

# Criminal Justice Legitimacy in United States in the Light of Post-Conviction DNA Testing

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## Abstract

Criminal justice system is an institution which ensures that the moral balance of the society is not disrupted by the malfeasance of any of its members. When an imbalance so feared is created, the system attempts to correct it by punishing the offender. But this punishment system has become a dragnet for both the guilty and the innocent. No one is sure how many innocent people are incarcerated in both federal and state prisons in the United States. This paper examines criminal justice in the light of post-conviction Deoxyribonucleic Acid (DNA) testing and exoneration in the United States. The outcome is that post-conviction DNA testing has helped to exonerate not less than 438 convicted individuals in the United States who served an average of 15 years in prison between 1989 and 2016. This number casts doubt over the legitimacy of the criminal justice system in the country. As a result, this paper makes a case for mandatory post-conviction DNA testing in all crimes where human material samples are available and where accused persons claim innocence.

**Keywords:** Criminal justice, DNA, Post-conviction, Exoneration, Credibility

## 1. Introduction

There are approximately 1.526 million adults incarcerated in American state and federal prisons by year-end 2015 (Bureau of Justice Statistics, 2016). This is the lowest population of inmates in the country since 2005. By the end of 2010, America's adult prison population was 2.26 million (Bureau of Justice Statistics, 2011). These inmates are in prison for various offenses ranging from misdemeanor to felony. A significant number of those in prison has continued to maintain their innocence. But how does the criminal justice system react to this clamor for fairness? At the moment, Innocence Project, a non-profit legal organization and other charity legal agencies have committed to exonerating wrongfully convicted people through the use of DNA testing and to reforming the criminal justice system with a view to preventing future injustice. Their efforts have yielded 438 DNA exonerations recorded from 1989 to 2016 (National Registry of Exonerations, 2017). Innocence Project is responsible for 341 of the DNA exonerations. Total exonerations for this period, including DNA exonerations and non-DNA exonerations, stand at 1,995. This paper contends that there is need for mandatory post-conviction DNA testing for convicts who claim to be innocent. State and Federal legislatures should enact laws making post-conviction DNA testing mandatory in cases where human biological samples are available. Congress should step in here because of the precariousness of this issue. It is assumed that the natural course of justice was followed before those in prisons were sentenced. Some stakeholders in criminal justice believe that the high prison population of the United States is an indication that the crime control model is working, while those who advocate the due process model see the inverse as the case – a failure of the criminal justice system to work toward proving the innocence of the accused and ensuring that only the guilty are convicted (Barker, 2006; Fehr & Gachter, 2002; Maguire & Okada, 2011; Marion & Oliver, 2012; Robinson, 2005; Walsh & Yun, 2011). The crime control model places emphasis on reducing the crime in society through increased police and prosecutorial powers and on vindicating victims' rights rather than protecting defendants' rights. In contrast, the due process model focuses on individual liberties and rights and is concerned with limiting the powers of government. It maintains that fairness and procedural safeguards should serve as much to protect the factually innocent as to convict the factually guilty.

Justice (Halvorsen, 2004) is a societal expectation that justice's scale be balanced with punishment fit for the crime; therefore, punishment must be for the guilty. Justice is supposed to be the counterbalance when society's moral standards are violated (Halvorsen, 2004). It is applying fit punishment for a crime which tilted the balance in the scale of justice. Since it is a societal expectation that justice's scale be balanced with punishment fit for the crime; therefore, punishment must be for the guilty.

Sentencing an individual to prison or death for an offense the person did not commit is a travesty of justice. It threatens the probity, professionalism, and legitimacy of the criminal justice system in America. There is a primordial expectation by the accused and the society that justice would be dispensed in a manner that does not deprive the accused of his or her rights. This is where Parker's (1964, 1968) crime control and due process models of criminal justice converge to ensure justice and set limits for the criminal process. Unfortunately, an unknown number of Americans is languishing in our prisons for crimes they did not commit.

Although racism is often touted as a major cause of wrongful convictions, this paper will examine other salient reasons for wrongful convictions. They are faulty eyewitness account, flawed forensic testing and

analysis, false confession and inculpatory statements, and preconceived ascription of guilt and poor handling of crime-scene investigation or what is known as police and prosecutorial deviance (Barker & Carter, 1991). Many Americans have expressed disappointment at the performance of our justice system. Some have called for a major overhaul of the system. This paper focuses on how the factors identified above, among others, lead to wrongful convictions.

Is there a justification, under any circumstance, for convicting the innocent? Untold numbers of innocent people have tumbled into the dark pit of prison. Some of them have eventually gained their freedom, but a majority remains imprisoned. To secure the freedom of the incarcerated innocent and to prevent future wrongful convictions should be a primary concern of the criminal justice system. The protection of a victim's right should not entail the condemnation of the innocent. This paper intends to describe how post-conviction DNA testing has led to the exoneration of 438 convicts for serious offenses since 1989. Mandatory post-conviction DNA testing is recommended to enhance the legitimacy of criminal justice in America. The exoneration of any convict shows that the doctrine of innocence until proven guilty remains a fundamental principle of the justice system.

## 2. Literature Review

Down the ages, the problem of convicting the innocent and acquitting the guilty has been a contentious topic (Reiman & van den Haag, 1990). Philosophers like William Blackstone (1765) have asked if it is better to let ten guilty persons go free than to convict one innocent person. Though scholars have debated this question from various angles, a better approach to its evaluation rests on understanding the purpose of justice. What purpose should justice serve? Halvorsen (2004) argues that justice is a process aimed at correcting the shift in the moral balance of a society. Any act that tilts the moral scale to one side has created an imbalance that must be remedied with a fit and commensurate counterweight that will help to restore the balance. This view is in line with the works of earlier scholars like Cesare Beccaria, William Blackstone, and Jeremy Bentham. These philosophers believe that all due diligence should be taken to ensure that the accused person is not over-punished and also only punished after an unequivocal establishment that s/he committed the crime.

Given that the primary focus of the criminal justice system in the United States is to punish offenses against the law, the possibility that an innocent person could be unjustly punished has never been of much concern in the criminal justice system (Halvorsen, 2004). Bentham's (1825) central argument is about even-handed justice for the accused; however, he also foresaw the possibility of an innocent person being wrongly convicted. The conviction of an innocent person and the acquittal of a guilty person negate the principle of retributive justice which stipulates that the punishment must be proportionate to the crime and only for the offender. Which is more important, to punish the guilty or to acquit the innocent? Reiman and van den Haag (1990) examined this question in an intense scholarly exchange.

Reiman has a three-point analysis of the question. He contends that to punish an innocent person for a crime not committed amounts to committing the crime against the individual; that failing to convict the guilty is tantamount to committing his crime against the innocent; and that acquitting the guilty is as unfair as punishing the innocent. In his rebuttal, van den Haag argues that punishing the guilty and acquitting the innocent should be treated as individual ends; meaning that understanding the moral weight of each outcome should guide the means to each end.

The presumption of the innocence of an accused is the cardinal principle of the criminal justice administration in the United States and in other world democracies. It is then an aberration when this principle is not followed conscientiously. In an ideal criminal justice system, every effort should be made to acquit the innocent (Van Sliedregt, 2009; Baradara, 2011). Unfortunately, criminal justice administration is far from being ideal. The imperfection of human principles and duties makes it extremely hard to achieve the ideal criminal justice system (see Halvorsen, 2004).

The claim of imperfection of human principles and duties is not cogent enough to justify the punishment of the innocent. The conviction of innocent people for crimes they did not commit has been blamed on false confessions they gave to the police, faulty eyewitness accounts, shoddy forensic analysis, and poor investigation and prosecution of criminal cases. Kassir (2008) points out that eyewitness and confession evidence means much to criminal justice. Kassir also acknowledges the fallibility of eye witness accounts. Lay people would expect that a factor that has such determinative weight as eyewitness account and confession evidence must be error-free before their evidentiary admission. What are at stake are someone's life, future, and liberty.

Eyewitness misidentification has been a problem plaguing the criminal justice system for a long time. Notwithstanding the damage done to innocent people and the credibility of the system, law enforcement officers still rely heavily on eyewitness accounts in suspect identification (Innocence Project, 2012). To ensure a better identification procedure, the Innocence Project recommends double-blind procedure, letting the witness know that the suspect may or may not be in the line-up, making the suspect not to stand out in the line-up, ensuring that witnesses provide written statements after the line-up vouching for their confidence in their selection, and electronically recording the line-up exercise as some of the mechanisms for dealing with the prevalent recurrence

of eyewitness misidentification (Innocence Project, 2012).

Kassin and Wrightsman (1985) explain that there are three types of false confessions - voluntary, compliant, and internalized - that people engage in for various reasons. Voluntary confessions occur in high-profile cases without prodding by the police. Some of the reasons for voluntary confession are chronic desire for attention, self-delusion, expectation of gain, and playing proxy for the actual offender. Compliant confessions result from inducement or promise of something better by the police like letting the suspects off the hook if they confessed. The final type is internalized confession by vulnerable suspects. Police use suggestive and manipulative interrogation techniques like lengthy questioning sessions and giving suspects the reasons to believe they committed the crimes (Kassin and Wrightsman, 1985).

When a crime is committed, law enforcement officers draw a list of possible suspects or persons of interest. Based on their training, the interrogators are looking for verbal and nonverbal clues that would help them draw the offender from a dragnet of suspects. This technique of interrogation has been impugned by researchers for having only 54% accuracy (Bond and DePaulo, 2006). The probability of choosing the right suspect is low. The only way to move on with the investigation is for the interrogator to employ devious methods to extract confessions from suspects to justify his or her prejudgment of guilt which is often wrong (Meissner and Kassin, 2002). Often innocent people assume that everyone would see their innocence and believe them. Unfortunately this is not the case. Kassin, Meissner, and Norwick (2005) explain that in an experimental study ordinary people and police officers have proven 42% to 64% of the time that they could differentiate between false and true confessions made by prisoners. This leaves a high margin of error of 36% to 58%. This implies that there is a low probability of identifying the wrong person in a criminal act and subsequent imprisonment.

This situation calls for a drastic and urgent response. How could the doctrine of presumption of innocence be ensured in the justice administration so that wrongful imprisonment of innocent people could cease? When unreliable eyewitnesses stand by their accounts and accused persons are deemed to have confessed to crimes, every level of the criminal justice structure concludes that they are guilty. This conclusion fails to recognize some misleading factors. The consequence of this incognizance is wrongful imprisonment. Imprisoning the innocent is akin to rejecting the null hypothesis when the research hypothesis is wrong – a Type 1 error. Conversely, acquitting the guilty is like accepting the null hypothesis when the research hypothesis is right – a Type 2 error (see Halvorsen, 2004). Some scholars have advocated the use of DNA testing in determining contributors to crimes. Bond and Hammond (2008) encourage matching DNA materials from crime scenes with database DNA profiles as a way of eliminating suspects that do not have something to do with the crime. They cite their analyses of 1,500 DNA samples recovered from property crime scenes in a city in the UK and how the results helped to solve the cases. They argue that maintaining a nationwide database of DNA samples and immediate analyses of samples from crime scenes have helped in solving numerous property and non-property crimes in the UK, crimes that ordinarily would not be easily solved.

Rothstein (2005) agrees that DNA testing has proven to be a good tool for making sure that the innocent person is not wrongfully convicted. He recounts instances of individuals who were imprisoned but released after many years because of post-sentencing exoneration necessitated by DNA analyses. Rothstein is gravely concerned that the number of innocent persons languishing in prison is not known; stressing that the number of those exonerated and released may be a tip of the iceberg. He was ambivalent in his view on the benefits of DNA testing and its unwieldy expansion that seems to encroach on civil liberties of Americans. His dilemma, therefore, is whether to allow innocent persons to waste in prison for crimes they did not commit or to disregard civil liberties of citizens by collecting DNA samples from everyone at the risk of incrimination. Rothstein's latter concern is echoed by Simoncelli (2006) who argues that expanding DNA database to include those not accused of any crimes has disturbing constitutional and legal implications. She is not against the use of DNA testing in solving crimes but her contention is that only persons of interest in a case should be made to give DNA samples. According to Simoncelli, dragnet DNA sample collection violates the doctrine of innocence before conviction, the Fourth Amendment of the United States Constitution that creates a zone of individual rights that the government cannot infringe on, and individual privacy (Simoncelli, 2006). Other reasons she adduces for assailing the nationwide DNA sample collection are tainting of DNA samples, high backlog of unprocessed DNA samples, expensiveness of the expansion, and the unfairness of collecting everyone's DNA when they are not suspects in crimes. In the case of the District Attorney (Alaska) versus Osborne, the United States Supreme Court (2009) ruled that there is no federal substantive due process right to post-conviction DNA testing. The Supreme Court noted that a "criminal defendant proved guilty after a fair trial does not have the same liberty interests as a free man" and his right to due process must be analyzed in the light of the fact that he has already been found guilty in a trial, and has only a limited interest in post-conviction relief. The court stated that the availability of technologies not available at trial cannot mean that every criminal conviction, or even every criminal conviction involving biological evidence, is suddenly in doubt. However, the Court recognized the significance of post-conviction DNA test in some cases as it acknowledged the efforts by 46 states that had passed broad substantive due process right to DNA testing laws.

Simoncelli cites three instances where DNA samples have been switched in the UK, USA, and Canada with the intention of exonerating the suspects while framing innocent persons. She advises that the expansion of the DNA database in the United States creates more harm than good. Thompson (1995) points out that subjective interpretation of DNA test results, errors by laboratory analysts in the conduct of DNA tests, tainted DNA samples, and misleading statistical evidence of genotype matching are factors that could invalidate the probative value and potency of the DNA evidence. He suggests that great caution should be exercised by applying blind or objective methods in scoring DNA test results. This is important in ruling out analysts' personal bias in result interpretation. DNA evidence is a two-sided coin. Despite the side that shows-up in a flip, the crux is the probative value of DNA. DNA, in spite of its downsides, has helped in exonerating more than 438 innocent people convicted for serious crimes they did not commit. Is it better that many guilty be acquitted than one innocent person be convicted? Banks (2013) believes that criminal justice would be considered professional and legitimate when its practitioners live up to certain standards of conduct. There are numerous instances of unethical or unprofessional conducts by criminal justice practitioners that persuade some observers to conclude that the system has legitimacy issues (Eligon, 2011; Ivkovic, 2005a; Rimer, 2002; Westmarland, 2001). There is the need to put in place ethical standards when administering DNA tests to guard against abuse. A greater good would be served, as seen in the cases cited above, when mandatory post-conviction DNA tests are administered on convicts who claim to be innocent, especially in capital offenses. This paper contends that both the federal and state legislatures should expand existing laws on post-conviction due process DNA testing to make it mandatory, especially in contentious cases. This will guarantee that fairness and the right to justice for the accused are followed. This will ensure that the innocent is exonerated and the guilty is convicted.

### **3. Statement of Purpose**

The foregoing literature review shows that there may be innocent people languishing in American prisons. Gross and Shaffer (2012) argue that there is no justification for a person to be imprisoned for a crime he or she did not commit. Those individuals are victims of a corrupt and inept criminal justice system (Gier, 2006; Rimer, 2002). Though it is not clear how many people in prison in the United States are innocent; scholars believe that if the rate is just 1% of 1.56million prisoners that amounts to 15,600 men and women. This estimate of 1% is believed to be very conservative (Innocence Project, 2012). What post-conviction DNA testing does is that it helps to confirm or disconfirm the conviction. For example, if a man is accused of rape and assault, his semen, hair or blood stain is supposed to be on the victim (see Gier, 2006). Such samples obtained from the victim can then be utilized to match the DNA of the accused.

DNA is a genetic imprint made of protein materials that define each person. It is the building block of the entire person. Scientists have shown through research that every living thing has DNA unique to that species. Humans have their DNA strands that are different from plant DNA. This uniqueness consists in the genetic make-up of each person. What DNA forensic does is to extract DNA strands from blood, hair, saliva, fingernail, etc., of the accused and match them with the strands of human material samples recovered from the scene of a crime. With 438 convicts already exonerated from serious crimes, post-conviction DNA is an important tool for enhancing the legitimacy of our criminal justice system. This paper advocates the need for mandatory post-conviction DNA testing for all those in prison for serious crimes. It also advocates mandatory pre-trial DNA testing for accused persons.

#### *3.1 Methods*

This study does not use primary data in explaining how post-conviction DNA testing relates to criminal justice legitimacy. It will analyze post-conviction DNA exoneration data from the National Registry of Exonerations. The list of exonerations covers the period from 1989 to 2016. Post-conviction exonerations by DNA are not the only ones on the Registry's list. However, post-conviction exonerations by DNA testing are the focus of the paper. The Registry's database of exonerations by DNA is supplied by the Innocence Project, Inc., a non-profit legal organization that encompasses other charitable legal agencies committed to the exoneration of those wrongfully convicted and in some cases compensated (Kilgannon, 2008). The organization has affiliates in 35 states of the country and Washington, DC. They advocate for DNA testing in crimes such as murder, sexual assault, and other violent offenses where human material samples are available. The first exoneration by DNA was in 1989. It was not until 1992 that the Innocence Project became a full-fledged charity with the mission of using DNA evidence to prove innocence and bring attention to the dark sides of the criminal justice system. Each year, these agencies receive more than 3,000 letters from inmates who request assistance. They keep contact with the inmates while working on their cases. It takes a couple of years to process each case. Some cases run into hitches because of lost DNA samples or vital aspects of the investigation or judicial red tape.

#### *3.2 Analysis*

Descriptive statistics is used to explain frequencies, proportion, and percentage of exonerations by DNA between

1989 and 2016. This analysis compares DNA exonerations and non-DNA exonerations in calculating the proportion and percentage of DNA exonerations. Between 1989 and 2016, total post-conviction exonerations in the USA amount to 1,995. Of this number DNA accounts for 438. That means that DNA accounts for 22% (0.2195) of all post-conviction exonerations for the period in study, while other factors are responsible for 78 (0.7805).

Year		DNA Exonerations	Total Exonerations	%	x/y
1989		2	23	8.70%	0.0870
1990		1	29	3.45%	0.0345
1991		3	39	7.69%	0.0769
1992		5	35	14.29%	0.1429
1993		6	37	16.22%	0.1622
1994		9	33	27.27%	0.2727
1995		10	37	27.03%	0.2703
1996		17	47	36.17%	0.3617
1997		9	50	18.00%	0.1800
1998		4	36	11.11%	0.1111
1999		13	52	25.00%	0.2500
2000		15	75	20.00%	0.2000
2001		20	93	21.51%	0.2151
2002		24	66	36.36%	0.3636
2003		24	79	30.38%	0.3038
2004		13	58	22.41%	0.2241
2005		23	62	37.10%	0.3710
2006		24	69	34.78%	0.3478
2007		21	73	28.77%	0.2877
2008		19	67	28.36%	0.2836
2009		28	91	30.77%	0.3077
2010		24	79	30.38%	0.3038
2011		19	74	25.68%	0.2568
2012		20	115	17.39%	0.1739
2013		19	99	19.19%	0.1919
2014		22	147	14.97%	0.1497
2015		27	162	16.67%	0.1667
2016		17	168	10.12%	0.1012
		438	1995	21.95%	0.2195

Table 1: Post-conviction DNA and non-DNA exonerations between 1989 and 2016. Data source: National Registry of Exonerations.

From the table above, it is clear DNA accounts for almost a quarter of all post-conviction exonerations. The year 2009 marked the high point of post-conviction exonerations with 28. From 1999 to 2016, post-conviction DNA exonerations have been in the double digit. Since 2003 the average years spent in prison before exoneration has been increasing because those benefiting from post-conviction DNA exoneration are inmates who have been incarcerated before 2003 when DNA testing became probative evidence. Most of the DNA exonerees were sentenced to prison terms of life or death. From 1989 to 2016, the mean exoneration by DNA is 15.75 (16) post-conviction DNA exonerations for each of the past 28 years; the median is 18 exonerations, while the mode is 24 exonerations

DNA testing has proven very useful in solving cases of homicide, sexual assaults, and other violent crimes. It is yet to prove effective in solving property crime in the United States. This does not mean that DNA testing cannot be used in solving property crime, but there must be human material sample that exonerates the convicted



person or matches someone other than the incarcerated individual. Figure 1 below is a graphical group distribution of post-conviction DNA exonerations. Post-conviction DNA exonerations started in low numbers and peaked between 2009 and 2013. The first five years witnessed only 17 exonerations by DNA while the peak period of five years from 2009 to 2013 recorded 110 post-conviction exonerations by DNA. The first three years of the five-year frequency from 2014 to 2018 has recorded 66 exonerations so far. It is not likely that the five year peak of 110 exonerations will be surpassed any time soon.

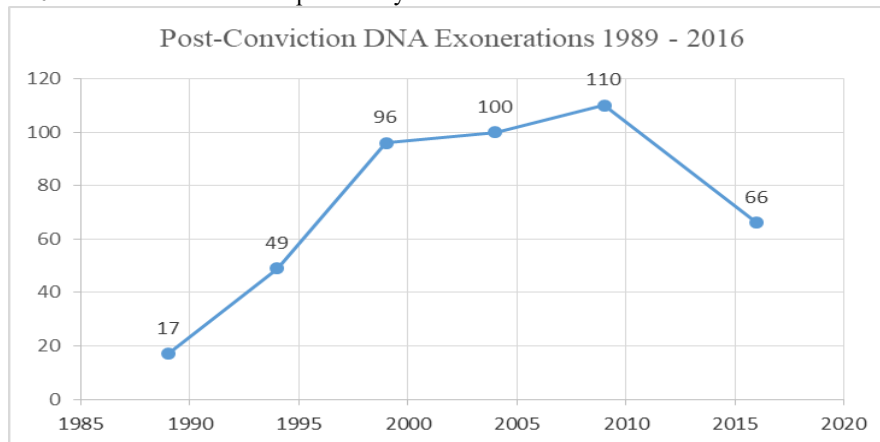


Figure 1: Five-year group distribution of post-conviction DNA exonerations 1989-2016

#### 4. Discussion, Implications, Limitations, and Recommendations

The analysis of the data above indicated that DNA accounted for 22% (438) of all post-conviction exonerations (1,995) from 1989 to 2016. Available data also point out that as more DNA tests come back conclusive and exculpatory, more convicted prisoners will be found to be innocent. Most of future post-conviction DNA exonerations will be for those who had spent upward of 25 years in prison.

Some of the implications are 1) DNA testing is effective in determining innocence, 2) there are convicted prisoners who are innocent of the crimes, 3) the criminal justice system has failed in its primary duty of ensuring that the innocent do not suffer for crimes they did not commit, 4) some of the players in the criminal justice structure have also failed to live up to their constitutional and juridical responsibilities, 5) wrongfully convicted individuals' future and positions in life are circumvented for no fault of theirs, 6) the criminal justice system is a big drain on taxpayers, and 7) that as a broken system, the criminal justice structure needs immediate fixing. The Department of Justice of the United States has taken a step in the right direction by constituting a unit for dealing with prosecutorial misconduct (Savage, 2011).

This study is not without limitations. Criminal justice legitimacy is a wide sphere of study that cannot be assessed properly with only DNA testing and exoneration. First, no one knows how many innocent people are in prison. Second, even the actual number of exonerations is not currently known because various legal aid organizations are working on different cases. Third, DNA testing is very effective where human material samples are available. Fourth, faulty DNA testing and result interpretation could still deny innocent prisoners exoneration and innocence. Fifth, property crimes which constitute a greater percentage of crimes have not benefitted from DNA testing in the United States.

Finally, the criminal justice system will benefit by reorganizing for the better. Schools of criminology and criminal justice should open innocence clinics for helping those who claim wrongful convictions to seek legal exoneration. Furthermore, DNA testing should be made mandatory throughout the United States, by an Act of Congress, in cases of homicide, sexual assaults, and other violent crimes. Less reliance on eyewitness accounts and false confessions is advocated. Racial bias of some justice administrators should be a subject of scholarly research. DNA testing should also be applied in cases of property crimes particularly when the offender's DNA samples can be obtained from victims. All organizations involved in DNA testing should be coordinated by the Department of Justice to ensure that they follow the proven standards of DNA testing and keep accurate data about requests for exonerations, and actual exonerations and compensations.

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