Reducing Misconceptions and False Beliefs in Police and Criminal Psychology
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Although certainly not alone, the field of police and criminal psychology seems to be an area that is highly susceptible to myths and misinformation. 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. This article discusses research conducted by the author and his students over the past several years to investigate the accuracy of some common beliefs in police and criminal psychology. Four principles are proposed that, if considered, might reduce the level of misinformation in police and criminal psychology. These principles include using primary sources, comparing apples with apples, avoiding the oversimplification of what is being studied, and understanding that in general, human judgment is not a good predictor of behavior.

Keywords: criminal psychology; police psychology; crime myths; serial killers; police suicide

Although 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 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:1

- 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.

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• 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).  

**PRINCIPLE 2: COMPARE APPLES WITH APPLES**

**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.
- 300 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 (Shehan & 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 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) 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.

One could certainly quibble with some of the data provided above. 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 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 the above 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 above 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

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TABLE 1: Expected Law Enforcement Suicide Rate for Ages 25 to 54

<table>
<thead>
<tr>
<th>Race/Gender</th>
<th>Suicide Rate</th>
<th>% in Law Enforcement</th>
<th>Adjusted Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/male</td>
<td>26.6</td>
<td>72.1</td>
<td>18.46</td>
</tr>
<tr>
<td>White/female</td>
<td>6.3</td>
<td>8.9</td>
<td>0.56</td>
</tr>
<tr>
<td>Black/male</td>
<td>13.5</td>
<td>16.9</td>
<td>2.28</td>
</tr>
<tr>
<td>Black/female</td>
<td>2.9</td>
<td>2.1</td>
<td>0.61</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>21.89</td>
</tr>
</tbody>
</table>
in employees who commit workplace violence. Likewise, BLS data indicate that 80% of employees committing 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**

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\(^3\) (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 (age 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

**TABLE 2: Race of Serial Killers in the United States (1980-2006; in percentages)**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>White</td>
<td>72.82</td>
<td>74.40</td>
</tr>
<tr>
<td>Black</td>
<td>21.33</td>
<td>11.95</td>
</tr>
<tr>
<td>Hispanic</td>
<td>5.13</td>
<td>9.55</td>
</tr>
<tr>
<td>Asian</td>
<td>0.72</td>
<td>2.81</td>
</tr>
</tbody>
</table>

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\(^3\) Aamodt et al., 2007.
**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, 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**

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).

The above 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.4

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.

NOTES

1. Citations are not provided for entries in the bulleted lists in this article. These statements are widely made and can be found in numerous textbooks and online sources.

2. I would like to acknowledge that although my students and I could not find the primary source for the three examples, it doesn’t mean that one may not exist somewhere. If any reader has insight into a primary source, I would appreciate his or her sharing it with us.

3. The Radford University Serial Killer Database is the result of an ongoing project, now in its 15th year, to obtain accurate information about serial killers. At the time this article was being written, the database contained at least partial information on more than 1,900 serial killers throughout the world. The information was obtained from a variety of sources including prison records, court transcripts, media articles, biographies, and Web sources. Information in the database includes demographic, childhood, personal, and occupational information about each serial killer; crime information; victim demographics; and arrest and conviction information. After 15 years of data collection, we are just beginning to conduct some preliminary analyses, some of which are contained in this article.

4. At a recent conference, a psychologist making a presentation about one such program mentioned the high rates for police suicide. After noticing a number of audience members shaking their heads in disbelief, the speaker said, “I know there is research saying that the suicide rates for police are actually the same as for other people, but I don’t want to get into that.” A cynic might translate this statement as “If I acknowledge that police officers commit suicide at the same rate and for the same reasons as everyone else, I won’t be able to sell my program.”

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