

Racial Disparity in the Case of Duane Edward Buck

Prepared by:
Ray Paternoster
University of Maryland

With the assistance of Scott Phillips¹
University of Denver

My name is Raymond Paternoster. I am a Professor for the Institute of Criminal Justice and Criminology at the University of Maryland. I hold a Ph.D. in Criminology from Florida State University and a M.S. in Criminal Justice from Southern Illinois University. I have published more than one hundred papers in journals, proceedings, and as book chapters. I have received twelve grants or contracts for my work, including the Office of the Governor of Maryland granting \$225,000 for my work conducting “An Empirical Examination of the Administration of the Death Penalty in Maryland.” A detailed listing of my educational background and publications is attached as Exhibit 1.

My fields of expertise are capital punishment, criminological theory, quantitative methods, and offender decision making. My research has been published in leading academic journals including several publications in both the *Journal of Law and Criminology* and the *Law and Society Review*. I also serve on the Editorial Board of the *Journal of Quantitative Criminology* and serve as a Consulting Editor to the *Journal of Contemporary Criminal Justice*. As a member of the editorial board, I critically evaluate academic research papers annually that contain hundreds of studies collectively. The criteria for evaluation include an assessment of the contribution of the paper, the soundness of the conceptual ideas, as well as the appropriateness of the survey or experimental methodology and the analysis techniques.

I have served as an expert witness in approximately five cases in South Carolina, two in Georgia, and two in Maryland. I have conducted similar quantitative studies about sentencing factors when implementing the death penalty in South Carolina, Georgia, and Maryland. I have testified both before the Maryland Assembly and the Legislative Commission on Capital Punishment.

I was asked by the NAACP Legal Defense & Educational Fund, Inc. and Texas Defender Service, who are counsel for Duane Edward Buck, to examine the influence of the defendant’s race in Mr. Buck’s

¹ The data analyzed here were collected by Dr. Scott Phillips and generously provided to Dr. Paternoster by Dr. Phillips. Dr. Phillips is the Director of the Socio-Legal Program and the Chair of the Department of Sociology and Criminology at the University of Denver. Dr. Phillips received his B.A. in History from Texas Christian University, his M.A. in Sociology from Louisiana State University, and his Ph.D. in Sociology from the University of Georgia.

Harris County, Texas capital murder case. To do so, I examined data on 504 adult defendants indicted for capital murder in that county from 1992 to 1999. The data were originally collected by Professor Scott Phillips and descriptions of the data sources can be found in Scott Phillips, *Racial Disparities in the Capital of Capital Punishment*, 45 Hous. L. Rev. 807, 808 (Spring 2008). There were two decision points in the capital punishment process that were captured by these data: (1) the district attorney's decision to advance a case to a penalty trial, and (2) the jury's decision to impose a death sentence. Of the 504 defendants, the district attorney advanced the case to a penalty trial in 129 cases, of which 98 were sentenced to death.² In general, the evidence suggests that the race of the defendant influenced the disposition of the 504 cases in question (Phillips 2008). But here I ask a more specific question: Did the race of the defendant affect cases that were similar to the Duane Buck case? While I cannot know with certainty whether the decisions made in Mr. Buck's particular case were influenced by his race (Mr. Buck is African-American), I can examine whether the defendant's race had an influence on similarly situated cases.

The question of identifying similar cases is a thorny one because it may not always be clear exactly what factors may have led to decisions in a case. For example, did the district attorney advance Mr. Buck's case to a penalty trial because there was more than one victim killed in the crime, because one of the victims was a female, because at the time of his arrest Mr. Buck apparently showed no remorse, because they happened to know one another, or for these and other reasons? I let the data answer this question for us. I estimated what is known as a logistic regression equation with the district attorney's decision to advance a case to a penalty trial as the outcome variable. I included a host (21) of variables for which I had data and which were expected to explain why a case was advanced to a penalty trial and others were not. These "independent" or "explanatory" variables included:

1. Defendant prior conviction for a violent offense
2. Defendant prior conviction for a non-violent offense

² Of the remaining defendants, 29 were sentenced to life, 1 was sentenced to a period of confinement less than life, and 1 defendant was acquitted.

3. Victim was a female
4. Victim was of a vulnerable age (16 and under or over 60)
5. Victim had prior conviction
6. Type of Capital Murder: Burglary
7. Type of Capital Murder: Multiple Victims
8. Type of Capital Murder: Kidnaping
9. Type of Capital Murder: Rape
10. Type of Capital Murder: Remuneration
11. Type of Capital Murder: Child Victim
12. Type of Capital Murder: Other³
13. Method of Murder: Victim was Beaten
14. Method of Murder: Victim was Stabbed
15. Method of Murder: Victim was Asphyxiated⁴
16. Victim was white
17. Attorney was hired
18. Defendant was male
19. Heinous Level 2⁵
20. Heinous Level 3⁶

³ Robbery was the reference category.

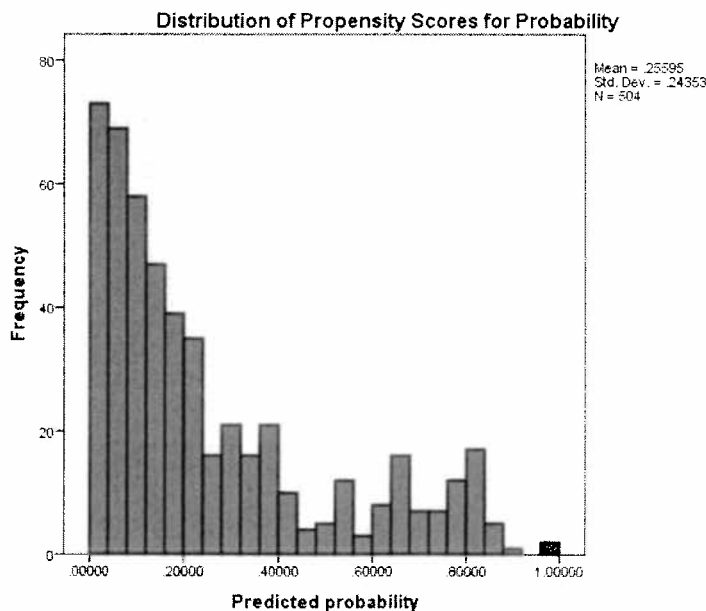
⁴ Victim was shot was the reference category.

⁵ The heinousness factor was based upon 12 aggravating (ex: victim was tortured, victim suffered lingering death, victim pled for their life etc.) and 13 mitigating factors (ex: defendant showed remorse, victim provoked defendant, defendant had mental impairment, etc.). A scale of case heinousness was created by taking the difference between the number of aggravating factors in a case and the number of mitigating factors. The scores were then trichotomized into Level 1 Heinousness (bottom 25% of the rank-ordered distribution), Level 2 Heinousness (middle 50% of the distribution) and Level 3 (top 25% of the distribution). The heinous scale thus produces captures very well the egregiousness of the case; the probability that a case was advanced to a penalty trial was .14 at Level 1, .26 at Level 2, and .38 at Level 3. The corresponding probability for a death sentence being imposed was .12 at Level 1, .17 at Level 2, and .35 at Level 3.

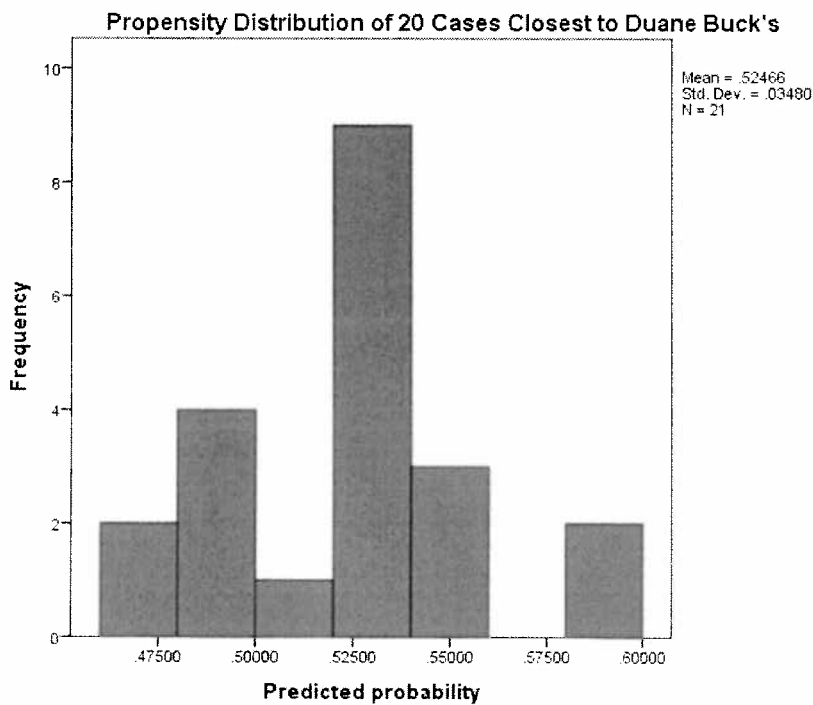
⁶ Heinous Level 1 was the reference category.

21. Multiple defendants indicted

With this statistical model I estimated for each of the 504 cases what is known in the literature as a propensity score. A propensity score is the estimated probability that a case will be advanced to a penalty trial. The distribution of propensity scores is shown in the figure along with the mean (average). A propensity score of .45, for example, means that the estimated probability that the district attorney would advance this case to a penalty trial is .45, or slightly less than half of the time. Different cases that have similar or a comparable propensity score have comparable probabilities of being advanced to a penalty trial, and the higher the propensity score the more serious the case. As expected, most of the cases are found at the left end of the distribution, indicating that most cases have a low probability of being advanced to a penalty trial because they are lower in seriousness. The mean estimated probability that a case is advanced is .26. The estimated propensity for Mr. Buck was .527, well above the mean. This reflects the fact that approximately one-half of cases like Mr. Buck's are estimated to be advanced to a penalty trial. The distribution of the estimated propensity score for the total sample of 504 cases is shown in the following figure.



In order to examine the role of race in cases similar to Mr. Buck's I selected the next ten cases to Mr. Buck's that had a lower estimated propensity and the next ten that had a higher estimated propensity for a total comparison of 21 cases. I selected all cases within the propensity range .450-.591. Importantly, these cases had an average propensity of .525, which is not that different from Mr. Buck's own estimated propensity score of .527. The distribution of the propensity scores for these 21 cases is shown in the following figure. To be absolutely clear, this group of 21 cases⁷ constitutes those cases among the 504 that are most similar to Mr. Buck's in terms of the overall estimated likelihood that the case would be advanced to a penalty trial. In this sense, these 20 cases can be considered comparable to Mr. Buck's in seriousness. Among this group of 21 comparable cases that include Mr. Buck's, the district attorney sought death in 62% of the cases (13/21) and death was imposed in 43% of the cases (9/21; and 69% of the cases presented to them [9/13]). The question is whether the defendant's race affected either the decision to advance the case to a penalty trial or the decision to impose death among this group of cases that were most comparable to Mr. Buck's.



⁷ The names of these cases are listed in Appendix A.

For the district attorney's decision to advance the case to a penalty trial the pertinent data are:

Race of Defendant	Did Not Advance	Advance
White	.800 (4/5)	.200 (1/5)
Hispanic	.200 (1/5)	.800 (4/5)
African-American	.300 (3/10)	.700 (7/10)
Asian	.000 (0/1)	1.00 (1/1)
Total	.381 (8/21)	.619 (13/21)

Note that the district attorney advanced 13 of these 21 cases to a penalty trial (a probability of .619). This probability, however, varies substantially by the race of the defendant. The probability that the district attorney will advance a case to a penalty trial is more than *three times as high when the defendant is African-American* than for white defendants (this includes Mr. Buck's case). This disparity by race of the defendant, moreover, cannot be attributed to observed case characteristics because these cases are those that were most comparable in terms of the estimated propensity score.

This racial disparity is only partially corrected at the jury sentencing stage:

Race of Defendant	No Death	Death Imposed
White	.800 (4/5)	.200 (1/5)
Hispanic	.400 (2/5)	.600 (3/5)
African-American	.600 (6/10)	.400 (4/10)
Asian	.000 (0/1)	1.00 (1/1)
Total	.571 (12/21)	.429 (9/21)

Ultimately, among this group of comparable cases a death sentence was twice as likely to be imposed on an African American defendant as a white defendant.

To examine how robust this finding was I extended my comparison to thirty cases in addition to Mr. Buck's – the adjacent fifteen cases that had a lower propensity and the adjacent fifteen cases that had

a higher propensity than Buck's. The mean propensity level for these 31 cases was .517 (with a median of .527) which is very comparable to Mr. Buck's propensity score of .527. For these thirty one cases I then examined the effect of the defendant's race on the district attorney's decision to advance a case to a penalty hearing and the jury's sentencing decision.

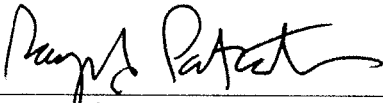
	Advance to Penalty Hearing	Impose Death
Race of Defendant		
White	.333 (2/6)	.333 (2/6)
Black	.688 (11/16)	.438 (7/16)
Hispanic	.857 (6/7)	.571 (4/7)
Asian	.500 (1/2)	.500 (1/2)

The Harris County district attorney advanced to a penalty trial only one out of every three cases within this propensity range for a probability of .333. The probability that the DA would advance a comparable case among defendants who were African-American was about twice as high (.688), and over two and one-half times as high for Hispanic defendants (.857). This disparity is slightly reduced when the jury's decision to sentence to death is examined. Among this group of comparable cases, the probability that a jury would impose a death sentence was .33 in white defendant cases and increased to .438 for black defendants (1.3 times higher than for white defendants), and .571 for Hispanic defendants (1.7 times higher than for white defendants).

CONCLUSION

There is reason to believe that Duane Buck's race played a role in the decision to advance his case to a penalty trial and impose a death sentence. There are two limitations to my analysis thus far. First, it would be desirable to have information on the quality of evidence in the 504 cases that I have in my data set currently. Information like this would include whether there was eyewitness testimony, DNA or other physical evidence, whether the defendant confessed to the crime, if there were co-offenders that cooperated with the prosecution and other such factors. The second and more important limitation is that I

lack information on what previous literature has shown to be an important decision in the capital punishment process – the decision of the local prosecutor to seek a death sentence (Paternoster et. al, *Justice by Geography and Race: The Administration of the Death Penalty in Maryland, 1978-1991*, 4 MARGINS 1 (2004)). Not every potentially capital case is charged as a capital crime and prosecutors have the discretion not to charge an offense as a capital crime even if the facts of the case could justify such a charge. Previous research in other states has shown that the prosecutor’s charging decision is where a great deal of racial disparity can be found, disparity which affects the processing of cases further down the process. I have a list of all homicides committed in Harris County from 1992 to 2000 and would like to collect information on cases from 1992 to 1998, a three year window before and after the year of the Buck case (1995). The information would consist of all information collected in the original Phillips study plus additional information about the quality of evidence in the case.



Raymond Paternoster

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Appendix A

Names of 21 Cases Deemed Comparable to Duane Buck's

Cases Not Advanced to a Penalty Trial

1. Anderson, Derrick
2. Clark, Bradley Shane
3. Cloud, Donald Robin
4. Collins, Dalton David
5. Gonzalez, Juan
6. McCray, Lee Roy
7. Roy, John Dean
8. Talerico, Andrew Benjamin

Cases Advanced to a Penalty Trial But Death Not Imposed

9. Mackey, Donald Eugene
10. Nieves, Richard Lee
11. Samuel, Lawrence
12. Wingate, Jonathan Lee

Cases Advanced to a Penalty Trial and Death Imposed

13. Buck, Duane Edward
14. Conner, Johnny Ray
15. Davis, Brian
16. Escobedo, Joel
17. Matamoros, Johnny Ray
18. Reese, Raymond
19. Resendiz, Angel Maturino
20. Tong, Chuong Duong
21. Williams, Jeffrey Demond