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Wrongful Conviction

Perceptions of Criminal Justice Professionals Regarding the Frequency of Wrongful Conviction and the Extent of System Errors

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Drawing on a sample of 798 Ohio criminal justice professionals (police, prosecutors, defense attorneys, judges), the authors examine respondents' perceptions regarding the frequency of system errors (i.e., professional error and misconduct suggested by previous research to be associated with wrongful conviction), and wrongful felony conviction. Results indicate that respondents perceive system errors to occur more than infrequently but less than moderately frequent. Respondents also perceive that wrongful felony conviction occurs in their own jurisdictions in .5% to 1% of all felony cases, and in the United States in 1% to 3% of all felony cases. Respondents, however, specify an acceptable rate of wrongful conviction to be less than .5%. Findings thus indicate that criminal justice professionals perceive an unacceptable frequency of wrongful conviction and associated system errors and suggest that programs aimed at reducing system errors and improving professional conduct would be broadly accepted among criminal justice professionals.

Keywords: *wrongful conviction; system error; frequency; criminal justice system*

The wrongful conviction of innocent defendants in the United States is a continuing concern among criminal justice professionals and policy makers. Attention to this problem has come from the highest levels of government. Former prosecutor and now U.S. Senator Patrick Leahy stated,

These mistakes carry a high personal and social price. They undermine the public's confidence in our judicial system, they produce unbearable anguish for innocent people and their families and for the victims of these crimes, and they compromise public safety because for every wrongly convicted person, there is a real criminal who may still be roaming the streets (Leahy, 2003).

In 2000, Illinois Governor George Ryan imposed a moratorium on the state's death penalty after stating,

We have now freed more people than we have put to death under our system—13 people have been exonerated and 12 have been put to death. There is a flaw in the system, without question, and it needs to be studied. (CNN, 2000)

Continuing concern about the possible execution of innocent individuals led to the Justice for All Act of 2004 that passed both chambers of the U.S. Congress and was signed into law on October 30, 2004. The act includes many key provisions that assist states that have the death penalty to create effective systems for the appointment and performance of qualified counsel, together with better training and monitoring for both the defense and prosecution, and also provides substantial funding to states for increased reliance on DNA testing in new criminal investigations.

Concern about wrongful conviction is not limited to those involved in the death penalty debate. In fact, approximately two thirds of exposed wrongful conviction cases involve noncapital crimes such as rape or assault where the death penalty is not applicable (Innocence Project, 2006). In recent years, numerous articles have appeared in the national media reporting cases of wrongfully convicted individuals who have served long prison terms for various noncapital cases before new evidence either proved their innocence or at least cast doubt on their guilt. As such, the problem of wrongful conviction should be viewed as one that affects defendants irrespective of the seriousness of the offense.

Background

The basic impulses for examining issues related to wrongful conviction are related to three primary concerns. First is the concern for individual justice. The belief that all law-abiding people should be free of oppression from the

criminal justice system makes wrongful conviction especially repugnant to many U.S. citizens.

A second impulse that drives the research on wrongful conviction is that of public safety. When a wrongfully accused individual is convicted of a crime, that person is punished in place of the person who actually committed the offense. Therefore, for every suspect wrongfully convicted, there is a corresponding guilty individual who has not been brought to justice and who may be continuing to commit crimes in the community (see Justice Thurgood Marshall's dissent in *Manson v. Brathwaite*, 1977). Scheck, Neufeld, and Dwyer (2000) note, "All wrongfully convicted individuals take the lash of punishment for someone else's crime; that is the very definition of their predicament. Far too often, they are surrogates for serial criminals and killers" (p. 244).

Third, wrongful conviction is a concern to many people because it undermines public confidence in the criminal justice system. Every year, stories come from the media concerning individuals who have languished for years in prison or who have faced execution and are later found to have been wrongfully convicted. Stories of this nature can shake the faith of criminal justice professionals and the citizenry alike in the ability of the criminal justice system to identify criminals and achieve justice. Wrongful convictions, therefore, can damage the symbolic status of the criminal justice process—a process that symbolizes America's moral stance against crime and the desire to achieve justice (Liebman et al., 2002). This damage ultimately places a burden on the integrity, prestige, reputation, credibility, and effectiveness of the entire criminal justice process.

The pioneering research in wrongful conviction was conducted by Yale University law professor Edwin Borchard in 1932 when he documented 65 cases where innocent people were convicted. Borchard's book, *Convicting the Innocent*, was a qualitative effort involving case studies of wrongfully convicted individuals. The book was written in response to a local district attorney who told Borchard that "innocent men are never convicted. . . . It is a physical impossibility" (Borchard, 1932, p. v). Borchard's work was followed by other qualitative and quantitative studies of the phenomenon of wrongful conviction.

The broad concept of *wrongful conviction* has received considerable attention from scholars during the past several decades. In 1987, Bedau and Radelet published a groundbreaking article examining the cases of 350 convicted defendants they determined were factually innocent. This article served

as the catalyst for renewed interest in the plight of innocent yet convicted defendants (Drizin & Leo, 2003-2004). Since the mid-1980s, the development of DNA technology and its acceptance within the court community has allowed numerous defendants to conclusively prove their innocence. These cases proved newsworthy and attracted increased media attention showing that claims concerning the fallibility of court decisions were not solely the ranting of academics. Accumulating proof that wrongful convictions occur, and that they occur with a frequency that was not previously anticipated, has resulted in more resources being devoted to discovering cases involving factually innocent defendants and in increased academic interest in the extent and causes of wrongful convictions; in turn, system actors have become increasingly aware of the problems and dangers of convicting innocent defendants.

Studies following in the tradition of Borchard (1932) have examined a variety of issues associated with wrongful convictions. Many researchers have focused on providing a better overall picture of the phenomenon (Brandon & Davies, 1973; Carter & Beth, 1978; Christianson, 2004; Conners, Lundregan, Miller, & McEwen, 1996; Frank & Frank, 1957; Huff & Rattner, 1988; Huff, Rattner, & Sagarin, 1996; MacNamara, 1969; McCloskey, 1989; Radin, 1964; Ramsey, 2003; Scheck et al., 2000; C. Walker & Keir, 1999; S. Walker, 2006; Westervelt & Humphrey, 2002; Yant, 1991), whereas other studies have focused on addressing specific issues. For example, some researchers have focused on discussing and diagnosing cases of specific defendants who have been wrongfully convicted (Barlow, 1999; Cooper, Cooper, & Reese, 1995; Frisbie & Garrett, 1998; Hirsch, 2000; Humes, 1999; Linscott & Frame, 1994; Potter & Bost, 1997; Protess & Warden, 1998). Others have focused primarily on the issues concerning wrongful conviction and capital punishment (Bedau & Radelet, 1987, 1988; Cohen, 2003; Dieter, 1997; Fan, Keltner, & Wyatt, 2002; Gross, 1998; Liebman, Fagan, & West, 2000; Radelet & Bedau, 1998; Radelet, Bedau, & Putnam, 1992; McCloskey, 1996; Unnever & Cullen, 2005; Weinstock & Schwartz, 1998). Still other studies have focused on specific types of errors, such as eyewitness error (Wells & Olson, 2003), false confessions (Connery, 1996; Drizin & Leo, 2003-2004; Kassin, 1997; Leo & Ofshe, 1997-1998), police error (McMahon, 1995), prosecutor error (Gershman, 1999), ineffective counsel (Finer, 1973), and the impact of race (Harmon, 2004; Parker, Dewees, & Radelet, 2002; Young, 2004). Some researchers have sought to better understand and determine the nature and extent of wrongful convictions (Gross, Jacoby, Matheson, Montgomery, & Patel, 2005; Huff &

Rattner, 1988; Huff et al., 1996; Huff, Rattner, & Sagarin, 1986; Poveda, 2001; Ramsey, 2003; Rattner, 1988).

How Frequently Wrongful Conviction Occurs

Initially, the debate on wrongful conviction centered on whether the phenomenon actually occurred (see Radelet & Bedau, 1998). Revelations concerning wrongfully convicted defendants during the past several decades conclusively has shown that such does occur and now a seminal question concerns how frequently wrongful conviction occurs. Various studies have provided estimates of the frequency of wrongful conviction ranging from .5% to as high as 20% (Huff et al., 1986; McCloskey, 1989; Poveda, 2001). Considering the fact that the Justice Department reports that there are now in excess of 2,000,000 people behind bars (Bureau of Justice Statistics, 2004), these estimations suggest that between 10,000 and 400,000 wrongfully convicted individuals are incarcerated. Even if one accepts an error rate at the low end of the spectrum, say 1%, this translates into 20,000 individuals now incarcerated for crimes they did not commit.

Most of the information we have on the frequency of wrongful conviction has come from case studies. Developments in forensic DNA technology during the past 20 years can be credited for shedding some light on the frequency issue. The Innocence Project, an independent nonprofit legal clinic and resource center founded in 1992 at the Benjamin N. Cardozo School of Law, handles and keeps track of cases where postconviction DNA testing of evidence has yielded conclusive proof of innocence. As of January 5, 2006, the Innocence Project's Web site reported that new forensic tests conducted on old evidence (i.e., evidence that was gathered before the advent of modern DNA technology) had led to the identification, release, and exoneration of at least 172 wrongfully convicted individuals (Innocence Project, 2006).

Revelations of the incidence of wrongful conviction through the use of DNA technology have heightened the awareness of the problem of wrongful conviction and spawned new research into cases where convictions have been overturned for reasons other than the reanalysis of old evidence using DNA—usually wrongful convictions that in some way were influenced by, or are the result of, system breakdowns within the criminal justice process. Gross et al. (2005) found 183 cases of exonerations of defendants

convicted of serious crimes since 1989 where evidence other than DNA was used to declare a defendant not guilty of a crime for which he or she had previously been convicted.¹ Liebman et al. (2000) determined that 7% of the defendants in their sample of cases reversed on appeal were found not guilty when they were retried for the initial capital conviction offense.

Although the identification of these cases of wrongful conviction demonstrates that a problem does exist, the actual extent of the problem remains unknown. Many researchers who have studied the phenomenon believe these revealed cases represent only the tip of the iceberg concerning the black hole of wrongful conviction (Gross et al., 2005; Huff et al., 1996; McCloskey, 1989; Poveda, 2001; Scheck et al., 2000). Radelet and Bedau (1998, p. 117) addressed the frequency issue by discussing the likelihood that someone convicted of a capital offense is actually innocent. They contend that for each conviction, there is a perceived level of certainty (i.e., 95% certain) that the person is actually guilty. When this level of certainty is multiplied across all defendants in similar circumstances, the conviction error rate continues to increase—the larger the population the larger the odds of having innocent defendants on death row. Therefore, without providing an estimate of the frequency of these situations, they suggest the conviction of factually innocent people may be more likely than others have suggested.

The belief that the frequency of wrongful conviction is typically underestimated is primarily due to two reasons. First, cases of wrongful conviction are not typically exposed because of a properly working criminal justice system that has a tendency to correct its own errors. Instead, most cases are the result of some serendipitous circumstance wherein a wrongly convicted individual fortuitously happens to have his or her case investigated by an individual or organization that champions their case and commits the resources necessary to see that justice is done (Adams, Hoffer, & Hoffer, 1991; Protess & Warden, 1998; Scheck et al., 2000). Likely, many wrongfully convicted individuals who have not been so fortuitous remain incarcerated. As Bedau and Radelet (1987) contend, “the coincidences involved in exposing so many of the errors and the luck that is so often required suggest that only a fraction of the wrongly convicted are eventually able to clear their names” (p. 70). Gross et al. (2005) note that “a large number of false convictions in noncapital cases are never even discovered because nobody ever seriously investigates these cases” (p. 10). Another reason for believing that the revealed cases represent only a fraction of all wrongful convictions is because a large number of these revelations resulted from the use of modern forensic techniques where scientists were able to apply DNA technology to reanalyze old evidence—usually

involving blood, hair, semen, or other body fluids—to determine that a convicted individual was innocent. Unfortunately, materials amenable to DNA analysis are available in only a small percentage of criminal cases (Gross et al., 2005; Scheck et al., 2000). It is therefore logical to assume that for every case of wrongful conviction uncovered using DNA technology, there are other cases involving incarcerated innocent individuals who will never be able to benefit from this new science.

Why Wrongful Conviction Occurs

In addition to answering the question of how frequently wrongful convictions occur, researchers are ultimately interested in answering the question of why they occur. Leo and Ofshe (1997-1998) note that knowledge of the frequency of system errors is important but suggest that the more “important question is “How can such errors be prevented?”” (p. 492). Answering the why question(s) would allow for more focused efforts to reduce system errors and consequentially reduce the frequency of wrongful convictions.

Many writers have provided general comments concerning the potential causes of wrongful conviction. Liebman et al. (2000) state that the most common errors prompting reversals are incompetent defense attorneys and police and prosecutors who fail to suppress exculpatory evidence. Radelet and Bedau (1998) argue that innocent people are placed on death row because of “politically ambitious prosecutors, angry juries and incompetent defense counsel” (p. 111). Gross et al. (2005) suggest that eyewitness identifications, perjury, and false confessions are the key causes of wrongful convictions. Drizin and Leo (2003-2004) claim that false confessions lead to erroneous convictions. Unfortunately, these general comments are not specific enough to allow for the development of effective remedies.

Major research projects conducted by the National Institute of Justice (Connors et al., 1996) and by the Innocence Project at the Benjamin N. Cardozo School of Law (Scheck et al., 2000) have analyzed cases of wrongful conviction to identify factors commonly associated with wrongful conviction. A primary focus of the present study is to identify and evaluate the perceptions of criminal justice professionals regarding many of the findings and conclusions of the Connors et al. (1996) and Scheck et al. (2000) studies.

It must be noted that although system errors may be a primary cause of wrongful convictions, it is possible that factually innocent defendants may be wrongfully convicted even when there is no system error (Frank &

Frank, 1957). Because decisions are rendered by fallible human beings, it is entirely possible that innocent defendants may be found guilty, even when testimony and physical evidence is properly collected. The North Carolina case of Ronald Cotton is a prime example of a wrongful conviction that could have possibly occurred where system error did not occur. Mr. Cotton was mistakenly identified as a rapist by the victim and then spent more than 10 years in prison before DNA analysis of the rape kit excluded him and matched another individual who was already incarcerated for another crime (Simon, 2003; see also Innocence Project, 2006). As Supreme Court Justice Thurgood Marshall commented in *Furman v. Georgia* (1972), “No matter how careful courts are, the possibility of perjured testimony, mistaken honest testimony and human error remain all too real” (p. 79). In sum, innocent people will be convicted even when system actors properly do their jobs. All we can expect by improving the system of justice, therefore, is a reduction in—and not an eradication of—wrongful convictions.

The Present Study

This study replicates, in part, previous research conducted by Huff et al. (1986). Included in the Huff et al. study was an analysis of Rattner’s (1983) survey of Ohio criminal justice professionals who investigated perceptions regarding the frequency of wrongful conviction and its associated causes. Rattner solicited the opinions of police, prosecutors, defense attorneys, and judges because he surmised that those professionals “closest to the trial process” were in an ideal position to provide insights regarding these issues (Huff et al., 1996, p. 55).

Twenty years have passed since the Rattner (1983) survey and many advancements have occurred in the area of forensic science (especially DNA testing) that have shed further light on the phenomenon of wrongful conviction. Anticipating that this new information might help to either clarify or dispute the opinions proffered by respondents to the Rattner survey, we conducted our own 2002 to 2003 survey of a similar group of Ohio criminal justice professionals—revisiting and expanding on many of the issues dealt with in the Rattner survey and the Huff et al. (1986) article.

This research, however, takes a narrower approach than was taken by Huff et al. (1986). Although Huff et al. addressed both perceptions of system errors (errors or misconduct by police, prosecutor, defense attorney, and judge) and

nonsystem errors (e.g., eyewitnesses and expert testimony error, false accusations, false confessions, community pressure), the focus of this article is on the perceptions of criminal justice professionals concerning only system errors that have been determined by prior research to be associated with wrongful conviction. This narrower approach is taken because numerous research endeavors in the past 20 years suggest that it is system errors that often precipitate, exacerbate, and amplify nonsystem errors. For example, eyewitness error has been associated with inadequate police investigation and faulty identification procedures (Conners et al., 1996; Loftus, 2003; Wells & Olson, 2003); false confessions have been found to occur because of overzealousness on the part of police officials or prosecutors (Gross et al., 2005; Scheck et al., 2000); false accusations, especially those by jail-house snitches have been encouraged and attenuated by overzealous police or prosecutorial actions or inadequate investigations (Huff et al., 1996; Scheck et al., 2000; see also *State of Oklahoma v. Ronald Keith Williamson and Dennis Leon Fritz*, 1991); and wrongful conviction because of forensic error has often occurred because of system errors associated with inadequate counsel, overzealous prosecution, and judicial error (Scheck et al., 2000). Also, community pressure to obtain a conviction for a particular crime has, at times, provoked all members of the criminal justice profession into system error actions (Huff et al., 1996). In sum, research suggests that a reduction in system error should ultimately lead to a reduction in nonsystem errors.

At the same time, we expand on the prior work of Huff et al. (1986). Whereas the Rattner (1983) survey asked respondents to simply rank order a list of possible system errors (from *most frequent* to *least frequent*), the present study asks respondents to estimate (on a 9-point scale ranging from *never* to *always*) how often they believe specific system errors occur—errors that have been determined by recent research to be associated with wrongful conviction. Also, the Rattner survey only inquired into the perceived frequency of police, prosecutorial, and judicial error and did not address perceived error by defense attorneys,² unlike our study that adds the variable *defense attorney error* (DE) and examines and compares respondents' perceptions of the frequency of particular system errors committed by four groups of system actors (police, prosecutor, judges, and defense attorneys). Finally, we expand on the Huff et al. (1986) study by garnering the opinions of system actors on how wrongful conviction might be reduced—opinions often based on revelations due to modern DNA technology that was not available at the time of the Rattner survey. The following is a brief discussion of the types of system error that are addressed in this study.

Police Error (PE) and Misconduct

Police officers or detectives are often the first members of the criminal justice system to intervene in a criminal case and become involved at a very critical time—the beginning. The activities of the police at this juncture and how well they do their job can have dramatic implications for an innocent individual who has become a suspect. Prosecutors, when making a decision concerning whether to prosecute a case, rely heavily on the evidence presented to them by police officials. Evidence properly collected by police should be able to be properly reviewed by prosecutors. However, when police conduct sloppy investigations or manufacture evidence (e.g., the Rampart scandal³) or produce mistaken eyewitness identification because of biased identification techniques (e.g., misuse of show ups or conducting biased photospreads or lineups), prosecutors may make decisions to use such evidence without full knowledge of how it was acquired. Thus, once PE or misconduct contributes to a wrongful arrest, there is an increased likelihood that other criminal justice officials will add momentum to the mistake. Huff et al. (1996) call this phenomenon the ratification of error:

The criminal justice system, starting with the police investigation of an alleged crime and culminating in the appellate courts, tends to ratify errors made at the lower levels of the system. The further the case progresses in the system, the less chance there is that the error will be discovered and corrected, unless it involves a basic issue of constitutional rights and due process. (p. 144)

For example, Leo and Ofshe (1997-1998) found that police-induced false confessions substantially bias jury evaluations of evidence and are perceived as dispositive of issues of guilt (see also Gross, 1996, 1998).

Extant research confirms that PE and misconduct are significant contributors to the wrongful conviction of the innocent (Connors et al., 1996; Gross et al., 2005; Huff et al., 1986, 1996; Leo & Ofshe, 1997-1998; McCloskey, 1989; Radelet et al., 1992; Scheck et al., 2000; Yant, 1991).⁴

Prosecutorial Error (PrE) and Misconduct

Prosecutorial error or misconduct is another factor associated with wrongful conviction (see *Buckley v. Fitzsimmons*, 1993; *Miller v. Pate*, 1967). The prosecutor is considered by many to be the most powerful individual within the criminal justice process (Gershman, 1999; Gottfredson & Gottfredson, 1988). Because of their position within the criminal justice process, prosecutors' errors or misconduct can result in devastating consequences to an

innocent suspect (Huff et al., 1996; Leo & Ofshe, 1997-1998). Prosecutors, who enjoy significant immunity, have wide discretion regarding how many investigative resources to use, which cases to dismiss, and which cases to prosecute. By deciding to dismiss a case believed to be based on unreliable evidence (e.g., a false confession, misidentification) or where there exists trustworthy exculpatory evidence, prosecutors can correct errors of other system participants. On the other hand, when a prosecutor pursues a case based on bias, limited information, or less than reliable evidence, a wrongful conviction can occur.

Inadequacy of Counsel (DE)

Inadequacy of counsel refers to instances where innocent individuals are wrongfully convicted of a crime they did not commit because, in part, their defense lawyers were incompetent, lazy, ill-prepared, and underfunded. Huff and Rattner (1988) list inadequacy of counsel as an important factor in wrongful conviction. They found that inexperienced original defense counsel, often with inadequate investigative resources, did not adequately represent the interests of the suspect (see also Liebman et al., 2000, who found that the most common error in death penalty cases is “egregiously incompetent defense lawyering” [p. 5] that accounts for 37% of state postconviction reversals). Yant (1991) suggested that some defense attorneys—without fully investigating their client’s claims of innocence—too often use plea bargaining as a standard operating procedure to reduce their workload. He also criticized defense lawyers for seldom taking the time to properly challenge forensic evidence offered by the prosecution (see also Connors et al., 1996; Scheck et al., 2000). This may occur because the attorney is unable to conduct independent tests necessary to assess the conclusions of the state’s forensic expert because of limited resources, time, or a lack of sufficient effort (Huff et al., 1996; Scheck et al., 2000).

Judicial Error (JE) and Bias

This category was not specifically included in the National Institute of Justice or Innocence Project’s findings as being related to wrongful conviction. Other research, however, has concluded that JE and bias are associated with wrongful convictions (Huff et al., 1986; Rattner, 1983). As an integral part of the “courtroom work group” (S. Walker, 2006, p. 57), judges bear responsibility for permitting various types of misleading evidence to enter the courtroom. Wrongful convictions can occur because judges allow incompetent defense attorneys, overzealous police and prosecutors, and questionable

forensic evidence to permeate the courtroom. Sometimes, the biases of the judges themselves lead to trial errors that are not reversible but nevertheless influence decision making (Huff et al., 1996; Rattner, 1983). Scheck et al. (2000) note that the occurrences of wrongful conviction are attenuated when appellate judges issue only one-line judicial orders that do not specify the reasons for overturning a conviction. Huff et al. (1986) lists three major types of JE associated with wrongful conviction: JEs affected by bias, judicial neglect of duty, and technical errors in judicial decisions.

Data and Method

For these analyses, four groups of Ohio criminal justice professionals were surveyed: law enforcement (sheriffs and chiefs of police), prosecutors (chiefs and assistants), defense attorneys (private and public defenders), and judges (common pleas, appellate, and Supreme Court). Using a single large state, such as Ohio, serves to control for the effect of varying legal definitions while still allowing for a diversity of settings. Furthermore, Rattner (1983) conducted his survey in Ohio, and his findings therefore provide a baseline for comparison purposes.⁵

The perceptions of criminal justice professionals were chosen as a measure because there may be no better way to approach the question of prevalence than through perceptions (Huff et al., 1986). Because no research approach has yet been devised to exactly measure the extent of the problem, the perceptions elicited in the present study offer a best estimate of the phenomenon. The professionals surveyed are in a position to make such observations because they are exposed, on almost a daily basis, to the environment where wrongful convictions might occur. Because of their experience within the criminal justice system, their perceptions regarding the issues of this study may enable them to offer data close enough to objective truth to provide a reasonable baseline estimate of the frequency of system errors.

The research reported here is designed to provide insight into the perceptions of criminal justice professionals regarding the following four questions: (a) How frequently does wrongful felony conviction occur? (b) What is an acceptable level of wrongful convictions? (c) How frequently are the types of system errors, previously identified by research to be associated with wrongful conviction, committed by criminal justice professionals? and (d) Do groups of criminal justice professionals differ in their perceptions?

The survey was administered using a version of Dillman's (2000) tailored design method that uses a 5-step multiple mailing procedure to improve survey response rates.⁶ Sample sizes were determined using Dillman's formula

Table 1
Survey Response Rates

Group	Surveys Mailed	Responses	Response Rate
Police	488	274	56.1
Sheriffs	88	62	70.4
Chiefs of police	400	212	53.0
Prosecutors	220	103	46.8
Chief prosecutors	88	62	70.4
Assistant prosecutors	132	41	31.1
Defense attorneys	488	235	48.2
Private	238	98	41.1
Public defenders	250	137	54.8
Judges	304	186	61.2
Common pleas	230	142	61.7
Appellate	67	41	61.2
Supreme court	7	3	42.9
Total	1,500	798	53.2

based on the amount of sampling error that can be tolerated, the population size from which the sample is to be drawn, how varied the population is with respect to the characteristics of interest, and the required confidence level. Sample sizes for the present survey were determined using the formula to target a 95% confidence level, with a $\pm 5\%$ sampling error. An overall response rate of 53.2% was attained (see Table 1).

Sample

To examine these issues, a 53-item questionnaire was mailed to 1,500 Ohio criminal justice professionals. The sampling frame consisted of all 230 presiding common pleas court judges, 67 appellate court judges, and 7 Supreme Court judges; all 88 chief county prosecutors; and all 88 county sheriffs.⁷ Also surveyed were 132 randomly selected assistant prosecutors, 400 randomly selected chiefs of police, 250 randomly selected county public defenders, and 238 randomly selected private defense attorneys. Table 2 contains demographic information on the sample.

Measures

Wrongful conviction. For purposes of the survey, the term *wrongful conviction* is defined as people who have been convicted of a criminal offense but are in fact innocent. This definition of wrongful conviction appeared on the inside front cover of the survey instrument. Following in the tradition of

Table 2
Group Comparisons: Demographic Variables

Variables	Police	Prosecutors	Attorneys	Judges	Total ^a
Age					
18 to 29	5	7	13	0	25
30 to 39	32	22	71	4	129
40 to 49	106	34	66	30	236
50 to 59	112	37	67	82	298
60 to 69	18	0	16	50	94
70 to 79	2	0	4	9	15
80 or older	0	0	0	0	0
Race					
White	272	98	219	167	756
Black	0	1	8	2	11
Hispanic	0	0	2	1	3
Asian	0	0	1	0	1
Other	1	1	3	1	6
Gender					
Male	271	86	194	148	699
Female	4	14	43	31	92
Jurisdiction					
Village	98	0	2	0	100
Township	28	2	1	2	33
City	82	2	29	2	115
County	61	92	112	123	388
State	1	0	20	32	53
Multiple	5	3	70	19	97

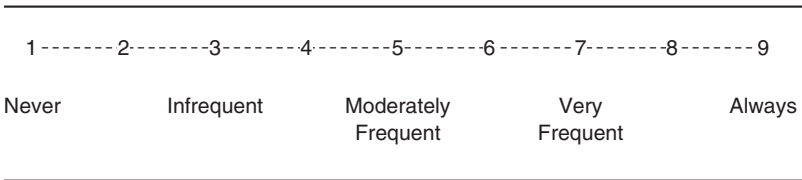
^aNot all respondents provided demographic data.

Borchard (1932) and others (Bedau & Radelet, 1987; Gross, 1996, 1998; Gross et al., 2005; Huff et al., 1986), our definition refers to convicted individuals who are factually innocent. This is in contrast to legal innocence, which includes persons who may or may not be factually guilty but were nevertheless improperly convicted because of a prejudicial legal error at trial (see Liebman et al., 2000).

Frequency of wrongful conviction. Three survey items addressed the issue of respondent's perceptions of the frequency of wrongful conviction. The first two items asked respondents to estimate what they perceive to be the percentage of wrongful felony conviction occurring in their own jurisdiction and then in the United States. The third survey item asked respondents what they believed to be an acceptable level of wrongful conviction. A 10-item scale was used (see list) with values ranging from "0%" to "more than 25%."

- a. 0%
- b. less than .5%
- c. 5% to 1%
- d. 1% to 3%
- e. 4% to 5%
- f. 6% to 10%
- g. 11% to 15%
- h. 16% to 20%
- i. 21% to 25%
- j. more than 25%

Figure 1
9-item Scale



Specific types of system error or misconduct. As noted, extant research has identified specific types of police, prosecutorial, attorney, and judicial errors that are associated with wrongful conviction. In an effort to move beyond general perceptions of the frequency of this phenomenon, respondents were also queried about the extent to which each group of criminal justice actors engaged in the listed types of conduct. Specifically, for each survey item, respondents were asked to indicate on a 9-item response scale ranging from *never* to *always* (hereafter called 9-item scale; see Figure 1) how often they believed the named group of criminal justice officials participated in the listed behavior.

Police error (PE) or misconduct. The following five types of PE have been identified as being associated with wrongful conviction (Connors et al., 1996; Drizin & Leo, 2003-2004; Gross, 1996; Gross et al., 2005; Huff et al., 1996; Leo & Ofshe, 1997-1998; McMahon, 1995; Radelet et al., 1992; Scheck et al., 2000):

- Inadequate police investigation
- Police coaching witnesses in pretrial identification procedures
- Police suppressing exculpatory evidence
- Police using false evidence
- Police using undue pressure to obtain a confession

All respondents were asked to use the 9-item scale to estimate how often police commit each of these types of error.

Prosecutorial error (PrE) or misconduct. Five prosecutorial errors have been found to be commonly associated with the incidence of wrongful conviction (Connors et al., 1996; Huff et al., 1996; Humes, 1999; Liebman et al., 2000; Radelet et al., 1992; Scheck et al., 2000):

- Inadequate investigation of case by prosecutor
- Prosecutor suppressing exculpatory evidence
- Prosecutor using undue plea-bargaining pressure
- Prosecutor prompting witnesses
- Prosecutor knowingly using false testimony

This variable was also operationalized and measured using the 9-item scale.

Inadequacy of defense counsel (DE). Defense attorney error (DE) was operationalized and measured by asking respondents to indicate, on the same 9-item scale, how often they believe defense attorneys are involved in the following five types of defense error found to be associated with wrongful conviction (Connors et al., 1996; Finer, 1973; Huff et al., 1996; Gross et al., 2005; Liebman et al., 2000; Scheck et al., 2000):

- Inadequate investigation of case by defense attorney
- Defense attorney failing to file proper motions
- Defense attorney not adequately challenging forensic evidence
- Defense attorney not adequately challenging witnesses
- Defense attorney making unwarranted plea-bargain concessions

Judicial error (JE). Prior research suggests four types of JEs are associated with wrongful conviction. Respondents were again asked to use the 9-item scale to indicate how often they believe each of these four types of JE occur (Rattner, 1983):

- Judicial error concerning the admissibility of physical evidence
- Judicial error concerning the admissibility of eyewitness testimony
- Judicial error concerning the admissibility of expert testimony
- Error resulting from judicial bias

Statistical Analysis

The main emphasis of the statistical analysis was to examine the response rates of all participants regarding each of the study's research questions and to use statistical tests to measure variations in frequency of responses across groups of participants. Responses to questions concerning the frequency of

Table 3
Percentages—Wrongful Conviction in Own Jurisdiction

Response	Police		Prosecutors		Defense Attorneys		Judges		All	
	%	n	%	n	%	n	%	n	%	n
1 = 0%	33.2	91	29.0	29	1.8	4	15.5	26	19.5	150
2 = less than .5%	43.4	119	49.0	49	2.2	5	31.0	52	29.3	225
3 = .5% to 1%	13.5	37	13.0	13	9.3	21	21.4	36	13.9	107
4 = 1% to 3%	6.2	17	6.0	6	26.5	60	19.0	32	15.0	115
5 = 4% to 5%	3.3	9	1.0	1	18.6	42	6.0	10	8.1	62
6 = 6% to 10%	0.4	1	2.0	2	17.3	39	5.4	9	6.6	51
7 = 11% to 15%	-	-	-	-	9.3	21	1.2	2	3.0	23
8 = 16% to 20%	-	-	-	-	7.1	16	0.6	1	2.2	17
9 = 21% to 25%	-	-	-	-	5.3	12	-	-	1.6	12
10 = more than 25%	-	-	-	-	2.7	6	-	-	0.8	6
TOTAL	100.0	274	100.0	100	100.0	226	100.0	168	100.0	768

wrongful conviction and the specific types of error were analyzed using a four-step process. First, the response frequencies were examined. Second, the overall mean score was calculated and then the mean score for each group. Third, analysis of variance was used to determine if differences in group means existed. Finally, if ANOVA indicated that differences existed among group means, post hoc Tukey range tests and pairwise multiple comparisons were used to determine which group means were significantly different from one another.

Findings

Frequency of Wrongful Felony Conviction

Respondents, as a group, perceive wrongful felony conviction to occur in their own jurisdictions between .5% and 1% of the time (Table 3). When responses across groups are compared, defense attorneys perceive higher rates of wrongful conviction in their jurisdictions than do judges, prosecutors, and police. On average, defense attorneys believe that in-jurisdiction wrongful conviction occurs in 1% to 3% of all felony cases. Judges

Table 4
Percentages—Wrongful Conviction in United States

Response	Police		Prosecutors		Defense Attorneys		Judges		All	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
1 = 0%	1.1	3	1.0	1	0.5	1	-	-	0.7	5
2 = less than .5%	21.3	57	30.2	29	1.9	4	17.0	26	15.8	116
3 = .5% to 1%	23.6	63	31.3	30	6.0	13	20.3	31	18.7	137
4 = 1% to 3%	29.6	79	24.0	23	14.4	31	28.1	43	24.0	176
5 = 4% to 5%	14.2	38	10.4	10	25.9	56	18.3	28	18.0	132
6 = 6% to 10%	5.2	14	1.0	1	19.4	42	10.5	16	10.0	73
7 = 11% to 15%	2.2	6	2.1	2	8.8	19	3.9	6	4.5	33
8 = 16% to 20%	2.2	6	-	-	13.0	28	1.3	2	4.9	36
9 = 21% to 25%	0.4	1	-	-	2.3	5	-	-	0.8	6
10 = more than 25%	-	-	-	-	7.9	17	0.7	1	2.5	18
TOTAL	100.0	267	100.0	96	100.0	216	100.0	153	100.0	732

perceive wrongful convictions to occur less often (.5% to 1%), whereas both prosecutors and police believe these phenomena only occur in less than .5% of all felony cases. Statistically significant differences ($p = .000$) in the mean scores among the four groups were determined by ANOVA. A post hoc Tukey honestly significantly different (HSD) analysis indicates that group responses significantly differ from one another except those of prosecutors and police (in other words, differences were observed between defense attorneys and police and prosecutors and judges; also judges differed from defense attorneys and police from prosecutors, whereas the group responses of police and prosecutors did not differ).

When respondents were queried about the frequency of wrongful conviction across all jurisdictions of the United States (Table 4), three important findings are apparent. First, almost one fourth (24%) of all respondents believe that wrongful convictions occur between 1% and 3% of the time, and an additional 40.7% of the respondents believed they occur in more than 3% of all cases. Second, for each group of respondents, their estimate of the frequency of wrongful conviction in the United States is higher than their estimate of wrongful conviction in their own jurisdictions. Third, when group responses are compared, defense attorneys again report higher rates of wrongful conviction than do judges, prosecutors, and police. ANOVA indicates statistically significant differences in the mean scores among the four groups. Analysis of the subgroups again reveals that the responses

Table 5
Percentages—Acceptable Level of Wrongful Conviction

Response	Police		Prosecutors		Defense Attorneys		Judges		All	
	%	n	%	n	%	n	%	n	%	n
1 = 0%	54.6	148	48.5	48	49.1	113	51.1	89	51.4	398
2 = less than .5%	24.7	67	29.3	29	27.0	62	27.6	48	26.6	206
3 = .5% to 1%	10.7	29	13.1	13	10.9	25	12.6	22	11.5	89
4 = 1% to 3%	6.3	17	8.1	8	8.3	19	6.3	11	7.1	55
5 = 4% to 5%	1.1	3	1.0	1	3.0	7	2.3	4	1.9	15
6 = 6% to 10%	1.5	4	-	-	1.7	4	-	-	1.0	8
7 = 11% to 15%	0.7	2	-	-	-	-	-	-	0.3	2
8 = 16% to 20%	0.4	1	-	-	-	-	-	-	0.1	1
9 = 21% to 25%	-	-	-	-	-	-	-	-	-	-
10 = more than 25%	-	-	-	-	-	-	-	-	-	-
TOTAL	100.0	271	100.0	99	100.0	230	100.0	174	100.0	774

of defense attorneys differ significantly ($p = .000$) from those of the other three groups. In their own jurisdiction, however, judges' responses differ only from those of prosecutors ($p = .001$) and defense attorneys ($p = .000$). No significant differences are reported in the police perceptions when compared with those of prosecutors or judges.

Table 5 contains the response frequencies of respondents concerning their beliefs about what is an acceptable rate of wrongful conviction. Overall, slightly more than half of all respondents (51.4%) believe that only a rate of 0% is acceptable. Another one fourth of all respondents (26.6%) think that a rate of less than .5% is acceptable, and approximately one tenth of all respondents (11.5%) feel that a .5% to 1% rate is acceptable. Only 10% of all respondents chose an acceptable wrongful conviction rate of 1% or more. An ANOVA test revealed no significant differences in the mean scores among the four groups.

Specific System Error or Misconduct

The next four tables present mean responses to questions regarding perceptions of the frequency of specific types of error or misconduct involving the police, prosecutors, defense attorneys, and judges. Also reported, for each group and each type of error, is an additive scale that was created in each instance from the responses to individual survey items displayed in the

Table 6
Perceptions of Five Types of Police
Error (Mean Responses)^a

Type of Police Error	Police	Prosecutors	Defense Attorneys	Judges	All Respondents
Inadequate police investigation	3.57	3.93	5.90	4.63	4.55
Police using undue pressure to obtain a confession	2.79	2.68	6.23	3.66	4.01
Police coaching witnesses in pretrial I.D. procedures	2.87	2.48	5.65	3.44	3.78
Police suppressing exculpatory evidence	2.55	2.27	5.52	3.39	3.60
Police using false evidence	1.94	1.64	3.71	2.46	2.55
Mean scores	2.74	2.60	5.40	3.52	3.24

^aSurvey question: Based on your knowledge and experience, estimate the frequency of each type of police error.

table (e.g., PE, PrE, DE, and JE). Mean scores are derived from the 9-item scale responses to the survey questions.

Police Error (PE)

Table 6 reports mean responses for the four groups of respondents on each of the five PE measures. For each of the items, defense attorney means were the highest of the four groups. Mean responses for judges were the second highest, followed by police and then prosecutors (except for the question on inadequate investigations where the order of police and prosecutors is reversed).

A reliability test (Cronbach's alpha) was conducted to determine if all five items measure the same concept of PE.⁸ A Cronbach's alpha of .9179 suggests that the responses presented in Table 6 have enough intercorrelation to be combined as a single variable. As such, an additive scale was produced and a single variable PE created. Mean response to the variable PE (3.24) indicates respondents believe this type of error to occur more than infrequent but less than moderately frequent.

When group responses are analyzed separately, defense attorneys think PE occurs more frequently than do judges, prosecutors, and police. Judges perceive

Table 7
Perceptions of Five Types of Prosecutorial Error
(Mean Responses)^a

Type of Prosecutorial Error	Police	Prosecutors	Defense Attorneys	Judges	All Respondents
Inadequate investigation of case by prosecutor	3.67	2.67	5.28	4.03	4.11
Prosecutor using undue plea-bargain pressure	3.94	2.20	5.65	3.57	4.15
Prosecutor prompting witnesses	3.27	2.22	5.83	3.73	4.01
Prosecutor suppressing exculpatory evidence	2.67	1.59	4.66	2.88	3.18
Prosecutor knowingly using false testimony	1.84	1.25	3.11	1.96	2.17
Mean scores	3.08	1.99	4.91	3.23	3.52

^aSurvey question: Based on your knowledge and experience, estimate the frequency of each type of prosecutorial error.

PE to occur more frequently than do prosecutors and police but less frequently than defense attorneys. An ANOVA test of the variable PE indicates that there are statistically significant differences ($p = .000$) in the mean scores of the four groups. The results of the post hoc Tukey HSD test indicate that the opinions of both defense attorneys and judges differ significantly ($p = .000$) from the members of the other three groups, whereas the responses of police and prosecutors do not differ significantly from one another (although each does differ from those of defense attorneys and judges).

Prosecutorial Error (PrE)

Table 7 reports mean frequencies for each PrE item. The same pattern of responses that was observed for PE was evident with prosecutorial error. Specifically, the highest mean responses for each item were observed with defense attorneys followed by judges, police, and then prosecutors.

Again, a reliability test was conducted to determine if all five items measure the same concept of *PrE* (Cronbach's alpha = .8998). An additive scale was created using all five survey items, and a single variable PrE was created. The mean response for all respondents for the variable PrE is 3.52. On the 9-item response scale, a rating of 3.52 translates as more than "infrequent" and "less than moderately frequent."

Table 8
Perceptions of Five Types of Defense Error
(Mean Responses)^a

Type of Defense Attorney Error	Police	Prosecutors	Defense Attorneys	Judges	All Respondents
Inadequate investigation of case by defense attorney	4.54	4.31	5.35	4.70	4.79
Defense attorney not adequately challenging forensic evidence	3.84	3.71	5.24	4.07	4.30
Defense attorney failing to file proper motions	4.02	3.87	4.69	4.02	4.21
Defense attorney making unwarranted plea-bargain concessions	4.30	3.12	4.59	3.85	4.14
Defense attorney not adequately challenging witnesses	3.68	3.43	4.61	3.96	3.99
Mean scores	4.08	3.69	4.90	4.12	4.29

^aSurvey question: Based on your knowledge and experience, estimate the frequency of each type of defense attorney error.

An ANOVA test of the variable PrE reveals statistically significant ($p = .000$) differences in mean scores of the four groups. The results of a post hoc Tukey HSD test indicate that prosecutors perceive a significantly ($p = .000$) different rate of their own error than do members of the other three groups. In contrast to perceptions of PE, prosecutor responses also differ significantly from the other three groups ($p = .000$), whereas judges and police responses perceptions do not differ from one another. When the group responses to the PrE scale are analyzed separately, the major differences in perceptions are best understood when the responses are broken down into *infrequent or less* and *more than infrequent* categories. Only 8.9% of defense attorneys perceive PrE to occur at the infrequent or less level. On the other hand, prosecutors and police selected responses of *infrequent or less* at a rate 8 times higher than defense attorneys and at a rate almost 6 times higher than judges. Conversely, 91.1% of defense attorneys perceive PrE to occur more than infrequent—almost double the perception rate of judges and police, and 13 times higher than perceived by prosecutors.

Defense Attorney Error (DE)

Mean responses of all four groups of criminal justice professionals, individually and compositely, are reported in Table 8. Contrary to the findings reported in the prior two tables, there is no consistent pattern of response means across the four groups. Defense attorneys do have the highest means and prosecutors the lowest means. However, the means of judges and police are very similar.

The Cronbach's alpha (.8879) indicated that all five defense attorney questions measure the same concept of *DE*. An additive scale was produced using the five survey items, and a single variable *DE* was created. Overall, the mean response for *DE* is above the more than infrequent level and below the moderately frequent level ($M = 4.29$). There is consensus among prosecutors, police, and judges that *DE* occurs less than moderately frequently. Only defense attorneys believe their group's own error to be above the moderately frequent level.

An analysis of variance test reveals that significant differences ($p = .05$) exist in the mean scores of the four groups. The results of a post hoc Tukey HSD test indicate that defense attorneys perceive significantly ($p = .000$) different rates of their own groups' error than do members of the other three groups, whereas prosecutors report significantly different rates of *DE* than do police ($p = .039$) and judges ($p = .025$). Police and judges' perceptions do not significantly differ.

Judicial Error (JE)

Table 9 displays the responses to the four *JE* items. Similar to the other reported responses, defense attorneys believe that each form of *JE* is more common than do police, prosecutors, or judges. Furthermore, the difference in means of defense attorneys is quite substantial, whereas the means of the other three groups of criminal justice actors are quite similar. Still, prosecutor means are the lowest on each item, whereas response means of judges are the second lowest on two items. For the remaining two items, police means either are the same as judges or slightly lower.

A Cronbach's alpha of .8772 suggests that all four items can be combined as a single variable and as such an additive scale was produced. Overall, the mean response for the variable *JE* is above the infrequent level ($M = 3.37$) and below the moderately frequent level. An ANOVA test of the variable *JE* reveals that significant differences exist in the group mean scores. Whereas defense attorneys perceive a significantly ($p = .000$), different rate of error than do

Table 9
Perceptions of Four Types of Judicial Error
(Mean Responses)^a

Type of Judicial Error	Police	Prosecutors	Defense Attorneys	Judges	All Respondents
Error resulting from judicial bias	2.90	2.36	5.07	2.69	3.44
Error concerning admissibility of physical evidence	3.00	2.87	4.55	3.00	3.45
Error concerning admissibility of eyewitness testimony	3.01	2.50	4.45	2.84	3.35
Error concerning admissibility of expert testimony	2.79	2.54	4.25	2.94	3.23
Mean score	2.93	2.57	4.58	2.87	3.37

^aSurvey question: Based on your knowledge and experience, estimate the frequency of each type of judicial error.

members of the other three groups, the perceptions of prosecutors, police, and judges do not differ significantly from one another.

Discussion

The frequency of wrongful convictions within the criminal justice system is unknown. The figure remains elusive because knowledge of cases where defendants are wrongfully convicted usually occurs only when defendants have resources that are sufficient to proffer evidence of some nature to persuade a court that they have been unjustly convicted or, when no financial resources are available, others with resources agree to become involved. Additionally, the “criminal justice system is not designed to scrutinize its own decisions for a range of factual errors once a decision is reached” (Bedau & Radelet, 1987, p. 70; see also Gross et al., 2005, p. 2). As such, it is likely that most incidences of wrongful conviction are not discovered. Also, although much has been learned in recent years about the system errors associated with wrongful conviction, little research has been conducted to determine the extent of these errors. The present study extends previous research by providing information on system actors’ perceptions concerning both the frequency of wrongful convictions in general and also

the frequency with which specific system errors associated with wrongful convictions occur in the processing of criminal cases. Several of the findings are especially worthy of further mention and discussion.

Regarding the perceived frequency of wrongful conviction in the United States, when the results of the current study are compared with the findings of the 1983 Rattner survey, estimations of the frequency of wrongful conviction appears to have increased among criminal justice professionals. For example, respondents to our survey perceive that wrongful convictions occur more frequently in the United States (between 1% and 3% of all felony cases) than did respondents to the Rattner survey (less than 1%). Also, it appears that the belief of some criminal justice professionals that wrongful convictions never occur is dissipating. Only 0.7% of our survey respondents believe that wrongful conviction never happens in the United States—significantly less than the 5.6% of respondents to the 1983 survey who believed this to be true.

When perceptions of in-jurisdiction frequency are compared, respondents to our survey estimated a rate between .5% and 1% of all felony cases⁹—similar to the Rattner (1983) survey respondents' estimations of less than 1%. However, when the actual responses are examined, differences in the perceptions of the respondents to the two surveys emerge. For example, in the earlier survey about one in three respondents (36.8%) believed that wrongful felony conviction never occurred in their own jurisdictions, whereas in our survey, this figure changed to about one in five (19.5%). Similarly, when the 1% to 5% categories are compared, only 6.5% of respondents to the 1983 survey selected this option compared to 23% of respondents to the present survey—an almost fourfold increase. Thus, although the average responses were similar, there appear to be differences in the individual responses.

These changes in aggregate-level responses likely result because of several reasons. First, as previously mentioned, DNA technology has provided conclusive proof in many instances that wrongfully convicted individuals were factually innocent. Second, media outlets have reported the activities of several prominent organizations that have tracked wrongful convictions in capital crimes throughout the United States (i.e., Innocence Project, Death Penalty Information Center, and the Center on Wrongful Convictions). Another likely factor is the publicity surrounding the blanket clemency and death penalty moratorium implemented by Governor George Ryan in Illinois. Ultimately, however, answers to whether these increases are because of factors associated with the revelations of modern DNA technology and the accompanying media attention and professional discussion remains an empirical question (Gross et al., 2005; Drizin & Leo, 2003-2004).

Findings regarding the perceived frequency of system errors associated with wrongful conviction are also informative. We did not expect the majority of our respondents to perceive that system errors never occur, but we did expect that criminal justice actors would believe that such error occurs infrequently or less. Whereas it is not uncommon for system actors to occasionally criticize the system's dysfunctions, it is uncommon for a majority of queried system actors to state that error occurs more than infrequently. This is exactly what our respondents indicated. Across all categories of system error—PE, PrE, DE, and JE—respondents in total believe that error occurs more than infrequently. It is worth noting that the two lowest estimates of error concerned corrupt action (i.e., police using false evidence, prosecutor knowingly using false evidence), possibly reflecting the likelihood that respondents are more likely to acknowledge issues concerning negligence and poor training than they are to acknowledge issues involving corruption.

Interestingly, when survey responses were grouped according to the respondent's role within the system (police, prosecutors, defense counsel, judges), defense attorneys perceived each measured system error to be significantly more likely to occur than each of the other group of respondents. At the same time, for 18 of 19 comparisons, prosecutors on average perceived system errors to be least likely or common, and their responses were often quite similar to those voiced by police chiefs. Judges, although often similar to police chiefs, most often voiced responses indicating the belief that these errors were more likely to result than did police, although they believed they were less likely to occur than did defense attorneys.

It is not surprising that prosecutors perceive the least error given their primary role in the criminal justice system; the prosecutor picks the cases to prosecute, selects the charge(s), recommends the bail amount, makes and approves plea-bargain agreements, and urges the judge to impose a particular sentence. Tied to this decision-making process is an organizational culture in many prosecutors' offices that promotes a win-at-any-cost instead of a doing-justice mentality (Huff et al., 1996). Prosecutors thus are susceptible to using a guilty-until-proven-innocent approach to prosecutions that contributes to perceptions that wrongful convictions are rare. In sum, because prosecutors hold more responsibility in the processing of wrongful convicted individuals than any other court actor, they are particularly situated to deny that wrongful convictions occur with any frequency.

On the other hand, we find that defense attorneys perceive more error than the other system actors. This may, in part, be because of the adversarial professional relationship they have with these actors. Often, defense attorneys find themselves trying to refute police testimony and counter prosecutorial motions

and contesting judicial verdicts (Cole & Smith, 2005). Although defense attorneys, like prosecutors, are also involved in a case from arrest through verdict, they have relatively little influence on what cases are to be prosecuted, what bail will be set, or what sentence recommendations come from the prosecutor.

Police officials and judges generally occupied the midranges of the group means. In other words, these two groups generally perceive more error than prosecutors and less error than defense attorneys, although judges in most instances believed there was more error than did police officials. The more moderate estimations of police officials may be because of their relatively limited involvement in cases of wrongful conviction.

An encouraging finding of this study is, when respondents were asked what they believed to be an acceptable level of wrongful conviction in the United States, we found that a gap exists between what the majority believes is an acceptable frequency (0%) and what the majority believes to be the actual frequency (1% to 3%). A foundation for reform is therefore in place. Also, irrespective of their role or their perceptions regarding the frequency of wrongful conviction and system errors, those who responded to the survey assert that reductions in the frequency of wrongful conviction and the rate of system error are not only preferable but also possible. It is often the case that individuals are readily prepared to critique and criticize the criminal justice process but are unprepared to provide proposed solutions. In this study, however, two thirds of the respondents offered quite insightful, and well-informed, written suggestions concerning how the frequency of wrongful conviction might be reduced. The fact that almost 500 of the 798 respondents answered the survey's opened-ended question "In your opinion, what steps could be taken by criminal justice professionals to reduce the incidence of wrongful conviction?" indicates, we believe, that there exists a deep concern about this problem among criminal justice professionals. Many of the suggestions of these practitioners reflect those offered by prior research (for example, see Drizen & Leo, 2003-2004; Gross, 1996; Harmon, 2004; Huff et al., 1986) and should provide significant procedural implications and food for thought for policy makers. Reflecting the multifaceted and complex nature of wrongful conviction, respondent suggestions addressed a variety of issues. The following is a sample of some representative written comments provided by respondents.

System Overload

Members of all groups of criminal justice professionals agree that they and their colleagues are often overwhelmed by heavy caseloads, especially in large

cities. More than 100 respondents provided comments concerning how the avalanche of cases in some jurisdiction may either cause, or contribute to, wrongful conviction. They suggest that often high caseloads lead to inadequate investigations, rushes to judgment, and forced confessions. One judge wrote,

The tools are available to improve upon reducing the rate of wrongful conviction. However, the overwhelming volume of cases imposed upon the courts in certain jurisdictions within certain time spans without adequate investigation and preparation by law enforcement, prosecutors, defense counsel and the courts, will always impact upon a perfect system. Leadership by professionals in their respective fields will affect the wrongful conviction rate.

A chief county prosecutor said, “The biggest problem I see is that all of us—at every step—have so darn many cases that it is sometimes very difficult to do the job you know needs to be done.”

Police Practices

A major criticism of police practices involved the lack of thoroughness during investigations. One police official said, “Many experienced and inexperienced investigators form an opinion at the onset of their investigation and develop their fact base on their preconceived opinions. The facts need to speak for themselves.”

Police identification procedures were also a topic of significant criticism. A defense attorney wrote, “The reliability of eyewitness testimony varies from reliable to unreliable depending on the time between crime and identification—and type of lineup used. There is a need for less suggestive I.D. procedures and less reliance on stranger I.D.”

Other suggestions revolved around the need to videotape all police interrogations and confessions. A defense attorney noted,

Supposed “confessions” are often summaries prepared by the police and signed by an undereducated, unsophisticated client who is assured of leniency for cooperating and giving a statement. In this day and age, all statements should be videotaped. In fact, arrest to booking should be videotaped. When police video or audio an interview, they frequently do a “run-through” ahead of time. What is not on the tape is the 3 hours of interviews where the accused is told he “will fry” if he doesn’t confess or some other such nonsense.

A judge remarked, “Require the video-taping of a defendant from the moment police contact begins, not just 30 seconds of ‘confession.’”

Prosecutorial Practices

Prosecutors also received their fair share of criticism. Many respondents were concerned about prosecutorial overzealousness and the withholding of exculpatory evidence.

One defense attorney stated, "Chief prosecutors should refrain from pushing their assistant 'to win at all costs' irregardless of justice," whereas a judge wrote, "Prosecutors need to be better prepared, less overindicting, and realize the abuses of their power and be held accountable."

Another typical comment came from a police official who stated, "Prosecuting attorneys are 'graded' on conviction rates. Young prosecutors appear pressured to get some type of conviction. Emphasis must be placed on the truth."

Defense Attorney Practices

Defense attorneys were often criticized for lack of preparedness. Widely noted, however, was the problem defense attorneys often have in acquiring the necessary resources to properly defend their client. Many respondents noted that rarely do defense attorneys have the necessary resources to offset the resources of the prosecution.

A prosecutor commented,

Police officers do occasionally get sloppy and arrest the wrong person. It would be nice if we could make police more thorough and objective, but the reality is that our system relies on defense lawyers to make sure justice is done. Unfortunately it is rare for a lawyer to have the resources necessary to properly investigate and defend. In other words, sadly, justice requires money.

A public defender remarked, "The defense attorney does not have the support staff the prosecution has. The playing field is not balanced because the legwork must be done by the defense attorney him/her self."

Judicial Practices

Criticism of judges primarily revolved around personal bias, competency, and judicial pressure exerted on the plea-bargaining process. One defense attorney wrote,

Most judges in my county are less than impartial in criminal cases. Individuals very often confess to a crime they did not commit because most judges will tell

the defense attorney they will max your client's sentence if they go to trial and lose.

A police official commented, "Judges should be appointed based on skills, knowledge, experience, and abilities—not because of who they know or how popular they are."

Increased Professionalism and Training

Many respondents spoke of the need for increased professionalism and improved training across the criminal justice profession. Almost 100 respondents suggested that wrongful convictions might be reduced if more stringent selection and hiring standards were put in place. Another consistent suggestion was that more and better training should be provided (including ethical training) and that such training should not only occur when individuals are beginning their careers but also on a continuing basis. Finally, many respondents called for raising professional standards and stricter discipline for those who consistently make errors or are involved in professional misconduct. A police official wrote,

Set minimum requirements of training and continuing legal education for criminal defense attorneys—particularly in death penalty cases nationwide. Also, a minimum requirement of continuing training hours (annually) for police officers in general, and detectives in particular, regarding identification procedures, forensic evidence collection, and securing statements, in addition to others.

Conclusions and Recommendations for Future Research

The scientific study of wrongful conviction has now been carried on for approximately 75 years. When reviewing the conclusions of the early researchers regarding the frequency and causes of wrongful conviction one cannot help but take note of how little their research has been contradicted by modern science; most of the conclusions of these early researchers appear to remain valid today. Each researcher has consistently pointed to the same criteria: Eyewitness error, faulty science, professional error and misconduct, false witnesses, rushes to judgment, and presumption of guilt are the factors most often mentioned. Twenty-first century science has, to date, only tended to confirm the hunches of the earlier researchers that wrongful conviction is

basically a product of a complex mix of these factors. It is yet to be determined, however, if the laments and policy proposals of these writers—from Borchard in 1932, through Garner and Frank and Frank in the 1950s, Radin in the 1960s, and echoed by Huff et al., Bedau and Radelet, and McCloskey in the 1980s—have not significantly reduced the incidence of wrongful convictions or only served to cast some light on the problem. In many ways, we are still in the Dark Ages of understanding how to improve our system of justice in regards to separating the innocent from the guilty. We can take some comfort in the findings of this study—that those individuals who work in the criminal justice system are increasingly acknowledging that wrongful convictions and system errors occur at an unacceptable frequency.

Future research should continue to focus on determining what causes wrongful convictions. This study could only ask respondents to indicate their perceptions regarding errors that have been determined to be associated with the phenomenon of wrongful conviction because, to date, no direct causal relationships between the identified errors and wrongful convictions have been proven. Previous research appears to suggest that no single factor causes a wrongful conviction; in almost every proven case of wrongful conviction, numerous errors occurred in the processing of the accused. The challenge for the future research is to determine which errors, and which interactions, contribute to wrongful conviction. Finally, future research should be conducted to determine if the dynamics of wrongful conviction vary when large metropolitan jurisdictions are compared to smaller rural jurisdictions.

There is widespread recognition that, due to the human condition, the phenomenon of wrongful conviction is not likely to ever be totally eliminated. However, seeking to reduce the incidence of wrongful conviction is a noble task—given the misery that a wrongful conviction can impose on the wrongly convicted themselves, their families, the victims and their families, witnesses, jurors, and even those who work in the criminal justice system. Much work still needs to be done. We trust that this article has advanced the cause of justice.

Notes

1. Not included in these findings are an additional 174 cases of mass exonerations involving defendants whose cases were set aside after investigations revealed that they had been framed by rogue police officers.

2. One question in the Rattner survey asked respondents to estimate the number of cases where additional investigation by a public defender aided in the exoneration of a wrongfully convicted individual.

3. Officials investigating the Los Angeles Police Department's Rampart Community Resources Against Street Hoodlums unit uncovered a tangled web linking officers with street gangs, drug dealing, and the gangster-rap underworld.

4. Conners, Lundregan, Miller, & McEwen's (1996) investigation and discussion of wrongful conviction note,

This report does not discuss the issue of government misconduct because it is not particularized to the use of DNA technology. Beyond the limited instances noted in this report, enough examples of government misconduct in the criminal justice system exist in the popular media for government officials to be well aware of the problem. (p. 20)

5. State of Ohio criminal justice professionals were targeted for the Rattner survey because it was believed the use of a single large state, such as Ohio, served to control for the effect of varying legal definitions while still allowing for a diversity of settings. The present study targeted Ohio criminal justice professionals for the similar reasons. Ohio is the seventh largest state in terms of population (U.S. Bureau of Census, 2000) with slightly more than 11 million people. Ohio has law enforcement and court systems similar to most states (elected sheriffs, prosecutors and judges, and pressure to solve and close cases) and is likely to suffer from issues associated with the processing of defendants as they proceed through overburdened criminal justice systems. In other words, we know of no reasons why their perceptions should be unique. Also, at the time of the present survey Ohio was politically a swing state evenly split between Democrats and Republicans, which should increase the generalizability of the data as compared to less politically diverse states. We would welcome a national replication of the study.

6. The five mailings included (a) prenotice postcard, (b) initial mailing of survey with cover letter, (c) reminder or thank you post card, (d) second mailing of survey and cover letter, and (e) third mailing of survey and cover letter.

7. Ohio has 88 counties.

8. Cronbach's alpha was determined using SPSS. Cronbach's alpha can be written as a function of the number of survey items and the average intercorrelation among them. A reliability coefficient of .80 or higher is considered acceptable in most social science applications.

9. This estimate is lower than estimates by respondents for the frequency in the United States. It is believed the differences in these two estimates may result from estimations made by respondents from smaller jurisdictions, where smaller caseloads prevail and where rates of wrongful conviction may be lower than in larger jurisdictions where caseloads are heavier.

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