PERCEIVED TRAUMA, PHYSICAL INJURIES, AND THE EFFICACY OF
BLACK’S THEORY OF LAW: REPORTING ASSAULTS TO THE POLICE

by

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A thesis submitted to the Faculty of the University of Delaware in partial
fulfillment of the requirements for the degree of Master of Arts in Criminology

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ABSTRACT
Existing research focuses extensively on victim reporting of crime by using Donald Black’s (1976) behavior of law framework, but there has been little research that has focused on the influence of victims’ perceptions of trauma on police reporting. After controlling indicators of morphology and stratification as articulated by Black’s behavior of law framework, and crime seriousness indicators as presented by Gottfredson and Hindelang, this paper examines whether victims’ perception of trauma influence the likelihood that assault victimizations will be reported to police. Using recent data from the National Crime Victimization Survey (NCVS), which now queries victims about the emotional and physical trauma they experienced after an incident, models indicate that physical injuries that require medical care are the most significant factors related to an incident being reported to police. Although significant at the bivariate level, multivariate logistic regression models indicate that victims’ perceptions of overall trauma retained only marginal significance after controlling for the other variables.
Chapter 1
PERCEIVED TRAUMA, PHYSICAL INJURIES, AND THE EFFICACY OF BLACK’S THEORY OF LAW: REPORTING ASSAULTS TO THE POLICE

Introduction
Crimes occur every day, but not all crime victims are willing to report to the police. In fact, household theft victimizations are more likely to be reported than violent crimes (Morgan and Truman, 2018). Recent data from a nationally representative sample indicates that only 42% of all violent victimizations are reported to the police (Morgan and Kena, 2017). These are incidents of nonfatal violence that include rape or sexual assault, robbery, and both aggravated and simple assault. Victimization, although a broad concept, can be a traumatic event for many people, and this trauma may affect the reporting decisions by the victim themselves or a third party. While there has been a great deal of research examining the factors related to reporting behavior (Bosick et al., 2012; Davies, Block, and Campbell, 2007; Jasinski, 2003; Kidd and Chayet, 1984; Tarling and Morris, 2010), very few studies have examined how perceived trauma from a victimization affects reporting (Posick, 2014).

Using new questions in the National Crime Victimization Survey (NCVS) that measure victims’ emotional or physical trauma, this paper will examine the effect that this more direct measure of incident severity has on police reporting behavior. Specifically, this
research applies Donald Black’s (1976) behavior of law framework, and a competing framework proposed by Gottfredson and Hindelang (1979), to test the influence of trauma on the likelihood of police reporting of physical assaults. Thus, the following research questions will be examined: “How does trauma impact the likelihood of reporting a physical assault victimization to the police?” and “What factors are most significant in reporting a physical assault to the police?”

**Theoretical Framework**

*Donald Black’s Behavior of Law*

Donald Black’s behavior of law (1976) is an important work in the field of sociology. In it, he describes both the quantity of law and the style of law as main dependent variables, and elaborates on many variables that explain these outcomes. Black contends that the quantity of law can be defined by “the number and scope of prohibitions, obligations, and other standards to which people are subject…” (Black 1976, p. 3), while the style of law refers to the types of social control found in social life. Reporting a victimization to the police can be used as an indicator of the quantity of the law as mobilizing the police after a victimization is a form of social control.

Black (1976) identified five independent variables that interact to explain the quantity and the style of law. He concluded that if the variables stratification, morphology, culture, organization, and social control work together, the behavior of law can be easily explained. Little research (Myers, 1980), however, has been done that tests all five of Black’s independent variables because of the complexity of the framework. Consistent
with other research, this research will focus on two of Black’s independent variables—stratification and morphology.

The first of the concepts, stratification, is the vertical direction of law and can be defined by things such as wealth, income, or the social distance between two parties (the victim and offender) who engage in the law. Black predicted that it is more likely for law to be used in a downward direction, meaning a victim who is above an offender in social rank is more likely to call the police than the other way around. For example, police “handle more cases committed by blacks against whites…, by juveniles against adults…, and, in general, by poorer people against wealthier people” (Black 1976, p. 22).

The second, morphology, is the horizontal direction of law and can be explained by integration or relational distance between parties, such as intimacy. Black (1976) postulated that an individual would be least likely to use the law, such as calling the police, when victimized by someone who is a close partner, but as the distance between individuals grows, the likelihood of using the law would increase.

**Gottfredson and Hindelang’s Alternate Theory**

Gottfredson and Hindelang (1979) empirically critiqued many of Black’s (1976) propositions and concluded that Black exclusively focuses on individual motivation to invoke the law, but does not observe the objective seriousness of the offense. Black only speaks of seriousness in terms of the amount of law that will be used. Therefore, Gottfredson and Hindelang proposed an alternative model that “explains the behavior of law as a function of the individual consequences of legal infractions rather than as a function of Black’s five dimensions” (1979, p. 5).
By conducting a test of Black, and also including crime seriousness, these researchers were able to support their alternative model by using data from the National Crime Survey. In order to assess a victim’s decision to report the offense to the police, Gottfredson and Hindelang used data of personal crimes—rape, robbery, assault, and personal larceny—to analyze “the context of the victim’s decision about reporting the offense to the police” (1979, p. 5). The researchers also used the Sellin-Wolfgang (1964) seriousness scale, which is designed to “take into account the extent and nature of bodily injury, weapon use, intimidation, forcible intercourse, and financial loss,” (p.5) to study the effects of harm to the victim on reporting to the police.

Gottfredson and Hindelang found little to no support for Black’s argument. However, even after Black’s dimensions were controlled, the seriousness of the victimization significantly affected police reporting. The conclusions from this study suggest that because seriousness was more important when combined with Black’s principle variables, a theory of law should include “some measure of the consequences of legal infractions to individuals to be an accurate model” (Gottfredson and Hindelang 1979, p. 16). It can also be inferred that crime seriousness can affect the amount of trauma experienced from a victimization, and as such, victims’ perceptions of trauma should also be included as a measure of serious.

The current research study will focus on using the stratification and morphology concepts proposed by Black (1976), by using variables such as age, employment, victim-offender relationship, education, and race to assess the likelihood of police being notified. Crime seriousness, as proposed by Gottfredson and Hindelang (1979), will be assessed by
including measures such as injury to the victim, medical care received by the victim, and the presence of a weapon during the assault. In addition, unlike most research investigating police reporting using only physical injury or medical care as indicators of seriousness, this research will also examine how victims’ perceptions of trauma affect police reporting behavior.

**Literature Review**

*Reporting Assault Victimization to Police*

Several studies have attempted to determine the efficacy of Black’s theory when predicting police reporting behavior. One of the most frequently used variables used to indicate morphology has been age. For example, to determine the relationship between age and reporting, Bosick et al. (2012) used the NCVS to assess the characteristics that moderate reporting over the life course. Their findings demonstrated overall reporting violence to police was positively related to victims’ age. That is, older victims of violence were more likely to report compared to their younger counterparts. These findings are consistent with results from Hart and Rennison (2003), who found that aggravated assault reporting was low in the lowest age range (age 12-15), increased to its highest point between 35 and 49 years old, and decreased again for victims 65 years or older. Black (1976) would postulate the older a victim is in age, the more they would be inclined to use the law. This is in line with Posick and Singleton (2014), who stated older women who are White are more likely to report crimes to the police.

Black’s (1976) framework would hypothesize that when a victim and an offender are of the same race, they would use the law less, but when the victim is White and the
offender is Black, the victim would be more inclined to use the law because race is often used as an indicator of vertical ranking. Although Black (1976) indicates the use of law for inter-race incidents, most studies tend to focus only on the race of the victim when examining police reporting. In the literature, it is also common for race to be highly correlated with income, another measure of vertical ranking. For example, Jasinski (2003) concluded that police were more likely to be contacted if the victim was Black and had an income of less than $15,000, possibly because these victims lacked access to other resources. Xie and Lauritsen (2012) examined the relationships between victim and offender race and the reporting of crime using Black’s stratification hypothesis. They found support for the hypothesis—race was associated with police reporting where the gap in socioeconomic status was greater between the victim and the offender. However, Akers and Kaukinen (2008) found that racial minority women were more likely to contact the police compared to White women, which does not support Black’s claims.

The reporting behaviors of women is not explicitly discussed in Black’s (1976) theory, however, it can be assumed based on his other propositions that women would be more likely to use the law than men because traditionally sex was used as a measure of social ranking. Kaukinen’s (2002) findings suggest female victims are more likely to report to the police than male victims. Black’s (1976) morphology principle would also predict that as the distance between the victim and offender increase, so would the likelihood of police notification. This is supported by results of some studies that have found women who are attacked by a known offender are less likely to report their victimization compared to females attacked by a stranger (Chen and Ullman, 2014; Kaukinen, 2002). Chen and
Ullman (2014) also concluded women who were married were less likely to report their physical assaults.

Black (1976) would also assume that those victims who are employed would be more likely to report because the individuals who are employed, or have a higher income, are higher in vertical ranking compared to those with lower incomes and/or who are unemployed. However, there have been mixed results regarding employment and reporting of a violent crime. Rennison (2007) found that unemployed victims were less likely to report their victimization to the police compared to employed victims. In contrast, Posick (2014), who looked at are more refined categories of employment, found that victims who were employed full time were less likely to report to police compared to those who were employed either part-time or who were unemployed. Other research has found no effect of employment on police reporting (Johnson, 1990).

While the findings from the extant literature on police reporting have remained equivocal regarding the relationship between these demographic indicators and police reporting, variables measuring the seriousness of the incident have generally been found to increase the likelihood that the incident will be reported to police. For example, injuries are one of many common characteristics that warrant calls to the police. As noted above, Gottfredson and Hindelang (1979) argued that the seriousness of an assault would be positively related to the amount of law used, while Black’s theory (1976) did not mention seriousness as an important variable. There is a great deal of support for Gottfredson and Hindelang’s (1979) contention. For example, weapon presence during the assault, injuries sustained by the victim, and medical care obtained for these injuries each have been shown
to increase the likelihood that a victimization will be reported to the police (Akers and Kaukinen, 2009; Bosick et al, 2012; Chen and Ullman, 2014; Davies, Block, and Campbell, 2007; Felson et al, 2002; Jasinski, 2003). Tarling and Morris (2010) found that if victims felt they needed immediate assistance or treatment, they were more likely to contact the police. Crime seriousness was also significant in Reyns and Englebrecht’s (2010) study, where victims were more than twice as likely to report their victimization to the police if they perceived their crime to be serious.

Trauma and Victimization

Definition and Measurement of Trauma

Trauma and stressor related disorders, as defined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition or the DSM-5, are those disorders in which exposure to a traumatic or stressful event is listed explicitly as a diagnostic criterion. These disorders include posttraumatic stress disorder, acute stress disorder, adjustment disorders, reactive attachment disorder, disinhibited social engagement disorder, and adjustment disorders (American Psychiatric Association, 2013). Briefly, the criteria for posttraumatic stress disorder states the person was exposed to death, threatened death, actual or threatened serious injury, or actual or threatened sexual violence (American Psychiatric Association, 2013).

Some of the criterion for acute stress disorder stem from the posttraumatic stress criterion. Therefore, research focusing on stress or trauma is likely to use criteria from the version of the DSM that is most updated (depending on the year the research is done), or one of the many different scales that measure various emotions. There are many other
criteria for each of the above diagnoses, but explaining each criterion for each disorder is beyond the scope of this paper.

The American Psychiatric Association or APA states PTSD can occur in individuals who have experienced a traumatic event, including rape or other violent personal assaults (2017). These individuals may experience flashbacks or nightmares, sadness, fear or anger, and they may feel detached from other people (APA, 2017). Emotional and psychological trauma including stress and anxiety are not uncommon following a crime victimization (Green and Pomeroy, 2007). Victimizations are often perceived as unjust events that can also evoke negative emotions like anger or resentment (Hay and Evans, 2006; Kilpatrick et al., 1987).

Anger, which later related to the development of PTSD, was found to be significantly related to the use of a weapon, level of force, or misjudged perception of the assault by a female victim (Riggs et al. 1992). Other negative emotions such as anxiety, panic, and posttraumatic stress have been found in a growing literature of trauma resulting from victimization (Brewin et al., 1999; Green et al., 2010; Green and Diaz, 2008; Gutner et al., 2006; Kilpatrick et al., 1979). Similarly, others have found that both male and female assault victims are vulnerable to acute stress disorder and PTSD, and that acute stress disorder often manifests later as PTSD (Brewin et al., 1999).

Victims’ perceptions of trauma can clearly be assumed to be indicators of the seriousness of an incident along with the indicators of physical injury that have been used in the extant literature. However, virtually no research has investigated the effects of these perceptions of trauma when predicting police reporting behavior. There is evidence from
the British Crime Survey by Posick (2014) that indicates negative emotionality from victimization does affect the likelihood that a victimization will be reported to police net of other factors including injury. In his study, negative emotionality was measured by emotional distress, which included variables of anger, shock, fear, depression, anxiety, loss of confidence, loss of sleep, and crying, and emotional intensity or how much the victimization affected them.

In sum, we know that stress and other trauma-related symptoms are common effects of victimization. It is also clear that indicators of seriousness, such as injury and weapon presence also increase the likelihood police being notified. There is a gap in our knowledge, however, regarding the net effect of these seriousness indicators after victims’ perceptions of trauma are controlled. Moreover, the indicators typically used to measure the concept of morphology in Black’s theory of law have only sporadically predicted police reporting behavior. Using previous literature as a guide, as well as Donald Black’s (1976) framework and Gottfredson and Hindelang’s (1979) competing theory, the following hypotheses are formed:

**Hypothesis 1:** Victims who experience higher rates of trauma will be more likely to report their victimization to the police net of all other factors suggested by Black, and Gottfredson and Hindelang.

**Hypothesis 2:** Indicators of incident seriousness, as articulated by Gottfredson and Hindelang, will be more significant when predicting police reporting compared to the indicators of morphology and stratification asserted by Black.
Methodology

Sample

Data from the National Crime Victimization Survey (NCVS), an annual data collection, are used for the current study. Information is acquired by the NCVS about nonlethal personal crimes (i.e., rape or sexual assault, robbery, aggravated and simple assault, and personal larceny), as well as household property crimes (i.e., burglary, motor vehicle theft, and other theft). This national survey attempts to capture the prevalence of crimes that were both reported and not reported to the police. The NCVS asks a nationally representative sample in the United States to provide information about themselves, including age, sex, race and Hispanic origin, martial status, education level, and income, and whether they experienced a victimization in the past six months (Bureau of Justice Statistics). By using a stratified multistage cluster sampling process, the survey results in a representative sample of households.

To measure victimizations that are as homogeneous as possible, this research examines assaults. The Bureau of Justice Statistics defines assault as “an unlawful physical attack or threat of attack” (BJS, 2018). Assaults can be classified as either aggravated or simple. Those assaults that involve a weapon with injury or threatening with a weapon are defined as aggravated assaults, while simple assaults are attacks without a weapon resulting in minor or no injury. Not included in the definition of assault is rape, attempted rape, sexual assault, robbery, and attempted robbery. Because questions specific to this research were not asked until 2008, victimizations that occurred between 2008 and 2015 were included in the analyses that follows, which resulted in a sample of 6,473 unweighted incidents of assault.
**Measures**

Table 1. Descriptive Statistics of All Variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reported to Police</td>
<td>6,473</td>
<td>0</td>
<td>1</td>
<td>0.49</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trauma</td>
<td>3,147</td>
<td>0</td>
<td>12</td>
<td>5.34</td>
<td>3.76</td>
</tr>
<tr>
<td>Employed</td>
<td>6,473</td>
<td>0</td>
<td>1</td>
<td>0.59</td>
<td>0.49</td>
</tr>
<tr>
<td>Known Offender</td>
<td>6,473</td>
<td>0</td>
<td>1</td>
<td>0.66</td>
<td>0.47</td>
</tr>
<tr>
<td>Some College Ed. Or More</td>
<td>6,429</td>
<td>0</td>
<td>1</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>White non-Hispanic</td>
<td>6,268</td>
<td>0</td>
<td>1</td>
<td>0.82</td>
<td>0.39</td>
</tr>
<tr>
<td>Age</td>
<td>6,473</td>
<td>12</td>
<td>90</td>
<td>36.12</td>
<td>16.01</td>
</tr>
<tr>
<td>Injury</td>
<td>6,473</td>
<td>0</td>
<td>1</td>
<td>0.33</td>
<td>0.47</td>
</tr>
<tr>
<td>Medical Care Received</td>
<td>6,473</td>
<td>0</td>
<td>1</td>
<td>0.14</td>
<td>0.35</td>
</tr>
<tr>
<td>Weapon Present</td>
<td>6,473</td>
<td>0</td>
<td>1</td>
<td>0.28</td>
<td>0.49</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Victim</td>
<td>6,473</td>
<td>0</td>
<td>1</td>
<td>0.49</td>
<td>0.5</td>
</tr>
<tr>
<td>Private Location</td>
<td>6,473</td>
<td>0</td>
<td>1</td>
<td>0.25</td>
<td>0.43</td>
</tr>
</tbody>
</table>

Dependent Variable: Police reporting is the dependent variable of interest in this study. Victims of assault were asked “Were the police informed or did they find out about this incident in any way?” Police reporting is coded 0 if no, or 1 if yes. About half of the sample, 49.4%, reported that their physical assault victimization came to the attention of the police. Descriptive statistics are presented in Table 1.

Independent Variables: Trauma is the main independent variable. Because trauma is not specifically asked about in the NCVS, previous research (National Center for Victims of Crime, 2008) is used as a guideline to create the trauma index when selecting existing variables from the NCVS codebook. The definition of PTSD, as presented by the American Psychiatric Association (APA), also helped in the choice of variables for the trauma index,
as well as criterion related to the DSM-5 definition of trauma and stressor related disorders. To create the trauma index, the following questions were chosen: “did you feel worried or anxious?” “did you feel sad or depressed?”, “did you feel vulnerable?”, “did you feel violated?”, “did you feel like you couldn’t trust people?”, “did you feel unsafe?”, “did you experience headaches?”, “did you experience trouble sleeping?”, “did you experience changes in your eating or drinking habits?”, “did you experience upset stomach?”, “did you experience fatigue?”, and “did you experience muscle tension or back pain?” where respondents were asked if they felt these problems for a month or more. These items were additively combined into a index measuring trauma that resulted in a Cronbach’s alpha of 0.88, indicating inter-item reliability. The index ranges from 0 to 12, with a mean of 5.34.

The other independent variables reflect what both Black (1976) and Gottfredson and Hindelang (1979) proposed in their works. As stated earlier, this study will focus on the stratification and morphology variables Black (1976) suggested, and also variables related to crime seriousness, what Gottfredson and Hindelang (1979) argued were most important for police reporting. Employment (0=not employed, 1=employed), race (0=all other, 1=White non-Hispanic), and education level (0=high school grad or less, 1=some college or more) are used to measure Black’s concept of stratification. The majority of the sample, about 59%, was employed at the time of the survey, 79% of the victims were White non-Hispanic, and about 50% of the sample had some college education or more.

Variables that measure the concept of morphology are measured by the victim-offender relationship (0=unknown, 1=known), and age. About 66% of the sample was assaulted by a known individual, while the sample age range spanned from 12 to 90, with
the average age of a respondent being 36 years of age. To measure crime seriousness, victims were asked if they sustained any injuries as the result of their victimization and these variables was coded 1 for those victimizations that resulted in injuries and 0 otherwise. An additional variable indicated whether medical care was received for the injuries and coded 1 if yes and 0 otherwise. Victims who were injured during their assault made up approximately 33% of the sample, while those victims who received medical care after their assault made up about 15% of the sample. If victims reported that offenders had a weapon, weapon presence was coded 1 and 0 if no weapon was present. Approximately 28% of the victimizations had a weapon present.

Two control variables are also used in this study. These include sex (0=male, 1=female) and location of the incident (0=public location, 1=private location). Just under half, 48.8%, of the sample was comprised of female victims and about 25% of victimizations occurred in a private location.

Analytic Strategy

The purpose of the current study is to determine the factors that affect the likelihood of police being notified of an assault victimization. First, bivariate analyses are examined to see the unique contribution of each independent variable on the likelihood of police notification. Next, logistic regression is used to estimate the effect of each independent variable on the probability police reporting when holding other independent variables constant. In the current research, three separate models are run using SPSS statistical software. The first model runs trauma against variables suggested by Black, the second model runs trauma against variables suggested by Gottfredson and Hindelang, and the final
model includes all variables. Separate models are run to determine the net effect of victims’ perceived trauma separately for both Black’s theoretical indicators and for other crime serious indicators.

### Results

**Bivariate Analyses**

Table 2. Bivariate Relationships between Independent Variables and Police Reporting, Chi-Square Results for Dichotomous Independent Variables and Bivariate Logistic Regression Analyses for Interval/Ratio Independent Variables.

<table>
<thead>
<tr>
<th>Percent Reported to the Police</th>
<th>O.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
</tr>
<tr>
<td>Trauma</td>
<td>1.01***</td>
</tr>
<tr>
<td>Employed</td>
<td>50.2</td>
</tr>
<tr>
<td>Unemployed</td>
<td>48.3</td>
</tr>
<tr>
<td>Known Offender</td>
<td>50.3*</td>
</tr>
<tr>
<td>Unknown Offender</td>
<td>47.7</td>
</tr>
<tr>
<td>Some College Ed. Or More</td>
<td>50.6*</td>
</tr>
<tr>
<td>High School Degree or Less</td>
<td>48.2*</td>
</tr>
<tr>
<td>White non-Hispanic Victim</td>
<td>48.8</td>
</tr>
<tr>
<td>Non-White Victim</td>
<td>50.7</td>
</tr>
<tr>
<td>Age</td>
<td>1.04***</td>
</tr>
<tr>
<td>Injured</td>
<td>61.2***</td>
</tr>
<tr>
<td>Not Injured</td>
<td>43.7</td>
</tr>
<tr>
<td>Medical Care Received</td>
<td>71.3***</td>
</tr>
<tr>
<td>Medical Care Not Received</td>
<td>45.7</td>
</tr>
<tr>
<td>Weapon Present</td>
<td>60.4***</td>
</tr>
<tr>
<td>No Weapon Present</td>
<td>45.1</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
</tr>
<tr>
<td>Female Victim</td>
<td>53.3***</td>
</tr>
<tr>
<td>Male Victim</td>
<td>45.8</td>
</tr>
<tr>
<td>Private Location</td>
<td>59.7***</td>
</tr>
<tr>
<td>Public Location</td>
<td>46.1</td>
</tr>
</tbody>
</table>

Note: ***p<.001; *p<.05
To assess the relationship between the dependent variables and the independent variables, crosstab analyses are run and results are shown in Table 2. Chi-square analyses indicate all independent variables, except employment and race, significantly affect the likelihood that the police were informed about the assault. Compared to victims who were attacked by an unknown person, victims who were attacked by someone they knew reported their victimization to the police at a rate of 50.3% compared to 48% of assault victimization perpetrated by other offenders. Respondents who had some college education or more were reported their victimization to the police at a rate of 51%, compared to respondents who had a high school degree or less who reported at a rate of 48%. White non-Hispanic victims reported their victimization to the police at a rate of about 49% in comparison to victims of other races and ethnicities who reported at about 51%. When a victim was injured, they reported their crime to the police at a rate of approximately 61%, compared to 44% of assault victimizations that did not result in injury. Victims who received medical care reported their victimization to the police at a rate of 71%, compared 46% of victims who did not receive medical care. When a weapon was present during an assault, the crime was reported at a rate of 60%, whereas assaults with no weapon present were reported at a rate of 45%. Female victims of physical assault had their victimizations reported to the police at a rate of about 53% compared to 46% of victimizations with a male victim. Victimizations that occurred in a private location were reported at a rate of approximately 60%, while physical assaults that occurred in a public location were reported at a rate of 46%.
And finally, as victims’ perceptions of trauma increased, the likelihood of police being notified of the assault also increased. To determine if this relationship remains net of other factors, logistic regression models are examined next.

**Logistic Regression Analyses**

*Black’s Proposed Variables*

Results of logistic regression analyses analyzing trauma against variables of stratification and morphology can be seen in Table 3. Overall, this model is significant (p<.001), indicating that at least one of the independent variables is significantly related to the dependent variable. Trauma and private location are significant at the p<.001 level, while age is significant at the p<.01 level, and employment is significant at the p<.05 level.

Incidents in which victims perceived higher levels of trauma were more likely to be reported compared to those in which victims perceived low levels of trauma. Employed victims, compared to unemployed victims, had a 17% higher odds of their physical assault being reported to the police. As a victim’s age increases by year, there is a 0.6% increase in the odds that their victimization was reported. If a physical assault occurred in a private location, there is about a 40% greater odds that the victim reported the victimization to the police.

Overall, this model indicates that assault victimizations where victims report higher levels of trauma are more likely to be reported to police compared to victimizations that result in less trauma, net of Black’s indicators of morphology and stratification from Black’s theory of law. The only other independent variables that remained significant were employment and age, suggesting that employed victims and older victims have a higher
likelihood of their assaults being reported to the police. Interestingly, when a physical assault occurred in a private location, it was more likely to be reported to the police than those that occurred in a public location.

Table 3. Logistic Regressions Predicting Police Reporting, N=6,473

<table>
<thead>
<tr>
<th></th>
<th>Black's Proposed Variables OR (S.E.)</th>
<th>Gottfredson &amp; Hindelang’s Proposed Variables OR (S.E.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trauma</td>
<td>1.04 (.01)**</td>
<td>1.02 (.01)*</td>
</tr>
<tr>
<td>Employed</td>
<td>1.17 (.08)*</td>
<td></td>
</tr>
<tr>
<td>Known Offender</td>
<td>0.85 (.09)</td>
<td></td>
</tr>
<tr>
<td>Some College Ed. Or More</td>
<td>1.04 (.08)</td>
<td></td>
</tr>
<tr>
<td>White non-Hispanic</td>
<td>0.89 (.08)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.01 (.00)*</td>
<td></td>
</tr>
<tr>
<td>Injury</td>
<td></td>
<td>1.28 (.10)**</td>
</tr>
<tr>
<td>Medical Care Received</td>
<td></td>
<td>2.06 (.12)*****</td>
</tr>
<tr>
<td>Weapon Present</td>
<td></td>
<td>2.08 (.09)*****</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Victim</td>
<td>1.06 (.08)</td>
<td>1.16 (.08)+</td>
</tr>
<tr>
<td>Private Location</td>
<td>1.40 (.08)**</td>
<td>1.26 (.08)****</td>
</tr>
</tbody>
</table>

Note: ***p<.001; **p<.01; *p<.05; +p<.10

Gottfredson and Hindelang’s Proposed Variables

Table 3 also provides the results for the logistic regression analyzing trauma and the variables proposed by Gottfredson and Hindelang in the crime seriousness model. The model was significant at the p<.001 level, and trauma was significant at the p<.05 level. Two of the crime seriousness variables, medical care received and weapon present, were
significant at the p<.001 level. Injury received was significant at the p<.01 level, along with location of the assault. Sex of the victim was only significant at the conservative p<.10 level.

This model suggests the crime seriousness framework is a strong framework as all indicators of seriousness, including trauma, all remained highly significant. Victims who experienced higher rates of trauma were significantly more likely to have their victimization reported to the police when compared to those who had lower rates of trauma. Crime seriousness variables of injury to the victim, medical care received, and having a weapon present during the assault all indicate greater likelihood of the physical assault victimization being reported to the police.

**Full Model**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>OR (S.E.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trauma</td>
<td>1.02 (.01)+</td>
</tr>
<tr>
<td>Employed</td>
<td>1.21 (.08)*</td>
</tr>
<tr>
<td>Known Offender</td>
<td>1.01 (.10)</td>
</tr>
<tr>
<td>Some College Ed. Or More</td>
<td>1.03 (.08)</td>
</tr>
<tr>
<td>White non-Hispanic</td>
<td>0.98 (.08)</td>
</tr>
<tr>
<td>Age</td>
<td>1.01 (.00)***</td>
</tr>
<tr>
<td>Injury</td>
<td>1.41 (.10)***</td>
</tr>
<tr>
<td>Medical Care Received</td>
<td>2.04 (.12)***</td>
</tr>
<tr>
<td>Weapon Present</td>
<td>2.12 (.09)***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>OR (S.E.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Victim</td>
<td>1.18 (.08)*</td>
</tr>
<tr>
<td>Private Location</td>
<td>1.21 (.09)</td>
</tr>
</tbody>
</table>

Note: ***p<.001; **p<.01; *p<.05; +p<.10
Results of the full model are presented in Table 4. The full model, which includes variables from the competing theories as well as perceptions of trauma, is significant at the p<.001 level. Out of the constructs suggested by Black, only employment (p<.05) and age (p<.001) are statistically significant. The crime seriousness variables retain their significance at the p<.001 level. The control variables are also significant, with sex and location being significant at p<.05. Perceptions of trauma by victims, however, decreased in significance after controlling for the other variables (p<.10).\(^1\)

Victimizations where higher levels of trauma were perceived were more likely to be reported than those where lower levels of trauma were perceived. However, after all variables were included, the significance of trauma dropped to the p<.10 level. If a victim was employed, there was about a 21% higher odds their victimization was reported to the police when compared to unemployed victims. With each year increase in age of the victim, there was a 1% greater odd that the physical assault would be reported to the police. Injured victims had a 40.8% higher odds of the victimization being reported compared to victims who were not injured during the assault. Compared to victims who did not receive medical care, those who did had approximately a 104% greater odds of their victimization being reported to the police. When a weapon was present during the assault, there was about a 112% higher odds of the assault being reported compared to victimizations in which the offender did not possess a weapon. Victims of physical assault who were female and those

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\(^1\) To determine if multicollinearity affected the results of the full model, VIF scores were examined. Because no VIF score was above 1, this indicates that multicollinearity does not compromise the validity of these results.
assaults that occurred in a private location also resulted in an increase in the odds of reporting by 18.4% and 21.1%, respectively.

Overall, this model suggests crime seriousness variables are significant in reporting victimization to the police, even more so than majority of Black’s behavior of law variables and the main independent variable of trauma.

**Discussion**

While violent crime victimization rates have decreased in the United States during the past two decades, the percentage of those victimizations that are reported to police has remained relatively constant with less than half being reported to police (Morgan and Kena, 2017). There are many factors that have been found to be related to police reporting behavior. For example, many victims choose not to call the police after a victimization because they feel it is an “embarrassing admission of one’s own vulnerability or culpability in the crime” (Tarling and Morris, 2010, p. 475). Other victims reported their victimization because they felt their crime was serious or they needed self-protection (Felson et al., 2002). Research using indicators of Black’s (1976) behavior of law framework are prevalent in the literature, as are studies that examine the effect of crime seriousness by using indicators of injury and weapon presence. However, little research has focused on how perceived trauma from a victimization affects reporting of the incident. This research helped fill this gap by examining the effect of victims’ perceptions of trauma net of these other important variables.

When looking specifically at trauma and its relationship to the variables suggested by Black (1976), trauma had a greater influence on police reporting than variables Black
suggested in *The Behavior of Law*. Trauma also remained significant in predicting the likelihood of reporting the physical assault to the police in the second model, which included indictors of seriousness suggested by Gottfredson and Hindelang (1979). However, in the full model that included all independent and control variables, perceptions of trauma remained significant at the $p<.10$ level only. Despite VIF scores indicating that multicollinearity was not a problem in this research, it is very likely that victims’ perceptions of trauma are strongly related to whether they were injured, required medical care, or faced armed offenders. As a result, when all variables are included in models predicting police notification, perceptions of trauma drop in significance, as they did here.

There was support for Black’s (1976) theory. He argued that individuals who were employed would be more likely to mobilize the law compared to those victims who were unemployed and results from this analysis support this. Age, another indicator of stratification, was also significant. Older victims were also more likely to have their victimization reported to the police compared to younger victims. This might be because as people get older, they are more aware of the criminal justice system and more willing to involve the police.

All of the crime seriousness variables increased the likelihood of the physical assault being reported to the police, supporting Gottfredson and Hindelang’s (1979) framework in its entirety. Existing literature (Felson et al., 2002; Akers and Kaukinen, 2008) also concluded that when an assault involved a weapon or an injury, the likelihood of the police being contacted increased.
The two control variables were also significant. The likelihood of reporting to the police increased when the victimization occurred in a private location. This is in line with Felson et al. (2002) who found when a domestic violence assault occurred in the victim’s home, the police were more likely to be called. Assault victimizations against females were also more likely to be reported compared to their male counterparts, which is also consistent with other research (Kaukinen, 2002; Posick and Singleton, 2014).

While this research has been one of the first attempts to examine the effects of victims’ perceptions of trauma, it is not without its limitations. The use of secondary data, although practical, is always a limitation because it prevents a researcher from asking their own questions. Because the NCVS is a survey that measures crime, respondents of the survey may not feel their victimization amounted to a crime, or victims may feel their assault is a personal matter (Thomson and Langley, 2004). While assessing the influence of trauma is important for police reporting, trauma is a sensitive topic and can be difficult for people to discuss. Thus, victims’ actual perceptions of trauma may be underreported here, especially if the victimization occurred earlier in the 6-month reference period used by the NCVS to measure victimizations.

Future research should take these limitations into consideration, as well as factor in the significance of trauma on police reporting and as a crime seriousness variable. Because trauma generally remained significant over the three models, researchers should look at specific types of trauma as defined in the literature as it relates to other consequences of victimization. Trauma experienced by victims of other types of crime, like sexual assault or stalking, should also be examined because perceived trauma may vary across crime.
Because trauma is a sensitive topic for individuals to discuss, future research should also address the gendered differences in perceived and exhibited trauma.

Lastly, there are policy implications from this research. Because trauma had a significant effect on police being notified of an assault, criminal justice agencies must be ready to ameliorate this trauma when victimizations come to their attention. These findings imply psychological or emotional support should be given to a victim following an assault, and treatment services be improved for assisting victims. There is great support for crime seriousness and reporting to the police, however, many crimes that involve a weapon or injury go unreported (Langton et al., 2012), meaning many victims may be dealing with trauma on their own.

Additional trauma-informed care policies can also be derived from the results of this study. Trauma-informed services are those where service delivery “is influenced by an understanding of the impact of…victimization on an individual’s life and development” (Elliott et al., 2005). Trauma-informed practices also consider that the amount of trauma a victim experiences will affect the types of services needed. Existing research indicates that trauma-informed care is well-suited for those recovering from drug addiction (Covington et al., 2008), as well as in the public health sphere (Corbin et al., 2010). The findings in this research indicate that because of the significance of trauma, policies should be created to properly address the needs of victims of crime. Future policy should also encourage agencies to treat all victims as though they have experienced a traumatic event.
REFERENCES


