RAPE SHIELD LAWS AND GAME THEORY: THE PSYCHOLOGICAL EFFECTS ON COMPLAINANTS WHO FILE FALSE RAPE ALLEGATIONS

"Better that ten guilty persons escape than that one innocent suffer."¹

Rape is "an accusation easily to be made ... and harder to be defended by the party accused, tho never so innocent."²

I. INTRODUCTION

In the last 40 years rape laws in the United States have undergone a significant transformation. Starting in the early 1970s, there was an emergence of a rape law reform in the United States.³ Feminist agenda groups, like the National Organization of Women’s Task Force on Rape, lobbied the federal and state legislatures to revise old-fashioned rape laws and to treat rape like other crimes.⁴ Surprisingly, unexpected groups aided the move for changes to the antiquated rape laws. As a result of the drastic increases in the number of rapes from the late 1960s to the early 1970s, numerous organizations, including those representing police officers and prosecutors, joined the movement to reform rape laws in an effort to increase the reporting of this crime.⁵ It was not long before all of their efforts made a significant impact. One momentous change in United States rape laws was the emergence of rape shield laws. Currently, the federal government, every state, and the District of Columbia have adopted some form of a rape shield law, either by statute or case law, to be applied in criminal cases.⁶

Rape shield laws can be categorized into four different types. Type one is "Legislated Exceptions Laws," which twenty-five states have

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1. WILLIAM BLACKSTONE, 4 COMMENTARIES *358.
4. See SPOHN & HORNEY, supra note 3, at 20.
5. Id.
enacted. The legislated exception laws contain prohibitions on the introduction of evidence concerning opinion and reputation of the victim's sexual predisposition or history unless the evidence offered by the defendant falls within a group of exceptions. The exceptions generally permit the introduction of previously excluded evidence regarding the accuser's sexual history to show: relevant instances of prior consensual sex between the accuser and the defendant; that someone other than the defendant was the source of semen, other bodily fluid, and the cause of the injury at issue in the prosecution; complainants pattern of prior sexual conduct; bias or bad motive that could cause fabrication of the sexual assault; the alleged perpetrators belief in the complainant's consent; and instances of prior false accusations of sexual assault by the complainant. Type Two is called the "Constitutional Catch-All Laws," which are modeled after Federal Rules of Evidence 412 and have been enacted in eleven states. These laws bear a strong resemblance to the "Legislative Exceptions Laws" in that they maintain the same provisions but they differ by including one more exception. The exception provides that the evidence offered by the defendant will be admitted if the judge determines that the inadmissibility of such evidence will violate the defendants' constitutional right. Type Three is called the "Judicial Discretion Laws," which provide the judge with the broad discretion to determine whether a victim's sexual history should be admitted into evidence. In jurisdictions using "Judicial Discretion Laws," judges apply a general balancing test. Judges will examine whether the "evidence is relevant and that its probative value is not outweighed by its prejudicial effect." Type Four is called the "Evidentiary Purpose Laws," and in these jurisdictions the admission of a victim's sexual history is dependent upon its purpose in trial. The jurisdictions that apply this type of law are split as to its application. Half of the jurisdictions permit evidence of sexual history to attack credibility but do not permit evidence of sexual history to prove the complainant's consent, while the other jurisdictions apply the law completely opposite. The reasons and purposes for rape shield exceptions vary. The exception permitting the use of the accuser's prior consensual sex with the ac-

8. Id.
9. Id.
10. Id; see also The National Center for Victims of Crime, supra note 6.
12. Id.
15. Id.
16. Id.
Rape Shield Laws

Cursed seems, according to some commentators who oppose the exception, to be based on "the premise that women forfeit their right to say 'no' after voluntarily commencing a sexual relationship." The exception that allows the admission of complainant's prior sexual history to show that someone other than the accused was the source of semen, other bodily fluid, and the cause of the injury is generally permitted because it allows the defendant an opportunity to attack the complainant's credibility and demonstrate that the charges may be false. The exception permitting evidence that is necessary in order to protect a defendant's constitutional right is justified because a statute cannot carry more legal weight than the Constitution. The purposes of rape shield laws also vary. One purpose is to maintain the focus of the respective trial on the alleged rapist's culpability and not on the victim's sexual history. A second purpose is that it is generally thought that a victim's sexual history, no matter how promiscuous, is irrelevant to the accused's culpability. A third purpose is that these laws make it more likely a victim will come forward and report rape. Considering some recent statistics which put the number of victims who choose not to report sexual assaults during the average year as high as 59%, rape shield laws can be an important tool to increase reporting.

However, to date, no study has examined the psychological effects of the different types of rape shield laws on a complainant's signals to a prosecutor and a prosecutor's ability to determine whether an indictment should be filed in light of those signals. This article examines this very concept under a signaling game analysis, which is a branch of game theory. Part II of the article details what is known about false rape allegations. Part III examines the role and responsibilities of a prosecutor when an allegation is reported. Part IV introduces and explains signaling games, and subsequently provides the analysis of each type of rape shield law under this area of game theory. Part V provides the conclusion as to whether, under this evaluation and within the respective jurisdictions, prosecutors are more or less likely to bring an indictment of rape and whether there is an increased or decreased probability of false rape allegation indictments when the alleged rape is not witnessed.

18. See SLOAN, supra note 2, at 47-48.
19. Linger, supra note 17, at 1391.
21. Id. at 123.
22. See National Center for Victims of Crime, supra note 6.
24. See discussion infra Part IV.
II. FALSE RAPE ALLEGATIONS

Up until the 1950s and through much of the mid-1970s, the antiquated common law definition of rape was still in use throughout the United States. Under the common law, rape was defined as the "unlawful carnal knowledge of a woman, by a man not her husband, without her effective consent." Currently, most U.S. jurisdictions define rape as "sexual intercourse accomplished without the consent of the victim." Changes in rape laws were essentially non-existent for hundreds of years because of the concern of false rape allegations. The skepticism was so great that several states provided "cautionary instructions to the jury warning of women's propensity to make false charges of rape."

Today, there are many who believe and have proven that "false rape accusations are not uncommon." The FBI's Uniform Crime Report stated that eight percent of rape accusations are completely unfounded (while the average rate for other index crimes, like property crimes, arson, robbery, and aggravated assault, was much lower, at about two percent). However, statistics frequently cited by feminist groups put the number somewhere around two percent. Recently, in a study focusing on false rape accusations, spanning nine years of research, Eugene J. Kanin found that in a relatively small Midwestern city, forty one percent of one hundred and nine rape complainants later admitted the charges were false. Another study, performed by supervisory special agent of the U.S. Air Force's Office of Special Investigations, Charles McDowell, examined 556 rape accusations filed against U.S. Air Force personnel. Of the accusations studied, twenty seven percent were later found to be false. Furthermore, in his report he stated that some accusers file false

25. Stacy Futter & Walter R. Mebane, Jr., The Effects of Rape Law Reform on Rape Case Processing, 16 BERKELEY WOMEN'S L.J. 72, 74 (2001).
27. Id. at 3 (citing Henry F. Fradella & Kegan Brown, Withdrawal of Consent Post-Penetration: Redefining the Law of Rape, 41 CRIM. L. BULL. 3, 4-5 (2005)).
32. Kanin, supra note 29, at 83-84.
34. Id.
rape allegations as a defense mechanism to increase or protect their self-esteem.  

As one would expect, false rape allegations have a drastic impact on the wrongly accused's life. It is unknown how many of those convicted of a sexual assault crime are innocent. A 1996 Department of Justice report stated that since 1989 in "about 25% of the sexual assault cases referred to the FBI . . . the primary suspect has been excluded by forensic DNA testing." This average has been consistent for seven years. The range of compensation awarded from the respective states to the wrongly accused ranged from five-thousand dollars to one million dollars. The intangible damage to their lives was not and cannot be quantified. Although the report did not specifically address the reasons for the false allegations, it was apparent in most of the cases that some of the key evidence used by the prosecution and heavily weighted by the jury was the victim's identification of the accused.

The purpose of this information provided in this article is not to aid in calculating the number false allegations into some ratio or statistic. Rather, its purpose is explanatory in nature and to provide an assumption for the game theory model later used. The assumption is that among all the truly grotesque and unfortunate occurrences of rape, there exists and there will continue to exist a group of people who choose to abuse the criminal justice system and report false rape allegations. This article makes no attempt to try to quantify that group, nor does it try to explain their reasoning.

III. THE ROLE OF A PROSECUTOR

In general, prosecutors handle oversight of an investigation, the decision to charge, initial and pre-trial hearings, plea agreements, motions in limine, the trial and sentencing phases, and the appeals of cases. For purposes of this article, the decision to charge and the responsibilities surrounding that decision are most important and relevant. In the criminal justice system, the prosecutor has "broad discretion" as to whom to prose-
Thus, this broad discretion of power gives prosecutors "more control over life, liberty and reputations than any other persons in America." Furthermore, it is the decision to charge which, more than any other decision by the prosecution, "affect[s] critically the lives of suspects." Unfortunately for the prosecutor, not much is known about the facts at the indictment stage. The prosecutor is forced to base his decision to prosecute on the victim's account of the crime, the few facts that are known, the purpose of the relevant criminal law, and his intuition. The weight given to each of these factors varies from prosecutor to prosecutor. Some of those factors include "the strength of the case, the prosecution's general deterrence value, the Government's enforcement priorities, and the case's relationship to the Government's overall enforcement plan." Other factors generally weighed are "the prosecutor's reasonable doubt that the accused is in fact guilty, the extent of the harm caused by the offense, the disproportion of the authorized punishment in relation to the particular offense or the offender, possible improper motives of a complainant, reluctance of the victim to testify, cooperation of the accused in the apprehension or conviction of others, availability and likelihood of prosecution by another jurisdiction." Although prosecutors generally do not have extensive information to look at when deciding whether or not to indict someone, they are aware of society's expectations. A prosecutor has a fiduciary duty to his clients, the people who live within his jurisdiction. That duty includes that the prosecutor acts as the administrator of justice, while exercising "sound discretion in the performance of his or her functions." Moreover, it is his or her duty not merely to convict but to also seek justice. These instructions create dual allegiances, an allegiance to the prosecutor's constituencies and to the victim of the alleged crime.

Recently, the allegiance to the victim has become even more complicated by the emergence of victim's rights created by state amendments.

42. MICHAEL R. GOTTFREDSON & DON M. GOTTFREDSON, DECISION MAKING IN CRIMINAL JUSTICE: TOWARD THE RATIONAL EXERCISE OF DISCRETION 113 (2nd ed. 1988)(citations omitted).
43. Id. at 113.
44. See id. at 115.
46. Id. at 607.
47. ABA STANDARD FOR CRIMINAL JUSTICE: SPEEDY TRIAL AND TIMELY RESOLUTION OF CRIMINAL CASES 3-3.9 (3d ed. 2006)[hereinafter ABA] (emphasis added).
49. ABA, supra note 47, at 3-1.2.
50. Id.
51. Gershman, supra note 48, at 561.
Those amendments include such provisions as a right to be treated with fairness and with dignity, to restitution for injuries, to be protected from the accused, disclosure and access to court proceedings, and to be heard in court proceedings.\textsuperscript{52} In order to ease the tension prosecutors are under to balance the aforementioned rights, standards on how to create and proceed in a relationship with a victim have been published.\textsuperscript{53} Among other things, these standards imply that prosecutors should disclose relevant trial information and constraints on the introduction of evidence.

The conflict between what is owed to society and what is owed to the victim, which is compounded by the different types of rape shield laws, is the focus of this article. In the absence of any witnesses, other than the victim and accused’s account of the alleged crime, different types of rape shield laws have a significant impact on a prosecutor’s ability to determine false rape allegations.

IV. GAME THEORY: SIGNALING GAME AND ANALYSIS

John von Neumann, a mathematician, and Oskar Morgenstern, an economist, were pioneers who helped create early game theory in the 1940s.\textsuperscript{54} Since then, the field has been applied to help evaluate and understand psychological interactions between decision-makers in areas like political science, biology, and economics.\textsuperscript{55} Game theory is simply an analytical tool for studying how decision-makers behave and interact\textsuperscript{56} and mathematics is the tool used to quantify the actions of the players into concepts, ideas, and assumptions within each respective game.\textsuperscript{57} Two basic assumptions are required in game theory. They are (1) that decisions-makers make rational choices in pursuing their self-interest, and (2) that they react or behave based on their analysis of one another’s behavior.\textsuperscript{58} Each game describes the interaction between decision-makers, the constraints on those players, the actions they may take, and their respective interests, but it does not express the actions they do take.\textsuperscript{59} A solution to a game describes the payoff to each player.\textsuperscript{60} A payoff is the “gain or

\begin{itemize}
\item \textsuperscript{52} See id. at 559-60.
\item \textsuperscript{53} ABA, supra note 47, at 3-3.2.
\item \textsuperscript{54} MARTIN J. OSBORNE & ARIEL RUBINSTEIN, A COURSE IN GAME THEORY 8 (1994).
\item \textsuperscript{55} See id. at 1.
\item \textsuperscript{56} DOUGLAS G. BAIRD ET AL., GAME THEORY AND THE LAW 1 (Harvard Univ. Press 1994).
\item \textsuperscript{57} OSBORNE & RUBINSTEIN, supra note 54, at 2.
\item \textsuperscript{58} Id. at 1.
\item \textsuperscript{59} Id. at 2.
\item \textsuperscript{60} Id.
\end{itemize}
loss or any other type of ‘satisfaction’ that is of an importance to the player.\textsuperscript{61}

The game applied in this article is a signaling game. A signaling game is a specific type of Bayesian extensive form game with imperfect information.\textsuperscript{62} A Bayesian extensive game models the interaction of players, over time, where each player observes the other’s actions.\textsuperscript{63} It has five elements: (1) the players in the game, (2) the point of their actions, (3) their available choices throughout the game, (4) the knowledge each player possesses when deciding to make another move, and (5) their respective payoffs.\textsuperscript{64} Imperfect information in a Bayesian extensive game is “private, nonverifiable information.”\textsuperscript{65}

The game uses only two players, player 1 (“sender”) and player 2 (“receiver”).\textsuperscript{66} Nature, not a player, determines what type of information is private and non verifiable to sender.\textsuperscript{67} Nature moves first and chooses an option that is revealed to the sender, who then chooses an action, called a “signal,” based on the information received.\textsuperscript{68} Signals are given in two ways: (1) sender signals his type freely or (2) receiver induces signals by asking questions, trying to get sender to reveal its type.\textsuperscript{69} Receiver observes sender’s choice and is required to make a choice based on the information relayed by sender.\textsuperscript{70} The payoff, or utility gained, to each player is dependent on Nature’s choice, the action chosen by sender, and the action taken by receiver.\textsuperscript{71}

The sender can be one of two types: a good type or a bad type.\textsuperscript{72} A good type values future returns, invests for the long term, and prefers to match up with a good type; a bad type does not value future returns as much as good types, acts as a con artist seeking to cheat the other player, and prefers matching up with a good type.\textsuperscript{73} Signals help the receiver distinguish between good types and bad types, and, for each signal sent, there is a relational and observable cost.\textsuperscript{74} Cost is the price or conse-
quence incurred to a player after a signal is sent, and it can be expressed as money, time, labor, trouble, sacrifice, penalties, and the like.

Within the game, there are three different types of equilibrium. Type one is called "separating equilibrium" and occurs where the receiver has the ability to separate the good types from the bad types based on the signals sent. The signals are distinguishable because the good types send signals that can be matched up with each other, while the bad types do not send signals or the signals they do send match up with each other. Type Two is called "pooling equilibrium" and occurs where both types send the same signal or send no signal at all such that the receiver is unable to distinguish between the two types. Finally, Type Three is called "semi-separating" or "partial pooling" equilibrium and occurs where one type sends pure signals and the other type sends mixed signals. This randomizing of actions makes it extremely hard for the receiver to distinguish between the types.

A. Assumptions and Applicable Tree

As in any game theory analysis, there are assumptions that must be made in order for the model to be applied properly. As such, the game in this paper isolates the signals that are sent by a complainant to a prosecutor after the prosecutor induces a signal from the complainant. The prosecutor induces signals to gather more data to determine whether or not to prosecute the alleged rape allegation. Rape shield laws indirectly provide prosecutors with sets of questions that induce signals. This concept is illustrated as follows: in a Type One jurisdiction, evidence of a complainant's sexual history that may show a bias or motive to fabricate the rape allegation is admissible at trial; thus, a prosecutor must question and investigate whether or not a bias or motive exists because that type of evidence may be admitted. In contrast, in a Type Two jurisdiction that same evidence may or may not be used in court. The weight of that evidence is undeterminable before trial begins, and, therefore, the prosecutor may or may not question or investigate into the matter. Either way, the evidence's admissibility and legal weight will be determined at a later time.

75. See OSBORNE & RUBINSTEIN, supra note 54, at 4-5.
77. POSNER, supra note 69, at 19-20.
78. See id.
79. Id. at 20; Game Theory 14.122: Handout #1 Finding PBE Signaling Games, supra note 76, at 1.
80. Game Theory 14.122: Handout #1 Finding PBE Signaling Games, supra note 76, at 1.
As stated previously, the prosecutor carries the burden of seeking justice while the complainant seeks the prosecution of the alleged. Furthermore, for purposes of this game, a stance must be taken in the overall controversy of rape shield laws: how much and what type of the complainant's sexual history information should flow to the jury. This article assumes that the more relevant sexual history information that can be uncovered during the initial prosecutor's screening process and during the trial, the more likely that all parties, prosecutors, complainants with truthful rape allegations, and the alleged, except those with false rape allegations, benefit. In the following game, the listed assumptions are applied:

1. Prosecutors and complainants act rationally;
2. Complainants have knowledge of the truth of the allegations;
3. A prosecutor's decision to prosecute is based solely on the complainant's signals and the evidence;
4. Complainants are aware of the respective rape shield law (this is not an overreaching assumption given the purposes of rape shield laws);
5. The respective rape shield laws provide prosecutors with sets of questions that induce a complainant to reveal its type.

These assumptions are an attempt to understand and model behavior. Unfortunately, behavior outside of these assumptions can also be described as everyday normal behavior. For example, contrary to assumption in number three, some prosecutors may base their decision to prosecute for political or budgetary reasons.

Lastly, the game tree seen in Appendix 1 and the legend seen in Appendix 2 display the possible paths, choices, and payoffs to the game.

I. Play

The outcome of a given case is determined by nature. Only the complainant knows this private, non verifiable information. A prosecutor must evaluate each case and decide whether or not to commence prosecution based on the sent signals. The prosecutor is aware of the different types of complainants and the possible outcomes. However, he or she is unaware of the type of sender and must evaluate the complainant based on the sender's signals. Both types of complainants, good and bad, must choose the type and frequency of signals to send. The respective rape shield law acts as a filter, preventing the discovery or observation of certain signals. Good types and bad types gain utility from having their cases being prosecuted. Neither gains utility from having their cases not prosecuted. Good types want to see their attackers instituted and send signals no matter what the cost; bad types want the alleged to suffer from prosecution and act as con artists seeking to have their fabricated rape cases prosecuted. Prosecutors only gain utility from prosecuting cases. Although the prosecutor does not know the type of case, he or she believes
the probability of a winning case is \( x \), and the probability of a losing case is \( 1-x \). The prosecutor has the ability to update the probability of success based on the signals he or she receives from the complainant.

2. Order of play

Nature chooses the complainant's type. The complainant realizes its type. It signals a rape allegation to a prosecutor. Then, dependent upon the jurisdiction, the prosecutor may ask inducing questions, in an effort to determine the sender's type and whether or not to prosecute. Players then receive their respective payoffs.

3. Payoffs

The prosecutor makes the last move in the game by deciding whether to prosecute the case or not. If the case is prosecuted, a winning case is given a utility value of \( 1 \), and a losing case is given a utility value of \( 0 \), which is later subtracted from the cost of prosecuting the case \( \text{CP} \). If the case does not get prosecuted, then the prosecutor is subjected to the cost of not prosecuting \( \text{CNP} \). The prosecutor's payoffs can be expressed as follows:

\[
U_P = \begin{cases} 
1-\text{CP} & \text{if the prosecutor prosecutes and wins} \\
0-\text{CP} & \text{if the prosecutor prosecutes and loses} \\
0-\text{CNP} & \text{if the prosecutor does not prosecute} 
\end{cases}
\]

(where \( 1-\text{CP} > 0 > -\text{CNP} > -\text{CP} \))

4. Signaling Costs

After nature has chosen the type of complainant, the complainant gets to move by signaling. The complainant gains utility from having either a winning or losing case prosecuted, where \( a_L \) (the value of truthful allegation being prosecuted) is greater than \( a_{FL} \) (the value of a fabricated allegation being prosecuted). However when a case is not prosecuted, the complainant gains no utility and suffers the cost of signaling \( \text{C(S)} \). Thus, the complainant's payoffs can be expressed as follows:

\[
U_c = \begin{cases} 
a_L-\text{C(S)} & \text{if the prosecutor prosecutes and wins a truthful rape allegation} \\
\text{a}_{FL}-\text{C(S)} & \text{if the prosecutor prosecutes and wins a false rape allegation} \\
0-\text{CNP} & \text{if the prosecutor does not prosecute} 
\end{cases}
\]

(where \( a_L > a_{FL} > 0 \))

The value of \( a_L \) and \( a_{FL} \) increase as the case moves through the stages of the criminal justice process. For example, a case that only makes it through the indictment process is valued less than a case that
makes it to trial. Similarly, the value of \((C_r)\) increases as the prosecutor moves the case along the stages of the criminal justice process.

**B. Hypothesis One: Type One and Type Two Rape Shield Laws Act as a Separating Equilibrium**

Rape shield laws Type One and Type Two, Legislated Exceptions Laws and Constitutional Catch-All Laws respectively, operate as a separating equilibrium. In both types of jurisdictions, the complainant knows that there are numerous exceptions to the admission of evidence. These exceptions increase the cost of signaling to both the good type and the bad type of complainants. The cost increases because more of the complainant's sexual history will be discoverable, by both the prosecutor and the defense, because of its relevance at trial. Additionally, the bad type's cost specifically increase because it is more likely that the ulterior motive for pursuing a claim with no merit will be discovered. The false claim is more likely to be discovered because the prosecutor will be provided with more resources to ask and investigate each exception before he or she can properly weigh the evidence. Thus, the bad type's overall payoff will be significantly less than the good type's payoff because the cost of signaling a rape allegation, let alone a false rape allegation, is extremely high in these jurisdictions. Moreover, both types realize that the value of having the allegation litigated, irrelevant to it being true or false, is decreased because the admission of this type of evidence decreases the likelihood of the alleged defendant's guilt. The expected payoff to the bad type is significantly less than the expected payoff to the good type, who puts more value on prosecuting the case no matter what the cost. Therefore, such a jurisdiction is less advantageous to a bad type because a prosecutor, the receiver, is much better equipped to distinguish the type of complainant before the decision to prosecute is made. Thus, the complainant filing a false rape allegation deduces these values \(a_{FL}-Cs(WC) < 0-Cs(LC)\), making them more likely to be caught or to completely refrain from filing a false rape allegation.

**C. Hypothesis Two: Type Three Rape Shield Laws Act As A Pooling Equilibrium**

Type Three, the Judicial Discretion Laws, operate as a pooling equilibrium. In this jurisdiction, the complainant knows that it is impossible for a prosecutor to determine the admissibility and relevance of sexual history evidence. The extensive number of external factors, such as the strength and weaknesses of each party's argument as to the relevance of the evidence, the judge's natural inclination to the admission of certain types of sexual history evidence, the credibility of the witness offering the evidence
and the like, make it impossible for the prosecutor to determine admissibility. In addition, it is less likely that prosecutors will be given the same amount of resources to question and investigate the same exceptions that are permitted in Type One and Type Two jurisdictions because of the undeterminable admissibility of sexual history evidence. Generally, most prosecutors’ offices would rather bear the lower cost of prosecuting the case with the minimal cost of arguing admissibility before the trial judge, rather than assuming the higher costs of pre-determining the weight of evidence only to possibly dismiss truthful rape allegations. These external variables make the cost of signaling worthwhile for the bad type because it knows that the prosecutor is more likely to infer that they are a good type because of the costs to him. As time progresses, good types may realize that bad types are benefiting from signaling, causing good types to stop signaling. Thus, either both types’ payoff will be equally high, as all cases will be prosecuted, or both types’ payoff will be equally low, as no cases will be prosecuted. The more likely occurrence is that the prosecutor will prosecute more cases than necessary in order to seek justice. Therefore, such a jurisdiction is less advantageous to a good type because a prosecutor is less likely to distinguish between the two different types. As a result, more rape cases are brought and less time is spent on truthful rape allegations. For these same reasons, this jurisdiction is more advantageous to a bad type who cannot be distinguished at the onset and who knows there is an increased likelihood of a rape prosecution being brought against the wrongly accused. Thus, the complainant filing a false rape allegation deduces these values $a_{FL}-C_{S}(WC) > 0-C_{S}(LC)$, making them less likely to be caught or to completely refrain from filing a false rape allegation.

**D. Hypothesis Two: Type Four Rape Shield Laws Act As A Semi-Separating or Partial-Pooling Equilibrium**

Type Four, the Evidentiary Purpose Laws, operate as a semi-separating or partial-pooling equilibrium. In this jurisdiction, the complainant knows that there are some definitive exceptions to the rape shield law. However, these exceptions are minimal, generally two per jurisdiction, and this restricts the use of some inducement questions. Both complainant types are aware of the constraints. However, the effect of the constraints only changes the bad type’s strategy on how to play the game since the good type must still send all signals because of its sincerity in seeing the case prosecuted. The bad type, still looking to get a case prosecuted, will send signals in an attempt to resemble a good type. The constraints are still worthwhile because the bad type only sends minimal signals, reducing the cost of signaling. However, the prosecutor has the ability to ask some inducement questions. The use of these questions helps to
distinguish some complainant types from others. Thus, payoffs for complainants vary, and because they vary a prosecutor may or may not be able to distinguish between the good types and the bad types. Therefore, such a jurisdiction is not more or less advantageous to either type of complainant.

V. CONCLUSION

This game aided in identifying why its players may or may not make the choices that are available to them. It displayed how different types of rape shield laws affect parties who have and parties who seek private, non verifiable information. In this case, the private, non verifiable information was whether or not the rape allegation was truthful. The game displayed that rape shield laws can limit the actions of the uninformed players. Such an example was displayed by showing that a pooling equilibrium is created in jurisdictions that apply Judicial Discretion Laws because all complainants' cases will be taken to trial. The game also showed that rape shield laws can limit the actions of informed players. Such an example was displayed by showing that a separating equilibrium is created in jurisdictions that apply either Legislated Exceptions Laws or Constitutional Catch-All Laws because the amount of private, non verifiable information and the cost of signaling to the bad types could be increased by providing the uninformed player with a large set of inducement questions. Thus, such laws make it easier for prosecutors to distinguish between good and bad types. Lastly, the game showed that rape shield laws can limit the actions of both informed and uninformed players. An example was displayed by showing that a semi-separating or partial-pooling equilibrium is created in jurisdictions that apply either Evidentiary Purpose Laws because the amount of private, non verifiable information and the amount of inducement questions seem to neutralize the overall payoffs. Therefore, in the interest of seeing truthful cases litigated and the alleged from suffering the prosecution of false rape allegations, the game proved that Legislated Exceptions Laws or Constitutional Catch-All Laws are the best jurisdictions to meet these interests because they create a separating equilibrium. In addition, the game proved that as the amount of inducement questions increased, the likely prosecution of a false rape allegation decreased. This was the result of the bad type’s cost of signaling increasing and its overall payoff decreasing.

Having evaluated and analyzed the different types of rape shield laws, I believe a strict categorical rule with limiting instructions provided to the jury would be the best solution. The rule would look something like this:

Evidence of a victim’s sexual history is irrelevant and generally inadmissible unless it meets one of the following exceptions: Evi-
Rape Shield Laws

dence of a victim's sexual history is admissible only if it is offered (1) to show relevant instances of prior consensual sex between the accuser and the defendant; (2) to show that someone other than the defendant was the source of semen, other bodily fluid, and the cause of the injury at issue in the prosecution; (3) to display a pattern of prior sexual conduct by the complainant; (4) to show a bias or motive to fabricate the sexual assault; (5) to prove that the accused had a reasonable, but mistaken belief, in the complainant's consent; (6) and to show instances of prior false accusations of sexual assault by the complainant. Trial judges are required to instruct the jury on how to correctly apply this evidence, and must do so to mitigate the prejudicial effect on the victim.

Although it is true judges will determine whether or not evidence fits into one of these categories, it is also true they will not have the discretion to determine relevance. Giving prosecutors the ability to determine the strength and weakness of their cases based upon the relevance of the evidence provides them with a more precise ability to determine whether or not cases should be brought to trial. This ability decreases cost to taxpayers, increases work production at the respective prosecuting attorney's office, and hopefully, decreases the amount of time that falsely accused defendants must spend in the criminal justice system.

In general, I believe that if prosecutors, irrelevant of their respective jurisdiction, could follow and oversee investigations with the proposed categorical rule above in mind, then their prosecutions would be more successful. For example, if prosecutors ensured that investigators continuously researched areas involving possible reasons for a complainant to file a false rape, then there may be a reduction in the number of false rapes that are prosecuted. Thus, researching what justice requires instead of prosecuting based on what evidence is likely to be admissible at trial would lead to more accurate prosecutions.

One area that was not discussed or proven was the area of increasing signaling costs to the bad type as a deterrent. Many factors can increase the cost of sending a signal to a complainant. Some factors are the time it takes to create or fabricate a story, collection of evidence, or even money spent calling or driving to the prosecutor's office. However, adding deterrents may also increase cost. For example, charging complainants who file a false rape allegation with filing a false report to the police would significantly increase cost to the bad types. Another example could be a permanent record of the false statement. Rather than a sentence or fine being imposed, a complainant's criminal record would always reflect that they made a false allegation. That permanent record may or may not be admissible in future trials but could certainly be used at sentencing if the complainant was ever convicted of a crime. One final example could be
permitting the accused to bring a civil action against the complainant. The accused could recover damages for having unjustifiably suffered through the criminal process and any possible loss of reputation. Unfortunately, these examples would more than likely have an equally chilling effect on some of the good types. Good types may obviously fear that if the case is a losing case, they too may be subject to these repercussions.

Ultimately, it is this solution we seek - the solution of decreasing the overall payoff to the bad types, while not affecting the overall payoff to the good types. This solution would decrease the number of false rape allegations, and increase the amount of resources provided to the investigation and prosecution of truthful rape allegations.

Josh Torres*

* This article is dedicated to my wife, Wendy, with all my love.
Appendix 1 - Game Tree

\[
\begin{align*}
&\text{(a}_L\text{-C}(S), 1\text{-C}_P) & &\text{(a}_L\text{-C}(S), 0\text{-C}_P) \\
&P & &P \\
\text{N} & &\text{WC} & &\text{LC} & &\text{N} \\
&\text{(0-C}(S), 0\text{-C}_{NP}) & &\text{CT} & &\text{(x)} & &\text{(0-C}(S), 0\text{-C}_{NP}) \\
&\text{CF} & &\text{(1-x)} & &\text{(0-C}(S), 0\text{-C}_{NP}) & &\text{P} \\
&\text{N} & &\text{WC} & &\text{LC} & &\text{N} \\
&\text{(a}_F\text{L-C}(S), 1\text{-C}_P) & &\text{(a}_F\text{L-C}(S), 0\text{-C}_P) \\
\end{align*}
\]

Legend

**Players**
- **P** = Prosecutor
- **CT** = Complainant with truthful rape allegation
- **CF** = Complainant with fabricated rape allegation

**Types of Cases**
- **WC** = Winning Case
- **LC** = Losing Case

**Actions**
- **P** = Prosecute
- **N** = Do Not Prosecute

**Probability**
- **x** = Percentage of type in community
- **1-x** = Percentage of type in community

**Payoff**
- **Payoff Solution** (Payoff to the Complainant, Payoff to the Prosecutor)
- **a_L** = Value of truthful allegation prosecuted
- **a_FL** = Value of fabricated allegation prosecuted
- (**As prosecutions move further in the criminal justice process, the value to the complainant increases**)
- **C(S)** = Cost of sending a signal
- **CP** = Cost of prosecuting
- **CNP** = Cost of not prosecuting
- **Utility (Expected payoff)**
- **1** = Winning Case's Utility
- **0** = Losing Case's Utility