed to enhance community reentry and reduce recidivism. These include using more careful, empirically based risk-assessment procedures on entry into prison (Birmingham, Gray, Mason, & Grubin, 2000), careful screening of offenders with mental health problems prior to their release from prisons or jails (Gagliardi, Lovell, Peterson, & Jemelka, 2004; Petersilia, 2004), more corrections-based educational and vocational training programs to teach marketable job skills (Rakis, 2005), more vocational and work programs to develop good work habits (Saylor & Gaes, 1997), and better discharge planning activities and meaningful community linkages to make services immediately available on release (Hammett, Roberts, & Kennedy, 2001).

Past practices of managing prisoner reentry by single agencies working in isolation have not been successful because they have resulted in needy offenders "falling through the cracks," vital services being interrupted, therapeutic alliances being disrupted, and agencies engaging in inefficient, duplicative data-gathering and treatment activities (Lurigio, Rollins, & Fallon, 2004). Consequently, a more collaborative, efficient, systems-oriented approach has been proposed and supported by such federal government efforts as the Reentry Partnership Initiative, which actively promotes collaboration in planning and implementation (Rakis, 2005), and the Criminal Justice/Mental Health Consensus Project, which seeks bipartisan agreement among the various stakeholders in the criminal justice and mental health systems (Thompson, Reuland, & Souweine, 2003). Under this collaborative model, a multitude of agencies are encouraged to work together to address the myriad issues associated with moving all types of offenders back into the community. Furthermore, collaborative roles have been proposed for police (Byrne & Hummer, 2004); probation and parole officers (Lurigio et al., 2004; Rakis, 2005); academic institutions (Kendig, 2004); community mental health agencies and clinicians (Wolff, 2005); correctional educational, vocational, and treatment practitioners (Rakis, 2005); community-based substance-abuse treatment agencies (Butzin, Martin, & Inciardi, 2005); and community-based hospital and medical practitioners (Hammett et al., 2001). However, what happens when agencies such as these, with their diversity of ideologies and practices, are brought together in a collaborative model remains largely unknown and is, in itself, a topic for further research.

Innovative electronic technologies (e.g., electronic monitoring, telehealth, and videoconferencing) have been suggested to connect correctional and community-based services and to enhance community supervision (Pattavina, 2004). However, little empirical research has been conducted to determine which combinations of services offered by which agencies targeting which offender needs will prove most

successful in reducing offender recidivism. Other innovative suggestions include a restructuring of data-collection systems so that various agencies can share information and avoid duplication (Rakis, 2005), more cross-training and cultural awareness among agencies and organizations involved in the reentry process (Lurigio et al., 2004), and better public education.

Although our focus has been on re-integration, “front end” entry also deserves attention. There are now many criminal-justice-entry pathways, particularly for mentally disordered and substance-abusing offenders. Anecdotal evidence and some program-evaluation research suggest that these programs are effective (e.g., Broner, Mayrl, & Landsberg, 2005). For example, Steadman (2001) demonstrated the value of diversion programs that include well-integrated community services for mentally disordered offenders who would otherwise be in jail. Marlowe (2003) reported that drug courts that use structured behavioral and cognitive-behavioral programs are associated with the greatest reductions in drug use and recidivism, and meta-analyses suggest a 7.5% to 10.7% reduction in recidivism rates (Aos et al., 2006). However, others have noted that scientifically rigorous empirical research is still lacking (Wolff & Pogorzelski, 2005). The evaluation of specialized courts is complicated by the non-standardized nature of these programs and the various definitions used to measure success. Drug-court research has been criticized for its inadequate comparison groups, relatively brief follow-up periods, and limited range of outcome measures (Belenko, 2002). Future evaluation of specialized courts should address these issues.

## CONCLUSION

First, we call for more collaborative efforts between correctional practitioners and researchers.

Although correctional professionals who provide treatment may be in a position to evaluate the effectiveness of their services and contribute to the current correctional knowledge base, they may be impeded by constant clinical demands. Researchers, on the other hand, may have the luxury to design ideal studies but may lack access to and insight about the dynamics of prison life. Jointly, they can plan and conduct treatment–outcome studies that need not be overly intensive or cumbersome. The evaluation of outcomes, including clinical trials, should use reliable and valid measures, administered over time, to afford insight into the long-term benefits of the provided services. In developing an evaluation plan, researchers should not focus solely on recidivism but conduct a multiple source assessment, including behavioral assessment, functional domain assessment, collateral assessments, and quality of care.

Second, we ask, What are the kinds of advances that should be sought by the time *Criminal Justice and Behavior* celebrates its 40th anniversary in the next decade? Although we probably will still be asking about “what works,” answers to the more specific questions about for whom does it work, when does it work, and how does it work should become clearer, particularly in the treatment of sexual offenders for which further direction is very much required. We should also know more about offender motivation and preparation for treatment to minimize client attrition and maximize treatment impact. Emerging approaches to offender intervention, such as those based on “good lives” and positive psychology, require the same kind of detailed process and outcome evaluation from which cognitive-behavioral interventions have learned and benefited during the past three decades. Finally, we should know more about combinations of treatment and treatment in its various criminal justice contexts, including diversion from prison, transition from prison, and reintegration after prison.

## WHAT IS CORRECTIONAL ABOUT CLINICAL PRACTICE IN CORRECTIONS?\*

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**T**he ever-growing need for mental health services in corrections is resulting from an escalation in incarceration rates, the high prevalence of mental illness and substance abuse among offenders, and several decades of social changes that expanded opportunities for mental health professionals in the field of corrections (Bartol & Bartol, 2004a; Harrison & Beck, 2004; Diamond, Wang, Holzer, Thomas, & Cruser, 2001; Magaletta & Boothby, 2003; Otto & Heilbrun, 2002). Beyond the application of mental health principles to individuals who “just happen” to be in prison, clinical practice

in corrections is a complex enterprise. It requires a keen understanding and broad mastery of the profession’s unique body of knowledge as it is applied in the prison. Considering the salient outcomes in effective clinical practice in corrections (i.e., preventing suicide, self-harm, physical and sexual assault; increasing the likelihood of drug and alcohol recovery and successful community reentry), it is clear that adequate academic and continuing education/training for correctional mental health professionals is imperative (Carter, 1991; Magaletta & Verdeyen, 2005).

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\*This article was first published in *Criminal Justice and Behavior* (January 2007), Vol. 34, No. 1, pp.7–21. We have deleted three tables, some results on training, and parts of the discussion section.



Unfortunately, little objective knowledge exists to indicate which core bodies of knowledge should underlie such training. Although academics have a mission partially focusing on generating new and objective knowledge, clinical practice in corrections has rarely been the focus of such knowledge. Equally problematic is the fact that correctional employees typically function under an "action-imperative." In resolving one crisis after another, they rarely have the time, mission, budget, or human capital needed to generate knowledge regarding effective clinical practices (Kendig, 2004; Magaletta & Boothby, 2003). Adding to this reality are the considerable complexities involved in actually providing, coordinating, or evaluating clinical services in corrections. Offenders display numerous combinations of mental health problems rarely encountered in other settings, and service providers rarely assume just one role. Furthermore, the correctional system itself comprises nested systems, each of which exerts its own unique influence on clinical practice.

Psychologists remain the most frequently employed mental health professional practicing in today's correctional environment (Camp & Camp, 2000). Studies that have examined such psychologists have mainly focused on their most frequently performed job duties. Since the 1940s, this literature has consistently suggested that psychologists are likely to spend their time providing assessment and treatment to offenders (Boothby & Clements, 2000; Burton, 1948; Corsini, 1945; Corsini & Miller, 1954; Levinson, 1985; Sell, 1955; Silber, 1974; Smith & Sabatino, 1990). More recent research (Boothby & Clements, 2000) has also indicated that administrative tasks consume the largest amount of work time: 30%. Although this literature provides a starting point for understanding the nature of psychologists' work from a temporal perspective (i.e., what do they spend most of their time doing), the meaning of frequently performed tasks may simply reflect the mandates of policy and the volume of offenders, not the contextual and more nuanced dimensions of the work. Aspects of the work that are important despite

their infrequent use remain unexplored, as do those areas that prison administrators expect from their mental health staff, such as the management of risk.

To grow the science in this area beyond analyses of frequently performed job duties, a training survey was developed to obtain a range of relevant, objective information about the knowledge used and training needed by contemporary psychology service providers in the Federal Bureau of Prisons (BOP). The BOP, with more than 187,000 offenders in custody, is now the United States' largest prison system (Harrison & Beck, 2004). With a doctoral-level hiring standard, the system employs more than 350 psychologists, who provide direct mental health care and consultative services in more than 110 facilities. Facilities range in mission (e.g., detention centers that function like jails and in-house medical centers that provide inpatient medical services) and security level (minimum, low, medium, and high security).

To inform the training, clinical practices, and evaluation techniques used by these BOP psychologists, we empirically examined the core bodies of knowledge that psychologists use in their various roles and duties. In addition, the developmental sequence of training in and for those areas was explored. As such, this work represents an important first step in delineating empirically supported training domains germane to the needs of psychologists practicing in this highly complex environment with one of the neediest mental health populations in the United States.

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## METHOD

### Participants

Eligible participants for this study were psychology service providers in all BOP institutions during the summer of 2002 who returned a copy of the training survey.

Of the distributed surveys, 309 were returned, resulting in a 52% return rate. Of the returned surveys, 177 were from doctoral-level psychologists,

and 132 were from treatment program specialists. The educational backgrounds and direct services provided by these two groups remain distinct. The present analysis will focus on the frontline mental health/psychology service providers—the doctoral-level psychologists.

A summary profile of all psychologist respondents is provided in Table [24.1] and reveals adequate representation within each of the professional demographics measured. The modal psychologist who responded to the survey was a licensed, doctoral-level psychologist working at a medium-security facility with about 7.5 years of service. For those psychologists sampled, 38% held a PhD in clinical psychology, another 38% possessed the PsyD in clinical psychology, and 20% had a PhD in counseling psychology. Thirty-six percent had completed a predoctoral internship with the BOP and 64% had not. In terms of participants' current positions, there was approximately one third of the sample in each of three core positions: staff psychologist, treatment program coordinator, and chief psychologist.

## Instrumentation

To conduct this study, the "Federal Bureau of Prisons Training Analysis of Psychology Services and Staff Positions Survey" (July 2002) was created. An expert consensus method was used to generate survey items. Seven senior psychology services staff from the BOP, representing a mix of clinicians and administrators with an average of 16 years with the agency, were recruited for this group. They were asked to construct a comprehensive list of clinical and administrative bodies of knowledge that would characterize the operation of maximally effective psychology service departments. For the purpose of consistency in survey design, these bodies of knowledge were referred to as job functions. Through consensus, similar initial job functions were combined to form a final list of 41 functions. Next, individual items to define each job function were created. These too were refined and combined through consensus until 96 individual items tapping the 41 job functions were agreed on.

**Table 24.1** Profile of Psychologist Respondents ( $N = 177$ )

|                                     | Percentage | Frequency |
|-------------------------------------|------------|-----------|
| <i>Position title</i>               |            |           |
| Chief psychologist                  | 31.1       | 55        |
| Treatment program coordinator       | 32.2       | 57        |
| Staff psychologist                  | 31.1       | 55        |
| Direct clinical training            | 4.0        | 7         |
| Forensic examiner                   | 1.7        | 3         |
| <i>Degree held</i>                  |            |           |
| Clinical (PhD)                      | 38.4       | 68        |
| Clinical (PsyD)                     | 37.9       | 67        |
| Counseling (PhD)                    | 19.2       | 34        |
| Clinical/counseling (EdD)           | 2.8        | 5         |
| <i>Predocctoral BOP internship?</i> |            |           |
| Yes                                 | 36.0       | 59        |
| No                                  | 64.0       | 105       |
| <i>Licensed?</i>                    |            |           |
| Yes                                 | 73.4       | 130       |
| No                                  | 26.6       | 47        |
| Less than 1 year                    | 4.5        | 8         |
| 1 to 5 years                        | 34.5       | 61        |
| 6 to 10 years                       | 33.9       | 60        |
| 11 to 15 years                      | 18.6       | 33        |
| 16 or more years                    | 7.9        | 14        |
| <i>Facility type</i>                |            |           |
| Maximum                             | 2.8        | 5         |
| High                                | 8.5        | 15        |
| Medium                              | 33.9       | 60        |
| Low                                 | 22.6       | 40        |
| Minimum                             | 11.9       | 21        |
| Admin/medical referral              | 11.3       | 20        |
| Admin/detention                     | 8.5        | 15        |

Note: BOP = Federal Bureau of Prisons.

Next, two measurement structures, training and descriptive, were created and applied to each job function. Respondents were asked to provide information regarding these structures as they related to their current positions. In the training structure, respondents were asked to indicate the points during their education at which they had received (if at all) training in a job function. Response options included graduate school, internship, postgraduate BOP-sponsored new psychologist training, continuing education, on-the-job, and no training.

In the descriptive structure, information was gathered on three questions for each individual item in the survey. These questions, called importance, frequency, and risk (IFR), allowed for each knowledge domain to be simultaneously assessed from multiple vantage points. In this way, IFR served as a three-dimensional model from which training goals and priorities could be identified. Each of the IFR questions was scaled along a 5-point Likert-type index (from 0 to 4). The importance question read, "How important is this [job function] in your current position? How central is this knowledge, skill, or ability in fulfilling your role or completing the tasks assigned to you?" and was scored 0 = no importance, 1 = blank, 2 = average importance, 3 = blank, and 4 = greatest importance. The frequency question read, "How frequently do you use this [job function] in your current position?" and was scored 0 = never, 1 = quarterly, 2 = monthly, 3 = weekly, and 4 = daily. The risk question read, "How risky/critical is this [job function]? In your current position, to what degree would it compromise the safe and orderly running of an institution if the knowledge were lacking or ability/skill were deficient/negligent?" and was scored 0 = low risk, 1 = blank, 2 = moderate risk, 3 = blank, and 4 = high risk.

## Procedure

A research team located in the Psychology Services Branch of the Correctional Programs Division designed, distributed, and collected the survey by mail in the summer of 2002. Approximately 595 surveys were distributed in packets to

99 institutions. Each packet was addressed to the chief psychologist of the institution's psychology services department. A cover letter was enclosed that invited the chief to participate voluntarily in the anonymous survey and to invite all treatment staff (doctoral-level psychologists and nonpsychologist correctional treatment program staff) to complete the enclosed surveys as well. Treatment staff included doctoral-level psychologists and non-psychologist correctional treatment program staff. The latter staff are nondoctoral providers, usually substance abuse treatment specialists.

Several data analytic strategies were used to create manageable, parsimonious, and meaningful units of analysis and thus meet the primary objective of identifying job functions most salient in terms of IFR. In the interest of parsimony, once the internal consistency of the individual-level items was obtained, item-level measurements were aggregated within each job function by using participants' mean ratings for each of the IFR measurement dimensions. These job function-level mean scores for each category were then rank ordered, and the top 10 most important, most frequently used, and highest risk (conceptualized as the most critical) bodies of knowledge were retained for the next level of analysis.

Next, one-sample *t* tests were used against the grand means of the top 10 job functions within each IFR 10 job functions to help identify the items that stood out as being the most important, frequently used, and critical. In other words, individual job function means were compared to the overall mean for the top 10 functions within each IFR category. Job functions ranked as more important, frequently used, or riskier than the grand means of the top

[Ten] functions in the respective IFR category were selected for inclusion as a core body of knowledge. In addition, to determine if operationally meaningful trends existed in the data, job functions that were simultaneously endorsed in each of the top 10 IFR, regardless of whether they emerged as significantly higher than the grand mean of the top 10 items in any IFR categories, were also selected for inclusion as a core body of knowledge. Once each core body of knowledge was selected, the types of training received for each was explored.



## RESULTS

### Core Bodies of Knowledge

Overall, 9 of the original 41 job functions emerged as core bodies of knowledge. . . . The two core bodies of knowledge rated as most important were psychopathology and suicide prevention. . . . Psychopathology and interdepartmental communications/relationships were tapped almost daily and were the most frequently used core bodies of knowledge. . . . Environmental factors (special housing unit; SHU), suicide prevention, psychopathology, safety, and confrontation avoidance were the top job functions in the risk category . . . . Participants indicated that these were the areas most likely to compromise the safe and orderly running of an institution if in their current position the knowledge were lacking or ability/skill were deficient/ negligent.

Among this aforementioned list of statistically significant job functions, six remained unique (psychopathology, suicide prevention, interdepartmental communications/relationships, environmental factors [SHU], safety, and confrontation avoidance). Psychopathology actually appeared in each IFR category, and suicide prevention appeared in the importance and risk categories. Thus, there were only six statistically significant job functions that were retained among the core bodies of knowledge and examined in subsequent analyses.

To further determine if nonstatistically significant but operationally meaningful trends existed in the data, job functions that were simultaneously endorsed across each of the top 10 IFR categories were captured. Overall, three knowledge bases met these criteria and were added to core bodies of knowledge: ethical issues, medical/psychopharmacology, and clinical psychopathy.

## DISCUSSION

Findings from this study provide a basic empirical answer to the question, "Just what is correctional

about clinical practice in corrections?" At least in part, the answer is the prison environment itself. The core bodies reflect the reciprocal influence of individual-level psychopathology and the correctional environment in the day-to-day clinical practice of correctional psychology. These discrete bodies of knowledge can serve to shape the training of those who wish to enter clinical practice in corrections or have already begun their public service careers in corrections.

At the center of the psychologist's work, only one core body of knowledge was statistically significant in each of the three IFR categories. Psychopathology was statistically distinguished from other core bodies of knowledge by being of greatest importance, being used daily, and being of high risk when knowledge in that area was absent. It is clearly the body of knowledge around which much of the BOP psychologists' work is organized. Indeed, many of the other knowledge bases selected (e.g., suicide prevention, environmental factors/SHU, psychopharmacology) are conceptually linked to a deep understanding of psychopathology.

Overall, the finding that the knowledge of psychopathology is important and frequently used in the correctional environment is of little surprise. Once thought of as an indicator of "special need," the presence of psychopathology in correctional populations has actually become one of their defining features. A recent summative review on the topic suggested that the prevalence of mental illness in prisons is higher than in the community and that comorbidities are common (Diamond et al., 2001). With psychologists increasingly involved in the biological aspects of mental health treatment, psychopharmacology was also found in each of the top 10 IFR rankings. Given that psychologists continue to serve as liaisons in prison psychiatry clinics through telehealth (Magaletta, Fagan, & Ax, 1998) or with psychiatrists consulting directly in BOP institutions (Morgan, 2003), the need for and interest in this knowledge is only expected to increase. Furthermore, Fagan et al. (2004) recently found that interns and training directors

(combined) in correctional settings were more interested in pursuing prescription privileges than their counterparts in other surveyed internship programs (e.g., at Veterans Affairs Medical Centers). Not coincidentally, Ax and Morgan (2002) found that most BOP internship programs were already offering training in psychopharmacology, highlighting an increasing ability to meet training with need and interest.

An interesting pattern emerged when considering the IFR pattern for interdepartmental communications/relations. Although it is not even ranked in the top 10 for importance or risk, it makes a statistically significant entry with its weekly use. Knowledge of the prison environment and its interrelated systems (Magaletta et al., 1998) is used daily and remains an essential resource for carrying out or supporting the content of other important and/or risky work (e.g., suicide prevention and working in segregation).

Ranked among the most important and riskiest bodies of knowledge, suicide prevention remains a major focus of BOP psychologists' work. Every year, psychologists train all new and existing staff in the identification and referral of suicidal inmates. During the 5-year period from 1999 to 2003, the number of completed suicide risk assessments rose 32%. In 2005, BOP psychologists completed more than 4,100 suicide risk assessments and 1,700 suicide watches.

The core body of knowledge ranked highest in the risk category was environmental factors, or knowledge of managing the mentally ill in SHU. This finding again highlights the degree to which an understanding of both psychopathology and the correctional environment itself undergird clinical practice in corrections. Given the historical trend of completed suicides and other acting-out behaviors often witnessed in segregation units (Rhodes, 2004), it is not surprising that this knowledge base entered through the risk category. The risk management work that psychologists perform in segregation remains most crucial to prisons' dual mission of custody and care. More than any other, it is their

work in SHU that distinguishes psychologists as specialists and requires the use of their unique training and knowledge (Magaletta, Ax, Patry, & Dietz, 2005).

Confrontation avoidance was measured along two risk-related dimensions in this study. One definition was the first step in the progressive use of force model: active listening/verbal communication/crisis intervention. Because most use of force occurs in segregation units (Collins, 2004), this core body is thought to link very closely to segregation knowledge. The second item tapping confrontation avoidance dealt more globally with knowing how to intervene with an inmate to avoid further confrontation. At this more general level, confrontation avoidance suggests a quality, process, or aspect of effective management and treatment conducted with offenders.

Conceptually linked to this second definition of confrontation avoidance and again through the risk category was safety. When confrontation avoidance is effective, it prevents harm to staff and inmates and assists in maintaining the orderly running of the institution. An examination of the item-level comparisons and the high alpha coefficients suggests that psychologists conceptualize safety along both clinical and custodial lines, just as they do confrontation avoidance. Consistent with previous and more recent literature, safety is conceptualized as an important risk area even among psychology graduate students who are considering working at a secure facility (Morgan, Beer, Fitzgerald, & Mandracchia, 2007; Norton, 1990). It is interesting that safety is one of the most salient factors leading to job satisfaction among correctional psychologists (Boothby & Clements, 2002).

Consistent with their status as mental health care professionals and their assumption of a public trust, BOP psychologists clearly identified ethics as a core body of knowledge. Clinical practice in corrections presents several unique professional features (Dignam, 2003), including multiple roles, and psychologists continue to endorse an understanding of ethical issues and

how to resolve them for its importance, frequency of use, and risk if absent.

### **TRAINING AND BUILDING KNOWLEDGE FOR CLINICAL PRACTICE IN CORRECTIONS**

The data clearly show that those entering clinical practice in corrections can be expected to arrive with solid academic exposure to core clinical areas such as psychopathology, suicide prevention, psychopharmacology, psychopathy, and ethics. For these clinicians, the "already received" academic training/exposure areas should be reinforced with specialized training. This may be conceptualized as moving from the mastery of knowledge to the application of skills for effective correctional practice. For example, clinicians could build on knowledge of standard suicide risk markers. They could be taught to query correctional staff as part of the suicide risk assessment process and to investigate if the offender has been giving away their possessions, a behavior recognized as a suicide risk factor in correctional work.

It does appear that aspects of graduate school curriculums are tapping and exposing students to areas of knowledge relevant to correctional work. For faculty and students interested in correctional work, these aspects can be highlighted and condensed to form a specialized course of study. In addition, for those students already involved in a correctional practicum or predoctoral internship, didactics might be revised to align with, emphasize, and build on the core domains outlined in this study.

A second trend seen in the training data was observed for areas more central to working in

the prison environment, such as managing the mentally ill in segregation, confrontation avoidance, and staying safe on the job. For these areas, low reported rates for the more formal training (i.e., academic or continuing education training) and very high rates of OJT (on-[the]-job-training) were observed. In fact, less than 25% of the sample received exposure during graduate school for any of these areas. This finding warrants further consideration and suggests that at least some of the knowledge needed for clinical practice in corrections is generated and transmitted by the prison itself. That is, although psychologists may understand the importance of this work and the risk related to it, they actually gain the knowledge by doing the work. For better or for worse, this knowledge is transmitted experientially as they use firsthand experience as the vehicle for learning.

Beyond the uniqueness of the prison environment itself, another possible reason for the heavy emphasis on experiential learning is that very little formal textbook knowledge or research concerning best clinical practices in this environment exists. For example, no published studies have been found in the literature of psychology, criminology, or sociology that dictate the use of particular assessment tools or intervention techniques within a segregation unit. In essence, those providing services in this highly specialized environment must rely largely on experience and clinical impression that are neither supported nor refuted on scientific grounds.

To meet the challenges that this poses, it is imperative that psychologists involved in correctional work become increasingly involved in the development of such knowledge and flowing from that, its dissemination through continuing education workshops, pre-employment training, and written media.



## THE CHALLENGES OF MENTALLY ILL FEMALE OFFENDERS IN PRISONS\*

ELAINE A. LORD

On any given morning, the noise of cell doors opening as women are released from each of the 60 cells on a unit, 30 on each gallery, 360 cells altogether, resounds though the main housing block and over the hillside. On this particular morning, shortly before 6:00 a.m., the clanging and banging was interrupted by garbled screams from 114A gallery. All the solitary officer in the control bubble could hear was a repeated shout, "It's the devil. It's the devil. The devil's in her," followed by almost unintelligible pleas for help. As he rushed down the corridor, he heard again, "The devil's in her. It's the devil." However, before the officer could get to Cell A-7 near the middle of the gallery, three inmates who had been on their way to the showers rushed in through the open cell door.

As the officer arrived, he could see Violet sitting over Jane, straddling her prone form and choking her. She pounded Jane's head into the pillow. It took the three inmates to pull Violet off Jane. When the officer took control of Violet, she was still yelling about the devil; she continued to yell all the way to the mental health unit and for some time after. Jane, a teenager, was inconsolable, shaking and breathless, disturbed beyond measure and sobbing uncontrollably. It was clear that she had no idea what had happened. She had never met Violet, and it was the first night she had ever spent in a cell.

Violet struggled with demons long before she was incarcerated. She also had a history of not showering because she insisted that black bugs would come out of the showerhead and cover

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her body. Whenever Violet stopped showering, we knew that a referral for mental health services was in order. Sometimes another inmate made the referral before correctional staff because showering next to Violet usually led to the earliest clue.

Most women in prison know why they are there, accept that they have done something wrong, serve their sentences, and go about their business, making changes and doing what they need to do to move on. However, inmates with mental illness sometimes cannot even understand why they are in prison. For example, a woman named Jennifer would write to me periodically to say that the judge had framed her. She told me many times that she had not cooperated when he wanted to have sex with her, and so he had had her arrested, tried, and convicted of her serious crime.

Women like Violet who suffered with periodic delusional activity lived within the prison's population because there were too many of them to house in the prison's small specialized units for the mentally ill or because their symptoms could be controlled for periods of time. However, it was women such as Miriam, who suffered from severe behavioral problems, who created the greatest and most consistent dangers and challenges. Miriam accumulated one misbehavior report after another. Although many were for petty offenses, she was often involved in incidents that led to injury to herself, staff, or other inmates. On one occasion, she grabbed a baseball bat from a woman going up to bat in a game in the yard. She swung the bat wildly and menaced anyone who tried to take it away. She was finally backed by officers into an interior lobby adjacent to the yard but only after breaking out every window within her reach. When the officers finally got control of the bat, Miriam was crying uncontrollably but could not explain what had caused her to act so dangerously.

On another occasion, Miriam took the fire hose out of its cabinet, whipped it around so fiercely that the brass nozzle made a whooshing sound, and threatened anyone who came within

range, causing almost all normal activities to cease. These behaviors were not characteristic of what happened during an average prison day, but they are examples of an almost endless stream of violence-prone behavior from mentally ill women. It was very unlike the behavior of the majority of inmates, and it severely disrupted the ability of staff to perform their duties and inmates to serve their time. These incidents illustrate the challenges presented by mentally ill women within the prison environment.

In 1982, I was appointed deputy superintendent for programs at the Bedford Hills Correctional Facility, New York State's maximum security correctional facility for women and its reception center for all women entering the state correctional system. In 1984, I became superintendent, a position I held until my retirement in 2004. During these years, the female inmate population exploded, not only in New York but also across the United States. Embedded in this huge increase in the numbers of women in prison were growing numbers of mentally ill women. Because the most seriously mentally ill women remained at Bedford Hills, half of all inmates were on the mental health caseload, with one fourth of them considered seriously and persistently mentally ill. At times, to express my frustration, I would say that I was managing a mental institution, not a prison.

When I first became superintendent, I would sometimes spend quiet evenings in the facility's special program units for the mentally ill reading to the women. At that time, I was trying in small ways to think about the kinds of programs that we could initiate for mentally ill women housed within the general population, given that there were never more than 50 beds available within our specialized mental health program units. However, as the population expanded quickly and we began construction of two new dormitory buildings to accommodate the influx, I could no longer spare the time for such endeavors. Within just a few years, the inmate population in Bedford Hills had doubled.

Mentally ill women can rarely negotiate prison environments long enough to get involved

in the self-improvement programs that are available. For example, obtaining a GED is one of the most desirable goals that an inmate can pursue while in prison and one closely tied to success on release. However, the mentally ill women fall asleep in classes as a result of their medication, or they attend for 3 days and miss the next 2, having been readmitted to acute psychiatric care. They write bizarre essays; they ask the teacher or tutor for help but they don't know the assignment, or they ruin their schoolbooks in a flood, having clogged the toilet in their cell with a blanket. They cut themselves with the smallest piece of glass, blood dripping on their just-completed schoolwork.

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[One] woman would always ask if I had received her pardon from the U.S. president yet. She would then describe to me a gorgeous suit that she believed was now in the Package Room, having just arrived from Paris from her parents. As seasons and presidents came and went, she was still awaiting the pardon, ready with the latest fashion. If you are not prepared for such conversations with inmates, then you are not prepared to work in a prison today.

## THE NEW MENTAL HEALTH HOSPITALS

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It is the seriously and persistently mentally ill who are truly prison's untouchables. In our prisons, just as in our society, the mentally ill are looked on as people it is best to keep at a distance. In prisons, they remain stigmatized, isolated, and misunderstood. The numbers of mentally ill women in prison have grown significantly during the past 20 to 30 years, and they are at the absolute bottom of the hierarchy of a women's prison. As with other mentally ill persons, the closure of most residential mental institutions in this country led to the release of many women who had been in the back wards of our mental institutions. This change was driven by the development of a whole range of new

medications that addressed various symptoms, making institutionalization unnecessary for many women. However, community mental health opportunities did not keep pace with need, and funding for alternatives to the larger hospitals was not always adequate. Mentally ill women, who had once been disproportionately represented among the ranks of the institutionalized mentally ill, found themselves in shelters or among the homeless. They joined the ranks of the self-medicating and as a result involved themselves in the illegal drug world. Some of these women became victims of the get-tough policies toward crime, the war on drugs, and the ever more rigid sentencing policies of the past few decades, and now they populate our jails and prisons in ever-increasing numbers. The range of community alternatives is increasing but still remains underfunded or unavailable to many poor women.

Human Rights Watch announced in 2006 that there were three times as many men and women with mental illness in U.S. prisons as in our mental health hospitals (Human Rights Watch, 2006). To put it another way, prisons have become our new mental institutions.

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## A PRISON IS NOT A MENTAL HOSPITAL

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Placing mentally ill women in prison means that they must acclimate themselves to the regimentation and unquestioning obedience that keep prisons running smoothly. However, the behaviors required are simply beyond the abilities of most seriously mentally ill women. They do not set out to be recalcitrant or to involve themselves in serial self-harm or serial violence; in fact, in most cases, these patterns formed long before they entered prison. In her National Institute of Justice-funded research in a female maximum-security prison, Janet Warren (2003), a clinical associate professor of psychiatric medicine at the University of Virginia, studied a sample of 802 women in one prison's general population and found very high levels of psychological distress. She described the



women inmates in her sample as more similar to women who were receiving inpatient or outpatient mental health treatment than to women in the community. Symptoms of personality disorders among the women inmates fell in two major clusters of diagnoses that included tumultuous relationships, impulsivity, recklessness, susceptibility to substance abuse, and abuse in one cluster and suspiciousness, social awkwardness, and overly dependent attitudes and behaviors in another. Warren stated that these behaviors preceded incarceration and inevitably contributed to the behavior or the series of behaviors that led to incarceration.

As the population exploded at Bedford Hills, we tried our best to be responsive to the needs of mentally ill women who lived in cells or dormitories in the general population. In the case of a young woman who banged and yelled throughout the night, we discovered that she had been kept in a closet as a young child whenever she refused to consent to her uncle's sexual demands. We installed a nightlight in her cell (there were no dormitories at the time), and the unit became more peaceful. When we added bunk beds in our new dormitories, we asked for railings to prevent falls by women who were heavily medicated. Denied these, we created a system to review bed placements with mental health staff, a time-consuming process. Mental health and correctional staff continued to fill the gaps and address these seemingly small needs, but within the context of a prison, individualized needs are neither small nor simple. There is always an overlay of security concerns to be reckoned with, always a concern that other inmates might demand similar treatment but for dangerous reasons.

## SELF-HARM ACTIVITIES

Some mentally ill women self-harm exclusively, and some vacillate between self-harm and violence. They do all sorts of damage to themselves with whatever lies in reach. If one woman self-harmed, others often followed because the nature of relationships between women cued much of their behavior, both positive and negative.

Women use broken pieces of light bulbs; screws that they pulled out of objects; broken pieces of floor tile; pieces of plastic, including pieces from medicine cups; the sharp edges of little foil packets that contained skin cream; paper clips; staples taken out of books; pencils; knitting needles; a small, sharp stone; a thousand different things. It is impossible in a prison to remove every item that can be used for self-harm. Prisons do not have rubber rooms. They do have observation cells overseen by mental health professionals, but inmates remain in them for only a few days until they are calm or are transferred to the secure psychiatric hospital.

Self-harm activities often began long before a woman arrived in prison. Most began to cut or swallow when they were young teenagers, often in juvenile facilities, on observing another girl cut or self-harm. Many women arrive with scars over much of their body; some arrive with eating disorders, a less visible self-harming behavior. One woman had to be taken to the outside hospital each time she inserted an item into her abdomen, sometimes in the unhealed scar. After each of these incidents, she ended up in an observation cell but was then released and self-harmed again. At times, she used a pencil stub, at another, magic markers that bled their colors all over her intestines causing severe infection. She was denied the stick pens issued to all inmates because she inserted so many into her abdomen. Finally, she was given only non-toxic, washable crayons, but they, too, found their way into her abdomen.

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Women in prison want to go to school; go to their job; participate in drug treatment or domestic violence group or violence preventions programs; and then spend their evenings washing their clothes, cleaning their room, taking a shower, watching TV, making a cup of tea, calling or writing home, playing cards—not much different from most of us. When the population includes the severely mentally ill, however, these activities are often interrupted by some medical

or security emergency surrounding a mentally ill woman. Sometimes, it is a woman who has saved up her pills and has taken an overdose; at others, it is someone cutting herself. When someone is howling like a dog, quacking like a duck, or otherwise disturbing sleep, it is difficult to even get up in the morning, much less endure the daily routine of prison.

Although some prisons punish self-harm, most prisons punish the behaviors associated with self-harm. However, there is nothing to be gained by stigmatizing these women still more or sanctioning them. In fact, cell confinement seems to result in yet more self-harm. Women who self-harm are expressing such deep pain that punishment seems absurd and inappropriate. Too often, both correctional and mental health staff are concerned that women will self-harm again if not punished, that they would feel able to manipulate the prison system and rules. This is faulty thinking that needs to be eradicated. Punitiveness and feelings of guilt are what often led to this behavior, and more punitiveness by the prison is not going to reverse it or establish a climate to address the dynamics and pain that [self-harm] is indicating. In fact, the entire chain of events that surrounds self-harm behaviors needs to be looked at flexibly and as a whole unit of behaviors related to the initial [self-harming] act.

## RULE BREAKING

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There are few mechanisms to create conformity in prison other than institutional rules and punishment for not following them. Although many mentally ill inmates serve their time quietly and almost invisibly, routinely attending what therapeutic appointments the overtaxed staff can provide and taking their medications regularly, even one incident involving a mentally ill woman can create stigma against all others. These women, especially those with severe borderline personalities, startle staff and other inmates with their quick changes of demeanor and outbursts of anger aimed at anything or anyone. A few inmates suffer serious psychosis and

exhibit odd mannerisms that signal a serious loss of touch with reality. Both inmates and staff see such women as potentially dangerous, as “earth disturbers,” resulting in the belief that their unpredictability makes them inappropriate candidates for sharing living quarters or work areas within prison, even in the less dangerous and somewhat less violent atmosphere of most women’s prisons.

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Warren (2003) suggested that “suspiciousness and odd beliefs are highly relevant to risk assessment for violence among women, superseding the reckless and tumultuous behavior more commonly associated with personality disorders among female inmates” (p. 23). These findings, Warren wrote, indicate that women in prison

suffer from more extensive types of psychopathology than is suggested by studies that focus only on the acute forms of mental illness. It also highlights the societal cost that accrues from our current impasse regarding effective ways of either minimizing the development of these less obvious forms of psychiatric impairment or treating them once they have crystallized into long-term forms of maladaptive functioning. (pp. 23–24)

Warren [2003] found that in addition to the forms of mental disorder that are associated with specific symptoms and discrete episodes of disturbance, such as depression or substance abuse disorder, incarcerated women frequently are diagnosed with varying forms of character pathology. This type of dysregulation, usually termed personality disorder, refers to stable, long-standing dysfunctional interpersonal behavior that results in impairment throughout most spheres of adult functioning (p. 37). Prison, therefore, becomes just one more in a series of environments that create difficulties in adaptation for mentally ill women.

Martin and Hesselbrock (2001) created a typology of women to examine the relationship of risk, resilience, and vulnerability. They labeled the group with the highest rates of mental illness

as "Troubled" and found that these women were the most likely to be incarcerated for violent offenses or public order offenses. They were described as having the highest rates of posttraumatic stress disorder, antisocial personality disorder, and depression; as being least likely to be substance abusers; as having experienced trauma as children; as having the highest rates of family criminal history and risky home environments; and as having high rates of sexual assault victimization. Another group, called the "Volatile," the youngest group of women, were most likely to be alcohol dependent, with high rates of public order, property, and violent crimes. They exhibited relatively high rates of mental illness and the highest rates of sexual assault victimization while identifying few resources within themselves and exhibiting a tendency to be pessimistic about life. This group showed a high incidence of depression and posttraumatic stress disorder (PTSD). They had also experienced incarceration of family members and difficult and harmful home environments (Martin & Hesselbrock, 2001, pp. 38–39). Women in these groups needed intensive mental health interventions combined with substance abuse treatment and attention to PTSD issues. In sum, the women in prison with the greatest mental health needs had experienced the greatest levels of violence as children, had few social supports, and exhibited the greatest risk for violent behavior.

It is not always easy to identify when mental illness is escalating or even when it has reached critical proportions. It is nearly impossible to understand when a mentally ill inmate will react in a way to cause harm. If even once in a while violence occurs without warning and without a basis that can be understood, it is that much more difficult to forget. A young woman named Lilly lined up with many other inmates at the unit door for the school line run. Another inmate, Wanda, also joined the line but quickly reached out and slashed Lilly across the cheek so deeply that her teeth were exposed. The escort officer was standing right next to the line, and there were more than 30 inmate witnesses. Lilly had never even spoken with Wanda, and Wanda never explained

why she slashed Lilly, a person she appeared not to know. Wanda, who had a lengthy mental health history, was so ill that she was transferred to the psychiatric center. However, Wanda left confusion, fear, and anger in her wake, and that fear encompassed all mentally ill inmates.

Although hearing officers conduct a review of a woman's mental status in cases of misconduct, this does not guarantee that mentally ill women will be kept out of cell confinement or the Special Housing Unit (SHU). Most prisons have not come to view requiring individual counseling or placement on a specialized unit as a disciplinary measure. Jamie Fellner (2006, p. 400) of Human Rights Watch described such occurrences in the Georgia Department of Corrections and pointed out that correctional agencies have just begun to struggle with concepts of fairness and punishment for mentally ill inmates. It is clear, as in the [ . . . ] case with Wanda and Lilly, that the prison must protect other inmates and staff. It is also clear that at times transfer to a secure hospital is an acceptable answer.

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## PRISON MENTAL HEALTH UNITS

Over the more than 20 years that I worked at Bedford Hills, there were only three alternative mental health programs within the facility designed to address the needs of the mentally ill. These programs were operated by the Office of Mental Health, another state agency. The first was a 13-bed unit for inpatient care of women at the secure psychiatric hospital (beds that were shared with county jails). The second program, the Satellite Unit, contained both shortstay observation cells for women who were dangerous to themselves or others and a small dorm. These units were not integrated with other general population units but rather were located in the health building where the medical clinics and infirmary were located.

The third program, ICP, was operated under a therapeutic community model and was located



within the facility to provide a place for inmates to live who could not adjust to living within the general population units because of their mental illness. The ICP was staffed jointly by the corrections agency and the mental health agency. Admission to the ICP was decided by a joint committee, but admission to the Satellite Unit was a decision made by a mental health professional.

On the ICP, most of the actual work involved getting women out of their cells in the morning to participate in simple unit activities. These women were primarily quietly psychotic. Other inmates strived to help these women by developing a self-care, self-esteem program on the ICP. Bulletin boards were hung to keep track of bed making, personal hygiene, hair care, cleanliness of a cell, and similar skills. There was no alternative setting for those women with severe behavior disorders. Correctional staff used to argue that the mental health clinicians needed to put the most disruptive women with serious behavior problems on the ICP. However, the few times that this occurred, we quickly learned that these highly aggressive women took advantage of the other ICP women or instigated them to act inappropriately or dangerously. In any case, most of the mentally ill women had to be managed within the general population housing units because there were simply not enough spaces in the specialized mental health units.

## THE STEP-UP PROGRAM

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Too often, we noticed that women who moved from the ICP to general population returned to a mental health unit within a few days or weeks. Therefore, around 2000, the facility created another therapeutic program unit called Step-Up, a 60-cell unit geared to helping women transition from the ICP or Satellite Unit to general population. It had become apparent to us that if we were going to view the facility as a community in terms of mental health, and if we were serious about integrating the mentally ill women returning from specialized mental health programs or the psychiatric hospital to the general population,

we needed to develop programs within the general population to ease the transition. We wanted to reduce the feelings of trepidation and alienation of women who left the relative safety of the mental health unit when they moved to general population.

One of our counselors worked with inmates to create this unit for transitioning from the sheltered residential ICP or the more acute services of the dorm or hospital. Most of the cells in the newly created unit were occupied by inmates who had had serious involvement with mental health services and felt awkward in the general population or found themselves cycling from mental health programs to general population and then back again. These women said they did not always need to be in a special mental health unit, but they did feel more comfortable on a therapeutically focused unit, where support was provided and where people knew that they had mental health problems.

The counselor ran the overall program and held daily meetings on the unit. Several inmate program aides were assigned to assist in the operation of the program. Inmates were asked to volunteer for this position, and several of the volunteers had valuable prior experience dealing with family mental health issues. One woman wanted to help because she had a brother who was mentally ill and had been in and out of hospitals as a child. Another had a mother who had problems with mental illness. Several had prior histories of some mental health involvement prior to incarceration. Both volunteers and participants were willing to share their experiences. In one case, a woman stood up at a community meeting (at the behest of many of the other women) and announced that she had not cut herself in several months, the longest time that she could remember, to the cheers of the other residents. Another woman stood up and indicated that she would try to accomplish the same goal; she was met with equal enthusiasm.

These women found a great deal of support on the Step-Up Unit. The counselor reported that a woman recently released from a mental health program would usually stand at the far end of the

dayroom where unit meetings were held, illustrating how stigmatized these women felt. The counselor would often encourage the inmate to move closer, saying that everyone on the unit knew what it was like to be coming out of a mental health program and asking her to at least take a chair. Over a period of several days, the woman would push her chair closer to the circle as she began participating.

Women had to submit a request to participate in the Step-Up Unit, and they had to agree to certain behavior. Everyone worked to help them maintain this behavior, including the officers. The number of misbehavior reports decreased, as did problems reported in other areas when Step-Up women went to school or work. The tenor of the entire facility was positively affected, and women in the Step-Up Unit were not as despised or isolated as they had been before. In addition, because they formed a supportive group, they had an easier time in work and school settings as well. These inmates also appeared to be able to move back onto regular units with greater ease once they were established: working in the mess hall, cutting the grass, or other assigned prison activities where they had routine interactions with inmates in the general population.

Step-Up encompassed several characteristics that Merry Morash and her research colleagues at the University of Michigan identified as critical for women inmates: Participants were screened, staff served as role models, security staff were supportive and avoided aggressive use of power, the administration clearly supported the program, peers provided support and expectations of increased normative behavior, inmates helped to run the program, and the programming was continuous and comprehensive (Morash, Bynum, & Koons, 1998).

The facility went on from this success to increase involvement of inmates from the general population in the ICP and to develop in conjunction with mental health staff a suicide prevention and response program that deeply involved inmates in the general population in reducing the incidents of self-harm and responding to serious incidents. This program built on the positive

impact of training not only staff but also inmates to recognize signs of mental illness and/or suicidality. This increased knowledge also helped to sensitize this segment of the prison community's population to issues confronting the mentally ill.

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## WHERE DO WE GO FROM HERE?

Prisons can and do—out of necessity—develop programs that address issues of mental health. However, they provide the worst environment possible for the implementation of such programs because, ultimately, prisons operate on the basis of power and control. Prisons are not the best places for the mentally ill to develop a sense of autonomy or to experiment with new interpersonal skills. Women in particular feel the burdens of imprisonment, and sometimes their “crazy” actions only hint at the inner psychic pain that they endure. Furthermore, prisons are antithetical to the issues of family relationships that sometimes underlie the mental illness of incarcerated women.

Barbara Bloom, a noted sociologist who has studied incarcerated women, and her coauthors pointed out that “the dominant theme of connections and relationships threads throughout the lives of women offenders,” and they argued that “when correctional policy ignores this theme, the ability to improve women’s lives through correctional intervention is significantly diminished” (Bloom, Owen, & Covington, 2006, p. 9). However, this is exactly the problem with placing mentally ill women in prison. It is hard enough for anyone to be in prison, but prison is a place where touch (referred to as physical contact in many prisons, with a pejorative connotation), a primary part of a woman’s interpersonal relationships with her family members, especially children, is increasingly not permitted during visits. Sometimes, children are forced to talk to their mothers over the phone through a glass partition. When women leave prison, although they may have formed positive friendships and

supportive groups over the years which can be crucial to successful reentry, they are not permitted to have contact with other offenders, leaving many women who are mentally ill once again isolated and lonely.

Women react to incarceration differently than do men, and most prisons for women have a different feel to their atmosphere. Women's prisons are less violent places than are men's facilities. Women place great weight on their relationships with others, and they see themselves in terms of their relationships: as mothers, sisters, daughters, wives, partners, or friends. Women bring this focus on the importance of relationships with them to prison, and it provides fertile ground for the development of programs as well as positive community networks within the prison and on release. Women are extremely interested in [self-improvement] and generally use their time in prison to participate in available educational or counseling programs, so much so that they often create long waiting lists and are always lobbying for more programs.

With this huge influx of mentally ill women, prisons have had to struggle to make appropriate changes from the ways they have traditionally operated. Cassandra Newkirk, MD, vice chair of the American Psychiatric Association's Council on Social Issues and Public Policy, who has worked in several correctional institutions both for men and women, said,

Women come with much different histories when they're incarcerated than men. The majority have children. What they bring in with them is different. It was a rude awakening—switching from a male institution was a big eye-opener for me. We worked with several women who I thought were suffering from bipolar disorder but were really suffering from posttraumatic stress disorder, and many of the things we did re-traumatized them, such as locking them in a single room. Many of them had a history of being locked in closets and sexually abused. We're much more sensitive to that now. (quoted in Sherer, 2006)

What Newkirk described certainly mirrored our experiences at Bedford Hills. However,

despite our sensitivity to mental illness and the willingness of staff to adapt and accommodate, these efforts were like drops in the proverbial bucket. In fact, as often happens in periods of growth and construction or renovation—processes that are expensive in and of themselves—programs were the first things to be cut back, resulting in fewer services precisely when the numbers of inmates were expanding.

It is clear that no matter how violence prone these mentally ill women are at any moment, whether they act out or self-harm, or both, they are extremely vulnerable and fragile, an indication of how devastatingly dreary, difficult, violence ridden, and bereft of hope their lives had been prior to incarceration. To experience prison as better, calmer, and safer than their lives in the community is not a measure of how the prison is run but a measure of the destructive forces that have shredded their lives in the community. Prison most clearly does not answer the needs of mentally ill women who sometimes do not have the ability to care for even their basic needs and who too often remain on the outside of friendship groups that develop within the prison as women help each other out, sharing food and other personal items, providing emotional support and encouragement.

Correctional agencies have many fine administrators and staff members who want to not only confine women according to the law but also provide opportunities for rehabilitation. With the mentally ill women, we were aided by many inmates who wanted to build a positive community, increase the chances for everyone's success, and create a decent and humane atmosphere. There are many examples of things that went right for the mentally ill women at Bedford Hills. However, they were basically the result of decisions and actions initiated and carried out by people of good will. There was no systemic, sustained recognition of the management problems faced by the facility or its staff or the danger to staff and to inmates that was created by mixing so many seriously mentally ill women within the population. We cannot treat such severely mentally ill women in such a punitive setting. By the



very nature of their illnesses, they will violate the myriad institutional rules that overlay correctional management. Bedford Hills did a very good job keeping people confined, keeping them out of the larger community, until their release on parole. However, given that more than 90% of the budget of any facility is expended on security, this left very little funding for programs to address the underlying issues of the mentally ill.

Litigation has forced corrections and mental health systems to provide more appropriate treatment and services for the seriously mentally ill. Correctional agencies themselves, aided by many other governmental and private interest groups, have begun to create policies and procedures or new standards to deal with the mentally ill in prison that hopefully are gender responsive. However, these efforts and related court decisions do not address the essential issue in most cases: Seriously mentally ill women do not belong in and cannot be treated in prisons.

Even more distressing, court decisions cannot change the way our society thinks. I do not believe that corrections, for all its good will and excellent efforts, will be any more successful in dealing with the most mentally ill women in its prisons than community programs have been in the past. Mentally ill women get caught up in the web of custody and control that rules prison management, that is the very nature of prison culture, and short of throwing out this basic prison dynamic, mentally ill women will continue to be entangled in prison rules and regulations, will continue to serve longer sentences, and will remain our most complex group for transition to the community. As Zaitzow (2004) noted, "Under the prison system, dependence on authority figures is maximized, and opportunities to learn and experience responsible personal decision making are minimized" (p. 46). We have not systematically addressed the needs of the mentally ill who are incarcerated; we have not helped them to maintain their dignity or reduced their suffering; we have not relieved the suffering of staff and other inmates who are adversely affected by the presence of the mentally ill within correctional institutions.

Severely mentally ill women need to be in hospitals, even if that means reviewing civil commitment statutes and revisiting policies about forced medication. Those women who have proved themselves to be dangerous need to be maintained in secure hospital settings, just as we have begun to do with serious sex offenders. Staff at Bedford Hills used to sometimes stand at the top of the hill overlooking the front gate as a severely mentally ill woman was being released with little to no supervision, having served every day of her sentence. They would sometimes take bets on how much time would elapse before one of these women returned. Almost always, the staff member who had bet on the shortest amount of time won the bet.

I stopped being a superintendent in part because I no longer believed that the levels of confinement that we support in this country, particularly of mentally ill women, made any sense. My training and that of my staff did not prepare us for the role that society has imposed on prisons such as Bedford Hills. Over the years and during the vast expansion of the prison population, programs to help women succeed on release were not expanded but rather reduced, just at a time when they were needed most. The courts may have forced us to have more clinicians and in the present climate may force us to do better initial screening and to develop even more appropriate treatment. But the operative words here are forced or forcing, and we continue to delude ourselves as a society. We do not have the will to even consider, much less implement, the changes that are necessary to address the treatment needs of mentally ill women who commit crimes, most of whom commit these crimes as a result of their mental illness. In fact, we have eliminated or eviscerated most of our laws concerning insanity, catching these women up in our anger and vengefulness and in our claims that they must be held responsible for their behavior.

It is not that we do not know how to create meaningful changes to our prison and mental health systems; it is that we do not have the will to do so. It is far easier to put people who are dangerously ill behind walls and fences; in that way, we will never have to acknowledge their suffering.

# MULTISYSTEMIC THERAPY FOR ANTISOCIAL JUVENILES

## *Suggestions for Improvement\**

WILLEM H. J. MARTENS

**M**ultisystemic therapy (MST) is an intensive family- and community-based treatment that was developed in the late 1970s to address the mental health needs of youth who were seriously antisocial . . . and their families (Letourneau, Cunningham, & Henggeler, 2002). . . . It is based on a theory of human behavior (i.e., social ecological theory) that is strongly supported by the extant literature. Social ecological theory views individuals as nested within increasingly complex systems. Thus, problem behavior is maintained by problematic interactions within and across the multiple systems in which the child is embedded (Letourneau et al., 2002). MST treats factors that might pertain to individual characteristics of the youth (e.g., poor problem-solving skills), family relations (e.g., inept discipline), peer relations

(e.g., association with deviant peers), and school performance (e.g., academic difficulties). On a highly individualized basis, treatment goals are developed in collaboration with the family, and family strengths are used as levers for therapeutic change (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998; Henggeler et al., 1999). Intervention strategies include strategic family therapy, structural family therapy, behavioral parental training, and cognitive behavior therapies. The use of a home-based model of service delivery (i.e., low caseloads, time-limited duration of treatment) removes barriers of access to care and provides the high level of intensity needed to successfully treat youth presenting serious clinical problems and their multineed families (Henggeler et al., 1998, 1999). [MST] is conducted by two or four therapists and an onsite

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supervisor, who work together for purposes of group and peer supervision and to support the 24-7 on-call needs of the team's client families. MST staff must be highly accessible to their clients (Henggeler et al., 1998, 1999).

Rowland et al. (2000) and Borduin, Heilbrun, Jones, and Grabe (2000) believed that MST appears to be a clinically effective and cost-effective alternative to out-of-home placements (e.g., incarceration, psychiatric hospitalization) for youth presenting serious clinical problems, such as antisocial behavior. Kazdin (2002), however, asserted that none of the existing intervention/treatment approaches would ameliorate antisocial disorder and overcome the poor long-term prognosis. Kazdin (2002) and Martens (1997) suggested that there is only mixed evidence for (long-term) success of current MST. The author speculates that a lack of long-lasting [effectiveness] of MST in juveniles who are antisocial might be the consequence of lack of attention to [the following]: (a) neurological treatment of neurobiological dysfunctions that correlate with core features of antisocial behavior (Martens, 2000a, 2001a); (b) specific needs, condition, and coexistent mental disorders of the patient (Martens, 1997, 2000a; van Marle, 1995); (c) specific therapeutic models that are proven effective, such as psychoanalytic or psychodynamic treatment (Kernberg, 1984; van Marle, 1995); and (d) crucial environmental (Minuchin, Montalvo, Guerney, Rosman, & Schumer, 1967) and cultural factors (Martens, 1997) that interfere with treatment [effectiveness]. I suggest that the following important topics, which are hardly considered in current MST approaches, should be included to make this treatment approach more adequate:

- The antisocial patient's old social environment will simply not accept when the patient's behavior is transformed into harmless, social behavior (Martens, 1997; Minuchin et al., 1967). Thus, most of these juveniles who are antisocial are afraid to demonstrate a prosocial attitude because of rejection by their old environment. Moreover, many juveniles who are

antisocial believe that a normal prosocial life and career is boring and only acceptable for stupid/dull people and losers. Without a solution to these problems, any intervention or prevention will have only limited success. Possible solutions could be (a) transfer of the juvenile with antisocial personality disorder (ASPD) and his or her family to a better neighborhood or structural improvement of neighborhood (Martens, 2000a); (b) creation of a more prosocial network; (c) improvement of academic skills, success, and social competence that will lead to increased possibilities for successful prosocial jobs/careers (Martens, 1997, 2000a), higher socioeconomic status, increased self-esteem, social awareness, and as a consequence, a possible decrease of impulsivity/hostility (Martens, 1997); and (d) stimulation of patient's awareness that a normal, social career and life is not necessarily boring.

- Specific treatment of coexisting mental disorders—most frequently substance abuse disorders, schizophrenia, and other personality disorders (Martens, 2000a). In addition, treatment of trauma or post-traumatic stress disorder (PTSD) (see *DSM-IV*, [American Psychiatric Association, 1994]) is needed, because many juveniles who are antisocial suffer from (recent) traumatic experiences as a consequence of physical/sexual abuse, neglect and rejection, homelessness, chaotic and violent family life, threatening neighborhood, and so on (Martens, 2000a, 2001/2002). Solomon and Johnson (2002) concluded in their review of outcome research that the strongest support is found for treatments that combine cognitive and behavioral techniques and that hypnosis, psychodynamic anxiety management, and group therapies also may produce short-term symptom reduction. Because of the neurobiological correlates of PTSD, neurological treatment of these patients might be necessary (Yehuda, 2002).
- Combination of specific psychotherapeutic, neurologic, and neurofeedback treatment of ASPD traits. Antisocial features that are frequently neurobiologically determined and thus need neurobiological attention are impulsivity, aggression (Martens, 2000a), sensation seeking (Martens, 2000a; Zuckerman, 1994), poor socialization and lack of guilt or remorse (Fowles &



Kochanska, 2000), poor fear conditioning and associated incapacity to learn from experiences (Lykken, 1995; Martens, 2000a), criminality (Raine, Venables, & Williams, 1996), and a lack of moral capacity (Martens, 2000b). Juvenile ADHD, CD, and ODD behavior could be treated effectively with the help of neuro-feedback (Horacek, 1998).

- By means of structured fantasy therapy (Garrison & Stolberg, 1983; Giannini, 2001), children and adolescents who are antisocial might be able to transform their hostile and paranoid fantasy world into a social and trustful one.
- Possibilities to learn from aggressive behavior in a controlled setting by means of agitation therapy (Martens, 2001a) . . . would increase the patient's awareness of his or her core problem and the roots and consequences of his or her aggression as a result of adequate guidance and confrontation with and feedback from others and psychotherapeutic aftercare, which may lead to self-insight and increased social, emotional, and moral capacities. Impressive confrontations with fellow patients and staff members may contribute to the process of remission in ASPD (Martens, 1997, 2000a). However, this treatment approach can only be realized in in-ward settings.
- Possibility for ethical and/or spiritual development, possibly by means of ethics therapy (Martens, 2001c) and/or spiritual psychotherapy (Martens, 2003b) [is] because remission in ASPD may be linked to ethical and spiritual activities and development (Black, Baumgart, & Bell, 1995; Martens, 1997; Robins, 1966).
- Increased responsibilities (as a consequence of parenthood, marriage, joining the armed services, getting a stable job, etc.) might be linked to remission in ASPD (Black et al., 1995; Martens, 2000a; Robins, 1966). Ideal treatment conditions will include a structural enhancement of the patient's responsibilities by means of stimulation of forming of bonds, attachments or commitments, which are characterized by [the] important dimension of loyalty, sympathy and/or care.
- Because many children and adolescents who are antisocial are homeless or frequently gadabouts, these juveniles should be offered adequate housing and guidance (hygiene, medical treatment of physical illness; Martens, 2001b,

2001/2002). Current MST programs are hardly tailored for and directed toward homeless juveniles (or those who often run away, are left alone, or are gadabouts).

- Facilities for privacy and relaxation, which might be necessary for adequate reflection, contemplation, and preparation for change, [are needed]. The life of many juveniles who are antisocial is characterized by restlessness, lack of safety, chaos, and a lack of privacy and relaxation, which interferes with healthy development and opportunities for recovery (Martens, 1997, 2000a). Moreover, the patient may experience the facility for privacy as an expression of respect, deep understanding, and constructive attention on the part of the treatment staff.
- Therapeutic circumstances/approaches that are also targeted toward enjoying life, which may include vacations, excursions, and trips, may relate to remission in ASPD (Martens, 2000a). Important learning moments (positive experiences, contacts, refreshing changes) occur frequently and could be stimulated easily during these pleasant events.
- Cultural influences may play an important role in the development of antisocial behavior: For instance, some refugees have different moral ideation and some behavioral manifestations that are regarded in the West as socially undesirable that are in the refugees' eyes acceptable (Martens, 1997). Only therapists with an understanding of these cultural dimensions of antisocial behavior may be able to change the patient's attitude.
- To meet the psychosocial, neurobiological, and psychiatric therapeutic needs of antisocial youth and to enhance the effectiveness and positive long-term outcome of MST, I suggest that a neurologist, a forensic psychiatrist, a neuro-feedback specialist, a pediatrician, a trauma therapist, and a social worker involved with the homeless worker should be added to the standard MST team.

I conclude, in contrast to others (Borduin et al., 2000; Henggeler et al., 1998, 1999; Letourneau et al., 2002), that MST is mainly appropriate for those individuals who are antisocial and their families who are motivated for it and who

are not severely (a) emotionally, socially, and morally disturbed and/or traumatized; (b) abused, rejected, and neglected by their relatives; (c) angry, hostile, and rancorous; and (d) at risk of re-offending, and who are capable of cooperating with relatives and MST staff and understanding instructions. Otherwise, a forensic psychiatric treatment community would be more suitable because it is evident that only therapeutic community treatment is effective in juveniles who are severely impaired, abused, and neglected

(Martens, 1997; 2003a; Ministry of Justice, 2002; van Marle, 1995). Treatment of such juveniles should take place explicitly (at least in the initial phase) away from the influence of abusive, chaotic family and friends, even when these people are willing to change their attitudes. Only when the patient becomes strong enough and able to cope with his or her negative memories, traumas, and the impact of peers and relatives is it useful that he or she be gradually involved in the MST process.

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## ABOUT THE EDITORS

**Curt R. Bartol** was a college professor for more than 30 years, teaching a wide variety of both undergraduate and graduate courses, including Biopsychology, Criminal Behavior, Juvenile Delinquency, Introduction to Forensic Psychology, Social Psychology, and Psychology and Law. He earned his PhD in personality/social psychology from Northern Illinois University in 1972. He was instrumental in creating and launching Castleton State College's graduate program in forensic psychology and served as its director for 6 years. As a licensed clinical psychologist, he has been a consulting police psychologist to local, municipal, state, and federal law enforcement agencies for over 25 years. In addition to editing this book of readings, he has written *Introduction to Forensic Psychology* (now in its 3rd ed.) and *Criminal Behavior: A Psychosocial Approach* (now in its 9th ed.). He also has coauthored *Juvenile Delinquency: A Systems Approach*, *Delinquency and Justice: A Psychosocial Approach* (2nd ed.) and *Psychology and Law: Theory, Research, and Application*

(3rd ed.). He is also the long-standing editor of SAGE's *Criminal Justice and Behavior*.

**Anne M. Bartol** earned an MA and a PhD in criminal justice from State University of New York at Albany. She also holds an MA in journalism from the University of Wisconsin–Madison. She taught criminal justice, sociology, and journalism courses over a 20-year college teaching career, primarily at Castleton State College, and has worked as a journalist and a social worker in child and adolescent protective services. In addition to editing this book of readings, she has coauthored *Introduction to Forensic Psychology*; *Juvenile Delinquency: A Systems Approach*; *Delinquency and Justice: A Psychosocial Approach* (2nd ed.); *Psychology and Law: Theory, Research, and Application* (3rd ed.); and *Criminal Behavior* (8th and 9th eds.). She has served as book review editor and managing editor of *Criminal Justice and Behavior* and has published articles on women and criminal justice, rural courts, and the history of forensic psychology.



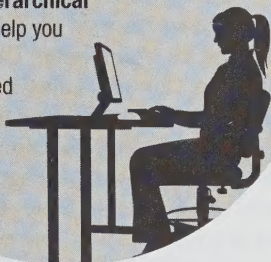
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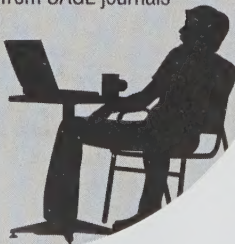


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