

FEAR OF DNA EXONEREES

by

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ABSTRACT

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The purpose of this research was to determine if the public has a fear of wrongly convicted individuals that have since been exonerated through the use of DNA evidence. Existing research on DNA exonerations and exonerees has not addressed this phenomenon. The researcher distributed surveys to undergraduate students taking criminology and criminal justice courses at the University of Texas at Arlington. The data was analyzed using a t-test to compare the means of Caucasian and non-Caucasian respondents. The findings suggest that Caucasians and minorities have different levels of perceived fear of DNA exonerees in a variety of circumstances. The two groups felt differently about fear of exonerees in public and private places, during the day and at night. Caucasians were less likely to agree that they feared exonerees in these circumstances. Minorities were more likely to fear DNA exonerees would commit violent and property crime after being released.

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CHAPTER I

INTRODUCTION

Since 1989, when the first DNA exoneration took place, 290 prisoners have been exonerated through DNA evidence (Innocence Project, 2012). These individuals face challenges that are unique to them. They must reenter society after having spent years in prison and address a public that is unsure of how to approach them. Reports of these prisoners have become more frequent with the growing number of exonerations. The media has covered more and more exonerations, academic research has been done, and government agencies have studied cases of wrongful conviction, why innocent people were convicted, and what procedures should be changed to reduce rates of wrongful conviction. Exonerations through DNA evidence have also questioned the wisdom of the death penalty. Seventeen of the exonerations that have taken place were prisoners on death row at the time (Innocence Project, 2012). Exonerations have led many criminal justice professionals and those in the media to conclude that the system is seriously flawed (Innocence Project, 2012; Acker & Bonventre, 2010; Berger, 2006; Page, 2007; Kirschner, 2002).

Packer (1968) described two models of criminal process based on the given values of a society. Each model is based on the perceived primary function of the criminal justice system. The crime control model reflects the belief that the repression of criminal behavior should be the primary function and the criminal process should be

streamlined for this purpose. The due process model holds that the criminal justice apparatus should be set up with checks, balances, and as many appeals as are needed to ensure freedom from errors (Packer, 1968)

If Packer's (1968) crime control and due process models are accepted, knowing that the actual criminal justice system lies somewhere between the two models, there will always be the possibility of innocent people being wrongly convicted. The emphasis of a particular system determines the importance of assuring freedom of the innocent vis a vis punishment of the guilty. No criminal justice system falls completely under one model. This suggests that no matter how important punishing the guilty is, there will be guilty parties that avoid convictions. The opposite is also true. A criminal justice system can place emphasis on ensuring innocent individuals are not punished, but this does not mean the system will never punish someone who is innocent (Packer, 1968).

Early criminal justice officials could probably never have imagined "that such a little thing, the DNA molecule, could become perhaps the most powerful single tool in the multifaceted fight against crime" (Jobling, 2004, p. 739). In recent years, however, DNA (Deoxyribonucleic Acid), has been used to both convict and exonerate individuals (Murty & Vyas, 2010). Every person's DNA is unique to them and because it is in nearly every cell of the body, very little evidence is needed to identify someone (Murty & Vyas, 2010). Genetic material, or DNA, is extracted from the nucleus of cells, for instance from semen or blood, and examined for profiling purposes (Aronson & Cole, 2009). Testing is not a perfect process (Murty & Vyas, 2010). The entirety of a person's

genetic make-up is not analyzed. Computers and profilers isolate short sequences of nucleotides at certain locations along strands of DNA (Aronson & Cole, 2009). Mistakes can be made, but often they are made by those doing the DNA testing. The human factor in testing is the least reliable. It should be noted that despite possible mistakes, identification is highly accurate and can provide proof of guilt that is very nearly certain (Murty & Vyas, 2010). There can be no doubt that DNA profiling and analysis have revolutionized the field of forensic science and investigations, and the criminal justice system (Jobling & Gill, 2004).

Legal exoneree status occurs, according to the Death Penalty Information Center, when someone who has been convicted of a crime has that conviction overturned and is then either acquitted at a re-trial or has all charges against him dropped. Exonerations are also legal when an absolute and full pardon is given by the governor based on evidence of innocence. DNA exonerees are those defendants that reached legal exoneree status through DNA evidence found at the crime scene or on the victim that clears them of connection to the crime (Murty & Vyas, 2010). Exonerations by DNA evidence have only arisen of late because the testing for DNA was not developed until recently. The first DNA exoneration did not occur until 1989 (The Innocence Project).

Although exonerees have been cleared of all charges and may not legally recidivate, they face many of the same circumstances as offenders once released. Consequently, exonerees may have the same risk factors for committing crime after exoneration. For the purposes of this study, recidivism will be defined as any criminal

activity that might result in a conviction since the defendant's release. A few possible factors for exonerees that may correlate with recidivism are previous criminal records or behavior, socialization within the prison system, family structure and the influence of peers, drug use, economic status, and problems reintegrating into society after release. Many of these possible factors are the same as those seen with guilty convicts (Gendreau, Little, & Goggin, 1996; Esperian, 2010; Halsey, 2008; Clemmer, 1940). Economic status for DNA exonerees may vary widely due to the compensation laws that exist in different states. Of the 35 states that have had exonerations, only 27 of them have compensation laws. Although those exonerated are eligible to receive monetary compensation, not all of them have received that compensation (The Innocence Project).

Wrongful convictions certainly hurt the accused, but the effects can go far beyond them. "Their family members and close friends, for example, often experience grief, trauma, embarrassment, and a financial loss" (Murty & Vyas, 2010, p. 87). These consequences are typically compounded when the convicted individual is on death row. These families and friends receive no legal support, unlike the families and friends of victims. Wrongful convictions also take a toll on society. They can foster doubt in the criminal justice system and fear for certain people that they too could be wrongly convicted. The financial costs are also substantial. Keeping someone imprisoned costs a lot of money, especially if the inmate is on death row. In addition, the cost of the court case can be high for taxpayers, and again, this price is much higher for death row cases (Murty & Vyas, 2010). Another cost to society are the crimes that may result from a

wrongful conviction. The true guilty person is free to continue committing crimes while an innocent person is convicted. There may be more victims than just the wrongly convicted (Kassin, 2010).

While the subject of exonerations has been studied extensively, very little research has been dedicated to what exonerees experience after release. It is certain that these exonerees are affected in some way by their wrongful convictions, but it remains to be seen exactly what these effects are and what impact they have on the lives of these men. A Canadian study examined the effects wrongful conviction has on those released in Canada (Campbell & Denov, 2004). The researchers conducted in-depth interviews to discover how these exonerees felt during their ordeal, including what kinds of problems they had after being released. The results of this study are important for making decisions on how to assist exonerees after release in the future. The implications of this research might be different for the United States, but since there has not been a similar study in the U.S., the country with the most exonerations in the world, this study provides the only academic insight into the aftereffects of wrongful convictions (Campbell & Denov, 2004).

The researchers, Campbell and Denov (2004), interviewed five Canadian exonerees in 2002 to examine their experiences of maintaining innocence and life after release. All five of the exonerees had been imprisoned for an extended length of time, 3 to 8 years, and all were white males ranging from 31 to 65 years of age. “At the time of their interviews, all of the participants were seeking some form of compensation and/or acknowledgement of error from the Canadian government” (Campbell & Denov, 2004,

p. 142). The researchers found that, in addition to the normal problems associated with conviction, the exonerees had group specific issues with the criminal justice system.

Most offenders have some trouble adjusting to society after being imprisoned for long periods of time. Exonerees are no different in this respect, however, they do have added concerns (Campbell & Denov, 2004). These exonerees are even more distrustful of the criminal justice system than guilty offenders. Exonerees are also preoccupied with being compensated and receiving acknowledgement of, or an apology for, the error on the part of the government. Exonerees seem to put more emphasis on the representative aspect of compensation and less on the money itself. Some are even waging civil cases against certain people in the government. The experiences of these exonerees often leave them more cynical than they previously were and they have problems trusting in the “fairness and legitimacy of authority figures” (Campbell & Denov, 2004, p. 155). Like many victims of crimes, exonerees are twice victimized. The only difference is that they are victimized at the hand of a system that is designed to do just the opposite.

Innocence Project (2012) has attempted to follow some exonerees to see what their lives are like after release. Unfortunately, it appears that exonerees face many of the same problems as guilty prisoners released after serving out a sentence (Gendreau, 1996; Esperian, 2010; Halsey, 2008; Clemmer, 1940). Exonerees are released without knowledge of where they will go. These individuals have a difficult time finding a job or a place to stay. Often, they have spent so much time in prison that their friends and families are either strangers or gone entirely. They often have little or no money and

compensation is not a guarantee (Innocence Project, 2012). The wrongfully convicted seem to be punished long after their exoneration.

There are researchers that clearly view the release of prisoners through the use of DNA exonerations as failings in the criminal justice system (Page, 2007). What remains to be fully seen is the entirety of what these exonerees face once back out in the world. They may be viewed differently by the public because they have often spent large amounts of time in prison. Exonerees may face unanticipated reactions in the public as a result of their former criminal status.

The purpose of the current research will be to discover if there is an existing fear of DNA exonerees in the public and the level of that fear. It will also attempt to determine if the public feels that exonerees are likely to commit crime after being released. This information will be gathered through the use of a survey instrument with University of Texas at Arlington undergraduate students as participants.

The following chapters will cover a review of the literature, the methods employed for researching, the findings of the research, and the conclusions of that research. Chapter II will include a review of the existing literature on DNA exonerations and recidivism. Chapter III will be concerned with the methods involved in researching the fear of DNA exonerees. Chapter IV will discuss the findings that resulted from the research conducted. Finally, in Chapter V, the conclusions of the research, implications of that research, and opportunities for further study will be addressed.

CHAPTER II

LITERATURE REVIEW

DNA Exoneration

DNA profiling, also known as genetic profiling or DNA fingerprinting, is “the use of biological residue found at the scene of a crime for genetic comparisons in aiding the identification of criminal suspects” (Murty & Vyas, 2010, p. 82). Profiling rests on the principle that no two people have the same DNA, short of identical twins (Aronson & Cole, 2009). DNA evidence can take many forms, such as blood, saliva, skin cells, hair, and semen. This kind of evidence is often found at crime scenes, especially those sexual or violent in nature because the perpetrator of those crimes is more likely to leave evidence behind. Often this evidence is found on the victim him or herself, but it can also be found on inanimate objects at the scene. Finding evidence on the victim is key because it proves there was physical contact. Knowing someone was at the place where a crime was committed is often not enough to prove they were involved in the crime, but it is much more likely if evidence is found on and around the victim of the crime (Murty & Vyas, 2010).

Once collected and analyzed, DNA evidence can be matched to possible suspects for a case. Oftentimes, there is no suspect or the DNA does not match with any of the suspects. DNA evidence can also be compared to suspects of other crimes where DNA was obtained. An FBI database, the combined DNA index system, or CODIS,

contains these DNA profiles. It is possible to locate a suspect that was never considered. CODIS has profiles for both known and unknown individuals (Murty & Vyas, 2010).

DNA is not only used to determine if a particular person was at the scene of a crime and to exonerate the wrongfully convicted. It is used in civil cases as well. Cold cases can also be reopened and solved with DNA that was stored at the time but unable to be analyzed. Outside of the criminal justice system, DNA can be used to identify victims of accidents and mass disasters, DNA typing for scientific discovery, and determining paternity. As far reaching and amazing as DNA profiling is, it cannot be the only evidence in a criminal case. DNA evidence must be combined with other forms of evidence, and geneticists can only give the facts in a case, not suggest guilt or innocence (Jobling & Gill, 2004).

Exoneration can be defined as “an official act declaring a defendant not guilty of a crime for which he or she had previously been convicted” (Gross, Jacoby, Matheson, Montgomery, and Patil, 2005). Aronson and Cole (2009) argue that “cases of innocence have always been contestable” (p. 609). Even before the advent of DNA testing in the criminal justice field, exonerations took place. They were a rarity, with only a few occurring in a given year (Gross et al., 2005). One reason for this is that before DNA evidence, innocence was nearly impossible to prove beyond a doubt (Latzer, 2003). In cases where DNA evidence eventually led to exonerations, attempts were sometimes made to argue innocence but were ignored or rejected. In other cases, however, arguments for innocence were not even brought up before requesting DNA testing (Garrett, 2008).

There are organizations whose aim is to assist exonerees and those seeking exoneration. The Innocence Project, created in 1992, is one such organization. It employs numerous attorneys that both represent and help in cases where an individual is seeking exoneration through DNA evidence. Access to an organization like Innocence Project is important for inmates because they are often indigent and have run out of options for appeal. The Innocence Project is hope for these inmates. They are sure of their own innocence and aware that DNA evidence was found in relation to the crime. Exonerees have an avenue in Innocence Project to prove that they were not the perpetrator. To date, the Innocence Project has seen 290 exoneration based on DNA evidence occur in 35 states and the District of Columbia. Seventeen of these exonerees were on death row. Only four DNA exonerees are women. The majority of these exonerees are black, and over 70% are minorities. Less than one third of exonerees are Caucasian. The “average age of exonerees at the time of their wrongful convictions was 27,” and “the average length of time served by exonerees is 13 years” (Innocence Project, 2011). The majority of cases of wrongful conviction have taken place in the United States (Johnson & Williams, 2004).

The history of wrongful convictions in the United States can be traced as far back as colonists being accused of illegal acts by British officials (Huff, 2004). These colonists would have no avenue for fighting such accusations. They were not allowed to question accusers and had no access to the kinds of due process included in the United States’ Bill of Rights. Due process was not absolute in the U.S. either, and racially motivated discrimination has played a large part in wrongful convictions since the time

of the colonies (Huff, 2004). To this day, as noted before, there is a stark discrepancy in the number of exonerees that are minorities and those that are white.

Before the first ever DNA exoneration, exonerations by any means were a rare event, however, “since 1989, these once-rare events have become disturbingly commonplace” (Gross et al., 2005, p. 523). Even the number of non-DNA exonerations has increased significantly, doubling since the 1990s. Since the year 2000, DNA exonerations average twenty a year, and non-DNA exonerations average twenty three. According to Gross et al. (2005), between the first exoneration in 1989 and the year 2003, “144 [exonerees] were cleared by DNA evidence, 196 by other means. With a handful of exceptions, they had been in prison for years. More than half had served terms of ten years or more; 80% had been imprisoned for at least five years” (Gross et al., 2005, p. 524).

On August 14, 1989, Gary Dotson was the first man to be exonerated through DNA testing. It was “a new kind of exoneration,” “one that was much less vulnerable to skepticism than those that came before it” (Aronson & Cole, 2009, p. 610). Dotson had been convicted in 1979 of aggravated kidnapping and rape. Although the woman he was accused of raping recanted her story a few years later in 1985, Dotson was not granted a retrial by a judge. In 1988, Dotson got a new attorney that was able to successfully have DNA testing done for Dotson. The first results were not conclusive, but the DNA was then sent to another testing lab. That lab found that the DNA could not have come from Dotson. He was released on August 14, 1989, after having spent ten years in prison for a crime he was innocent of committing (Innocence Project, 2012).

Wrongful Conviction Numbers

Criminal justice professionals that are concerned about DNA exonerations realize that these exonerations represent certain failings in the system. They also worry about the potential number of innocent people in prison as a result of wrongful convictions (Page, 2007). There is no way to accurately measure or predict the number of wrongly convicted individuals (Huff, 2004). In fact, determining this number would be even more difficult than determining true crime rates. One reason for this is that wrongful convictions may vary widely from jurisdiction to jurisdiction. Another is that there is no way to prove those in prison have been wrongly convicted until the legwork or DNA testing has been done. To obtain more accurate measures of crime rates in the country, victimization surveys are distributed. No such surveys exist for wrongful convictions (Huff, 2004).

Although difficult, researchers have attempted to discover wrongful conviction percentages. Huff, Rattner, and Sagarin (1996) surveyed prosecutors, judges, attorneys general, and law enforcement personnel, asking that they estimate the number of wrongfully convicted felonies. The responses given revealed an average 0.5% error rate for felony convictions as estimated by the participants (Huff et al., 1996). Assuming this number to be accurate, there would still be thousands of wrongly convicted felony cases each year in the United States (Huff, 2004). Gross et al. (2005) maintain that the most important result of their study is the knowledge that there are most definitely thousands of wrongfully convicted individuals in prison.

Research has also shown that the testing of DNA before trials may eliminate

25% or more of prime suspects in criminal cases. This number was found as a result of studying 18,000 cases where suspects had their DNA tested and were cleared before a trial began (Scheck, Neufeld, & Dwyer, 2000). Most criminal cases do not include DNA evidence, and this could mean that there is a large rate of wrongful convictions in those cases (Huff, 2004).

One study, conducted by Risinger (2007), sought to determine the exact wrongful conviction rate based on information from the 1980s on capital rape-murders. The study found a 3.3% minimum wrongful conviction rate and an estimated maximum of 5%. Before this research, the public had been lead to believe the number was much lower. The number had reportedly only been 27 out of every 100,000 people convicted. Historically, and especially in the 1980s, the criminal justice system was designed to keep people incarcerated. The appeals process is lengthy and difficult to navigate. DNA testing was no different. Original policies made DNA testing for innocence a hassle for inmates (Risinger, 2007).

A byproduct of these numbers is that people who are concerned about wrongful convictions have used them to try and reform the criminal justice system (Risinger, 2007). This may consequently make it harder to convict those who are actually guilty. The public is also concerned about this. One thing most people are more afraid of than convicting the innocent is letting guilty criminals go free. These criminals pose a risk to society (Risinger, 2007).

The implications of these estimated rates are also discussed. The higher percentage shows a serious possibility of wrongful conviction at any given time. This

hurts the criminal justice system because it calls into question the ability of the system to do what it was designed to do. It also affects those who work within the criminal justice system. Attorneys and judges have a harder time doing their jobs effectively when it appears they may be trying to put innocent people in prison. These people, however, can make arguments that exonerations are proof that the system does work. The option to have DNA testing at all shows that the criminal justice system releases those that are innocent (Risinger, 2007).

Although the sample group was only made up of capital rape-murders, there is no indication that the wrongful conviction rate for other crimes is different. It is impossible to generalize these findings because of the exact sample used, but “in regard to other capital murder prosecutions resulting in the imposition of the death penalty, there seems to be no strong reason to believe that the rate was (or is) significantly lower” (Risinger, 2007, p. 785). The rate may be even higher for both capital murder cases and rape cases outside the study. Rape charges notoriously rely on eyewitness testimony, which can easily convince a jury of guilt. In capital murder cases, the chosen jury has to answer many questions before being labeled as death qualified juries. The people that make it through the process are sometimes people that are willing to decide guilt before others would (Risinger, 2007).

Problems with DNA Evidence and Exonerations

There are some dangers in the use of DNA evidence. The public tends to see DNA evidence for or against a person as scientific, and therefore, unimpeachable. The fact that DNA evidence is seen to be irrefutable “justifies taking what would otherwise

be viewed as risky legal actions (i.e., the freeing of a convicted murderer or the execution of an accused murderer)” (Aronson & Cole, 2009, p. 607). DNA evidence and testing has particular appeal to those that view the criminal justice system as a failure (Aronson & Cole, 2009). It represents truth in a system that some feel is too corrupted or political. The appeal of DNA is that it is based entirely on fact and will give the innocent an avenue to fight existing procedures that fail to protect them (Rosen, 2003). DNA evidence, however, is not perfect and can be disputed. “DNA evidence is evidence, too, and therefore subject to error, misinterpretation, and uncertainty” (Aronson & Cole, 2009). This means that in a criminal case, or any other case for that matter, DNA should only be viewed as one piece of evidence among many. It should never be the only evidence considered (Jobling & Gill, 2004).

Unfortunately, the technology for testing DNA has been implemented ahead of the advances needed to ensure responsible use for it. This means that quality control may be compromised, training may not be as in-depth as it needs to be, and DNA testers may mishandle or falsify evidence based on their own beliefs to sway convictions (Huff, 2004). Employees of cities and counties, and even federal agencies, have been found to have fabricated evidence or gone around quality control procedures and then lied about DNA evidence in court (USDOJ, 2004). In response, researchers have suggested a standardization to the process of DNA profiling and testing. Labs may be run not by law enforcement agencies, but rather independent organizations with highly professional and unbiased scientists (Huff, 2004).

There is a possibility of coincidental matches in DNA testing, although the

likelihood of that occurring is very small. In fact, there has been no confirmation that a coincidental match has ever occurred (Aronson & Cole, 2009). There is now an increased concern about the planting of DNA evidence to shift suspicion to an individual that is not guilty (Thompson, 2008). This is troubling for innocent people because they are already at a higher risk for evidence showing their innocence not being found. Even when evidence suggesting innocence is found, it is sometimes incorrectly handled or not disclosed (Acker & Bonventre, 2010).

In addition, police procedures can be questioned over and over, without any acknowledgement that anything was done wrong. After DNA testing results in an exoneration, many police and departments will insist that they did not coerce a confession (Aronson & Cole, 2009). Prosecutors have also been known to deny DNA testing, even in cases of suspected innocence. After DNA testing exonerates an individual, some prosecutors will argue that the exoneree is guilty (Orenstein, 2011). In the case of Bruce Godschalk, after DNA testing demonstrated innocence, the courts ordered he be released. The district attorney maintained that Godschalk was guilty and that the DNA testing must be flawed. When asked how he could be sure, the district attorney responded with a statement that he trusted his detective and his confession (Rimer, 2002). This type of response is not always heard though, because public opinion finds DNA evidence to be infallible, and there is no tactical gain to be made by prosecutors and police departments denying its truth (Zimring, 2003).

The CSI effect, named for television shows like CSI: Las Vegas, Miami, and New York, refers to the possibility that juries have unrealistic expectations of evidence

because of what they have seen on television and will be less likely to convict in cases where DNA evidence was not found since they assume it is almost always present at a crime scene (Holmgren & Fordham, 2011). The opposite might also be an issue. If juries are more likely to convict based purely on DNA evidence in a case, innocent individuals could be found guilty (Aronson & Cole, 2009). Although little research has been done on the topic of the CSI effect, according to a study done by Holmgren and Fordham (2011), the CSI effect did not have a detrimental impact on juries or cases in either Canada or Australia. Jurors did have questions about forensic evidence in some cases, and these questions sometimes came from knowledge gained by watching television, however, there was no indication that jurors would refuse to convict someone without DNA evidence shown against them. The researchers determined that juries will responsibly deliberate even in the absence of DNA evidence, regardless of which television shows they watch and how often they watch them (Holmgren & Fordham, 2011). This is reassuring because, simply put, DNA evidence does not exist in every case (Murty & Vyas, 2010).

Some legislation has been passed to help those that are wrongly accused. The Innocence Protection Act (Justice for All Act of 2004) was made federal law under President Bush in 2004. This bill was designed to give wrongfully convicted individuals in federal prisons an avenue to DNA testing and give compensation to those proven to be innocent. The law also includes provisions for death row inmates, possibly aimed at influencing more states to abolish the death penalty as a form of punishment (Murty & Vyas, 2010). Although this bill is only law at the federal level, many states have

followed with their own laws. Texas has enacted similar laws. It has a DNA access law to make the process of receiving DNA testing easier. Texas also has a compensation law for wrongfully accused persons (The Innocence Project of Texas). Prisoners, however, do not have unfettered access to DNA for testing. While the Innocence Protection Act made DNA testing easier, the Supreme Court has decided against giving prisoners a constitutional right to DNA evidence, stating that these laws should be left to the states (Biskupic, 2009).

It has been argued that the United States should found a commission to monitor and investigate possible wrongful convictions (Huff, 2004). There have been task forces set up for this very purpose in the state of New York and their findings suggest that New York may be one of the leaders in wrongful convictions (Acker & Bonventre, 2010). New York is behind only Texas and Illinois in number of DNA exonerations (Innocence Project, 2012), and in number of total exonerations, not only those based on DNA evidence, New York ranks second (Gross et al., 2005). Although the task forces and the reports they have generated “help solemnize the gravity and urgency” of the issue of wrongful convictions, major changes still need to be made to address the problem (Acker & Bonventre, 2010, p. 1248-1249).

DNA exonerations are definitely affecting how the criminal justice system operates. Most laws concerning post-conviction DNA testing have only been created in the last decade (Berger, 2006). Before many states enacted these laws, the wait time for new trials, even based on new evidence that could be used to clear the offender, was lengthy. Despite the process problems, after the first exoneration in 1989, some judges

took it upon themselves to speed up these DNA based appeals. The number of inmates that have been exonerated based on DNA evidence is tiny in comparison to the number of total people incarcerated. Despite this fact, public opinion has been drastically impacted by these few exonerees. It has even caused people to think differently about the death penalty. DNA exonerations have shown the public the weaknesses of the criminal justice system, but it remains to be seen how this will affect reform (Berger, 2006).

While the focus of much DNA testing research is the wrongfully accused, there have been many offenders that have appealed for DNA testing only to have it further attest to their guilt (Carroll, 2007). In fact, the majority of DNA testing requested by offenders is either inconclusive or actually confirms guilt. This would not be a problem except that testing DNA is an expensive and lengthy process that costs taxpayers. The criminal justice system is already expensive to maintain and DNA testing confirming guilt is arguably unnecessary. Those that request it knowing they are guilty are not usually punished. As of 2007, Missouri was the only state that exacted any kind of penalty for guilty petitioners. There have been solutions proposed for this problem. One is to subject petitioners to a more difficult screening process. More demanding standards could also be added to the existing petition statutes. Another would be to make the petitioner pay for the test, or at least part of the test. If petitioners knew in advance that they would be responsible for part of the cost, guilty offenders would be less likely to apply. Finally, a law where the petitioner paid for the test if it turned out to prove their guilt would help. Add to this the loss of good behavior time or the addition

of time yet to be served and guilty persons would hopefully stop filing for DNA tests. Right now, guilty parties have no reason not to apply because they can only gain. Meanwhile, innocent individuals wait years for DNA tests that prove their innocence (Carroll, 2007).

DNA Exonerations and the Death Penalty

Since some of the DNA exonerees have been on death row, opinions have started to shift on the subject of the death penalty (Aronson & Cole, 2009). Many people used to believe the courts of law could do no wrong, but that ideal has been disproven by DNA exonerations and in greater numbers than most people are comfortable with (Garrett, 2008). Before DNA, the debate on capital punishment focused on deterrence, cost, and fairness in dealing out the death penalty (Aronson & Cole, 2009). Now, however, the issue of innocence is the focus. One reason for this is the perception of certainty of DNA evidence. Aronson and Cole (2009) argue that, “while DNA evidence may be more accurate and reliable than other forensic science, it is still fundamentally probabilistic in nature and is prone to uncertainties at all stages of its production” (p. 603). They claim that DNA evidence has effected public opinion to the point that it tests the authority of the law. Interestingly, they also argue that in addition to death penalty abolitionists, reformers use the certainty of DNA profiling to “promote a ‘scientific’ death penalty” (Aronson & Cole, 2009, p. 603).

Bedau and Radelet (1987) studied 350 potentially capital cases, ones where the death penalty could have been sought or sentenced but may or may not have been, that were already suspected of being wrongful convictions. They found that, of the 350

cases, 139 had death penalty sentences. Of these, twenty three people were executed. Bedau and Radelet (1987) wanted to use the study to fight proponents of the death penalty with statistics showing that innocent people had indeed been executed. Radelet, Bedau, and Putnam argued again in 1992 that these twenty three people were innocent and executed. The original study and assertions made later, however, were criticized heavily because the researchers failed to provide proof of the innocence of the executed (Aronson & Cole, 2009). A Gallup poll conducted in 2003 revealed that 73% of Americans “believe an innocent person has been executed under the death penalty in the last five years” (Death Penalty Information Center, 2012). It is clear that although there is no proof of an innocent person being executed, Americans are aware of the risk.

Many states have already abolished the death penalty. There are sixteen states, including Alaska, Hawaii, Illinois, Iowa, Maine, Massachusetts, Michigan, Minnesota, New Jersey, New Mexico, New York, North Dakota, Rhode Island, Vermont, West Virginia, and Wisconsin, and the District of Columbia that have abolished capital punishment (Death Penalty Information Center, 2012). The possibility of executing an innocent person has definitely been a factor in some of the recent states’ abolishment of the death penalty (Aronson & Cole, 2009). Although it is possible that an innocent person has already been executed and it is clear states are concerned about that possibility, some criminal justice professionals and politicians have been careful to block DNA testing that might prove it has happened (Risinger, 2007). One case that has received media attention is that of Cameron Willingham. He was sentenced with capital punishment in 1992 and executed in 2004 for purposely setting a fire that killed his

three daughters. Since his execution, and even before, the accuracy of the arson charge has been questioned. Knowledgeable arson experts have reported that the original arson analysis may be faulty. Many criminologists and the media have called for further investigation or done their own, and the Texas Forensic Science Commission has examined the evidence of the case. Unfortunately, state officials have blocked a full investigation and no exoneration has been issued (Innocence Project, 2012).

The use of DNA testing has not only been used by advocates of death penalty abolishment. Those who support the death penalty have seen an upside to DNA profiling. In the case of *Kansas v. Marsh*, the majority of the Supreme Court decided that the advent of DNA testing has given credence to capital punishment. Rather than seeing exonerations as a threat to the death penalty, the majority found that exonerations are an assurance that innocent people will not be executed. According to the majority, DNA exonerations show that the criminal justice system works, not that it is flawed. The majority opinion also stated that DNA testing is a way to ensure guilty verdicts are backed by scientific proof (*Kansas v. Marsh*, 2006).

Reasons for Wrongful Convictions

There have been multiple reasons for wrongful convictions of innocent men and women. They include “eyewitness errors; mishandling of evidence by police and prosecutors; false or coerced confessions; improper interrogations and line-ups; jailhouse informants or ‘snitches’; ineffective assistance of counsel; forensic errors; and the adversarial system” (Murty & Vyas, 2010, p. 82). The problem of mistaken identifications by eyewitnesses is considered one of the largest in relation to wrongful

convictions, and it is “the factor most often associated with wrongful convictions” (Murty & Vyas, 2010; Huff, 2004). It is by far the most frequent error made in cases that lead to exonerations. In the survey of prosecutors, judges, attorneys general, and law enforcement officials conducted by Huff et al. (1996), the respondents were aware of this fact, with 79% of them acknowledging witness error as the most frequent error type in these cases. Of the 290 total DNA exonerations in the U.S., 75% have involved eyewitness testimony, and 40% were cross-racial (Innocence Project). Some researchers have estimated this number to be as high as 80% in DNA exoneration cases (Kassin, 2010). In Texas, an estimated 80% of wrongful convictions involved eyewitness testimony (The Innocence Project of Texas). Scheck et al. (2000) have estimated that this number may be as high as 84%, reporting that in this percentage of exoneration cases, the conviction was based, or partially based, on the identification of witnesses.

In a study that looked at all exonerations, not only DNA based ones, eyewitness testimony was involved 64% of the time (Gross et al., 2005). There was a difference in the percentages for rape cases and homicides. In almost 90% of wrongful rape convictions there was eyewitness testimony. That number was only about 50% for wrongful homicide convictions. One reason for this is that in rape cases, there is normally a surviving victim able to testify. That is obviously not the case for homicides. Police and investigators also tend to put more effort and work into homicide cases. This leads to other kinds of evidence and sometimes more evidence, rather than relying primarily on witness testimony (Gross et al., 2005).

The researchers were, again, unable to make an estimation on the total number

of wrongful convictions that occur in the United States. The study only considered rape and murder convictions, not any other types of crimes. The pattern for rape convictions, however, was clear. Eyewitness misidentification was the biggest problem for these cases (Gross et al., 2005). In murder cases, perjury was the major problem. There are high rates of both rape and death penalty exonerations. Rapes are high because in these cases, DNA evidence had been gathered even though there was not a way to test it. Death penalty exonerations are over-represented because of the consequences for executing an innocent person. The public tolerability for time wrongly spent in prison is much higher than the tolerability for an innocent person being executed (Gross et al., 2005). Also for this reason, as previously stated, DNA testing after executions has largely been blocked (Risinger, 2007).

Eyewitnesses are an important tool for convicting individuals and the criminal justice system has traditionally used them a great deal (Wells, Memon, & Penrod, 2006; Wells & Olson, 2003). One with no reason to lie is even more important (Wells, Memon, & Penrod, 2006). A witness that is sure of what they saw or heard can be very effective at convincing jurors. The accounts by these witnesses is not normally questioned, unless there is evidence that they are lying or evidence that contradicts their testimony in some way. Eyewitness testimony is responsible for more wrongful convictions than all the other reasons combined. Before DNA testing was even discovered, psychologists were studying the validity of eyewitness identification. They were doing their own research to determine if eyewitness testimony could be trusted. They discovered that police, prosecutors, and juries were relying too heavily on this

testimony. They also revealed that how accurate an eyewitness identification was often depended on the method police were using. Individuals in the criminal justice system did nothing with this information until wrongful convictions starting being proven with DNA testing (Wells, Memon, & Penrod, 2006).

Psychologists have discovered many reasons for mistaken eyewitness identification. These include “the amount of time the culprit is in view, the lighting conditions, whether the culprit wears a disguise, the distinctiveness of the culprit’s appearance, the presence of a weapon, and the timing of knowledge that one is witnessing a crime” (Wells & Olson, 2003, p. 281). Cross-race identification has always been a problem. Participants in one experiment were much more easily able to identify someone of their own race than someone with another racial background (Wells, Memon, & Penrod, 2006). Many eyewitnesses are also under stress at the time the crime is being committed, especially violent crimes, and there is research that suggests the more violent the crime, the less likely witnesses are to accurately identify someone. Weapon focus occurs with many people. Victims and even witnesses will pay more attention to the weapon being used than the face of a perpetrator. Another major factor is simply the amount of exposure to the perpetrator’s face. People are less likely to be able to identify someone they only saw for a split second. If the offender is wearing a disguise of some sort, identification can be more difficult, and in some cases impossible. Even something as simple as a hat can provide disguise for the perpetrator. There are also cases when the witness to a crime has been drinking alcohol. Those that were inebriated during the event were less likely to identify the correct person (Wells,

Memon, & Penrod, 2006).

There are problems within the system that can affect accurate identification. The interviewing of witnesses can be a problem because criminal justice professionals will often influence them in some way. This may be done either consciously or subconsciously. Interviewers may ask questions that lead the witness in a certain direction or to a certain suspect when the story as told by the witness without any intervention would have been much different. Often, police use a lineup so that the witness can choose a suspect (Wells, Memon, & Penrod, 2006). A lineup “is a procedure in which a criminal suspect (or a picture of the suspect) is placed among other people (or pictures of other people) and shown to an eyewitness to see if the witness will identify the suspect as the culprit in question” (Wells & Olson, 2003, p. 278-279). One problem with this procedure is that witnesses will feel pressure to choose someone even if the perpetrator of the crime is not included. Another issue is that, again, officers can influence the decision of the witness with eye contact and questions about how sure the witness is about their identification. Recently, procedural changes have started to occur in law enforcement departments to ensure more accurate identification results (Wells, Memon, & Penrod, 2006). A change that can easily be implemented is having the lineup run by someone who does not know which individual in the lineup is the suspect (Wells & Bradfield, 1998). A set of guidelines has been produced by the United States Department of Justice based on scientific knowledge of collecting eyewitness evidence. Psychologists assisted in this process using behavioral analysis. The report includes recommendations like getting witnesses to volunteer evidence and not leading them,

asking open-ended questions, selecting appropriate lineup subjects, and having clear instructions during the different steps of the process. These guidelines do not mean the end of witness misidentification, but should avoid many of the mistakes that can be made (Wells et al., 2000).

Confidence in a witness has been thought to correlate with higher correct identification rates. This may or may not be the case. There might be a small difference but overall, the percentage of confident witnesses that have made a mistake is close to the percentage of witnesses that are less confident about their choice (Wells, Memon, & Penrod, 2006). Response latency has also been linked with correctness of identification. Response latency refers to the amount of time it takes a witness to make a choice about who the perpetrator is. Witnesses that respond quickly, or within 10 seconds or so, have a higher correct identification rate than those that take more time considering. Sometimes, witnesses will be asked to explain why they picked a particular person in a lineup or how they made their decision. Those that report having matched the person in the lineup based on their memory of the event are more likely to be correct than those that compared the different people in the lineup in order to make a choice. Often witnesses are not even able to say why they chose someone. They are just certain it is them. This also correlates with a higher accuracy rate (Wells, Memon, & Penrod, 2006).

There is also the possibility of “overzealous or unethical police and prosecutors” in wrongful convictions (Huff, 2004). According to Scheck et al. (2000), 63% of DNA exoneration cases included some sort of police or prosecuting misconduct. Misconduct may take the form of courtroom comments, questionable handling or admittance of

evidence or using phony evidence, and interfering with witnesses (Huff, 2004).

The use of jailhouse informants is sometimes a factor in the courtroom of wrongfully convicted cases (Huff, 2004). In 21% of the DNA exonerations studied by Scheck et al. (2000), jailhouse snitches provided evidence against the wrongly convicted. There appear to be some geographical areas where this is a significant problem. For instance, in Illinois, out of the first thirteen exonerations, five cases contained evidence gained through the use of jailhouse informants (Scheck et al., 2000). In another study, the researcher was surprised to find how prolific the use of jailhouse snitches were in certain jurisdictions (Giannelli, 2007). In one town, Ada, Oklahoma, a woman by the name of Terri Holland, who was a felon and jailhouse snitch, was a star witness for prosecutors, having heard the confessions of two different murderers for two separate killings. One of the men she heard confess was later exonerated through DNA evidence (Grisham, 2006; Scheck, Neufeld, & Dwyer, 2000). According to Giannelli (2007), there should be a much more stringent screening process in the use of jailhouse informants and, if necessary, the jury of a case should be given cautionary instructions when the prosecution employs these informants.

False confessions are also strongly correlated with wrongful convictions. “Despite the commonsense belief that people do not confess to crimes they did not commit, 20 to 25% of all DNA exonerations involve innocent prisoners who confessed” (Kassin, 2008, p. 249). False confessions in the United States happened as early as 1962 during the Salem Witch Trials after women were tortured to exact confessions (Kassin, 2010). There are different kinds of false confessions. Voluntary false confessions occur

as the name implies. An innocent person will confess to a crime they did not commit without any force, coercion, provocation, or threat made to them (Kassin, 2008; Kassin et al., 2010). This usually happens in glamorous cases, such as those where the victim is famous, the crime was particularly sensational, the crime has been heavily covered by the media, or a combination of the three. These confessions typically arise from people that covet attention or are feeling guilty about something else (Kassin, 2008; Kassin et al., 2010).

There are a number of ways in which one can tell if a confession is false. One is that the confession was for a crime that did not happen. The individual confessing may have been incapable of committing the crime or another person may clearly be guilty of the crime. There may also be evidence, including DNA evidence, showing the guilt of someone other than the person confessing (Kassin, 2010). There are some characteristics of individuals that may render their false confessions suspect. These include the age of the individual, especially juveniles, and any physical, intellectual, or mental disabilities (Kassin et al., 2010).

Interrogations can also produce false confessions. Police interrogations can be stressful, even for someone that is certain of his or her own innocence (Kassin, 2008). People may confess because they believe it will actually get them out of trouble or cause them less trouble than not confessing. The extorting of confessions has been known to happen. Those that confess do so often because they are thinking only of the consequences in the short term. Some do not think about the long term consequences and others do not believe the long term costs will be as high as those of the moment

(Kassin, 2008; Kassin et al., 2010). Unfortunately, the consequences for false confessions are long term and have a large impact on cases and lives (Kassin, 2010). Young people and those not familiar with the criminal justice system are especially susceptible to false confessions resulting from interrogations (Kassin, 2008).

Internalized false confessions occur when suspects are subjected to “highly suggestive interrogation tactics,” which influences these individuals to “not only confess but come to believe they committed the crime in question” (Kassin, 2008, p. 249). These people will often be confronted with statements that there is already evidence against them (Kassin, 2008; Kassin et al., 2010; Inbau, Reid, Buckley, & Jayne, 2001). Again, younger people are often the victims of this type of false confession (Kassin, 2008).

American interrogations include aspects that make false confessions a possibility. They are not allowed to physically harm a suspect, but they are able to use psychological manipulation to elicit information (Inbau et al., 2001). They can use the amount of time of an interrogation against a suspect. Extremely long interrogations wear suspects down emotionally (Kassin et al., 2010). They use the isolation of a subject to make him or her more anxious or nervous (Inbau et al., 2001). They engage in confrontation with the suspect. This is the stage at which interrogators will make statements about evidence that does not actually exist. This is also the stage in which outright accusations are made (Kassin, 2008; Kassin et al., 2010; Inbau et al., 2001). Police may use polygraph machines and fake results to exert pressure on suspects (Johnson & Drucker, 2009). This is particularly problematic because people will often

have no understanding as to how evidence showing their guilt could be possible but know that police officers are the law, and the law does not lie (Kassin, 2008). Lastly, police often employ the tool of minimization, where they try to connect to the suspect by being understanding and making the suspect feel like the crime that was committed was warranted. This, in turn, makes the suspect believe he or she will not be punished as harshly (Inbau et al., 2001).

Some people are psychologically more vulnerable to these interrogation techniques than others (Kassin, 2008). People that are naturally compliant and avoid confrontation wherever possible are at greater risk. There are also individuals that are easier to influence than others because they are highly suggestible. There is a large range of psychological problems that may make a person more likely to confess, such as anxiety, depression, and mental retardation. As previously stated, younger people are at risk. Over 90% of young people waive Miranda rights and are encouraged by parents to do what the police say and answer all questions. Juveniles are also considered more impulsive than adults because of the stage of development they are in. More impulsive people are also more likely to confess since their primary concern is now, rather than the consequences confessing will have later. Interestingly, Miranda rights are waved more often by those that are innocent than those that are guilty (Kassin, 2008). Innocent people have no fear of being wrongfully convicted and since they have not done anything wrong, they have nothing to hide. They believe the system will correct anything they do because they are innocent (Kassin, 2008; Grisham, 2006).

One way to limit false confessions is to record interrogations by the police (Leo

& Richman, 2007). In multiple cases, police officers have selectively recorded interrogations, but often the recordings are of confessions only or are cut together in a way that makes a suspect appear guilty (Leo & Richman, 2007; Grisham, 2006). Leo and Richman (2007) maintain that the entirety of an interrogation needs to be electronically recorded so any attempts to pressure, threaten, or coerce a confession out of a suspect are clearly shown. This will hopefully cut down on the number of false confessions offered after intense interrogations. Many states are already passing laws requiring police departments to record entire interrogations. Recording all of an interrogation over just part of one, or the resulting confession, is cost effective as well. There are “numerous benefits – to police, prosecutors, judges, juries, and society in general – and few costs” (Leo & Richman, 2007, p. 792).

DNA Exonerations and Exonerees in the Media

“The media has played an influential role in shaping the American public’s perceptions about crime, from the news coverage to movies to T.V. crime shows” (Murty & Vyas, 2010, p. 83). Stories of incarcerated men being released, sometimes after decades of imprisonment, are seen as sensational in the media and given an inordinate amount of coverage (Murty & Vyas, 2010). The media has paid particular attention to high profile cases where false confessions are involved (Johnson & Drucker, 2009). Although the media typically attempts to present coverage of exonerations as “heartwarming individual stories of tragedy and triumph,” there are some in the criminal justice field that want attention from exonerees to be turned to the failings in the system that led to the conviction (Aronson & Cole, 2009, p. 616). The

media will also not normally make the jump from an exoneree to the idea that a single exoneree represents many more wrongful convictions (Aronson & Cole, 2009). The media has the power to sway public opinion to feel outrage at the release of a particular exoneree or outrage at the system for wrongly accusing and imprisoning one (Murty & Vyas, 2010), however swaying the media, and through it the public, toward a serious consideration of the failings in the criminal justice system that led to a particular exoneration can be extremely difficult (Aronson & Cole, 2009).

The amount of publicity dedicated to exonerations has certainly brought the issue to the attention of both average citizens and those that influence or set policy in this country (Huff, 2004). Editorials have been written in magazines and newspapers around the country. One editorial, written by Page (2007), states that, “nothing concentrates the mind around the subject of justice like the prospect of being falsely convicted” (p. 26). Page (2007) argues for the storing of DNA evidence so that none is destroyed, but also that this evidence needs to be used to exonerate the wrongfully convicted and not only stored. In another editorial, Kirschner (2002) claims that DNA profiling can change the American criminal justice system, if only the system would allow for it to do so. The media feels that some states are not working hard enough to secure and preserve DNA evidence in cases. Consequently, the wrongfully convicted in those states are less likely to be exonerated. Without DNA evidence, exonerations require long man hours and can take years (Johnson, 2008). Dallas County in Texas has an extensive DNA archive and forensic science center which is thought to be the reason for the county having the most DNA exonerations in the United States (Johnson, 2011).

As previously stated, some editorials will sensationalize the wrongly convicted. For instance, one article, discussing the death row exoneree Glen Chapman, touts the fact that he was not angry about the failings of the criminal justice system in his case. The story points out that Chapman made friends in prison that he thinks have also been wrongly convicted. The article maintains that states need to seriously consider making changes to their death penalty stances (Boyter, 2008). Another article stated that one exoneree “has already endured far more trauma than most people could expect in a busy lifetime” (Chisholm & Driedger, 1995, p. 60). It goes on to talk about the time this exoneree had lost to prison.

The media even recognizes that they give more attention to exonerations now that DNA is involved. Taylor Jr. (2007) wrote that public attention for exonerees has changed with the advent of DNA testing. Before DNA, exonerations were a rare occurrence that did not get much attention from the media or the public. This may be because no one knew how many innocent people were being convicted. Since exonerations were rare, the media and public assumed wrongful convictions were not occurring very often. Now evidence shows there could be thousands of wrongful convictions per year (Taylor Jr., 2007).

Recidivism

Recidivism is defined as “a return to criminal behavior after release” (Esperian, 2010, p. 320). There have been no academic studies done on recidivism rates in DNA exonerees, but considering that exonerees face many of the same circumstances when trying to reenter society, they may very well have some of the same dangers for

recidivating (Innocence Project, 2012; Gendreau, 1996; Esperian, 2010; Halsey, 2008; Clemmer, 1940). Most incarcerated people are not sentenced to prison for life. Like exonerees, they end up back in society (Visher & Travis, 2003). The idea of rehabilitation during imprisonment is relatively new, brought out of a movement toward humanitarianism. Even imprisonment as a form of punishment for lawbreaking is an historically recent design. It is apparent that incarceration is not an effective deterrent for crime. A large number of those held end up committing crime again. It has also been suggested that the later crimes of ex-offenders are often “more sophisticated or heinous than the offenses for which they were first committed” (Clemmer, 1950, p. 313). Clearly recidivism has been a problem for this form of criminal punishment, however, “an individual’s transition from prison back into a home and into a community is difficult, and avoiding crime can be the least of his or her problems” (Visher & Travis, 2003, p. 89).

Rates of recidivism are staggering in the United States. Overall recidivism rates within three years were determined based on a study using 12,545 ex-inmates released in 2003 from Allegheny County Jail located in Pennsylvania. The three year recidivism rate was 55.9%, but the largest amount of recidivism, 36.7%, took place in the first year after release. The second year yielded an additional 12.5%, and the third year showed another 6% recidivating (Jung, Spjeldnes, & Yamatani, 2010).

Race is a serious issue in criminology and criminal justice. The criminal justice system and prisons include a much larger black population than white, just as the number of minority exonerees is significantly higher than the number of white

exonerates (Jung et al., 2010; Innocence Project, 2012). A study conducted by Jung (2010) found that black men have a higher recidivism rate than white men over a total of three years. It was also discovered that black men recidivated quicker than white men. Black men did not make it as long on the outside without getting caught for another crime, controlling for age at the time of release and the amount of time of the previous stay in jail. In the first year after release, 43% of black men returned to jail, as opposed to 31.1% of white men. This means there was a difference of 12% between black and white males. At the end of three years, that difference widened to 17.6%, with 65.2% of blacks and 47.6% of whites ending up back in jail. When analyzing age, black men were more likely at all ages than white men to recidivate (Jung et al., 2010). These results clearly exemplify that race is an important variable in regards to recidivism.

Multiple studies have been done to determine risk factors for recidivism and many have been identified through different means. Statistics gathered from law enforcement agencies and self-report surveys are two of the major instruments that have been employed. Surveys have returned some interesting results, such as the fact that most people being released from prison have no intention of ever coming back. Even with the numerous studies conducted, it is impossible to ascertain every variable that might lead an individual to reoffend (Halsey, 2008).

Each study on risk factors for recidivism seems to accent different variables. Some documented dynamics include history of criminality, history of antisocial behavior, demographics, family makeup, intelligence, economic wellbeing (Gendreau et al., 1996), parole supervision, amount of incarceration, severity of crimes in career

(Esperian, 2010), housing, peers, drugs, money (Halsey, 2008), and socialization (Clemmer, 1940). It has also been argued that ex-offenders who are checked up on frequently are less likely to recidivate but as the length of time between checks widens, recidivism rates increase (Esperian, 2010).

According to a study done by Gendreau, et al. (1996), a number of strong predictors are related to recidivism. These are categorized into two groups, static and dynamic. Static variables are those that do not change from day to day. Highly relevant ones include an offender's criminal history, social conduct, achievement in social status, and demographic variables like age, gender, race, religion, and family situations (such as single parent homes or foster care). There were a number of weaker correlates in the static category as well. These correlates consist of cognitive function, things that cause an individual distress, and the economic standing of the family. Dynamic variables can be factors as well. Variables are characterized as dynamic if they change over shorter periods of time or from moment to moment. In this particular study, the dynamic factors are as strongly correlated with recidivism as static factors. These dynamic variables have often been given a bad name because they are difficult to keep track of as they are constantly changing. There is a certain amount of subjectivity involved in studying these variables, partly because they can change rapidly. The most significantly correlated variables, in either group, were age, criminal history, relationships with certain friends, family situations, sex, social status, and drug use (Gendreau et al., 1996).

One study, by Halsey (2008), was performed to discover the most important

issues related to recidivism and to rank them in order of importance (Halsey, 2008). The research was conducted using longitudinal data over four years. The author of the study interviewed participants to gain in-depth narratives from them. The measurement instrument used was an open-ended type interview that left respondents free to use their own language and ideas. It was used because it would not constrain participants into a narrow range of responses. There were 47 total respondents with an age range of 15 to 20. To be considered for the sample, men had to have been arrested at least one time before 15 years of age. The sentences of the sampled men ranged in length from two months to over five years. Offenses they had been convicted of included possession of an illegal substance with possible intent to sell, breaking and entering, illegal use of a car or truck, endangering life, armed robbery, assault, and bodily harm. Of the 47 participants, 22 were only interviewed one time. This group of respondents would not be considered part of the longitudinal study. Seventeen participants were interviewed twice, five interviewed three times, and three participants were interviewed four times. The narratives provided showed young men that had lived through continuous arrests, incarcerations, and releases. It also revealed a large number of young men moving from juvenile sentences to adult incarceration. The researchers used the interviews to illustrate both that juvenile rates of recidivism are very high and that the number of juveniles making the jump to adult criminal lives is similarly high (Halsey, 2008).

The purpose of Halsey's study was to determine personal and circumstantial factors in the prevalence of recidivism in juveniles. One major theme behind the research was that recidivism in juveniles is not purely a personal problem, but a failure

of the system. Halsey (2008) argues that the system of incarceration is partially to blame but focuses on the problems that arise for juveniles and adults upon release from custody. The researcher sees the system as risky and dangerous. Released men run into brick walls as they are trying to start their lives over. The study attempts to determine what is happening to these men as they venture back out into society and what turns them again toward criminal activity. The true endeavor of the study was to challenge the accepted idea that the men themselves are simply criminal and that they inherently want to cause harm to themselves and society. The aim was to show that the system in which they are released does very little to help them and may, in fact, do more harm than good. The programs offered after release often put these ex-offenders in the same situations as before incarceration, and it should not be surprising that these young men return to criminal behavior. These programs give those released the perfect conditions in which to reoffend, but it is not criminal tendencies that leads them there. "Men return to custody because of responses to these systems and procedures and not solely because of their behavior" (Halsey, 2008, p. 1212).

One aspect of this study that was different from many others was the longitudinal look at these young men's lives. Much of the research on recidivism has been based on personal surveys and interviews but little of it has followed the participants for any length of time to determine if recidivism was taking place. While not all of the respondents for this study were interviewed more than once, most were. These were the participants that gave the researcher the most information about the problem of recidivism. The researcher seemed genuinely concerned with finding out as

much as possible from these men about the difficulties of reentering society, rather than trying to come up with reasons for criminality in them. The researcher looked at the individuals and not just the big picture (Halsey, 2008).

A noted commonality of all the respondents about to be released was hope for the future. Those that were about to leave juvenile facilities were optimistic about where their lives were headed. They had no intention of ever returning to custody and many seemed to feel that they would not commit crime at all upon release. Out of 18 juvenile respondents, only two thought there was more than a 50% chance they would end up back in custody and even they believed they would be able to stop committing crime before the age of 18 when they could be tried as adults and sent to an adult prison. It is important to note that throughout a custodial sentence, these young men did not always feel so hopeful. Most inmates in custodial settings have ups and downs, which can be very high and very low. These young men often go through periods of depression. This does not mean, however, that these juveniles all have emotional problems. The system sometimes fosters these kinds of emotions. The optimism of release is consistently found in the literature among respondents of surveys and interviews. They report feeling despair while in custody and this hopefulness upon release (Halsey, 2008).

Halsey's (2008) research found some specific risk factors for recidivism, as outlined by the participants. They reported that their major concerns included housing after release, peers and friends outside, drug and alcohol problems, and a lack of money. Housing is imperative. For most people, it is the backbone of their day to day lives. It is a place people need to feel safe and is often a haven. For most of the participants,

finding and keeping acceptable housing arrangements has been a trial. For the issue of housing, three subgroups, or particular housing problems, were discovered. One significant factor for young men is the delay in housing from the time of release. Many of these young men had to wait days, and even weeks, before housing was available. This interim leaves many of those released either homeless or forced to return to family homes that foster their criminal behavior (Halsey, 2008).

The second subgroup for housing is related to the concerns of respondents about exactly where they will be staying after release. These young men are often forced to take any housing they can find or anything that is offered. This housing is typically found in poor and rundown neighborhoods that foster crime. Other respondents had to return to families and friends. Being back in the setting that allowed for their original criminal activity was difficult for these young men. Those in this situation can become stressed and return to their old behavior. Many of these respondents committed crime again because they were stressed, because they were living with criminals, or simply to survive (Halsey, 2008).

Another problem for many of these young men in housing, and in general, is that they have never learned common life skills. In their former homes and in custody, few have been exposed to positive habits. Many do not know how to cook for themselves. As prisoners, they are not expected to do anything except follow orders given. Their environment, food, and clothing are provided and entertainment and activity are forced on them. They are not responsible for themselves or even what they are supposed to do on a daily bases. Showing initiative is something that can actually cause trouble or

punishment for these young men. “They react rather than act” (Halsey, 2008, p. 1228). These young men are ultimately taught not to do for themselves. Once back in society, many of them feel helpless, and one of the few things they do know how to do is what they were in custody for.

Peers are a serious concern for young men trying to avoid recidivating. These young men are advised in custody to try and cut ties with friends that negatively influence them. They are also told they need to find a new group of friends. Theoretically this is good advice. Unfortunately it can be hard to follow. Those in custody are not given the opportunity to spend time with people that will help them avoid crime and their friends on the outside provide an avenue back to crime. When these men are released into society, they are trying to change so much of their lives and old ties are often the only people they have a connection with. Previous friends can be more like family than acquaintances and completely cutting them out is more than most of these young men can do. Some of those released are able to follow the advice for a short amount of time, but most end up returning to friends at the worst time, like when they are already starting to slip and things are beginning to fall apart. Friends can provide the stability, validation, and assurance that these young men are not alone in the world, but they can also lead some of these men back to lives of crime. “Indeed, mateship is akin to the double-edged sword of incarceration itself-being both a means for striking some sort of stability and routine in peoples’ lives...but also the device through which one is predominantly deprived of the ability to learn how to create and sustain the kinds of stability and routines necessary for a life beyond crime and

custody” (Halsey, 2008, p. 1232).

Drugs play a noted role in recidivism. It is quite common that men with a history of using or dealing drugs will return to that behavior after being released from custody or prison. There are many reasons for this return. Many young men use drugs to pass time and survive from day to day. They may also go back to dealing drugs as a way to make money for basic needs like food and housing. Unfortunately, one major reason ex-offenders go back to drugs is the sense of identity they feel when using them. It might be unfeasible for some of these young men to stop using something that makes them feel good about themselves, particularly when so many other aspects of their life are creating the opposite feelings. In addition, it can be complicated to convince young men that drugs are always bad and will always lead to reincarceration when they are perfectly able to see that many people disagree. The number of smokers and alcoholics that function effectively are in direct conflict with what these men are being told. These young men may consequently view using drugs as a victimless crime and one that is being committed on a regular basis. Based on these beliefs, the use or dealing of drugs can be rationalized (Halsey, 2008).

Although economic issues are no longer considered to be the only, or even the main, reason for committing crime, there is no denying that “money matters - knowing how to earn it, how to value it, how to keep it, how to make it reach just far enough to secure food, shelter, clothing, gas, electricity, phone, and leisure requirements” (Halsey, 2008, p. 1237). Both strain and anomie theory have been criticized for not being complete enough in predicting criminal behavior, but economic difficulties definitely

play a part in the lives of those being released from prison. Many of those people released have a hard time finding legal avenues to make money, and they consequently turn to illegal means. Men who have jobs in prison earn very little in wages despite working long hours and many believe they will be paid similarly as part of the general workforce (Halsey, 2008).

Recidivism cannot be attributed to any one specific cause, but “is something that is pieced together-often in indiscernible ways but in ways which nonetheless extend beyond the efforts or actions of the individual” (Halsey, 2008, p. 1245). Recidivism may very well be caused by the combination of personal decisions made by the former prisoner and the constraints placed on him or her by the outside world. This is not meant to clear former prisoners of all responsibility in regards to repeat offending, but show that the entirety of the blame may not rest with them (Halsey, 2008).

“The adoption of the folkways, mores, customs and general culture of the inmate subculture” (Clemmer, 1940, p.270), also known as prisonization, has long been thought to be a significant contributor to recidivism. The question of whether or not our criminal justice system creates career criminals has been studied by numerous researchers. Although the extent to which prison culture affects each individual inmate is not known, “it is reasonable to presume that the culture of a prison influences the people participating in it, in the same way as culture anywhere plays a part in shaping the lives of men” (Clemmer, 1950, p. 313).

The differences between the culture of our society at large and that of prisons are not always easy to pinpoint. Obvious disparities do exist though. One of these is the fact

that prisons only hold people of one sex in one place. Another is that everyone held is a criminal and thought to be defective in some way since they cannot be trusted to follow the rules of a civilized society. The culture of prison also includes a devaluation of privacy and freedom of movement (Clemmer, 1950). Other differences may not be immediately apparent to outsiders. Offenders experience large amounts of confusion in prison because of the change in structure, values, and objectives. Prisoners end up feeling disinterested, sad, bewildered, angry, bitter, and hateful (Clemmer, 1940). Dumping people in this state of mind back out into the public can undoubtedly cause problems.

This is not to say that the prison culture is forced upon criminals in the system. Much of the culture is created by the very characteristics of offenders that prompted their incarceration in the first place. Inmates partially shape the culture they live in and are then subjected to it constantly. Prisons could conceivably do something to change this culture, but at this point in time, society is not prepared or willing to take steps that would make prisons happier places for inmates. Investing in rehabilitation would be a good decision for society and should be pursued, but removing the negative culture, or punishment aspect of prison, is not something that people find acceptable (Clemmer, 1950).

The process of prisonization takes place in multiple stages and effects different inmates in different ways, although every prisoner goes at least partially through the process. Stage one occurs when the offender is first subjected to prison life. The prisoner becomes nothing more than a face in a crowd, wearing the same clothes as

everyone else, eating the same thing, sitting in an identical cell to the person next to him, and generally following the examples other people set. Then second stage involves redefining the basic needs the prison is providing. This often includes thought of finding a good job within the system and creating a pattern to follow. In the last stages, prisoners will assume nearly new identities by changing their former habits. They will eat, dress, work, and sleep differently, as well as speak a different language and start changing social behavior. Inmates that are subjected to prison life for short stints, and those that are particularly strong, may not engage in all the aspects of prisonization and may consequently have better odds of fitting back into society (Clemmer, 1950).

Timing has been considered in relation to recidivism. “Clemmer concentrated on the process of induction into the community. He had little to say about changes that might occur as inmates neared the time for release” (Wheeler, 1961, p. 698). According to one study done, inmates that had served six months or less were only in the early stages of prison socialization and, in fact, conformed more readily to the culture of the staff in the prison. Those further along in the process had served more than six months but had more than six months left on their sentence. These inmates were less likely to follow staff norms. Offenders with less than six months left went back into a phase of low prisonization. The trend in this study showed that inmates go through an initial phase of conforming to prison staff culture. They then go through a phase where they identify with the inmate population. In the final phase, where they have less than six months of their sentence left to serve, inmates return to a higher level of conformity with the staff (Garabedian, 1963).

Wheeler (1961) was the first to suggest that time left until release might have an effect on amount of prisonization. He did find, agreeing with Clemmer's assertion, that the beginning of an inmate's sentence was vital in the process of prisonization. In addition he found that recidivists go through a process of prisonization every time they are incarcerated. They do not reoffend and enter prison again ready for the culture that exists there. He noted too that prisoners with more direct contact with other inmates become more prisonized than those that are distant from others. Wheeler first brought up the three phases based on time served and time remaining. He proposed that that process of prisonization warring with the clinging to of society's values creates a bell curve. At the beginning and end of a prison sentence, inmates are less prisonized. They are most likely to embrace the prison culture in the core of their sentence (Wheeler, 1961; Clemmer, 1950).

Atchley and McCabe (1968) attempted to replicate Wheeler's findings, but found multiple differences after compiling their data. They found that inmates that had been incarcerated for more than six months were more likely to conform to the outlooks of prison staff than those that had only been imprisoned for six weeks. They also could not find support for Wheeler's claim that an inmate's relationship with other inmates would affect prisonization. While the rough bell curve of prisonization was found, ultimately, not a single assertion of Wheeler's was able to be replicated by the study.

There are factors that may help inmates avoid the prisonization affect (Clemmer, 1950). One, referred to earlier, is a short sentence where prisonization cannot fully take place. Another is a concrete personality and strong relationships with positive influences

outside prison. Keeping these relationships through incarceration is important. Refraining from negative behavior and activities as well as sheer luck in cellmate selection can keep a prisoner from becoming too involved in the culture. The degree of prisonization on an inmate does not suggest criminality or a lack thereof, but inmates that are the least prisonized usually take advantage of available reform programs and are less likely to recidivate. Based on this discovery, the idea that prisons can cause recidivism is plausible (Clemmer, 1950).

Bullying is a large problem in prisons and may be a factor in socializing men to the unique culture of the prison system. One study, using six prisons in England, found that bullying took place frequently in prisons, “with over half the prisoners being both a victim and perpetrator of bullying” (South, 2006, p.490). The definition of bullying used for the study involved both isolated events and repeated aggression. It also specifically included those events where the perpetrator was not necessarily aware they were being aggressive. Bullying has been connected to the hierarchy within the prison system and the status of one prisoner over others. Those that are able to bully effectively and not become the victim of bullying have a higher status among both peers and guards. This is especially important for those prisoners concerned with access to resources only available to the most powerful of them (Ireland, 2002).

South (2006) found that bullying was directly and significantly correlated with the “perceived importance of social status in prison” (p. 495). This finding was not surprising considering earlier studies that have established those inmates who accept and welcome the existent hierarchy and prison culture within the prison system as

inmates that will attempt to secure their status (Paterline & Peterson, 1999). South (2006) also found this to be the case. In addition to the relationship between bullying and status, she found a positive correlation between prisonization and the inmates' perception of social status importance. It was noted, however, that prisonization was not significantly correlated with bullying and is unable to completely explain the phenomenon of bullying. As mentioned earlier, the study found that the most common group for inmates to fall under was the combination bully and victim category, rather than one or the other. This may help explain why prisonization is not correlated strongly with bullying. These bullies may be concerned with prison status but are reacting simply to being bullied rather than knowingly and actively engaging in the prison subculture (Ireland, 2002).

Attempting to predict recidivism for certain types of crimes is important in the criminal justice field, where some crimes are considered to be more serious than others. The knowledge that a murderer is likely to commit the same crime after being released from prison might be more pressing than a repeat shoplifter's odds of recidivating. A very large portion of the public, especially people with children, worries about child molesters and child pornography. A study of 341 of these offenders, conducted through self-report surveys, shows that a risk for these people recidivating may be the use of child pornography. For most other crimes, this factor would not even be considered when assessing the likelihood of their recidivism. Results of the study concluded that pornography was a risk factor for those at a lower risk of recidivism and those in the higher risk category, and the frequency of pornography use was more of a risk factor for

the higher risk group (Kingston, Federoff, Firestone, Curry, & Bradford, 2008).

Vrieze and Grove (2010) used information on recidivism in sexual violence offenders and attempted to apply their findings to violent offenders in general. To do this, they examined the use of risk instruments in predicting recidivism. They found many problems with the available risk instruments. One was the use of instruments to predict a simple yes or no answer to the question of whether a particular person is going to commit crime again. When using a four point scale or probability for recidivism, the instruments were more likely to be reliable. Another problem is that the effectiveness of these risk instruments are measured against actual recidivism rates recorded, and these rates are not always correct (Vrieze & Grove, 2010).

One way to have more accurate findings on risk of recidivism is to use multiple risk instruments, identify scores that constitute the highest risk, and determine how many of the scores for an individual fall within the highest risk category. Test scores also need to be standardized or tuned so that results are comparable. In this way, one instrument will back up another and results will be more dependable. This is necessary for an accurate measure of predicting recidivism to be produced. The measures and procedures used in this study ultimately came up with a 40% chance of recidivism for a sex offender case study, but the researchers were unable to determine overall violent offender recidivism probabilities (Vrieze & Grove, 2010).

Recidivism is not only a problem for the United States. In South Africa, crime statistics are few and far between, and numbers on recidivism have not been officially collected. As in the U.S., prisoners typically do not want to end up back in prison and

plan to lead a life free of criminal activity (Gaum, Hoffman, & Venter, 2006). Unfortunately, like in the United States, many of these people do return to prison. It is estimated that up to 80% of prisoners in South Africa return to crime (Swart & Naude, 1994).

A study conducted on re-offenders in Pollsmoor Prison, South Africa, through the use of focus group discussions, found that reasons for recidivism in the country are similar to those found elsewhere in the world. One theme that was discovered was that a prisoner's behavior while incarcerated was not indicative of his behavior outside of prison and was not ensured as a predictor of whether or not he would be successful at avoiding criminal activity. The behavior practiced in prison, however, can have ramifications for ex-offenders in the outside world. Many of these prisoners learn to be dependent on the system and do have some problems readjusting to public life. To reduce recidivism, this issue should be addressed with rehabilitation (Guam et al., 2006).

According to the subjects in South Africa, "many participants felt that rehabilitation interventions are provided too late during imprisonment to be effective" (Gaum et al., 2006, p. 415). These prisoners only receive access to rehabilitation programs at the end of their sentences, when they are close to being paroled. Many of these programs are highly ineffective, not staffed by the most competent professionals, or offered on a consistent basis. The prisoners also had problems trusting personnel, and trust is needed for proper rehabilitation. Unfortunately, it is the perception of prisoners that the criminal justice system does not want to inspire trust in them (Guam et al.,

2006).

Drugs are a problem for prisoner rehabilitation in South Africa. Many of the prisoners in the study admitted to using drugs while incarcerated, but they conversely proclaimed they would be drug free outside of prison. Some were successful at staying off of drugs through Narcotics Anonymous and Alcoholics Anonymous programs offered (Gaum et al., 2006), however as noted earlier many ex-offenders return to using drugs outside prison (Halsey, 2007), which leads them to commit crime again.

“The effectiveness of corrections is usually measured by rates of recidivism” (Esperian, 2010, p. 320). Programs abound to reduce recidivism in offenders. If effective rehabilitation could be created, criminals could leave prison and become useful members of society. Expending more resources on rehabilitation is not a popular idea. In fact, the general population seems to feel that the worse the prison experience, the less likely inmates are to return. People feel that rehabilitation is a rewarding experience when, because of the pain caused to the victim or victims, an inmate should be punished. Research can help turn public opinion around. (Gaum et al., 2006).

The debate between using prison as punishment and using it as a vehicle for rehabilitation has been raging for the better part of a century. There is an argument to be made that rehabilitation can reduce the number of criminals in society because they will learn how to be productive citizens instead of leaving prison only to commit more crime. The education of inmates has been used as a tool to combat recidivism. The question of whether or not education programs are worth the cost to taxpayers was the focus of research performed by John H. Esperian (2010). He found that educational

programs can significantly impact recidivism rates.

It is a widely held belief that “the lack of a legitimate job fosters criminality and, conversely, that holding a legitimate job diminishes criminal conduct” (Henry, 2007, p. 755). When prisoners are released from custody, they have very little money from before their incarceration and only receive between \$50 and \$500 to start over. Ex-offenders are denied many aid programs offered to other Americans. They are typically ineligible for student loans. Ultimately these former inmates end up in the same situations that may have contributed to their criminal behavior in the first place and offer few employment opportunities (Harrison & Schehr, 2004).

Programs that assist ex-offenders in gaining employment may help them avoid recidivism. There are many jobs that are denied to ex-offenders for different reasons. They may not be allowed to work in certain fields or with particular groups of people. Despite laws that constrain employment for these ex-offenders, programs have been created to help them get jobs. These offenders can participate in education and job training while in custody. Some can also receive help once released (Henry, 2007). A review of four major programs designed to help ex-offenders find employment found that they, “can be successful in reducing overall recidivism between 10-50% for some participants over the first five years of post-release” (Harrison & Schehr, 2004, p. 61).

Successful programs need to include several features. It is absolutely necessary that programs be offered on the outside for released inmates. Programs that are only offered in prison do little for ex-offenders that are thrust out into a world they may no longer be prepared for. These programs should contain a provision for ex-offenders to

be kept up with for six months or more after their release. Former inmates need to be given better funding upon release so that they can afford more than just basic elements. In order for ex-offenders to apply for jobs, they should have appropriate clothing and a way to get to the place of employment. These men usually need additional training for many employment opportunities to be open to them. They often require further education, job specific skills, and domestic skill training (Harrison & Schehr, 2004).

Normally ex-offenders will be thrust out into society to look for work alone and forced to fill out applications that ask about criminal history. Some cities have started to walk back the discrimination against ex-offenders by agreeing to “ban the box on initial job applications that ask applicant about past criminal convictions,” and only criminal histories that pertain to the specific job will be taken into account. This dramatically increases the likelihood of consideration for ex-offenders applying for a position with the city (Henry, 2007).

These cities are at the forefront of a movement meant to combat the discrimination of employers against former offenders. Unfortunately, this initiative can only assist those ex-offenders that meet the qualifications for these city and county jobs. Many will not have the relevant experience, skills, and education necessary. It is yet to be seen if this initiative will be effective in increasing employment of ex-offenders because some cities may not take the program as seriously as others and some former offenders may be denied employment based on criminal histories later in the process of hiring. There may also be circumstances when a certain type of crime, specific combination of crimes, or rate of recidivism prohibits an ex-offender from being

employed (Henry, 2007). There is a concern from ex-offenders that employers will assume or infer that there is a criminal history because of gaps in their work record (Weiman, 2007). At this point in time, ex-offenders are still commonly discriminated against when looking for employment, even if they are qualified for a position, but cities engaged in the “ban the box’ movement may provide an important example that people can and do change, and that second (and even third) chances can be a smart societal investment” (Henry, 2007, p. 760).

Project Horizon is a program that was started in Utah in 1992 as a way to avoid recidivism in ex-offenders. A study of Project Horizon conducted by Robinson (2000) found that people in the program recidivated 18 to 20% less after being released than those not participating in the program. Of those ex-offenders in Project Horizon, 89% were able to find jobs after being released. Project Horizon was established to produce exactly these kinds of results. Lawmakers in Utah were concerned about the costs of recidivism in the state because 89% of the total crime being committed in the state was the result of repeat criminals. The aim of the project was to identify those criminals that were most likely to be rehabilitated and make an effort to help them. Once identified, these volunteer inmates were given education, job training, and contacts, along with assistance in writing resumes. After release they were provided with clothing and transport to interviews. Program participants were likely to recidivate an estimated 65% of the time as opposed to 82% of non-participants. Proponents of Project Horizon state that even this recorded difference in recidivism saves taxpayers enough money to justify the program costs. Opponents argue that the group of volunteers chosen for the program

are less likely to recidivate in the first place. To combat this argument, the study considered two equivalent groups where the only difference was participation in the program. The recidivism rates among these two groups were only slightly different from the original results (Robinson, 2000).

In addition to the recidivism rates, there is also a large race discrepancy in hiring ex-offenders. According to a study by Pager (2003), while ex-offenders were less likely to be considered in general for a particular job, black men were treated more harshly than white men. In fact, black men without criminal records had about the same chance to be called back for an interview for a position as white men with criminal records. White men without criminal records were twice as likely to be called back. Even with direct contact with a hiring manager, where ex-offenders had the opportunity to explain themselves and their actions, black men were less likely to be considered. Considering the much larger black population in prison, this discrimination doubly hurts black ex-offenders looking for work, which in turn may affect their rates of recidivism (Pager, 2003).

Recommendations for avoiding recidivism include half-way houses, inmate education, and effective service delivery. Half-way houses can provide some much needed stability and security at a time when ex-offenders are finding it difficult to transition from prison back to society. Inmate education should include having functional libraries available to prisoners, specifically legal texts and laws so inmates will know their rights and have an idea about the process they are going through. Prisoners have expressed a need for effective services to be provided. Professional

psychologists and social workers should be employed by prisons to run programs that will truly help inmates ready themselves for the outside world (Guam et al., 2006). Those that have been wrongly convicted would also benefit greatly from these programs. After all, they will be facing similar hardships when they are released.

As the research suggests, DNA exonerations are a growing concern for criminal justice professionals, politicians, the media, and the public. The proposed study will attempt to explain if there is a fear of DNA exonerees in the public and what that level of fear might be. There has been very little research done on what exonerees go through after being released or how the public feels about them. Recidivism rates are similarly difficult to determine. This research will attempt to analyze a possible general fear the public may have of DNA exonerees and if there is a perception that exonerees will commit property crime or violent crime after being exonerated.

The following section, Chapter III, will explain the methods used to collect and analyze the data for this research. It will outline why the research was conducted, the sample group used and how this sample was chosen, the survey instrument employed to collect the data, the circumstances under which the survey was distributed, and the process by which the data was analyzed.

CHAPTER III

METHODS

The researcher explored the subject of DNA exonerees and the public fear of these exonerees because there has been very little research on the public reaction to a topic that has been polarized by many professionals in the criminal justice community. The researcher thus conducted a cross-sectional, case-oriented study using a survey instrument distributed to criminology students at The University of Texas at Arlington. The aim of the research was both to explore the perceptions of the students in regards to DNA exonerations and to describe how they might feel about DNA exonerees. Prior to beginning any research, the Institutional Review Board had to approve the manner of data collection.

Institutional Review Board

The process of IRB approval is designed to ensure ethical consideration during research with human subjects. The researcher applied for IRB approval during the 2011 fall semester. A copy of the application, the survey instrument, and the paragraph for obtaining consent were sent to the major professor and the IRB. This study was determined to be ethically acceptable by the IRB since none of the participants are under the age of 18 or prisoners in the criminal justice system, and the survey was not designed to cause any discomfort for the participants. Once approval was gained in the fall of 2011, the survey instrument could be distributed.

Population and Sample

The sample used by the researcher can be generalized to a population made up of those students at the University of Texas at Arlington taking undergraduate courses in the Department of Criminology and Criminal Justice. The researcher chose this particular population because undergraduate students in criminology and criminal justice classes should know a little more than the general public about the topic concerned. It was also thought that these students, while having a familiarity with the subject, would not be experts on it. Therefore the population represents a group that understands the nature of DNA exonerations but does not have an overarching knowledge that would lead them to answer survey questions a specific way. The researcher employed non-probability sampling which means that the sample of the population that was taken was not done so randomly. Members of the population did not have an equal chance of being chosen to participate. The researcher employed convenience sampling. The participants were chosen based on their accessibility to the researcher, meaning that the students who did participate in the research were more readily available to the researcher, for one particular reason. The researcher was familiar with their professors.

The researcher composed the sample of students in classes with a professor that was already known to the researcher. These professors were asked ahead of IRB approval if they would or would not be willing to allow surveys to be distributed to their students. Professors were approached either in person or by email. All of the professors that were asked agreed to distribute surveys in their classes. Apart from some

scheduling conflicts, surveys were passed out in each of the undergraduate courses where the professor was willing in the fall of 2011, during the month of November. The fall semester was chosen because the number of students at the university is higher during fall semesters. The surveys were distributed late in the semester both because of the length of the IRB process and the fact that students are more likely to come to class when final exams are imminent.

The courses in which surveys were handed out consisted of Ethics and the Criminal Justice System (CRCJ 2335), Theoretical Criminology (CRCJ 3300), Introduction to Research Methods in Criminology and Criminal Justice (CRCJ 3350), and Women and Crime (CRCJ 3385). From these four classes, a sample of 122 students (N=122) was taken. Although the total number of enrolled students in these classes was higher than 122, some were absent the day the surveys were distributed and there may have also been some crossover between the classes. It was requested that students in more than one of the courses fill out only one survey. This was done to ensure that the sample contained 122 different individuals with no duplicate surveys completed. It may be possible that some students chose not to participate in the research. Students were given the option to participate, with no penalty for deciding not to do so.

Data Collection

Participants in the courses chosen for research were each asked to complete a survey. These surveys were passed out to students at the beginning of each class period by both the researcher and the professor. The researcher was required to attend these classes because, according to IRB standards, the participating students needed to be

advised of their right not to participate and give their consent if they chose to participate. In this way, ethical concerns over a participant not being aware of their role in the research was avoided. In order to gain consent, the researcher read aloud a brief overview to explain the research project, give contact information, describe what would be required of the student, and to advise that student about his or her rights as a research participant. A copy of this verbal consent page was given to those students who agreed to participate.

Students were told the title of the research project and listened to a few words about the purpose of the research. Contact information was provided for the researcher, the major professor, and the Office of Research Administration, Regulatory Services. The Office of Research Administration, Regulatory Services contact information is available for students that have questions about their rights as a research participant or if students think their rights have been violated. One reason for making sure participants had a copy of the verbal consent page was to guarantee they had this contact information. The verbal informed consent also covered what would be expected of the participant and an estimated time needed to complete the survey. Students were told that they would be handed a survey, asked to complete the questions on it, and hand it back once completed. They were advised that the survey would take approximately five minutes to complete. Students were also made aware that they could ask questions of the researcher at any time before, during, or after the survey procedure.

It was made clear that prospective participants would not be rewarded or punished for participating and that participation was completely voluntary. Students

were informed that professors would not give extra credit for participation in the research and the researcher would not be compensating participants in any way. Students were also notified that there would be no penalty or consequences for choosing to abstain from participating in the study. Similarly, there would be no negative effects of quitting the procedure. Participants were free to stop the procedure at any time for any reason. The researcher did not perceive any risks to students in taking the survey, but prospective participants were advised that if they did experience any discomfort, they could inform the researcher or quit the survey procedure.

The researcher chose not to attach student names to the surveys or the project. Therefore, the verbal informed consent was read and participants were not required to sign a consent form. The participants were aware that they would not be linked to the research by name and that there was no risk of a breach of confidentiality. After being given all of the information for verbal informed consent, the researcher requested participation by a show of hands.

The research process took place at the beginning of classes, before professors started their lectures. The researcher read the verbal informed consent, asked for participants, and proceeded to distribute surveys. Both the researcher and the professor handed out surveys. Participants were then left to fill out surveys with the researcher and professor at the front of the classroom. Often, the surveys took longer than the researcher's estimated five minutes to complete. Once completed, the researcher and the professor retrieved surveys from students. In some cases, participants came up to the front of the room to place surveys in a completed stack. The surveys were picked up in

no particular order and were not kept in order of completion by the researcher. At no time did a participant express any discomfort from taking the survey. After the first class in which surveys were distributed, students were asked not to fill out another survey. Repeat students did not have any difficulty in completing only one survey. Once all the surveys in a single class were completed, the researcher collected them and left so that the class could continue with the professor. The surveys from the different courses were not separated by class. The researcher placed all of the surveys together and in no specific order.

Survey Instrument

The measurement tool used by the researcher for the study was a survey instrument. A copy of the survey instrument can be found as Appendix A at the end of the research project. The survey contained a total of 32 questions. The first 18 questions were written with a five-point Likert scale of response options. The answer options were on a scale from “Strongly Agree” to “Strongly Disagree,” and included a middle response option of “Neutral.” The second section of questions, from 19 to 32, covered demographic data. The first questions of the survey, 1 through 4, were used to gauge how participants felt about the criminal justice system in general, learned criminality in prison, and the ethicality of releasing falsely accused persons.

Questions 5 through 18 concerned the fear respondents may have that exonerees will commit crimes after being released and the fear of exonerees respondents may have for themselves or their families. Participants were asked if they had a general fear that DNA exonerees would commit crimes, but they were also asked about exonerees

committing further crime given certain variables. These variables included exoneree compensation, amount of time an exoneree spent in prison, whether an exoneree had prior convictions, and the possibility of exonerees being socialized or institutionalized by their stay in prison. The personal fear of exonerees was addressed in questions 13 through 18. Questions 13 through 15 asked participants if they would fear going out with an exoneree under friendly circumstances in a public place during the day or at night, as well as whether they would fear being alone in private with an exoneree. Question 16 focused on the fear of having an exoneree as a neighbor. Respondents were asked about the fear of exonerees and their children, actual or hypothetical, in questions 17 and 18 of the survey.

Of the demographic questions, the first few, questions 19 through 22, were related to criminology and criminal justice in that they asked if respondents had been victims of either violent or property crime. Participants were also questioned about their family's conviction record and if this conviction was wrongful. At question 23, the demographics of gender, race or ethnicity, age, marital status, and religion were solicited. The researcher also included demographic questions about student classification, GPA, and major area of study at the university.

Data Analysis

The data analysis software Statistical Package for the Social Sciences, or SPSS, was used to study the survey responses. The decision to use a five-point Likert scale for response options to the DNA exoneree questions over nominal level answer choices means that complex data analysis could be done. The researcher employed a t-test using

the variable of race to determine if there was a statistically significant difference in the means of Caucasians and non-Caucasians in relation to questions about DNA exonerations and exonerees.

In the next section, Chapter IV, the researcher will communicate the findings that resulted from the survey responses. It will include both raw data in the form of tables and a discussion of that data. Data analysis will cover the demographic questions as well as the interval level Likert scale questions. The researcher will describe the product of the data analysis and any relationships that may exist.

CHAPTER IV

FINDINGS

This chapter will discuss the findings of the survey instrument. The researcher used SPSS to analyze the data generated by that survey. All aspects of the survey were studied, including demographic questions, knowledge-based questions, and those questions centering on perception. Frequencies and percentages were employed to study the demographic questions, while a t-test was done on the knowledge and perception Likert scale questions. The means of Caucasians were analyzed in relation to non-Caucasians for statistically significant differences. This was done to determine if the Caucasian responses were statistically significantly different from the responses of non-Caucasians.

Race was used as a variable because Caucasians have traditionally viewed the criminal justice system differently than minorities, and black individuals in particular. As noted by Hurwitz and Peffley (2005), “most blacks believe the system to be unfair and most whites believe the opposite” (p. 762). The researchers discuss how racial differences in the view of the system may determine how people interpret certain aspects of the system, particularly confrontations with the police. This difference in perceptions of the criminal justice system could extend to views on DNA exonerations, even though study in this particular area has not been done prior to this project. If perceptions of events with police differ according to race, minorities may also

understand events leading to wrongful convictions another way. Dissimilar minority views of wrongful convictions could affect how these individuals feel towards DNA exonerees.

Demographics

The demographics of the survey respondents were analyzed as frequencies and percentages. Most of the 122 surveys contained completed demographic sections, however some students chose not to answer certain questions. The information for demographic responses can be found in Table 1 on the next two pages. The frequencies for each question are the exact number of responses for a given option. For the variable of violent crime victimization, 23 responses confirming victimization were given. Ninety eight participants responded that they had not ever been the victim of a violent crime. The valid percent includes only those responses that were legitimate. If a participant did not answer the question or answered it in a way that was not perfectly clear, the response was not considered in the valid percentage. In the case of violent crime victimization, the percentage of responses that affirmed victimization was 19%, while those that had not been victimized made up 81% of responses.

The responses for property crime victimization were much higher than violent crime victimization. Fifty four respondents reported having been the victim of a property crime, while 67 responded that they had not been victimized in this way. This amounts to a valid percentage of 44.6% answering that they had been the victim of a property crime and 55.4% reporting that they had not been. Many more of the respondents had been the victim of property crime when compared to violent crime.

These numbers correspond to similar trends in violent and property crime gathered by the Federal Bureau of Investigation. According to the FBI's Uniform Crime Report for the year 2010, for every 100,000 people living in the United States, there was a violent crime rate of 403.6 and a property crime rate of 2,941.9. In fact, in every year the Uniform Crime Report has been published, property crime rates are higher than violent crime rates. This general tendency in crime rates in the United States matches what was found in the demographic data from the surveys.

Table 1 Demographic Information

Variable	Responses	Frequency	Valid Percent
Have you ever been the victim of a violent crime?	Yes	23	19.0
	No	98	81.0
Have you ever been the victim of a property crime?	Yes	54	44.6
	No	67	55.4
Has anyone in your immediate family ever been convicted of a crime?	Yes	43	35.8
	No	77	64.2
Has anyone in your immediate family ever been convicted of a crime he/she did not commit?	Yes	10	8.3
	No	111	91.7
Gender	Male	53	43.4
	Female	69	56.6

Table 1 - Continued

Race/Ethnicity	Caucasian	51	42.1
	African American	28	23.1
	Hispanic	32	26.4
	Asian	6	5.0
	Middle Eastern	1	0.8
	Other	3	2.5
Age	18-19	2	1.7
	20-24	79	65.8
	25-29	25	20.8
	30-34	8	6.7
	35-39	1	0.8
	40-44	1	0.8
	50+	4	3.3
Marital Status	Single	100	82.6
	Married	15	12.4
	Divorced	6	5.0
Religion	Christian	92	75.4
	Muslim	2	1.7
	Buddhist	2	1.7
	Other	11	9.1
	None	14	11.6
Student Classification	Freshman	1	0.8
	Sophomore	9	7.4
	Junior	54	44.6
	Senior	57	47.1
Are you an international student?	No	122	100
GPA	2.0-2.499	4	3.9
	2.5-2.999	27	26.2
	3.0-3.499	46	44.7
	3.5-4.0	26	25.2
Major	CRCJ	91	76.5
	University Studies	10	8.4
	INTS	10	8.4
	SOCW	2	1.7
	Other	6	5.0
Approximate number of CRCJ courses completed	0-1	10	9.3
	2-5	35	32.7
	6-10	26	24.3
	11-15	17	15.9
	16+	19	17.8

The two demographic questions following those on victimization addressed if respondents had family members that had been directly affected by the criminal justice system. The first asked respondents if they had an immediate family member that had been convicted of a crime. The second question allowed for the possibility that a family member had been wrongly convicted. It was important to determine what number of participants were intimately familiar with the affects of wrongful convictions. Forty three, or 35.8% of respondents reported that an immediate member of their family had been convicted of a crime before. Of these 43, ten reported that they had had a family member convicted of a crime he or she did not actually commit. Although it is possible that these respondents choose to believe that these convictions were erroneous, the fact remains that 23.3% of respondents with convicted family members felt that at least one of the convictions was wrongful. Seventy seven, or 64.2% of respondents did not have an immediate family member ever convicted of a crime, and 111 of the total participants (91.7%) had never had a family member wrongfully convicted of a crime.

Other demographic questions covered gender, race or ethnicity, age, marital status, religion, and college student demographics. There were 53 male respondents and 69 female respondents making up 43.4% and 56.6% of the total valid gender responses respectively. Caucasians comprised 42.1%, or 51 of the respondents. African American respondents made up 23.1% of the total, or 28 participants. There were 32 Hispanic participants (26.4%), six Asian participants (5.0%), and one Middle Eastern respondent (0.8%). Three respondents identified themselves in the category of “other” in regards to race or ethnicity, composing 2.5% of participants.

The majority of survey respondents were between 20 and 24 years of age. Seventy nine, or 65.8% of participants were in this age range. Twenty five to twenty nine year olds contained the second largest number of participants, with 25, or 20.8 percent. There were only 2 (1.7%) respondents in the 18 to 19 year old age range. Eight of the respondents, or 6.7%, were between 30 and 34 years of age. There was a single participant each in the 35 to 39 and 40 to 44 age ranges, making up a total of 1.6 percent. The remaining valid responses occurred in the 50 plus age group. There were four participants age 50 or older, making up a 3.3 valid percentage.

Exactly 100 of the participants identified themselves as single under the variable of marital status. This translates to 82.6% of valid responses. Fifteen (or 12.4%) of respondents were married and six (or 5.0%) were divorced. None of the respondents reported being widowed. Most of the survey respondents classified themselves as Christian. They constituted 92 of the responses on religion, or 75.4% of the total. Two participants, or 1.7%, reported being Muslim, and another two identified themselves as Buddhist. None of the respondents categorized themselves as Jewish, but 11 (9.1%) of the participants chose the “other” option and another 14 (11.6%) did not identify themselves with any religion.

Participants, being comprised completely of college students at the University of Texas at Arlington in Criminology and Criminal Justice undergraduate courses, were asked a series of questions about their status as students. They were questioned about their classification, international student status, GPA, major area of study, and the estimated number of Criminology and Criminal Justice courses they had previously

taken. The vast majority of respondents were upperclassmen. Seniors comprised 57 of the respondents and another 54 were juniors. This made up 47.1% and 44.6% of the respondents respectively. There were nine sophomores, or 7.4% of respondents, and one freshman, making up 0.8% of the total number of valid responses for student classification. None of the 122 respondents were international students.

None of the survey participants reporting having a GPA lower than a 2.0, and only four of the respondents had a GPA between 2.0 and 2.499, making up 3.9% of the total respondents. Twenty seven of the participants, or 26.2% of the total, had GPAs between 2.5 and 2.999. The largest group for the GPA variable was comprised of 46 respondents, or 44.7% of the total responses, that had a GPA between 3.0 and 3.499. There were 26 respondents (25.2%) in the highest bracket with a GPA between 3.5 and 4.0.

Most of the students surveyed, 91 of them, were Criminology and Criminal Justice majors. This means that 76.5% of the respondents were Criminology and Criminal Justice majors. This number should not be surprising given the classes that were chosen for survey participation. University Studies and Interdisciplinary Studies majors each had 10 respondent identifications, meaning each category included 8.4% of the total participants. There were two Social Work majors, comprising 1.7% of responses. Six students, or 5.0% of participants, identified themselves as majoring in another area at the university.

The number of Criminology and Criminal Justice courses participants had completed varied widely. Ten participants, or 9.3% of the total responses, had taken

either no courses in the area or only one course. Thirty five (32.7%) of those surveyed had taken between two and five courses in the field of study. This was the largest group for the variable. Twenty six of the students, or 24.3%, had taken between six and ten classes, and 17 participants, or 15.9%, reported having taken 11 to 15 courses. Nineteen students identified themselves as having taken more than 15 Criminology and Criminal Justice courses. Some of the responses, however, were over 100, leading the researcher to determine that some of the participants may have misread or misunderstood the question. Some students wrote a number in with the word “hours” after and the researcher was able to convert that number to an estimated number of courses taken. It is unclear how reliable information gathered with this question might be.

Knowledge

The researcher included a few questions in the survey that focused on knowledge rather than perception. These included questions about the criminal justice system in general and the possibility of socialization in prison leading to further crime. A t-test was performed to determine if there were statistically significant differences between the means of Caucasians and non-Caucasians. The questions, means for each race variable, and p-values can be found in Table 2 below.

Table 2 Comparison of Means for Knowledge Questions

Variable	Caucasian (Mean)	Non-Caucasian (Mean)	P-Value
The criminal justice system in the United States is fair and impartial.	3.20	3.50	0.010**

Table 2 - Continued

Justice is served through the exonerations of offenders with DNA evidence suggesting they were falsely accused.	2.37	2.44	0.561
Prison is a place where most inmates learn criminal behavior.	2.73	2.59	0.231
Exonerees are more likely to commit further crimes because of behavior they learned while wrongfully imprisoned.	3.12	3.03	0.450

*significant at the .05 level

**significant at the .01 level

The researcher found a statistically significant difference when comparing the means of Caucasians and non-Caucasians on the variable of fairness and impartiality of the criminal justice system. The mean of Caucasian responses was 3.20, where 1 is “Strongly Agree” and 5 is “Strongly Disagree.” The mean of non-Caucasian responses was 3.50, further toward disagreement with the statement that the criminal justice system is fair and impartial. The statistically significant difference was determined to be at the .01 level, meaning that it was found with a 99% confidence level. This indicates that the responses offered by Caucasians about the fairness of the criminal justice system were statistically significantly different from the responses given by non-

Caucasians. Caucasian and non-Caucasian respondents appear to feel differently about the impartiality of the criminal justice system.

For the variables of justice being served through DNA exonerations, prison being a place for learned criminal behavior, and exonerees committing more crime because of prisonization, there was no statistically significant difference found between Caucasians and non-Caucasians. Caucasian responses were not statistically significantly different from non-Caucasians when respondents were asked if justice is served through the exonerations of offenders with DNA evidence suggesting they were falsely accused. The same is true for the statement about prison being a place where inmates learn criminal behavior. There was no statistically significant difference in the means of Caucasians and non-Caucasians. Similarly, a statistically significant difference was not found between Caucasians and non-Caucasians in relation to the variable of exonerees learning criminal behavior in prison. Caucasian and non-Caucasian participants did not have statistically significantly different responses to whether DNA exonerees will commit crime because of the socialization process in prison. For those questions on the survey instrument based on knowledge, the only one that showed a statistically significant difference in Caucasian and non-Caucasian means pertained to whether the criminal justice system is fair and impartial.

Perception

The majority of Likert scale questions in the survey were based on the perception of DNA exonerations, DNA exonerees, and the fear of these DNA exonerees. A t-test was used to analyze the data on perception. This t-test compared the means of

Caucasians with the means of non-Caucasians for multiple variables. The researcher studied the different means to determine if the responses of Caucasians were statistically significantly different from the responses of non-Caucasians. Table 3 below shows the results of the t-test and a discussion of those results follows the table.

Table 3 Comparison of Means for Perception Questions

Variable	Caucasian (Mean)	Non-Caucasian (Mean)	P-Value
It is ethical to release falsely accused offenders from prison as soon as DNA testing suggests innocence.	1.73	1.84	0.304
I fear that exonerees will commit violent crimes even after being exonerated.	3.73	3.44	0.007**
I fear that exonerees will commit property crimes even after being exonerated.	3.63	3.41	0.032*
I fear exonerees that are not compensated will commit more violent crimes than those that have been compensated.	3.10	2.94	0.237
I fear exonerees that are not compensated will commit more property crimes than those that have been compensated.	3.06	2.93	0.313
I fear exonerees in public places that have spent over 5 years in prison, more than those that have spent less than 5 years in prison.	3.49	3.36	0.293

Table 3 - Continued

I fear an exoneree that I knew had prior convictions more than one that did not.	2.39	2.83	0.000**
I fear exonerees because of the possible institutionalization process in prisons.	3.10	2.87	0.052
I fear going out during the day to a public place, such as a movie, mall, bar, or restaurant, under friendly circumstances with an exoneree.	4.10	3.73	0.002**
I fear going out at night to a public place, such as a movie, mall, bar, or restaurant, under friendly circumstances with an exoneree.	3.92	3.57	0.009**
I fear being alone in a house, or other private place, with an exoneree.	3.64	3.33	0.025*
I fear having an exoneree as a neighbor.	3.66	3.46	0.132
I would object to my children going out in public during the day or at night with an exoneree.	2.73	2.89	0.239
I would object to my son/daughter dating an exoneree.	2.82	2.67	0.257

*significant at the .05 level

**significant at the .01 level

The researcher noted statistically significant differences in the means of Caucasians and non-Caucasians for multiple perception questions. A statistically significant difference was found between the means of Caucasians and non-Caucasians

for the variable of fear that DNA exonerees will commit violent crime after being exonerated. The mean for Caucasians was 3.73 and the mean for non-Caucasians was 3.44. In other words, the mean for Caucasians disagreed more with the fear of DNA exonerees committing further violent crime. Non-Caucasians disagreed with the statement less. This statistically significant difference was found at the .01 level, or with a 99% confidence level. The responses offered by Caucasians were statistically significantly different from the responses offered by non-Caucasians. With a 95% confidence level, a statistically significant difference was also found between the means of Caucasians and non-Caucasians for the question of whether exonerees will commit property crime after release. A similar trend in the means existed with Caucasians at 3.63 and non-Caucasians at 3.41. It again appears that Caucasian responses disagreed more strongly with the idea that DNA exonerees would commit further property crime. For both the future of violent and property crime being committed by exonerees, Caucasians and non-Caucasians had statistically significantly different responses.

Another question that showed a statistically significant difference in the means of Caucasians and non-Caucasians concerned the fear of an exoneree that had prior convictions. Participants were asked if they would fear an exoneree with prior convictions more than one without any prior convictions. The mean of Caucasian responses was 2.39 and the mean of non-Caucasian responses was 2.83, which translates to Caucasian responses showing a greater average of fear of exonerees with prior convictions over those with none. A statistically significant difference was found at the .01 level for the means of Caucasians and non-Caucasians. This means that with a

99% confidence level, the responses of Caucasians were statistically significantly different from the responses of non-Caucasians.

There were also a series of personal questions related to circumstances in which a participant would fear an exoneree they were physically close to. The circumstances varied between day or night, public or private places, and those specifying participants' children. When asked about engaging in friendly circumstances with a DNA exoneree during the day in a public place, a statistically significant difference occurred at the .01 level between the means of Caucasians and non-Caucasians. The mean for Caucasians was found to be 4.10 and the mean for non-Caucasians was 3.73, where 3 is a "Neutral" response and 4 is a "Disagree" response. The responses of Caucasians were statistically significantly different from the responses of non-Caucasians. Similarly, a statistically significant difference with a 99% confidence level was found between Caucasians and non-Caucasians for the fear of being out at night in a public place under friendly circumstances with an exoneree. The mean for Caucasians was 3.92 and the mean for non-Caucasians was 3.57. Non-Caucasian responses disagreed with the fear of exonerees at night less than Caucasian responses. The answers offered by Caucasians were, again, statistically significantly different from those offered by non-Caucasians. When participants were asked about their fear of being alone in a private place with an exoneree, the mean for Caucasians was 3.64 and the mean for non-Caucasians was 3.33. A statistically significant difference was found at the .05 level between the means of Caucasians and non-Caucasians on this question. Caucasian and non-Caucasian responses were statistically significantly different for this variable as well.

Many of the physically close fear of exoneree questions did not yield statistically significant differences in the mean of Caucasians and non-Caucasians. There was no statistically significant difference determined for the question related to a fear of having an exoneree as a neighbor. When regarding the children of participants, either spending friendly time with an exoneree or dating an exoneree, there was no statistically significant difference between the responses offered by Caucasians and those offered by non-Caucasians.

The researcher did not find any statistically significant difference in the means of Caucasians and non-Caucasians in many of the variables of an exoneree that might be related to fear levels. For instance, there was no statistically significant difference in the responses of Caucasians and non-Caucasians when participants were asked about a fear of exonerees because of their possible institutionalization in prison. Related to this question, a statistically significant difference was also not found between the means of Caucasians and non-Caucasians for the variable of fear of exonerees that have spent more than five years in prison over exonerees that were incarcerated for less than five years. The issue of compensation did not show any statistically significant difference for the means of Caucasians and non-Caucasians either. Caucasian responses were not statistically significantly different from non-Caucasian responses when participants were asked about the fear that exonerees who were not compensated monetarily would commit more violent or property crime than exonerees who did receive compensation. Finally, there was no statistically significant difference found between the means of Caucasians and non-Caucasians for the variable of ethicality in releasing falsely

accused offenders. Participants were asked if they felt it was ethical to release these wrongfully imprisoned offenders as soon as DNA evidence suggested innocence, and the responses of Caucasians were not statistically significantly different from the responses of non-Caucasians for the question.

Chapter V, the concluding section, will address what these findings suggest about Caucasian and non-Caucasian responses. It will discuss what can be explained about the sample, and the population, by the findings. The chapter will also include threats to validity in the study and implications for future research.

CHAPTER V

CONCLUSION

The purpose of this study is to determine if there is a public fear of DNA exonerees. Using a sample group of Criminology and Criminal Justice students at the University of Texas at Arlington, the researcher attempted to discover the answer to DNA exoneree fear by administering a survey instrument. The researcher collected 122 surveys to analyze. A t-test, controlling for race, was used to perform the data analysis. The results showed some statistically significant differences in Caucasian and non-Caucasian means.

Meaning of Results

There were multiple questions on the survey in which the means of Caucasians and non-Caucasians were statistically significantly different. The first question that yielded this result concerned the criminal justice system in general. Caucasian responses compared with non-Caucasian responses suggest that Caucasians were more likely than non-Caucasians to feel that the criminal justice system is fair and impartial. The Caucasians means in regard to this question was in a more neutral area, but the means of non-Caucasians began to lean more toward disagreement that the criminal justice system is fair and impartial. This discovery corresponds to findings in other research (Hurwitz & Peffley, 2005). This result should also not be surprising given the fact that arrest and incarceration rates are much higher for most minority groups (Blumstein,

1982). The disproportional rates of arrest and incarceration in minority communities may lead these minorities to view the criminal justice system as unfair.

The statistically significant difference found between Caucasians and non-Caucasians on the questions concerning recidivism was of particular interest to the researcher because many of the questions on fear were connected to a future commitment of crime by DNA exonerees. Both Caucasians and non-Caucasians were likely to disagree with the statement that they feared DNA exonerees would commit violent crime after being released. The means of each group was between feeling neutral and outright disagreement with the statement. Most of the survey respondents did not fear violent crime recidivism in DNA exonerees, however there was still a statistically significant difference in the means of Caucasians and non-Caucasians. The Caucasian mean was further toward disagreement with the statement than the mean of non-Caucasian responses. Minority responses to the survey question suggest that they had a greater fear that exonerees would recidivate and commit further violent crime. Unfortunately, the survey did not ask direct questions about the reason for this fear. It may be that since minorities are often victimized at greater rates than Caucasians (Bureau of Justice Statistics, 2011), minorities have a greater fear of crime in general. This general fear may influence how minorities feel about recidivism from offenders, and how they view recidivism from the wrongly accused. Also because of this victimization, minorities may feel more familiar with crime, and this familiarity may change how they feel about offenders. This theory does not explain the differences in means for the current study because non-Caucasian respondents did not report being

victimized more often than Caucasian participants. For violent crime, 11 Caucasians and 12 non-Caucasians reported being victimized. There were more non-Caucasian participants in the research, and if higher rates of violent crime victimization had been a factor in DNA exoneree survey questions, the researcher would have expected to see much higher levels of victimization in the minority group.

Fear may not necessarily be the motivating factor for participants' responses. Perhaps minorities are being more realistic about a person's likelihood of recidivating, even if that person is a DNA exoneree. There may not be statistics on how many exonerees return to criminal behavior, but recidivism rates of offenders are extremely high. Without knowing numbers specific to DNA exonerees, there may be no reason to feel they will act differently than those that have not been wrongly accused. Caucasians, often less familiar with crime and people who have been arrested or incarcerated, may be more idealistic about rates of recidivism, especially if they believe DNA exonerees have done nothing wrong.

As was the case with violent crime, the responses offered by both Caucasians and non-Caucasians were more likely than not to disagree that there was a fear of DNA exonerees committing property crime after release from prison. The results, however, were not exactly the same as the numbers on violent crime recidivism. Responses were closer to neutral for this question. Participants were more likely to fear an exoneree committing property crime. Considering property crime is much more prevalent than violent crime, respondents may have allowed for a greater possibility that anyone, including an exoneree, will commit property crime. Participants may also have seen

violent crime as more harmful to people than property crime, meaning an exoneree will have fewer moral qualms, and thus a greater likelihood, with committing property crime. It is, however, clear that respondents did not have a severe fear that DNA exonerees will leave prison and begin committing crimes.

The means of Caucasians and non-Caucasians also followed a similar leaning as the question on violent crime. Caucasian responses again were more severe in their disagreement with the statement that they fear DNA exonerees will commit property crime after being released. The statistically significant difference for this variable between Caucasian and non-Caucasian means may be for the same reasons as the difference in violent crime recidivism fear. Minorities may have a greater fear of recidivism, even in exonerees, because they are affected by crime more frequently, through either victimization or disproportionate arrests and incarceration rates. Non-Caucasians may purely view fear and recidivism as a combined variable differently from Caucasians. As with violent crime, however, the current research did not yield higher numbers of minority victimization. For property crime, 29 Caucasian respondents reported having been victimized and 25 non-Caucasian participants reported having been victimized. It appears that, in regards to this study, the difference in responses on fear of DNA exonerees for the variable of race cannot be attributed to victimization rates.

Caucasians and minorities had different levels of fear of those exonerees that have had prior convictions. The mean of Caucasians compared to the mean of non-Caucasians shows that Caucasians have a greater level of fear of DNA exonerees with

prior convictions than those exonerees without prior convictions. Unlike the other questions on DNA exonerees, this question had average answers closer to agreeing with the statement than disagreeing. In general, respondents agreed that there was reason to fear exonerees with prior convictions more than those without any, however, Caucasians agreed more strongly with the statement. This suggests that Caucasians are more fearful of repeat offenders than non-Caucasians and it also appears that prior convictions may change the opinions of participants. This finding may not bode well for views on recidivism. People may be less likely to trust people with prior convictions no matter the circumstances and this could even lead to further recidivism. If this is the case, rehabilitation and reintegration programs may not have much impact on recidivism rates.

For the personal questions on fear of DNA exonerees in different places, day or night, there were multiple statistically significant differences between Caucasians and non-Caucasians. For the variable of fear of being friendly with an exoneree during the day in a public place, Caucasians were more likely to disagree that they were fearful than non-Caucasians. In fact, the mean for Caucasians for the variable was between “Disagree” and “Strongly Disagree.” Minorities were less likely to disagree with the statement, to the point that there was a statistically significant difference when compared to Caucasian responses. Caucasians were also less likely to agree they were fearful of exonerees in friendly circumstances in a public place at night. Minorities were more likely to agree that they did have fear in these circumstances. Finally, there was a statistically significant difference between the means of Caucasians and non-Caucasians

in relation to the fear of being alone with an exoneree in private. Caucasians were more likely to disagree with the statement. Minorities were more likely to agree that they had a fear of being alone with a DNA exoneree in a private place.

The reasons for significantly different responses for Caucasians and non-Caucasians on various questions of the survey do not have a definitive source based on this research. Minority participants may have been more fearful of DNA exonerees because they have more fear of victimization, however non-Caucasian participants in the current study did not report having higher levels of victimization. Perhaps the findings on DNA exonerees come back to the differences between Caucasians and non-Caucasians on the subject of the criminal justice system. Since Caucasians view the criminal justice system as more fair and impartial, they may also feel that the system is capable of rehabilitation or that those who are wronged by the system will be compensated to the point that they have no reason to commit further crime. Minorities may be more realistic about the circumstances that lead to criminality, arrest, and incarceration because they have been most affected by the criminal justice system.

Limitations

In any study, limitations and threats to validity exist, and this research is no exception. Through research design and implementation, the researcher attempted to minimize these limitations. In this study, one limitation is that the sample group was not chosen at random. The results may not be an exact reflection of the population. The findings from the criminology and criminal justice classes used for research might not be representative of the entire student body of the Criminology and Criminal Justice

Department at the University of Texas at Arlington. Similarly, the population for the study is not an accurate representation of society. The researcher chose to survey from a population of undergraduate students studying Criminology and Criminal Justice at UTA. This population does not reflect the public in either knowledge of the criminal justice field or higher education. Differences in student classification did not appear to correlate with differing answers to survey questions in the current research. Upperclassmen and lowerclassmen had similar responses to questions on fear of DNA exonerees. Perhaps the level of higher education a person has would not lead to statistically significantly different responses in the general public, but this would need to be studied further.

Additionally, the location of students surveyed may skew findings. The students were all surveyed in a county that has had an exoneration and is next to the county with the highest number of DNA exonerations in the country (Innocence Project of Texas, 2012). People in this location may be more educated on the subject of exonerations than others around the country. Ultimately, public fear of DNA exonerees in the United States might be very different from that of the students surveyed.

Another threat to validity exists in the survey instrument. The researcher did not extensively field test the survey instrument. Consequently, there were some questions on the survey that may have been misinterpreted by participants. This occurred specifically on one of the open-ended demographic questions asking participants about the number of Criminology and Criminal Justice courses they had taken. Participants responded in a myriad of ways, including writing in hours rather than courses and

giving impossibly high numbers for the question asked. The researcher could also have added some open-ended questions asking participants why they did or did not feel a fear of DNA exonerees. The responses to a question of this nature could have given the researcher insight into either reasons for fear or sources of fear. The researcher did not have any kind of template to work from and all the questions on DNA exonerees were completely original, however, through a thorough test of the survey, the researcher may have gotten feedback that would have made the instrument more effective.

Participation rates may have been effected by the researchers decision to be present for the survey. The researcher chose to be present in order to read the verbal informed consent to the students. It was made perfectly clear to students that participation was both voluntary and appreciated. Having the researcher in the room and personally asking for participation through a show of hands, however, may have influenced some students to participate when they normally would not have filled out a survey.

Implications of Research

This research could have important ramifications for the criminal justice field, and even for the public. Something that should definitely be considered is education of the public. If people only get information from the media, they are not being properly educated by criminal justice professionals. There are few resources for the public to learn the true statistics and stories of DNA exonerations. One is Innocence Project. The personnel are advocates for exonerees, but still have reliable information on DNA exonerations. Another resource for accurate information in the criminal justice field is

the Bureau of Justice Statistics, where an individual can find databases on a multitude of crime-related topics. Unfortunately, many people do not know about these resources and turn to the media for their information. The federal, state, and local governments need to make education a priority, especially in places with high numbers of exonerations, like Dallas County (Innocence Project of Texas, 2012). This does not necessarily mean that Dallas County has a poor criminal justice process, and the public should be educated about this fact. Exonerations can occur for many reasons. For instance, some counties are better able to store and maintain DNA evidence and exoneration rates are higher in these places (Kirschner, 2002). The public should also learn about reasons for wrongful convictions. In this way, changes in laws can be demanded, jurors can knowledgeably consider evidence, and witnesses can avoid being pushed by themselves or police to identify offenders.

This research calls attention to an existing fear of DNA exonerees. While many of the respondents disagreed with statements concerning fear of exonerees, the responses were usually closer to a neutral feeling than a strong disagreement. Exonerees that have just been released from prison may not understand any fear the public feels toward them. They need to be aware that there is a possible fear of them, even though they have been legally exonerated. In addition to other reintegration programs made available to exonerees and compensation that may be offered for wrongful imprisonment, exonerees should be educated about which circumstances are most comfortable for people that may want to engage in friendly activities with exonerees. Exonerees could be taught when and where it is appropriate to approach a person that

may fear them. Obviously, these are not the only skills that an exoneree will need to learn. They are affected by the outside world after long stays in prison much the same as other offenders that are being released, and they have been wrongfully imprisoned that entire time. Exonerees should have access to numerous reintegration programs, teaching them not only about other people, but about life outside. Criminal justice and psychological professionals should be educating the public and the exonerees. Funding for these programs would need to be secured. Media attention could help criminal justice experts in gaining support for these programs. To truly address the issues facing DNA exonerees, everyone that can help needs to get involved.

Future Research

This study centers on a relatively recent subject in criminology, and there are many avenues that future research can take. Further research could address the sample and population limitations of this project. To determine if a significant public fear of DNA exonerees exists in the United States, a survey instrument should be administered to a much larger and more diverse sample group. The group should certainly consist of people that have differing levels of knowledge about criminology and DNA exonerations. This would include using members of the public that are in areas where exonerations take place often and areas that have not had any exonerations. The sample would also need to address individuals with different levels of general education. Ideally, the sample group would reflect the demographics of society using as many demographic variables as possible.

Future research could also focus on recidivism rates in the DNA exoneree population. At this time, there is no database for recidivism of this group. To create such a database, a researcher would need to go through each exoneree to see if they have committed further crime and been convicted of another crime since being released. This would certainly be a lengthy process, given the number of current exonerees. A database of this information would, however, show researchers if a fear of DNA exonerees has merit. If exonerees recidivate at a rate similar to offenders, researchers could determine if the fear of exonerees is warranted and compare that fear with the fear society feels of crime and criminals that have not been exonerated. A database would be another useful tool in educating the public about DNA exonerees. They could be made aware that exonerees are unlikely to recidivate, will recidivate in certain circumstances, or recidivate at rates that match criminal offenders. Research needs to ultimately attempt to bridge the gap between DNA exonerees and the public they encounter once released.

APPENDIX A

SURVEY INSTRUMENT

Fear of DNA Exonerees Survey

For questions 1- 19, please choose the response that best represents how you feel about the statement provided:

1. The criminal justice system in the United States is fair and impartial.

Strongly agree Agree Neutral Disagree Strongly disagree

2. Justice is served through the exonerations of offenders with DNA evidence suggesting they were falsely accused.

Strongly agree Agree Neutral Disagree Strongly disagree

3. Prison is a place where most inmates learn criminal behavior.

Strongly agree Agree Neutral Disagree Strongly disagree

4. It is ethical to release falsely accused offenders from prison as soon as DNA testing suggests innocence.

Strongly agree Agree Neutral Disagree Strongly disagree

5. I fear that exonerees will commit violent crimes even after being exonerated.

Strongly agree Agree Neutral Disagree Strongly disagree

6. I fear that exonerees will commit property crimes even after being exonerated.

Strongly agree Agree Neutral Disagree Strongly disagree

For questions 7 and 8: Many offenders that are wrongly accused are compensated monetarily by the state for the loss of freedom and damages experienced while they were in prison. Knowing this information...

7. I fear exonerees that are not compensated will commit more violent crimes than those that have been compensated.

Strongly agree Agree Neutral Disagree Strongly disagree

8. I fear exonerees that are not compensated will commit more property crimes than those that have been compensated.

Strongly agree Agree Neutral Disagree Strongly disagree

9. I fear exonerees in public places that have spent over 5 years in prison, more than those that have spent less than 5 years in prison.

Strongly agree Agree Neutral Disagree Strongly disagree

10. I fear an exoneree that I knew had prior convictions more than one that did not.

Strongly agree Agree Neutral Disagree Strongly disagree

11. I fear exonerees because of the possible institutionalization process in prisons.

Strongly agree Agree Neutral Disagree Strongly disagree

12. Exonerees are more likely to commit further crimes because of behavior they learned while wrongfully imprisoned.

Strongly agree Agree Neutral Disagree Strongly disagree

13. I fear going out during the day to a public place, such as a movie, mall, bar, or restaurant, under friendly circumstances with an exoneree.

Strongly agree Agree Neutral Disagree Strongly disagree

14. I fear going out at night to a public place, such as a movie, mall, bar, or restaurant, under friendly circumstances with an exoneree.

Strongly agree Agree Neutral Disagree Strongly disagree

15. I fear being alone in a house, or other private place, with an exoneree.

Strongly agree Agree Neutral Disagree Strongly disagree

16. I fear having an exoneree as a neighbor.

Strongly agree Agree Neutral Disagree Strongly disagree

17. I would object to my children going out in public during the day or at night with an exoneree.

Strongly agree Agree Neutral Disagree Strongly disagree

18. I would object to my son/daughter dating an exoneree.

Strongly agree Agree Neutral Disagree Strongly disagree

19. Have you ever been the victim of a violent crime? Yes No

20. Have you ever been the victim of a property crime? Yes No

21. Has anyone in your immediate family ever been convicted of a crime? Yes
No

22. Has anyone in your immediate family ever been convicted of a crime he/she did not commit?

Yes No

23. Gender: Male Female

24. Race/Ethnicity: Caucasian African American Hispanic Asian
Native American Middle Eastern Other

25. Age: _____

26. Marital Status: Single Married Divorced Widowed

27. Religion: Christian Muslim Jewish Buddhist Other None

28. Student Classification: Freshman Sophomore Junior Senior

29. Are you an international student? Yes No

30. GPA: _____

31. Major: _____

32. Approximate number of Criminal Justice/Criminology courses completed: _____

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BIOGRAPHICAL INFORMATION

Callie Brown was raised in Arlington, Texas and originally attended college at the University of North Texas. After deciding to change her major area of study, she transferred to the University of Texas at Arlington. She earned her Bachelor of Arts degree in Political Science with a minor in Psychology. She plans to graduate with her Master of Arts degree in Criminology and Criminal Justice after four semesters and hopes to find a career with the federal government.