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AN ANALYSIS OF CRIMINAL SITUATIONS: DECISION MAKING AND OTHER CONTEXTUAL FACTORS OF ROBBERY AND ASSAULT

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Philosophy

Kendra N. Bowen

Indiana University of Pennsylvania

May 2011

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Title: An Analysis of Criminal Situations: Decision Making and Other Contextual Factors of Robbery and Assault

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Research concerning the situational context in which crime occurs has taken a back seat to the study of criminality in criminological research. The purpose of this study was to examine the situational context of robbery, attempted robbery, assault, and avoided violence situations. Offenders from four western Pennsylvania county jail facilities were surveyed June through October 2010 concerning the contextual information in these types of situations in which they had been participants. This study examined situations nested within each respondent and compared these situations across respondents. This type of analysis was used to fully examine the personal (criminality) and situational factors that influence the studied situations. The personal level factors examined in this study were offender demographics, criminal history, hostile attribution bias and anger. The situational factors included decision making, anger and hostile attribution bias (in each situation), motive, victim selection, substance use, intent to harm, weaponry, and injury.

The results from this study indicate that the study of the situational context of crime can provide more opportunities for researchers to unveil the complexities of criminal behavior. Utilizing social information processing theory, this study found that

there were statistically significant differences in decision making in the studied situations. Additionally, hostile attribution bias and anger did play an important role in these situations, and more attention should be devoted to them. Lastly, past research has focused too narrowly on certain aspects of the situation (e.g., motive or victim selection), giving an incomplete depiction of the criminal situation. This research found that, by focusing on the situation in its entirety, more accurate information can be obtained as to which situational variables have a statistically significant relationship with robbery, attempted robbery, assault, and avoided violence situations.

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CHAPTER I

INTRODUCTION

Robbery and assault constitute the most frequently occurring violent crimes in the United States. In 2008, according to the Bureau of Justice's National Crime Victimization Survey (NCVS), there were 551,830 robberies and 4,100,850 assaults (Rand, 2009). When assaults were broken down by their level of seriousness, the Bureau of Justice found there were 3,472,600 simple assaults and 858,900 aggravated assaults. Overall, robbery and assault crimes constitute more than 95 percent of all violent crimes reported to the largest victimization survey in the United States. Similarly, of all violent crimes reported to the police in 2008, there were 441,855 robberies and 834,885 aggravated assaults (U.S. Department of Justice, Federal Bureau of Investigation, 2009), representing approximately 92 percent of all violent crimes reported to police. Despite the overwhelming frequency of both crimes, not much is known concerning the situational context in which they occur.

For a robbery or assault to occur, there are necessary conditions that must take place in the environment and immediate social setting (e.g., interaction between victim and offender). Sutherland (1947) suggested explanations of crime are either "historical" or "situational." Historical explanations focus on criminality; whereas, situational explanations examine the context in which the crime takes place. Although Sutherland suggested situational explanations could offer a better explanation of crime, the most studied theories of crime in the discipline of Criminology to date focus on historical explanations (e.g., strain, social learning, developmental). This focus in the discipline of Criminology is limited for several reasons.

First, criminality is not a sufficient condition for crime to occur (Birkbeck & Lafree, 1993; Hirschi & Gottfredson, 1986). Second, criminality does not explain why some situations become criminal while others do not, or thirdly, why individuals may respond and behave differently in similar situations (Birkbeck & Lafree; Jacobs & Wright, 1999). Fourth, theories of criminality do not explicate why individuals without implicated risk factors offend in certain situations (Jacobs & Wright). Lastly, these theories fail to take into account "why persons who are not determined to commit a crime one moment become determined to do so the next" (Jacobs & Wright, p. 50). With these limitations, criminality alone cannot adequately explain the complexity of criminal behavior.

To obtain a deeper understanding of violence and crime requires a closer examination of the criminal situation (Meier, Kennedy, & Sacco, 2001). The term "situation" generally refers to the immediate setting and circumstances in which a behavior takes place (see Birkbeck & LaFree, 1993). Examining situations allows the simultaneous analysis of the offender, victim, and the context of the circumstances that brought the offender and victim together (Meier et al.). Douglas and Waksler (1982) argued that the offender and victim are involved in a social encounter where the acts of one affect the other. According to research on victims and offenders, the victim and offender actors can interchange depending on the situation (Sampson & Lauritsen, 1990, 1994; Singer, 1981; von Hentig, 1948; Wolfgang, 1958). Studying situations can take this interchange into account. Situational analysis gives researchers the opportunity to study a complex phenomenon to obtain a comprehensive picture of what transpires during a criminal act.

In recent years, there has been a renewed interest in studying the situational components of crime (Horney, 2006). However, despite the renewed interest in situational components of criminal behavior, there has been a dearth of information regarding the context in which robbery and assault crimes take place. Of all the resources available to researchers, there has been dependence on official and unofficial crime statistics (e.g., Uniformed Crime Report (UCR) and the National Crime Victimization Survey (NCVS)) in explaining robbery and assaults. Although these statistics are important to study and provide valuable information, they do not provide a comprehensive picture of the criminal situation.

An additional limitation of the existing body of literature is the over-reliance on vignettes in situational analysis of criminal behavior. Vignettes are useful tools and can provide strong supplemental information to situational analysis; however, vignettes cannot capture true situational experiences of crime. Vignettes are "what ifs" for individuals to think about and try to place themselves in the situation. They are artificial environments that cannot examine the full complexities of real criminal situations that offenders experience. Therefore, vignettes alone cannot offer the most comprehensive and valid way to study criminal situations. The best way to capture the situational context of criminal behavior is to ask known offenders to report recent situations in which they have been involved. Ultimately, it is the offender who commits the crime in any situation. Therefore, the situation needs to be studied from the subjective perspective of the offender (Katz, 1988).

The limitations of official records and vignettes have left criminologists ill prepared to offer any real or clear understanding of the situational factors of crime. To

offer more valid explanations into the criminal situations of robbery and assault, researchers must focus attention on the setting and social meaning of these situations. Examining these crimes in a contextual framework allows researchers to examine the reality of criminal situations and permits a deeper understanding of the offender, victim, and the context in which the crimes take place (Meier et al., 2001), as well as a focus on the conditions that lead to crime.

Situational analysis permits examination of the full array of situational factors in which crime occurs. The decision making of the offender in a criminal act is crucial to understanding the criminal process. Cognitive processes within an individual must take place for any behavior to occur. Although criminologists have noted the importance of decision making in criminal activities, it is not well understood. For example, contemporary decision making theories in criminology (e.g., rational choice) fail to uncover the complex cognitive processes that take place in an individual in a criminal situation. Individuals do not make decisions in a "social vacuum"; rather, they are influenced by factors in the immediate social setting and past learning experiences (Morrison & O'Donnell, 1996).

Since the early 1990's, psychology has been using a reformulated social information processing theory (SIP) that explains the cognitive processes individuals go through to come to a decision and enact a behavioral response. Social information processing theory takes into account biologically limited capabilities and memories of past experiences of the individual, as well as the cues taken from the immediate social setting (Crick & Dodge, 1994). This theory has been used successfully to explain

aggression in children and adolescents in social situations (Losel, Bliesener, & Bender, 2007).

Concurrent with decision making, there are many other situational factors that must take place for a violent situation to occur. Motivation, the reason(s) someone decides to commit a criminal act (Jacobs & Wright, 1999), is central to understanding the situational context of crime, yet it is often assumed rather than thoroughly studied. Theories of crime assert motivation has to be present for crime to occur, yet many studies fail to ask offenders to report the motivations behind criminal behavior. Additionally, for a violent situation to occur, there has to be at least one target, or a victim. How does an offender pick a target? Other important situational factors (e.g., substance use, intent to harm, weaponry, and opponent injury) have been studied in past research, but typically in separate studies. These factors are important in understanding the situation and the escalation, or lack thereof, of physical violence.

Although researchers have suggested the situational context is imperative to understanding criminal behavior, it is a phenomenon that is difficult to study. Due to the inadequate attention given to the situational context of robbery and assault, the literature has only provided a partial picture of these crimes. To completely understand an individual's decision making processes and other situational factors in crime, the immediate social context in which crime occurs warrants further attention (Horney, 2006; Jacobs & Wright, 1999; Meier et al., 2001).

The Present Study

The purpose of this study was to examine the situational context of robbery, attempted robbery, assault, and avoided violence situations. To achieve this, the current study utilized quantitative research methods. Offenders from four western Pennsylvania county jail facilities were asked to report the contextual information in these types of situations in which they had been participants. This study examined situations nested within each respondent and compared these situations across respondents. This type of analysis was used to fully examine the personal (criminality) and situational factors that influence the studied situations. The personal or individual-level factors examined in this study were offender demographics, criminal history, hostile attribution bias and anger. The situational-level factors included decision making, anger and hostile attribution bias, motive, victim selection, substance use, intent to harm, weaponry, and injury.

Chapter 2 is a presentation of the literature concerning this topic. The literature review is divided into two sections. In the first section, the decision making theory that guided the study (SIP) is discussed. The theory's components and assertions are discussed, as well as past studies that have used the theory to explain violence and aggression. The second section of the literature review is dedicated to the review of the impact that other situational variables, particularly motive, victim selection, substance use and abuse, intent to harm, weaponry, and injury have on robberies and assaults. The third section of the literature review summarizes the limitations of past research, substantiating the need for a more comprehensive study to take place. This chapter concludes with a section dedicated to the statement of the research questions and hypotheses of this study.

Chapter 3 provides a discussion of the research methods that were used for this study. This chapter also provides a detailed description of the sampling strategy, research design, key variables, validity, survey administration, human subjects protection, strengths and weaknesses of the study, followed by the analysis plan. Chapter 4 presents the findings of the descriptive and statistical analyses for this study. Finally, Chapter 5 offers a discussion of the study and its results. Specifically, information concerning the limitations and strengths of the study are discussed. Then, a section is dedicated to the discussion of the decision making of offenders and the examination of the situational context of crime. This is followed by suggestions for future research and concluding thoughts.

CHAPTER II

LITERATURE REVIEW

To seriously examine the situational context of individual behavior takes an integrative approach, examining both individual and situational factors of crime in one comprehensive study. The current study examined both the individual and situational-level factors in robbery, attempted robbery, assault, and avoided violence situations. This literature review begins with an overview of the situational approach, and then proceeds with a discussion of decision making. This discussion includes the theory, social information processing theory (SIP), which was used to guide the present study, as well as empirical research that has been conducted on using the theory. Included in the decision making section is information linking the theory to adults and violent crime. Then, there is a section devoted to this researcher's decision to move away from the rational choice perspective of decision making. Next, literature concerning other situational variables related to robbery and assault is reviewed. Specifically, the situational variables discussed are motive, victim selection, substance use, intent to harm, weaponry, and injury. After the literature review concerning situational variables, the researcher highlights the important limitations of past research to emphasize the need for the current study. This chapter concludes with the listing of this study's research questions and hypotheses.

Situational Approach

All human behavior takes place in a situational context (Birkbeck & LaFree, 1993). Situational analysis permits examination of both the individual-level factors of an offender (criminality) and victim involved in the situation and the situational-level factors

of the immediate setting that brought the offender and victim together (context) (Horney, 2006; Meier et al., 2001). Individual-level factors are the with-in person factors (e.g., age, race, sex, and socio-economic status) and have been studied extensively in criminology (Sampson & Lauritsen, 1994). These individual-level factors are the most studied because they are the easiest to obtain. This information is usually available in all surveys, interviews, and official documents such as police reports. Conversely, situational-level factors are those factors having immediate influence on the initiation or outcome of criminal and high risk situations. Situational factors are much more difficult and less obvious to analyze (Sampson & Lauritsen).

The present study focused on violent situations, specifically, robbery and assault. To thoroughly examine offenders who commit crime and the situational context in which these crimes occur, the individual and situational variables in criminal situations need to be compared to similar high risk situations (Horney, 2006) to study the complexity of human behavior. These situations can be referred to as "avoided violence" situations. Avoided violence situations are similar to violent situations, in that the risk of violence occurring is high, but actual violence is avoided. There is a growing body of research identifying the importance of collecting both violent and avoided violence situations; however, both situations are not collected often (Horney, 2001; Meier et al., 2001; Sampson & Lauritsen, 1994; Wells & Horney, 2002).

To completely understand crime, one must study a wide range of situations that individuals experience to examine the differences across situations. By collecting data exclusively on violent situations, one can only examine conditional effects, or conditions under which criminal behaviors are likely to occur. However, with the inclusion of

avoided violence situations, unconditional effects can be examined (Sampson & Lauritsen, 1994). Collection of both types of situations gives researchers an opportunity to explore the situational causes of criminal behavior.

Collection of both violent and avoided violence situations may provide critical information on patterns of individual behaviors across multiple situations, the escalation of violence, and how threats and attempts turn into completed crimes (Horney, 2001). They may also provide insight into the importance of opponent behavior and the social conditions of the immediate social setting. Collecting the same contextual information in both violent and avoided violence situations may also provide information on variations across situations that are causally related to the probability that violence will occur (Sampson & Lauritsen). Obtaining the subjective perceptions of offenders in these situations allows a deeper understanding of the decision making processes of offenders in criminal situations.

Decision Making

Human behavior is complex. Before a behavior can occur in any situation, a unique set of cognitive processes have to take place within an individual. It has been a major challenge to empirically identify decision making strategies on an individual level since the underlying cognitive processes to arrive at a decision are not readily observable (Glockner & Betsch, 2008). Over the years, researchers in psychology have attempted to articulate this process through decision making theories of aggression, deviance, and criminal behavior. To be useful, these decision making theories should be inclusive, yet flexible, and account for time-dependent processes (Tuck & Riley, 1986). It is also necessary to understand the perspective of the individuals making the decision, the

individuals' interpretations of the situations they encounter, and their goals in these situations (Katz, 1988; Jacobs & Wright, 1999).

Crick and Dodge's (1994) reformulated social information-processing (SIP) theory holds promise for understanding adult decision making in a situational context. The theory is a social cognitive approach based on the assumption people "come to a social situation with a set of biologically limited capabilities and a database of memories of past experiences" (Crick & Dodge, p.76). In addition to bringing these capabilities and memories with them to a situation, people also take cues from the person(s) and their immediate environment in each situation. Social information processing theory pertains to the steps individuals take to arrive at a judgment during these situations and what takes place during these steps (Ybarra, 2002).

Social information processing theory is broadly concerned with the mental operations used to create a behavioral response during social interaction situations (Crick & Dodge, 1994). These operations include attention to social cues, which are selective to each individual, intent characteristics, goal generation, accessing scripts of past behavior from memory, decision making, and enacting the decision through behavioral responses (Zelli, Dodge, Laird, & Lochman, 1999; Dodge & Rabiner, 2004). Social information processing theory suggests all individuals go through six sequential processing steps, which are relatively independent of each other, during their processing of a social situation to come to a decision (See Figure 1). The first steps of the processing involve cognitions about input; whereas, the later steps involve cognitions about output (Lansford et al., 2006).

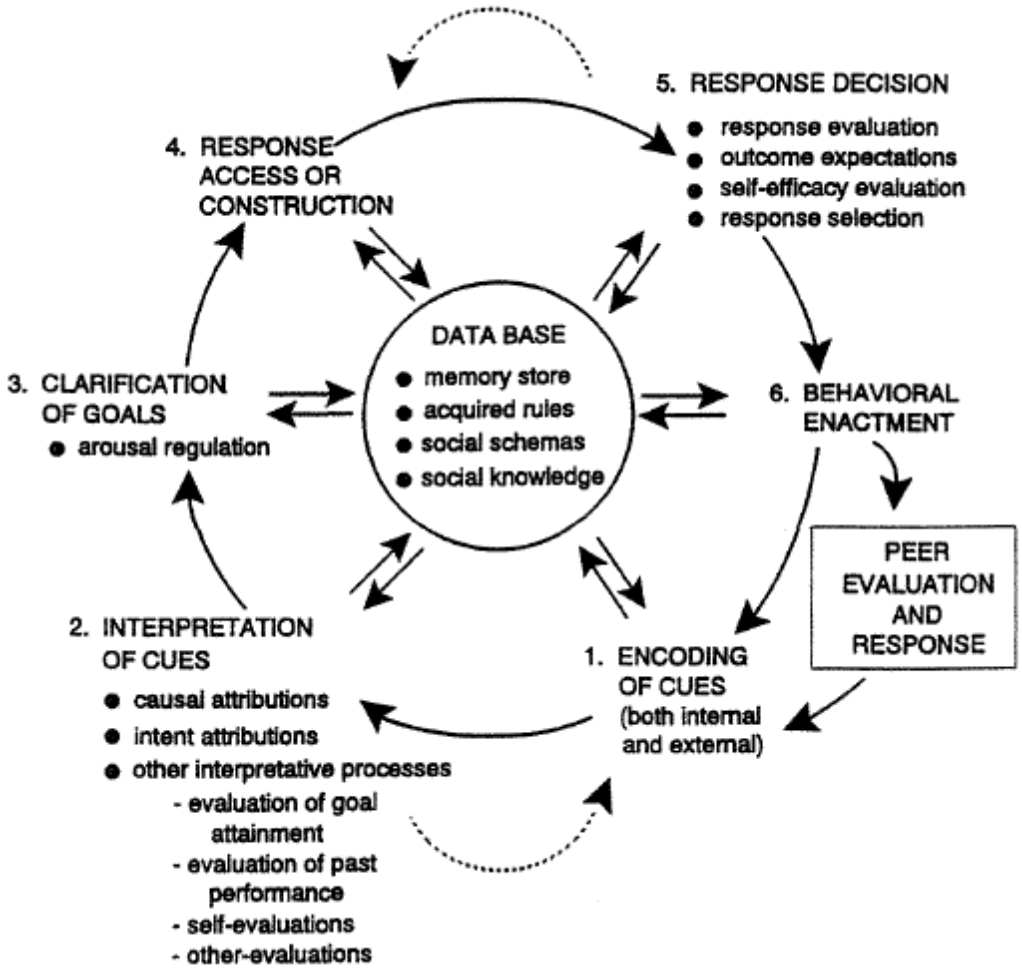

Figure 1. Reformulated Social Information Processing Theory. Adapted from "A Review and Reformulation of Social Information-Processing Mechanisms in Children's Social Adjustment" by N. R. Crick and K. A. Dodge, 1994, Psychological Bulletin, 115(1), p. 76. Copyright 1994 by the American Psychological Association, Inc.

Specifically, the first step of social information processing theory is the encoding of cues in a situation. These cues are both internal and external (Crick & Dodge, 1994). Internal cues are those the person brings with them into the situation, while external cues refer to those taken from the immediate situation (Lansford et al., 2006). For example, any prior knowledge or with-in person trait variables, like biases and hostile attributions to certain behaviors, constitute internal cues. Any new cue formed during the situation is an external cue. For example, any non-verbal or verbal communication another person

enacts in a situation can be an external cue, because it is a cue taken from the immediate situational context.

The second step, interpretation, may consist of one or more of the following: (a) a filtered, cognitive depiction of the situational cues assembled in long-term memory; (b) a causal analysis of events which have transpired during the situation (includes an assessment of goal achievement or lack thereof); (c) inferences about other individuals' intent and perspectives regarding the situation; (d) goal assessment for previous (if any) situations; (e) evaluation of the accuracy of previous outcome expectations and past performance; and (f) self evaluation of previous and current exchanges, and the evaluation of the individual(s) in a situation (Crick & Dodge, 1994). These processes are independent of each other and may be influenced by information in the individual's "database" stored in memory. The database is a storage unit for all earlier experiences. These experiences are stored in the form of associations, memories, schemata, scripts, and social knowledge (Crick & Dodge; Orobio de Castro, 2004). During this second step, the motive/intent of others' behaviors is interpreted (Lansford et al., 2006). This interpretational process may result in changes or revisions to the individual's database (Crick & Dodge), or changes in the social schemata, scripts, and social knowledge of the interpreter.

The third step in social information processing theory is the clarification of goals in a situation. "Goals are focused arousal states which function as orientations toward producing (or wanting to produce) particular outcomes" (Crick & Dodge, 1994, p.76). Crick and Dodge state that individuals bring goals to a social situation, but they can

revise or construct new goals in response to immediate social stimuli taking place in the situation.

During step four, individuals access plausible responses from memory or construct new behaviors in response to the immediate social situation. Responses in memory are mental representations of the individual's behavioral responses stored in long term memory and integrated with other memories into a general mental structure. These responses may or may not be triggered by the selected goal (Crick & Dodge, 1994).

Step five is hypothesized to be the response decision. An individual evaluates the previous responses (can be accessed from memory or constructed) and selects the most positively evaluated response to enact during the current social interaction. This decision can be made based on a number of factors, including: (a) the expected outcomes based on past experiences, (b) the degree of confidence the individual has in his or her ability to enact the specific response (self-efficacy), and (c) an evaluation of the appropriateness of the response (response evaluation). The sixth, and last, step is the enactment of such response through a given behavior (Crick & Dodge, 1994). Individuals initiate the behavior which seems most appropriate to obtain their goal in the situation (Losel et al., 2007).

Each event or decision can be conceptualized as a constant recycling of the six steps. Due to the complexity of social situations, individuals are continually engaged in this process. In the reformulated theory, it is proposed that "even though processing is simultaneous for each of these steps, the path from a particular stimulus (such as a single provocation by a peer) to a behavior response (such as retaliation) logically follows a

sequence of steps" (Crick & Dodge, 1994, p.77). It is suggested that individuals progress through the six steps automatically and with little reflection (Losel et al., 2007). Emotions are hypothesized to take place in each sequential step, and therefore play a vital role in the mental operations of an individual in each decision (Crick & Dodge; Dodge, 1991; Dodge & Rabiner, 2004). Anger and hostile attribution bias is an emotion and perception hypothesized to take place at different steps of the model to increase the chances of aggressive and violent behavior. However, the theory does not articulate the specific role these factors play (see Dodge & Crick, 1994).

The theory does suggest that deficits in one or more of the steps can result in socially unacceptable behavior in a situation (Losel et al., 2007). Researchers have found atypical encoding, socially unacceptable goal obtainment, negative experiences stored in database schemata, unconstructive generation of responses, and unconstructive response evaluation can result in aggressive behavior (Orobio de Castro, 2004; Dodge, 1980, 1993; Dodge, Lochman, Harnish, Bates, & Pettit, 1997). For example during the first step, encoding problems are the result of either an abnormal awareness of the environment or neglecting to take in non-hostile cues from the environment (Crick & Dodge, 1996; Lansford et al., 2006). Studies have found that aggressive children and adolescents focus on cues that are more aggressively oriented (Gouze, 1987), and they remember more about aggression-related details regarding past social situations (e.g., Dodge & Frame, 1982), increasing the likelihood of aggressive behavior.

At the second stage (interpretation), previous research has shown that aggressive children have a tendency to make hostile attributions, or to believe others have negative intents, even in non-hostile environments (Zelli et al., 1999; Lansford et al., 2006). These

children may be less apt to recognize the true intentions and motivations of others and may perceive others as being hostile (Losel et al., 2007). Individuals high in trait hostility may also possess a schema which results in a negative processing of social information (Vranceanu, Gallo, & Bogart, 2006). Hostile schemata and scripts result in a higher probability of violent behavior in social situations (Crick & Dodge, 1994), particularly in emotionally arousing situations (Lemerise & Arsenio, 2000).

At step three, it is assumed that aggressive individuals select more intrapersonal, rather than interpersonal, goals in a situation (Lansford et al., 2006). Intrapersonal, or instrumental, goals are self-serving and promote individual gains (Crick & Dodge, 1994; Lansford et al.; Losel et al., 2007). These intrapersonal goals tend to be more egocentric and antisocial. These individuals tend to dominate an interaction and try to maximize their own gains at the risk of injury to others (Losel et al.).

At the fourth stage, previous research has found aggressive children and adolescents generate fewer behavioral responses compared to non-aggressive individuals in social situations (Crick & Dodge, 1996, Lansford et al., 2006) and produce more hostile and aggressive response alternatives (Bliesener & Losel, 2001). Aggressive youth have also been found to have more individualistic and anti-social goals. These youth are more interested in self utility and domination at the expense of others and are not interested in forming relationships with individuals (Losel et al., 2007).

After the possible behavioral responses are generated, during the fifth stage, previous research has found that these youth positively evaluate the likely intrapersonal and instrumental outcomes of aggressive behaviors in a situation (Crick & Dodge, 1996; Lansford et al., 2006). Aggressive individuals tend to look at short-term consequences

when evaluating possible responses (Gottredson & Hirschi, 1990; Losel et al., 2007). They expect positive consequences out of aggressive responses (Losel et al.); therefore, they enact (sixth stage) the aggressive response(s) (Lansford et al.). This behavioral response seems to be most associated with their goals in step three.

Research has shown aggressive children exhibit these processing deficiencies across situations. Several longitudinal studies have found support for these patterns of deviant processing leading to aggressive responses across development (Zelli et al., 1999). However, the majority of this longitudinal and cross-sectional research on social information processing theory has been focused on children and adolescents (see Crick & Dodge, 1996; Crozier et al., 2008; Losel, et al., 2007; Quiggle, Garber, Panak, & Dodge, 1992; Shahinfar, Kupersmidt, & Matz, 2001; Zelli et al.). To date, this model has been effective in accounting for child and adolescent aggression (e.g., Dodge, Petit, Bates, & Valente, 1995; Fontaine, Burks, & Dodge, 2002).

There have been a few studies testing social information processing with late adolescent and adult aggression and violence. The use of vignettes to capture individuals' social information processing has been widely used and is the standard to test the theory (see Crozier et al., 2008**;** Lansford et al., 2006; Shahinfar et al., 2001; Vranceanu et al., 2006). Crozier et al. investigated 585 adolescents over a three year period, from age 16 to 18 years old. This was the first study to examine the relationship between processing patterns and antisocial behavior in late adolescent individuals. Antisocial behavior was assessed through a mailed behavioral questionnaire during each of the three years. Approximately six months after the first mailed questionnaire, the researchers assessed the respondents' social information processing by using six videotaped vignettes in a

laboratory setting. The researchers found deviant social information processing throughout every step predicted antisocial behavior and proactive aggression. The study also found social information processing measures predicted future antisocial behavior, even when controlling for past behavior(s).

Losel and colleagues (2007) conducted a prospective design on a sample of 102 adolescent boys in Germany. The researchers studied the boys in seventh and eighth grade, and again in ninth and tenth grade. Using vignettes to measure the steps of SIP, the researchers found SIP variables explained approximately 20 to 34 percent of the individuals' differences in aggression after 20 months. The vignettes presented respondents with conflicts that could trigger more or less aggressive-prone cognitive schemata. The researchers categorized answers as attribution of hostility, aggressive-egocentric, and aggressive-impulsive. The retrieval of aggressive-impulsive response schemata seemed to be the central importance of the SIP model in predicting aggressive and delinquent acts. Individuals rated as being aggressive-impulsive "frequently fought and quarreled with others" and "produced more aggressive-impulsive responses in the conflict scenarios" (p.338). These individuals also evaluated aggressive behavior as being a successful response in social contexts.

In one of the largest studies to date, a 12-year prospective study was conducted by Lansford et al. (2006) to assess social information processing on a community sample of 576 children in kindergarten, with follow-up assessments in grades 3, 8, and 11. Using video vignettes to assess social information processing of the respondents at each point, the researchers found SIP problems in eighth grade predicted externalizing behaviors in 11^{th} grade. Externalizing behaviors were measured by a 113-item Child Behavior

Checklist (which included measures of delinquency and aggression) completed by the children's mothers. Boys were more likely than girls to experience SIP problems.

The previous studies reviewed have used one tool to measure social information processing: vignettes. Although vignettes, or scenarios, are used as a standard for measuring social information processing and provide important information, self-report is a better strategy to utilize. Using vignettes, the respondent has to "pretend" he/she is part of a situation and decide what his/her actions would be if a part of the situation. These individuals may or may not be able to relate to the vignettes used to measure social information processing. Using the vignettes, these studies examined whether the social information processing of children and adolescents was normal or deficient. The researchers then used scales measuring past aggression or deviance to test whether SIP processing correlated with these individuals' aggression or deviance. A different and more direct way to measure social information processing would be to ask respondents about recent aggressive and non-aggressive situations that have taken place in their lives.

Similar to aggressive children and adolescents, adults who have committed violent crime have expressed deviant interpretations of social situations. Topalli (2005) conducted a quasi-experiment using videotaped Point Light Displays (PLD) to compare the extent offenders and non-offenders perceive situations differently. The study was composed of three groups: known offenders, individuals matched on demographics of the offender group, and college students. Known offenders perceived the PLD's to be more aggressive than college students and individuals matched to the offenders based on demographics. The offender group and the group demographically matched to the offenders similarly perceived crimes taking place in the PLD's at 72 percent and 69

percent of the time compared to college students perceiving a crime taking place 12 percent of the time. The study demonstrated the importance of perceptions in social situations. This study was significant because it brought social cognitive decision making into the criminal justice literature, but it fell short because it did not ask offenders to relate their decision making to crimes they had committed. It also failed to ask about the process of the decision making (Topalli).

Developmentally, as individuals age, their experiences with social situations increase, as well as their social knowledge (Crick & Dodge, 1994). Hypothetically, adults have more in their database, and each processing step will be more advanced than in children, thereby increasing speed and efficiency in the processing of information (Orobio de Castro, 2004; Crick & Dodge). With age, it is also hypothesized there is an increased rigidity of already-acquired processing patterns and tendencies (Crick & Dodge; Huesmann & Eron, 1989). For an adult, this hypothesis suggests maladaptive processing and behaviors can become routinized and resistant to change (Crick & Dodge). Studies utilizing adult samples are needed to test these hypotheses.

Linking social information processing theory to violent crime has been extremely difficult due to an inadequate exploration of adult respondents. There are unexplored topics, specifically relating social information processing theory and violent crime that warrant attention. First, to date there has been an absence of criminological studies using SIP to understand criminal decision making. Due to prior literature finding such strong support for the theory in regards to child and adolescent aggressive and antisocial behavior, linking the theory to adult decision making processes is needed. Second, past research studies have used vignettes to measure social information processing of

individuals. Although the use of vignettes is acceptable, it does not directly measure SIP and an individual's actual behavior. Asking adults about violent situations in which they have been involved more directly measures social information processing theory. Third, decision making and situational factors need to be examined to provide a more holistic framework to the study of robbery and aggravated assaults. As the decision making literature has shown, and the rest of the literature review reveals, researchers have not studied these factors enough when examining violent crime.

The Decision to Move Away from Rational Choice

As mentioned previously, social information processing theory is a psychological theory that, until recently, has not crossed disciplinary lines to criminology. Rather, rational choice perspective has dominated the decision making research in Criminology. Rational choice perspective investigates the decision making process of the offender (Beauregard & Leclerc, 2007). Brought into the criminological literature by Cornish and Clarke, the perspective draws from an economic principle indicating people make rational decisions based on weighing costs and benefits (1986). Offenders, who are "reasoning offenders," choose ultimately to maximize their profits or benefits and minimize their costs or losses (Clarke & Cornish, 1985; Cornish & Clarke). There are a range of factors which influence the individual's costs and benefits of crime (Cullen & Agnew, 2006).

Although attractive to many researchers in the criminology discipline, this does not mean it is a valid perspective applicable to all criminal offenses (Boudon, 1998). Clarke and Cornish's (1985) rational choice perspective is rather simplistic in nature (Haan & Vos, 2003), creating an over-rational portrayal of criminals and a very one-

dimensional understanding of choice (Hochstetler, 2010). This, in turn, has created many limitations of rational choice perspective concerning offenders' decision making.

Haan and Vos (2003) stated that rational choice perspective was too narrow and acknowledged individuals' actions were not the sole product of intention, but rather saw decision making as a social product. Rational choice perspective places its emphasis on the cost benefits analysis (step five of the social information processing theory); whereas, Crick and Dodge's social information processing theory is interested in the specific processing and judgment of events in social situations which lead to violence. Rational choice perspective also has little to say about the specifics of decision making processes offenders go through in making choices to commit illegal acts (Tuck & Riley, 1986).

Secondly, Haan and Vos (2003) suggested rational choice perspective does not clarify the offenders' experiences before and during the offenses committed. When this is neglected, opportunities to explain motive and thought processes are diminished. Rational choice assumes motivation but does not account for motivation (Jacobs & Wright, 1999). The third step, goal clarification, of social information processing theory overcomes this shortcoming of rational choice.

Third, objective assessments of situations are difficult when rationality is bounded (Walsh, 1986), or simply does not exist (Jacobs & Wright, 1999). Copious and objective responses may not be available due to the limited capabilities of individuals (Johnson & Payne, 1986). Offender's alternatives or choices are subjective; therefore, a rational, objective assessment of possible alternatives to committing a crime may not exist. This is a limitation of rational choice perspective. There is a fundamental discrepancy between offenders' accounts (reasons) of criminal events and the rational choice perspective

(Turner, 1992). Akers (1990) suggested rationality is limited by a lack of information, by offenders' values, and other "non-rational" influences, including situational influences.

The decision making process is quite complex, and rational choice perspective does not offer in-depth analysis or attention to important aspects of the decision making process. Due to its limited scope, rational choice is not as important as the actual decision making processes individuals go through to make a decision, and what influences those processes. Offenders' perceptions of the costs and benefits of crime is one small piece of a complex cognitive process (see Hochstetler, 2010). Since choices and preferences for each individual exists, they should be examined and should not be detached from situational and social contexts (Ahzebstadtm, 2009). Social information processing theory does this by measuring decision making through examining cognitive processes within a social context. The following section examines the literature concerning situational variables of robbery and aggravated assault.

Other Situational Variables

The purpose of this study was to examine the decision making of offenders, along with the other situational factors in robbery and assault situations. Situational factors surrounding criminal activity are important to study and can impact the decision making of an offender, increasing the likelihood of a crime occurring (Pizarro, 2008). Below is a review of the literature as it pertains to situational variables in robbery and assault. The variables included in this literature review concern offender motive(s), victim selection, substance use, intent to harm, weaponry, and injury.

Motive

Motive is central to understanding the causes of criminal behavior in the situational context (Jacobs & Wright, 1999). The crimes of robbery and assault cannot occur in the absence of motivation (Jacobs & Wright; Bennett & Brookman, 2008). Motives are unique to the individual and to the situation. Operationally defined, motive refers to the reason(s) that causes the offender to act out against the victim(s) (see Pizarro, 2008). Motives can be grouped into two categories: instrumental and expressive. Offenders with instrumental motives commit crime to achieve specific objects (e.g., cash, drugs). Offenders tend to have instrumental motives when they commit a crime for an explicit, future goal (Miethe & Regoeczi, 2004). Conversely, expressive motives are based on the offenders' emotions and lack a goal of material gain.

Research has shown mixed results regarding the motives of robbery and assault offenders, with assaults having a wider array of motives than robberies. The primary motive cited in the literature for robbery is instrumental; whereas, expressive motives have been the leading reasons for assaults. However, newer research has found both crimes can have instrumental and expressive motives. Below is the review of the robbery and assault literature as it pertains to motives. The robbery literature concerning motives is discussed first, followed by the smaller amount of literature concerning assault motives.

Research has recognized two types of robbery: street and commercial. These types of robbery can be committed by a solo offender or multiple offenders (referred to as group). Many studies do not differentiate between the type of robbery nor the number of offenders (solo or group); however, the research that does distinguish between the types

has found similar motives. The robbery literature has identified five main motives, regardless of type and number of offenders: money, drugs, the "buzz" or thrill of it, street justice, and toughness or status. These motives are not mutually exclusive.

Researchers interviewing convicted robbers have found the majority of these offenders were driven by instrumental motives, such as obtaining money and buying drugs (Feeney, 1986; Gabor et al., 1987; MacDonald, 1975). Money has been found to be the primary motive for robbery (Gill, 2001), regardless of the robbery type. Jacobs and Wright (1999) explored the decision making processes of active armed robbers, using a snowball sample of 86 offenders to understand how respondents moved from an unmotivated to a motivated state to commit the crime of armed robbery. Using semi-structured interviews, the researchers found the majority of the individuals in the sample were motivated by a need for cash. The offenders perceived they were in need of money, and robbery was a means to obtain money. Similarly, Petronsino and Brensilber (2003) conducted structured interviews with 28 offenders convicted of robbing convenience stores to understand their motives and decision making. Money was the primary motive for the majority (19) of the offenders.

Studies have found that robbers also need the money to buy drugs. Brookman, Mullins, Bennett, and Wright (2007) examined motivations using interviews of males and females in the United Kingdom. The researchers' sample consisted of 40 men who committed a total of 40 robbery incidences. Men identified their primary motive for robbery as the acquisition of cash or items to sell for drugs. These individuals saw "life as a party" and needed the money to sustain their lifestyles. Alarid, Burton, and Hochstetler (2009) found similar results when they compared solo and group robbery offenders in a

large county jail. Specifically, they found that group robbers identified the need for money to party and buy drugs as the primary motivation for committing the crime.

Other research has shown individuals commit robbery for more expressive reasons. Brookman et al.'s (2007) study revealed some of the respondents were motivated by the adventure or "buzz" of committing a robbery. Similarly, out of the 28 convicted convenience store robbers interviewed, Petronsino & Brensilber (2003) found three (3) respondents who suggested robbery served their emotional needs, consistent with findings from Feeney (1986) and Johnston (1978). These individuals said it was the "thrill," or "rush," which was their primary motive for committing the robbery. The appeal involves the power and adrenaline rush the offender gets from committing robbery. Researchers have found this as a secondary motivation as well (Alarid et al., 2009; Bennett & Brookman, 2008).

Street justice also has been found to be a motive in robberies (Jacobs, 2000; Jacobs & Wright, 2006; Topalli, Wright, & Fornango, 2002; Wright & Decker, 1997). In this respect, the robbery was driven by a need to collect debts, to settle drug-related disputes, or as a form of payback. Victims of street robbery, who actively engage in criminal activity, do not feel comfortable going to the police and therefore resort to rectifying the wrong with violence (Brookman et al., 2007). Brookman et al. found two subcategories emerged within the street justice group of robberies: robbery as debt collection and robbery in response to a status challenge. Individuals who committed robbery as a form of debt collection said the opponent owed them, their family, or their friends money. The status challenge robbery evolved out of a direct interaction with the

opponent and the need to resolve the challenge through robbery or assault. The street justice category emerged out of prior relations with the opponent.

Another motive discussed in the literature is related to gaining status or looking tough. On the street, reputation is critical (Topalli et al., 2002). Many group robbers in Alarid et al.'s (2009) study of jailed offenders identified wanting to fit in or gain status among the co-offenders as a motive. Similarly, Barker, Geraghty, Webb, and Kay (1993) connected street robbery motivations with a desire to appear tough in front of friends and to gain status. This was also a motive for the active offenders interviewed by Jacobs and Wright (2006). These offenders felt retaliatory robberies were needed when someone caused them to lose "face" or "status." Thus, the offender must go after that person to maintain their own status.

As mentioned above, the assault literature has devoted less attention to offender motivation than the robbery literature. The assault situation literature has placed significant importance on whether domestic assaults are different from general assaults and on the creation of partner abuse typologies. Although these subject areas are of importance, there has been an overall lack of emphasis on motives. When goals or motives are mentioned, it is to say that offenders do have goals/motives, but the literature lacks in-depth discussions about specific information related to offender motivation. The motives reported are primarily expressive. There are a few studies that have focused on the motives of all types of assaults, and these studies are discussed below.

The domestic assault literature has centered its focus on control as a motive. This motive has been supported by numerous studies (see Archer, 1994, 2000; Browne, 1987; Dobash & Dobash, 1979; Dutton, 1988; Fagan & Browne, 1994; Felson & Outlaw, 2007;

Koss, 1994; Websdale, 1999). Specifically, individuals may use violence to establish or maintain power over their partner or significant other (Felson & Outlaw; Smith, 1990). Although domestic assault literature has suggested control as a motive, it is limited empirically due to the lack of research in this area. This could be due to the significance placed on batterer typologies. Felson and Outlaw suggested this limitation could be due to the difficulty in measuring motivation.

The general assault literature has suggested many other motives for assault. Upon completion of semi-structured interviews with 25 adult male assault offenders incarcerated in Australia, Chambers, Ward, Eccleston, and Brown (2009) created five pathway models of assault from detailed questions concerning violent behavior development, violence supportive cognition, anger, violent event situational factors, contextual factors, the interpersonal interaction, and motivating factors for violent behavior. The researchers found the offenders often expressed multiple motives, and these motives could change during the course of the offense. The motives of defense, reputation, revenge, and retribution were disclosed by the offenders as reasons for the assaults. These motives were most often influenced by precipitating events. The researchers differentiated between revenge and retribution since these words are similar. Revenge was related to the punishment of the victim due to a personal wrong; whereas retribution was related to punishment for the violation of societal norms. The precipitating event did not have to be directed towards the offender, but could have been towards other individuals, such as women or children. These motives are similar to some of the motives found in the robbery literature.

The motives of reputation and revenge reported in the Chambers et al. (2009) study are similar to motivations in gang-related assaults. Motives for assaults by gang members can include initiation, revenge, or status enhancement (Bjerregaard, 2010; Spano, Freilich, & Bolland, 2008). Spano et al. argued that gang assaults are either a result of proactive and retaliatory attacks from rival gangs or from one's own gang due to hazing, initiation, or punishment for breaking the codes or rules (Padilla, 1995) of the gang.

More recent research has concluded that robbery and assault may have multiple motives, including both instrumental and expressive motives. However, there has been modest research examining robbery and assault situations in the same study. One such study suggested motives for both robbery and assault may be similar. Using the same sample of offenders and methods as Brookman et al.'s (2007) robbery study, Bennett and Brookman (2008) examined motivations for robbery and assault offenses. Similar to robbery, instrumental motives for assaults were the need to achieve specific objectives. Whereas for robbery the need was to obtain cash, assault offenders wanted to hurt the victim while avoiding injury to oneself in the situation. This was referred to as 'winning the fight' (Bennett & Brookman). Expressions of anger were also seen as motives in both offenses. These individuals felt it was difficult to explain why they were violent. The incidences of assault driven by anger were commonly associated with alcohol use. Another motivation revealed by participants, for both types of offenses, was status enhancement and honor. Robberies and assaults on the streets, the offenders felt, enhanced individuals' status and honor on the streets and in their respective groups (Bennett & Bookman). The last motivation discussed for both offenses was informal

justice (street justice). The robbery was a form of debt collection, and assaults were perceived as righting a wrong. Sometimes the robbery grew out of the assault to provide a bonus to the pay back or to add an additional punishment to the victim (Bennett & Brookman).

Summary of the literature concerning motives. There are several limitations in the motive literature concerning robbery and assault. Motives have been studied in the robbery literature, but many studies have used the same sample of offenders (i.e., Wright, Brookman, & Bennett ,2006; Brookman et al., 2007; Bennett & Brookman, 2008). These studies have failed to take into account the possibility of an offender's gang affiliations. According to victim assessments, anywhere from 10 to 45 percent of robberies are committed by gang members (Harrell, 2005). However, many studies of street and commercial robbery do not include information concerning gang involvement, nor do researchers examine the correlation between motives and gang affiliation. Due to the potentially high percentage of robberies committed by gang members, this information is important to examine, especially given the specific motives robbery offenders have disclosed in previous studies.

Another important limitation to prior robbery literature concerning offender motivation is mixed. Older studies have suggested robbery motivations are instrumental. However, newer literature suggests robbery offenders express both instrumental and expressive motives. One reason for these inconsistent results may be that many studies have not asked for multiple motives; rather they have limited their focus to one. Additionally, other studies have not asked offenders about the motive(s) of their crime, but rather assumed money to be the primary motivating factor for committing robbery.

The assault literature concerning motivations is truly lacking. To date, there has been no systematic examination of the individual differences of offenders who commit assault (Chambers et al., 2009). The results of Bennett and Brookman (2008) warrant further examination. Studying the motive(s) of robbery and assault situations may provide a better examination of the similarities and differences between the situations. Also, there is some research that suggests robbery and assault can take place in the same situation (Bennett & Brookman, 2008; Brookman et al., 2007; Topalli et al., 2002). This study attempts to shed light into this understudied situational variable.

Victim Selection

By their very nature, all robbery and assault crimes have a victim. Street robbery and assaults are interpersonal events, requiring an interaction to take place between the victim and offender (Porter & Alison, 2006). Some victimologists suggest crimes should be viewed and analyzed as a process of interactions between (at least) two parties to explain why a particular offender harmed a particular victim at a particular time and place (Karmen, 1990, p.103). Fattah (2004) suggested that victim characteristics and behaviors are important situational variables that need to be researched.

Victim selection is a very important situational factor to consider when examining robbery and assault. Victim selection refers to the process that takes place when an offender chooses a particular target, also referred to as victim. This process includes the who, what, when, and where of choosing a target. Theoretically, there are an abundance of targets for offenders to choose from, so what makes certain targets stand out to the offender? This is critical to understanding the complexities of crime; however, not much attention has been devoted to this topic. The victimization literature has focused on

explaining victimization through the victims' lifestyles. These lifestyles are measured by victimization surveys of victims. These measures are important, but crimes are committed by offenders, and they are not always aware of the victims' lifestyles. Therefore, it is important to study offenders' perceptions of victims during a violent situation and what makes a person a "suitable" target.

As the literature review indicates, there is an absence of studies that have examined the complete nature of the process of victim selection. Instead, literature has gone in a number of directions. Recent robbery literature has suggested a process to victim selection; however, these studies have not completely detailed all aspects of who the victim(s) is, what makes the victim(s) attractive, where individuals come into contact with victims, and when this contact takes place. Other, more generalized studies have examined individual components of the victim selection process. These studies have focused on a variety of topics including: characteristics of the target and victim offender relationship (who), characteristics of the immediate environment or social context of the crime (where), the distance traveled to the crime by the offender (where), the day and time of the crime (when), or a combination of one or more of these. These inconsistencies in measurement have made it extremely difficult to come to a valid conclusion about victim selection. The following section reviews the literature that has been conducted on victim selection. The robbery victim selection literature is presented first, followed by a review of the literature concerning assault victim selection.

Concerning victim selection, previous research has placed considerable importance on the "who" of robbery victims. There have been numerous studies and extensive reviews of the robbery literature devoted to describing the basic demographic

characteristics of the average robbery victim and the relationship between the victim and offender. Crime statistics have given a consistent picture of the victim demographic information. Robbery victims tend to be relatively young and a stranger to the offender (Alarid et al., 2009; Alvarez & Bachman, 2008; Chilton & Jarvis, 1999; Lauritsen & Heimer, 2008; Willis, 2006). According to the National Crime Victimization Survey (NCVS), individuals 16-19 years of age have the highest rate of street robbery victimization, followed by 12-15 year olds, then 20-24 year olds (Alvarez & Bachman). Literature reviews examining robbery victim demographics have found that robbery victims tend to be African Americans and Hispanics, urban residents, males, and those of lower socioeconomic status (Alvarez & Bachman; Chilton & Jarvis; Lauritsen & Heimer; Oliver, 1996). Felson, Baumer, and Messner (2000) analyzed the NCVS data from 1992-1995 to examine if specific demographic characteristics make individuals more likely to fall victim to acquaintance robbery. The researchers found, with some exception, acquaintance robbery involved young (most likely school aged), black, poor, and single victims. When females were victims of robbery, then the offender was more likely to be known by the victim (Alvarez & Bachman, 2008; Felson et al.). Consistent with prior research using the NCVS, a little more than one-third of the robberies were between people who were acquainted in some way. These relationships ranged from the offender being recognized by sight to familial relationships between the victim and offender (Felson et al.). The demographic information and victim offender relationship provides insight into the average victim of robbery; however, it fails to provide critical information concerning the bigger picture of the victim selection process of offenders.

Recent research examining robbery has suggested there is a certain process offenders go through when selecting a victim. This literature has taken two paths. There is research that suggests robbers place the utmost importance on choosing the specific target. Other research suggests offenders choose a location first and *then* a specific target. Both bodies of research are discussed below, beginning with the research concerning the choice of a target.

Brookman et al. (2007) discovered once their sample of incarcerated offenders was motivated to commit a robbery, then the participants began to choose a target (victim). In Brookman et al.'s sample, target selection involved two distinct processes. One process was that target selection either grew out of a prior encounter (personal or status challenge) or an assault. The other victim selection process grew out of offenders seeing a stranger or a target who they perceived as vulnerable. The paragraphs below discuss the research concerning victim selection processes that grew out of a prior encounter with the target.

Selecting a target from a prior encounter or an assault has been substantiated in studies examining drug robbers. This type of target selection is intermingled with the street justice motive described in the motive section of this paper. This type of target selection is done to send a message to the target (Jacobs & Wright, 2008). In a recent study, Jacobs and Wright focused their study on moralistic components of robbery. Combining a sample of street offenders (n=102) recruited for three different research projects (Jacobs, 2000; Jacobs, Topalli, & Wright, 2003; Jacobs & Wright, 2006), the researchers found robbery was used in response to one of three types of violations: market-related, status-based, or personalistic. Market-related violations were in response

to a business type transaction whereby the offender felt wronged and retaliated by committing robbery against the individual. This type of violation is prevalent in urban drug networks (Wright, Brookman, & Bennett, 2006). Status-based violations involved a 'loss of face' or the occurrence of the offender's status being challenged. For example, when an offense is committed against someone of higher street status by someone considered of lower status, the higher status person retaliates against the individual. This violation assumes a recognized and accepted hierarchy, which is hard to rationalize in street culture where there is a considerable amount of ambiguity. Nonetheless, the researchers found this violation most prevalent in drug markets. Personalistic violations accounted for the fewest responses of retaliation in the sample and were not explicitly related to the drug market or status, but dealt with human autonomy. These individuals retaliated when they felt their individuality had been jeopardized. This study found that victim selection was retaliatory, based on a prior situation with the opponent.

Similarly, studying 20 black active drug dealers who were recently robbed in St. Louis, Topalli et al. (2002) discovered respondents retaliated for various reasons: "(1) retribution, in the form of vengeance; (2) deterrence, in the form of reputation maintenance and; (3) compensation, in the form of loss recovery" (p. 340). Respondents who committed robbery due to vengeance committed it because they were angry and wanted to restore balance or get even. Individuals who committed robbery for reputation maintenance retaliated to deter future victimization and to reduce the risk of being labeled as weak or 'soft.' Reputation is everything in street life, and individuals will do what it takes to maintain a solid reputation (Anderson, 1999). The third reason identified in the interviews with the respondents was loss recovery. These respondents retaliated to

simply get their money or drugs back. The dealers interviewed regarded direct retaliation as the most appropriate way to achieve justice, but they admitted it was not always an option. Displacement of the robbery onto another individual and choosing not to retaliate were other strategies used by offenders to restore partial balance.

The review of literature above has detailed target selection that grew out of a prior encounter (personal or status challenge) and an assault. The second type of target selection Brookman et al. (2007) suggested grew out of seeing a stranger or someone else as a vulnerable target. Jacobs, Topalli, and Wright (2000) conducted a qualitative study involving 25 interviews with active, African American drug robbers in St. Louis to access vulnerability of targets. The researchers found these robbers sought out drug dealers who were 'soft,' or at a reduced risk of taking retributive actions. These participants overwhelmingly chose victims who were strangers to them to decrease chances of retaliation. A number of the participants who did rob individuals they knew would employ the help of another offender, who was unknown to the victim, to commit the robbery.

Likewise, in 34 of the 40 male-on-male robbery incidences in Brookman et al.'s (2007) sample of incarcerated offenders, respondents targeted strangers who were perceived as being vulnerable or having something of value worth taking. Cues to access vulnerability were both direct (e.g., actually seeing materials) and indirect (e.g., inferred by the way the person was dressed). This, too, is validated by prior research (Alvarez & Bachman, 2008; Block, Galary, & Brice, 2007; Wright & Decker, 1997). Part of being perceived as a suitable target is the offender's perception of how vulnerable, accessible, and profitable the target is (Bernasco & Block, 2009; Felson et al., 2000). A small

proportion of Deakin, Smithson, Spencer, and Medina-Ariza (2007) sample of 20 convicted street robbers in the United Kingdom said they preyed on other criminals when opportunities presented themselves in drug sales, or they robbed other criminals simply because they were rivals (e.g., street or informal justice). Individuals involved in criminal activities are less likely to report to the police (Bernasco & Block), thereby increasing the perception of vulnerability. Unacceptable targets included women and the elderly; however, these rules were broken on occasions of desperation (Deakin et al.). Robbers in Wright and Decker's (1997) study preferred to target whites instead of blacks because they posed less resistance.

Other research concerning the victim selection process of robbers has taken a different approach. Some research has found robbery offenders first pick a location, *then* a suitable target (Alvarez & Bachman, 2008; Bernasco & Block, 2009). Deakin et al. (2007) found respondents looked for victims in areas where they knew there would be plenty of targets. Research has suggested that individuals offend in familiar places to feel more comfortable and aware of their surroundings (Bernasco & Block, 2009; Block et al., 2007; Brantingham & Brantingham, 1990, 1999; Rossmo, 2000). If offenders go to unfamiliar territory, it may be dangerous, and they are more likely to stand out, especially if gangs are present. However, Jacobs et al. (2000) found that many of the robbers in their sample would commit drug robbery in geographically unfamiliar places to reduce chances of being known to victims.

Previous literature has supported the findings that street robbers tend to commit crimes in geographically bounded areas and close to their home (see Block et al., 2007; Deakin et al., 2007; Feeney, 1986; Wright et al., 2006; Wright & Decker, 1997).

Bernasco and Block (2009) used census tract data from 2000 and obtained robbery incidents and arrests for 1996-1998 from Chicago Police Department (n=12,872). The data included time and place of the robbery, along with basic offender characteristics, such as age, sex, and ethnicity. Approximately 48 percent of the incidences involved more than one offender. The researchers found crime ridden areas, such as illegal drug and prostitution markets, and crime generating areas, such as high schools and businesses, were attractive target areas. They also discovered territorial gangs may restrict mobility of offenders. Of the offenders, 28 percent committed robberies in their home census tract, and many others searched for targets in nearby areas which were similar to their home area.

Two recent studies on robbery suggest distance traveled to a robbery could be different depending on the type of robbery. In a recent study by Santtila, Laukkanen, Zappala, and Bosco (2008), the researchers examined the distance traveled from home to the crime incident for a sample of 275 commercial robbery offenders in Milan, Italy. The robbery data was skewed from relative small distances travelled (zero) to extremely far distances (1,029.26 km), with a median distance traveled for robbery of 5.76 km or approximately 3.6 miles. A similar study conducted by Block et al. (2007) in Chicago, using all of the Uniformed Crime Report (UCR) index crimes recorded in 1998, found that approximately 75 percent of non-commercial robberies took place at a location other than the victim's or offender's house. Consistent with prior research, robbers tended to travel greater distances than other criminal offenders to commit their crime. However, non-commercial robbery occurred closer to the offender's house (1,288 m) than did commercial robberies (2,850 m). These findings indicate that commercial robbers

traveled a greater distance than street robbers, but offenders of both types of robbery tended to commit crimes close to home. This conclusion is substantiated by the larger literature concerning bounded spatial areas (see Canter & Gregory, 1994; Deakin et al., 2007; Feeney, 1987; Lenz, 1986; van Koppen & Jansen, 1998; van Koppen & de Keijser, 1997; Wright et al., 2006; Wright & Decker, 1997). The same literature has acknowledged that some robbers will travel to further destinations where there are "good" targets.

The literature on active and former drug robbers provides important insight into the victim selection processes of active robberies. This literature suggests that victim selection grows out of a prior encounter with the target or seeing a stranger or someone else as a vulnerable target. African Americans have been the primary respondents in these victim selection studies. Although African Americans represent the majority of perpetrators of street robbery (Erikson, 1996; Wright & Decker, 1997), and their robberies are usually linked to the illicit drug market (Jacobs & Wright, 2008; Wright & Decker), there are limitations. There is a need for larger sample sizes and more diverse respondents. Also, past studies have focused too heavily on drug robbery. Drug robbery is only one type of robbery. Therefore, they cannot be generalized to include all types of robbery. Also, no one study has provided the who, what, when, and where of selecting a victim.

Research concerning victim selection in the robbery literature has gone in many directions for a variety of reasons. First, researchers have had different agendas. For example, some researchers focus solely on victim selection, while others sparsely comment on it when examining offender motivation. Some of the qualitative studies on

offender motivation include some information on victim selection when discussing the reasons offenders commit robbery. Second, most studies define victim selection differently; hence the measurements of victim selection include distinctive variables. Studies in this area lack consistency, and no one study provides a complete picture of victim selection. This study attempts to provide a comprehensive study in the literature as it pertains to victim selection in robberies.

Victim selection in assaults is very different from robbery, and there is an absence of literature examining this process (Oliver's (1996) study discussed below is the exception). Literature concerning victim selection in assaults has mainly focused on the "who" aspect of victims. The following section pertains to the literature on victim selection in assaults. First, the literature concerning target demographics and victim offender relationship is discussed. Then, the literature concerning gang membership and victimization is detailed. Partner abuse literature is detailed concerning victimization, followed by the conclusion of the victim selection section.

Consistent with the violence literature in general, the assault literature has found males have higher rates of victimization for assault than females (Alvarez & Bachman, 2008; Chilton & Jarvis, 1999; Krienert & Vandiver, 2009). Assault is broken down into two categories: aggravated and simple assault. Aggravated assaults involve the use of a weapon by an offender or more serious bodily injury occurring to the victim. Simple assaults involve less serious injuries to the victim or a physical confrontation without a weapon (Krienert & Vandiver). Lauritsen & Heimer (2008) examined NCVS (formally the NCS) data from 1973-2004 concerning the victim offender relationship and found that males were more likely to experience an aggravated assault by a stranger than

individuals known to them. In aggravated assaults, females were about equally as likely to be assaulted by strangers and people they know. However, past research has suggested aggravated assault against females usually occurs between individuals who know each other and takes place in private places, such as residences (Holzman, Hyatt, & Dempster, 2001). Males were less likely than females to be a victim of a simple assault by someone known to them. The majority of the literature in this paper concerns general assaults, which encompasses both types.

In a cross sectional study examining target demographics, Mustaine and Tewksbury (2000) used data collected from self-administered surveys of college students (n=1,513) in eight different states to examine whether certain individual characteristics and routines could predict chances of becoming a victim. Victims of assault were more likely to be males and participate in criminal behavior. For this sample, individuals who spent more time alone or with strangers or casual acquaintances were less likely to be victims of assault. This finding is consistent with the literature suggesting assaults occur between individuals who know each other. This study does have limitations. The study was conducted on college students and was not randomized. The majority of the sample were female, unmarried, living off-campus, and under the age of twenty-one.

Similarly, in an older study examining demographics and victim offender relationship, Sampson (1987) examined the 1982 British Crime Survey data to study violence against strangers. Assaults represented the largest category of violent victimizations. The strongest determinant of stranger victimization was age. Younger individuals were almost eight times more likely to be victimized by strangers than older adults. Sampson found males suffer risk of stranger violence three times more than

females. He also found single and divorced individuals were at a 2.5 times higher risk of stranger victimization than married individuals.

Sampson and Lauritsen (1990) found "...assaults, in particular, often take place in contexts where retaliation probability is high (e.g., bars, social clubs, parties, etc.)" (p. 112). Using 2005 National Incident Based Reporting System (NIBRS) data, Krienert & Vandiver (2009) examined the assaultive behavior in bars between females and males. The researchers found that the majority of simple and aggravated barroom assaults were between individuals who knew each other; however, males were more likely than females to assault a stranger. Males were overwhelming represented as victims of assault. Men constituted 82 percent of aggravated assault victims and 64.8 percent of simple assault victims. Aggravated assaults were significantly more likely to be intrasexual and intraracial than other types of crime. Although Sampson and Lauritsen found that assaults are likely to take place where retaliation is high, Block et al.'s (2007) findings, based on 1998 UCR data in Chicago, found that 41.4 percent of aggravated assaults took place outside the victim or offender's home. Approximately 26.3 percent of the reported aggravated assaults occurred at a location shared by the victim and offender. To summarize, these studies suggest that although assault takes place in environments where retaliation is high, such as bars and pubs, the majority of assaults take place in private dwellings.

Although research has found assaults are more likely to take place in private locations or dwellings, assaults also take place in public settings. The bar literature has suggested that victims are active participants in bar assault situations. In a study that attempted to learn more about the process of victim selection in assaults, Oliver (1996)

suggested an opponent's behavior immediately before the physical confrontation is critical to understanding the respondent's actions against the opponent. In the researcher's interviews with 41 black males examining violent confrontations in bars and bar-like settings, the respondents placed importance on the opponent's behaviors before the confrontation. The behaviors of the opponent included antagonistic talking, confrontational body language and communication, insults, and disrespect. The respondents felt opponents were active participants in the situation. The idea of active participation of the opponent has been speculated in studies using official police data and victimization surveys (see Sampson & Lauritsen, 1990, 1994; Wolfgang, 1958) and has been validated in qualitative studies interviewing offenders of assault (see Bennett & Brookman, 2008; Kennedy & Baron, 1993).

Gang assaults typically take place outside the home and can involve all types of victim offender relationships. Research has shown gang members select victims who are involved in gangs, whether within their own gang or from rival gangs. According to self-report surveys, 70 percent of violent offending in youth is accounted for by youth in gangs (Huizinga, Weiher, Espiritu, & Esbensen, 2003; Thornberry, Krohn, Lizotte, Smith, & Tobin, 2003). Peterson, Taylor, and Esbensen (2004) discovered youth involved in gangs experienced greater violent victimization while in a gang than before or after gang involvement. In an ethnographic study by Decker and Van Winkle (1996) in St. Louis, two-thirds of sampled gang members reported being "beat in" to the gang for initiation. Gang members' involvement in the drug market may also make them more susceptible to robbery (Bullock & Tilley, 2008; Jacobs, 2000). Therefore, gang members select victims who are also involved in gangs or other illegal activities. The victim

selection process has not been directly measured; however, past research has suggested violence is the result of competing for markets and protecting territory and clients (Decker & Van Winkle, 1994; Fagan & Chin, 1990; Howell & Decker, 1999; Huff, 1996). These findings would indicate that victim selection may be dependent on location. They also lend credibility to the conclusion that offenders are more susceptible to becoming a victim in certain situations. Similar to what has been found in the robbery literature, assault victims, who themselves are offenders in other situations, may be less likely to report the situation to police, thereby increasing their attractiveness (see Kennedy & Baron, 1993).

The assault literature reviewed above has been focused on general assaults. The studies below are dedicated to partner abuse. There has been a longstanding belief that partner abuse or domestic violence is different from general abuse (Moffitt, Krueger, Caspi, & Fagan, 2000). As a result, theories and literature concerning partner abuse has been kept separate from general assault literature. There has been a trend in this literature to develop typologies of partner abuse (see Deal & Wampler, 1986; Elbow, 1977; Faulk, 1974; Hanks, 1992; Hershorn & Rosenbaum, 1991; Holtzworth-Munroe & Stuart, 1994; Saunders, 1992; Sweeney & Key, 1982). Typologies are relevant and offer many advantages to studying this subgroup of offenders. However, typologies do not offer much insight into the study of victim selection. Thus, for the purposes of this study, the typologies' literature relevant to victim selection is included below.

After an extensive review of the literature on 15 different assault typologies, Holtzworth-Munroe and Stuart (1994) proposed three typologies of male domestic batterers: family only, dysphoric/borderline, and generally violent/antisocial. The victim

offender relationship is different for each typology. The researchers' proposed family only batterers would limit violence to family members (similar to Saunder's (1992) family-only batterers and Gondolf's (1988) sporadic typical batterers). This group is hypothesized to represent 50 percent of all male batterers. Second, dysphoric/borderline batterers primarily confine violence to the family, but there may be some incidences of extrafamiliar violence and criminal behavior. Third, generally violent/antisocial batterers represent the other 25 percent of male batterers and have the most extensive extrafamiliar aggression and extensive legal involvement with the criminal justice system. Based on the domestic violence literature concerning typologies, most incidents involving male batterers would take place against family members. The individuals who do not limit their victim selection to families are hypothesized to have more contact with law enforcement.

Thompson, Saltzman, and Bibel (1999) examined intimate partner violence using NIBRS data from Massachusetts. From 1994 to 1996, the researchers collected information on 9,711 incidences for eight different violent crimes with female victims. Approximately 99 percent of offenders were male, and the average age of the victims was 30 years old, slightly younger than the offenders (32). Women who were victimized by an intimate partner were more likely to experience simple assault. Aggravated assault represented approximately 40 percent of the sample and often resulted out of arguments (69%) and lovers' quarrels (23%). Perpetrators were overwhelmingly identified as current or former partners (60%), while other family members represented 14 percent, and strangers made up four percent of aggravated assault perpetrators. Although Thompson et al.'s study was very descriptive, the study needs to be interpreted with

caution. First, and most important, NIBRS data only represents 34 percent of the state's population and 20 percent of the state's crime. Second, the victim-offender relationship was missing in 18 percent of the aggravated assault records. Lastly, NIBRS data is restricted to crimes reported to police, and the information is taken from the reporting police officer(s). These limitations call into question the validity and accuracy of the study.

Summary of the literature concerning victim selection. The general lack of integration of domestic violence and broader crime and violence research has contributed to a lack of knowledge about victim selection. A greater hindrance has been the lack of studies concerning the process of victim selection in assaults. Instead, official police data and victimization studies have examined the demographic details of the victim and the victim offender relationship. Again, discounting the importance of this information is not this researcher's intent, but there is more to victim selection. Studies lack a close examination concerning the offender's perceptions of the victim and what brought the victim and offender together in the situational context.

As the literature review displays, researchers have gone in many different directions concerning victim selection in the robbery and assault literature. Most studies measured victim selection differently, hindering any strong, overall conclusions. The robbery studies conducted on active offenders have devoted more attention to victim selection. Some of the robbery studies have even detailed the selection process offenders go through, giving a better understanding of victim selection. The assault literature, however, has mainly focused on demographic variables and the victim offender relationship. Research concerning assaults and victim selection has not provided much

insight into why offenders choose specific targets. This study attempts to overcome these limitations by surveying offenders. Surveying offenders provides more detail concerning the victim selection characteristics of offenders who have committed robbery and assault. The next section of this literature review concerns the literature regarding substance abuse in regards to robbery and assault.

Substance Use

It is highly important to consider drug and alcohol use when studying violent scenarios (Phillips, Matusko, & Tomasovic, 2007). When people are under the influence of substances, they are more likely to be aggressive, impulsive, careless, and to violate social norms (Felson, Burchfield, & Teasdale, 2007; Graham, West, & Wells, 2000; Steele & Josephs, 1990). Alcohol and drugs are prevalent in many violent situations (Boles & Miotto, 2003). According to the Bureau of Justice Statistics in 2002, approximately 47 percent of convicted jail inmates reported being under the influence of drugs or alcohol when they committed the criminal act that resulted in incarceration (Karberg & James, 2005). The literature concerning substance use in robbery and assault situations is detailed below.

Arguably, alcohol is the strongest correlate of violence (Felson et al., 2007), with estimates of offender intoxication ranging from 57 percent to 85 percent at the time of their offense (Boles & Miotto, 2003; Felson et al., 2007; Roizen, 1997). Criminal offenders also report drug problems twice that of the general population (Chong, 1998). Participants in Chambers et al.'s (2009) study suggested state of mind at the time of the offense is essential in influencing violent behavior. Intoxication determined how the participants reacted to situations, amplifying the chances of violence taking place (also

supported by Krienert and Vandiver, 2009; Wells & Horney, 2002). One-third of Alarid et al.'s (2009) sample of solo and group robbers admitted being under the influences of substances (mainly alcohol) right before the robbery took place. Similarly, over half (57%) of Petronsino and Brensilber's (2003) study of convicted convenience store robbers acknowledged they were under the influence of drugs or alcohol during the commission of the crime. Using NIBRS data to capture aggravated and simple assaults in bars, Krienert and Vandiver found more than one third of individuals in their sample had used alcohol when the assaults took place. In a more limited study, Thompson et al. (1999) NIBRS data found drug and/or alcohol to be present in 19 percent of the crimes in Massachusetts. However, 81 percent of the drug and alcohol data in the researchers' study was missing.

Using the National Violence Against Women and Men Survey, Felson et al. (2007) examined the impact of alcohol on different types of violent incidents and found offenders were much more likely to be intoxicated when they assaulted a stranger rather than someone they knew. Offenders were least likely to be intoxicated when they assaulted an intimate partner. Pernanen (1991) examined assaultive behavior in a Canadian city and also found offenders were more likely to be intoxicated when they assaulted a stranger than non-stranger.

Chong (1998) suggested motivation and criminal behavior depend on the type of drug being used and the gender of the offender. Examining the UCR reports from 1988-1993, Chong examined crimes that were alcohol or drug related and crimes that were not related to substances to develop drug and alcohol indicators. Unlike the Felson et al. (2007) and Pernanen (1991) studies, alcohol use was correlated with offenses against

family and children and with aggravated assault. Chong's study, however, had several limitations. First, data from 1992 and 1993 was missing from one police agency, which served the largest population of its county and the majority of arrests, so the researcher used estimated arrests. Second, Arizona is a drug trafficking center from Mexico, so the information on drugs and drug related offenses are likely different from the majority of other states.

Although the above studies make a convincing argument about the correlation of substance use and violence, a recent study did not find substance use to be as important in the escalation of violence. Phillips et al. (2007) examined the relationship between alcohol and lethal violence by interviewing 100 men imprisoned for aggravated assault or homicide, stemming from conflict with other males. Lethal violence was defined as attempted or actual force used by the offender that was capable of causing death. The researchers asked the men to describe one violent conflict and one non-violent conflict they had encountered in two years leading up to the conflict. They found drinking did not have a direct impact on lethality of violence in the sample. There were three notable limitations to the study. First, the researchers restricted the sample to male-on-male violence. Second, the victims' intoxication levels were not available. Third, the researchers did not ask the offenders their perceptions of the victims' intoxication.

Similar to alcohol studies, research focusing solely on drug use has suggested similar correlates with violence, albeit not as strong. In a review of the literature, Boles and Miotto (2003) suggested drugs are prevalently used, but to a lesser degree than alcohol, by offenders involved in violent situations. Individuals who use illegal drugs commit robbery and assault crimes more frequently than non-drug users (U.S. Bureau of

Justice Statistics, 1992). According to the Bureau of Justice Statistics in 2002, 39.9 percent of male jail inmates reported being under the influence of drugs when they committed their last robbery, compared to 18.2 percent of individuals who committed an assault (Karberg & James, 2005). The Bureau of Justice also found that jail inmates reported marijuana and cocaine/crack cocaine to be the most common drugs used at the time of the offense. In a general study of violence, Goodrum, Wiese, and Leukefeld (2004) interviewed 637 men in four Kentucky prisons and found the use of marijuana and multiple substances was positively associated with committing violent crimes.

Substance use also may increase vulnerability of potential targets (Felson & Burchfield, 2004). Past research has shown victims of violence are also often under the influences of substances (Auerhahn & Parker, 1999; Felson & Burchfield; Mustaine & Tewksbury, 1998). McClelland and Teplin (2003) conducted an observational study of 2,365 police-citizen encounters and found offenders were more likely to be intoxicated than victims, but victims of violent crime were much more likely to be intoxicated than victims of non-violent crime. Mustaine and Tewksbury (2000) found alcohol consumption was positively associated with assault victimization. Research has also found that heavy drinkers experience higher rates of assault than light drinkers and people who do not drink (see Potter, Sacks, Kresnow & Mercy, 1999).

Knowing the state of mind of the offender and victim during a criminal situation is critical in understanding criminal situations. The literature concerning drug and alcohol use and violence is complex. As shown, many studies have found substance use increases the possibility of criminal activity. Studies have examined the offender's alcohol or drug use while other studies have examined the victim's substance use. Most studies have

either examined alcohol or drugs, rarely studying both substances. Also, there has been a lack of concentration on both the offender and victim's substance use in the same situation. This study attempts to overcome these limitations by providing measures of both the victim's and offender's alcohol and drug use before the situations. It also attempts to measure the exact relationship substance abuse has on violence by examining the same individuals across multiple situations, including those where violence was avoided.

Intent to Harm, Weapons, and Injury

Other situational variables important to study are the intentions of the offender and weaponry in a criminal situation. Specifically, it is important to know the degree of harm the offender wants to inflict on the victim during a situation and whether the offender brings or uses a weapon during the situation. In violent situations it is also important to consider the level of injury, if any, the victim receives from the offender. Even if a weapon is brought to a situation, it does not mean it has to be used or that a violent act will transpire. Likewise, if a weapon is used, it does not mean that an injury will automatically result.

An individual's "intent to harm is the common cause of both the presence/use of a gun and the violent outcomes" (Phillips & Maume, 2007, p.273). Research has proposed that if a weapon is used in a situation, then the risk of injury increases (Phillips & Maume). It is hypothesized that the aggressor's intent to harm is positively correlated to the outcome of an injury (Kleck & McElrath, 1991), with or without a weapon. Disentangling intent from weapon instrumentality has been difficult due to an inadequate focus on the intentions of the aggressor. Prior research has indirectly measured intentions

to harm by situational factors, such as victim-offender relationship and alcohol use, crime type and characteristics, and demographics of the offender (Wells & Horney, 2002). These indirect measures have been utilized in surveys, interviews, and secondary data sources, such as arrest and prison records or asking the victim. These sources are questionable and fail to provide an accurate portrayal of offender's intentions to harm.

An exception to these inadequate measures of intent to harm is the novel study by Wells and Horney (2002). The researchers gathered information on intent to harm and weapon information in both violent incidents and avoided violence incidents by interviewing 704 male offenders in a Midwestern correctional facility. For each situation, the researchers asked whether the offender had a gun and if he intended to harm the opponent. The results indicated that offenders were most likely to attack when they had a weapon other than a gun (e.g., a knife), followed by the likelihood to attack when they had a gun. The researchers found that an injury was more likely to occur when the offender intended to harm the opponent (also supported by Phillips and Maume, 2007), but there was a significant decrease in chances that an opponent would be injured when the offender had a gun (similar to Kleck & McElrath, 1991) compared to when the offender had another weapon.

Besides intent to harm, there are different reasons why individuals carry or use weapons in commission of a crime. Brookman et al. (2007) examined weapon use in their sample of incarcerated offenders. A weapon was used in approximately one-third of the robberies and mainly used in solo robberies to lend credibility to the threat and to discourage victim resistance (these results are supported by Alarid et al., 2009; Jacobs et al., 2000; Warner, 2007). Deakin et al. (2007) discovered offenders were more likely to

carry a weapon when they targeted other criminals. Therefore, guns and weapons may not only be used to harm an opponent but for power purposes as well.

Wells and Horney's (2002) study was the most comprehensive study examining intent to harm, weapons, and injury at the situational level. However, their study did not include other reasons why individuals carried weapons at the situational level. The current study examines intent to harm, weaponry, and injury to provide more research in this area and also examines other reasons why offenders might bring a weapon to a situation.

Conclusion of Literature Review

The purpose of this study is to examine the decision making of offenders and the situational factors of robbery, attempted robbery, assault, and similar situations where violence was avoided. Research studies examining decision making and situational factors of crime are scant. As displayed in the literature review, the literature on individual and situational factors of crime lacks comprehensiveness and uniformity.

Decision making literature in criminology has been inadequate due to the absence of studying the cognitive processes of offenders. From the psychology literature, social information processing theory examines the cognitive processes of individuals and is a theory that has solid support in studies of aggression using children and adolescents. A partial quantitative test of social information processing theory, during violent and avoided violence situations, is needed to provide new insight into the cognitive processes of offenders.

Researchers have not fully explored the role and importance of the immediate situation antecedent to the crime (Hochstetler, 2010). Situational factors of crime have

been researched, but the research lacks comprehensive studies of multiple situational factors that include personal level data. In situations of importance for this study, there is at least one offender and one opponent in all of the situations. Ignoring static personal level variables neglects the full examination of criminal situations.

Past studies have used a variety of methodologies to study robbery and assault, resulting in difficulties to draw conclusions across studies. The problem is that studies have utilized these different methods at convenience and not always for the best fit for the topic area. For example, using police data and other secondary data analysis to measure motives is problematic. Ideally, the aim of the study should direct the researcher to the appropriate methodology. Asking offenders to self-report decision making processes and situational variables of violent and avoided violence situations would be the ideal methodology to provide a comprehensive study that adds new information to the literature.

A review of the existing literature demonstrates that questions remain concerning decision making processes, motives, victim-selection, substance use, intent to harm, and weaponry factors that impact robbery and aggravated assault. Past research has been too limited to draw any substantial conclusions about the bigger picture of these offenders. These are all reasons why a study needs to be conducted to include all of these important factors to examine their significance in relation to these violent crimes.

Research Questions and Hypotheses

Upon review of the literature, the influence of personal level and situational level variables need to be further examined to form a more complete picture of the situational context of robbery and assault. This is vital to extending information and theories

concerning crime. Thus, the present study attempts to answer the following research questions:

1. Do variations in individual's decision making processes (SIP) affect situational outcomes?

2. Do hostile attribution bias and anger play a significant role in an offender's decision making in the studied situations?

3. Do hostile attribution bias and anger play the same role in robbery and assault situations?

4. Which individual level and situational level variables have the most impact on situational outcomes?

5. Are the individual level and situational level variables different depending on the violent situation (assault and robbery)?

This study measures a wide range of situational and personal, or individual level variables. Assault, robbery, and attempted robbery situations comprise violent situations. Similar volatile situations where serious violence was avoided comprise avoided violence situations. The following section details study information and hypotheses that were created for each research question.

To address the first research question, a partial test of social information processing theory is warranted. Four of the six cognitive processes of the theory are quantitatively examined in this study. Specifically, the second, third, fourth, and sixth steps of the theory (interpretation of cues, clarification of goals, response access or construction, and whether the respondent's behavior achieved their goal) are analyzed. To address the second and third research questions, hostile attribution bias and anger are

examined to gain an accurate portrayal of the importance of perception and emotion in decision making in the studied situations. The following are hypotheses for the first three research questions.

H_a (1): There will be significant variations in an individual's decision making processes that will affect the outcome of the situation.

H_a (1a): In assault situations (compared to avoided situations and robbery), respondents will attribute more negative intentions of the opponent(s) at the second step of processing. However, in avoided violence situations, respondents will attribute more negative intentions of the opponent(s) than in robbery and attempted robbery situations.

H_a (1b): At the third step in the processing, in both assault and robbery (both completed and attempted) situations, respondents will select more intrapersonal, rather than interpersonal goals compared to avoided violence situations.

H_a (1c): Additionally, during step four of processing, respondents will also generate fewer behavioral responses in violent situations (robbery, attempted robbery, and assault) compared to avoided violence situations.

H_a (1d): Respondents will be more apt to admit that their behavior in robbery and assault situations (compared to avoided violence and attempted robbery situations) got them what they wanted (relating back to goal clarification). Comparing robbery and assault situations, respondents in robbery situations will be more apt to admit their behavior got them what they wanted.

H_a (1e): The third step in the cognitive process will have the most impact on the situational outcome of injury. Intrapersonal goals are hypothesized to be positively correlated to seriousness of injury in violent situations.

H_a (2): Situational (state) hostile attribution bias and anger will play a significant role in an offender's decision making in certain studied outcomes. Trait anger and hostile attribution bias will be important, but they will not play as significant of a role as situational anger and hostile attribution bias on the studied situations.

H_a (2a): In robbery, attempted robbery, and avoided violence situations, respondents will be less likely to experience higher levels of anger or hostile attribution bias. Therefore, it is hypothesized respondents will report less angry emotions and hostile attribution bias in robbery, attempted robbery, and avoided violent situations compared to assault situations.

H_a (2b): However, in avoided violence situations, respondents will report more angry emotions and hostile attribution bias compared to robbery and attempted robbery situations.

H_a (3): Both anger and hostile attribution bias will play a significant role in an offender's decision making in assault situations. Respondents in assault situations will display more angry emotions and attribute opponents' intent as more hostile than robbery respondents. Neither emotion is hypothesized to play as significant of a role in most robbery situations.

To answer the fourth and fifth research questions, the individual, or personal level variables, will be analyzed with the situational level variables to indicate which variables have the most impact on situational outcomes. The situational outcomes include robbery,

attempted robbery, assault, and avoided violence. Injury is another situational outcome that will be measured to adequately test this research question.

H_a (4): The significance of individual level and situational level variables will be different depending on the situational outcomes.

> H_a (4a): At the individual level, trait anger and hostile attribution bias will play the most significant role in assault situations (compared to avoided violence, attempted robbery, and robbery situations). At the situational level, anger, hostile attribution bias, and the respondent's alcohol use will have the most impact in assault situations compared to all other studied situations.
>
> H_a (4b): In avoided violence situations compared to assault, decision making variables will play the most significant role. Specifically, respondents will be less likely to attribute negative intent to the opponent(s) and will generate more behavioral responses in avoided violence situations compared to violent. In avoided violence situations compared to robbery, certain decision making variables will be important. Specifically, respondents will be more likely to have interpersonal goals (compared to intrapersonal) and generate more behavioral responses. Individual level and situational level anger and hostile attribution bias will play a more significant role in avoided violence compared to robbery and attempted robbery situations. Additionally, all other studied situational variables will play a different role in avoided violence compared to robbery and attempted robbery situations.

H_a (4c): At the situational level, victim selection and motive will play a more important role in robbery and attempted robbery situations than in assault and avoided violence situations.

H_a (4d): Injury will be another situational outcome analyzed as a dependent variable. The offender's (respondent's) intent to harm will play the most significant, positive role in whether the opponent(s) is injured in violent situations. The more harm the offender wants to physically inflict on the opponent(s), the more likely possibility injury will occur.

H_a (4e): In assault situations, intent to harm will play a more significant role than in robbery situations.

H_a (4e): In robbery situations, intent to harm and weaponry will play a more significant role than in attempted robbery situations.

H_a (5): The individual level and situational level variables will be different in assault and robbery situations. Anger, hostile attribution bias, and substance use will play a more significant role in assault situations than in robbery situations. Motives and victim selection will be more important in robbery versus assault situations.

CHAPTER III

METHODOLOGY

Quantitative methods were utilized to test the above stated hypotheses. A cross-sectional design was used to collect data from a sample of incarcerated men. Using surveys administered by the researcher and an assistant[1], this research offered an in-depth examination of offenders' decision making and other situational information on violent and avoided violence situations. Specifically, the situations of robbery, attempted robbery, assault, and avoided violence situations were examined and compared.

This chapter presents the methods used for data collection and analysis for this study. It begins with a section summarizing the sampling strategy, including a discussion of the sample size and the access plan. Then, the research design and survey methodology is examined, followed by a detailed explanation of the key variables of this study. Immediately following the key variables, the researcher details the attention that was given to the validity of the measures and the study. The survey administration section explains how the survey process took place with the respondents, followed by a detailed discussion of the human subject protection, strengths and weaknesses of the study, and the analysis to test the research questions.

Sampling

The unit of analysis for this study was both situational and individual. The individual level data included basic respondent demographic information, as well as trait information on anger and hostile attribution bias. However, the crux of this research

[1]For this study, the researcher was female and the assistant was male.

asked each respondent to report multiple situations in which they had been involved, including robbery, attempted robbery, assault, and avoided violence. Each individual was asked to report up to three situations for each category, for a possible analysis of 12 situations per respondent. If a respondent had more than three of any one of these situations, then he was asked to report the three most recent situations.

College students and mainstream society do not have adequate or frequent experiences with the types of violent and potentially violent situations of interest in this study (see Horney, 2001). The small number of situations these individuals have been involved in and/or exposed to would severely limit the types of analyses that could be performed. Therefore, they would not be a sufficient respondent group for this type of study. Hence, the individual and situational level information was gathered by surveying incarcerated men about these experiences.

While offenders are not representative of the overall population, they do offer valuable insight into the study of violence. For example, offenders are likely to have numerous experiences with violence (Horney, 2001). As stated in the literature review, prior research has found that offenders are exposed to more violence, both as victims and offenders. Because of this exposure, offenders can be studied to gain a better understanding of decision making and other situational factors present in robbery and assault situations. These individuals are in a unique position to provide details about situations which other sources, such as police reports and victims, cannot directly measure. For these reasons, offenders are an ideal population to study.

The targeted individual population was newly incarcerated male offenders, age 18 and older, housed in four county facilities located in western Pennsylvania. For this

study, newly incarcerated offenders included all male offenders who had been housed in the jails for three months or less. County jails and prisons (some county jails refer to themselves as county prisons) offer an optimal study location due to their transient nature and volume of offenders in these facilities per day. These facilities hold many types of individuals. They hold the newly arrested, individuals awaiting trial and in the midst of trial proceedings, individuals who have been sentenced to relatively short sentences, and individuals who have been convicted and sentenced and are awaiting transfer to a more secure facility (i.e., a state prison). The sampling decision was largely grounded in the literature in which research has shown it is ideal to ask offenders about their past behaviors in a timely manner for the best recall (see Bradburn, Rips, & Shevell, 1987; Wells & Horney, 2002).

Each facility provided the researcher and the assistant with a list of inmates who fit the inclusion criteria (three months or less) for the study. The purpose of including all offenders, regardless of the specific crime for which they were currently incarcerated, was to gather information on reported and unreported robbery and assault situations in which the offender had taken part. All recently incarcerated male offenders were included in the study since past research has shown offenders participate in multiple offense types (see Bennett & Brookman, 2008; Brookman et al., 2007; Jacobs et al., 2000; Jacobs & Wright, 2008; Pizarro, 2008; Topalli et al., 2002). Due to time constraints, as many individuals as possible were contacted to participate in the study, thereby attempting to include everyone in the study population. New inmates who entered the jail once the study began were also recruited to participate. During the selection process, this type of

sampling procedure increased the amount of situations obtained, increasing the external validity of the study.

For the purposes of this study, females and juveniles were excluded from participation. Females were excluded based on research findings which have suggested female offenders make up a minute fraction of this population (see U.S. Census Bureau, 2010). Juveniles also were excluded for a few reasons. First, past research has kept adults and juveniles separate, and research has suggested juveniles and adults have different decision making and other situational characteristics (Crick & Dodge, 1994; Epps & Kendall, 1995; Losel et al., 2007). Second, as the literature review described, prior research on social information processing theory has focused on adolescents. Less is known about adults' social information processing to come to a decision. Thus, the present study focused specifically on adult offenders.

Access

Gaining access was critical in the research process. Gaining access can pose problems for studies (Maxwell, 2005). Access was very important in this research study due to the classification of respondents who were studied. Incarcerated offenders are a protected population due to their compounded situation and limited personal control (Office of Human Research Protections, Department of Health and Human Services, 2003). Therefore, there were many steps that had to be taken to gain formal and informal access to incarcerated offenders.

This researcher and members of the Criminology faculty met with the warden and/or the assistant warden of each facility to obtain approval. These individuals gave the researcher and the assistant full access to the county inmate populations. The facilities

hold both county and state inmates (due to overcrowding in the Pennsylvania Department of Corrections); however, for the purposes of this study, the researcher and the assistant did not survey the state inmates. To include state inmates in a research project, the Pennsylvania Department of Corrections (DOC) must approve the project. When this research study began, the Pennsylvania DOC was not accepting any new requests to conduct research on state inmates. Each facility agreed to leave space in a private setting for the researcher and the assistant to conduct the surveys on county inmates using a laptop computer.

The informal access was obtained by directly contacting the inmates who were eligible to take part in the research study. At this point, it was important to convey the overall importance of participation in the study, not only for the researcher and the assistant but also for the respondents. However, it was each respondent's decision to participate or not to participate in the study. Once informal access was granted, then the researcher and the assistant continued with the research and began the process of survey administration (discussed later in this chapter).

Research Design

For the purposes of this study, the researcher employed a cross-sectional research design. The researcher examined robbery, attempted robbery, assault, and avoided violence situations that the newly incarcerated offenders were involved in during the 24 months prior to their current incarceration. This time frame is relatively short, sufficient to attain multiple situations of interest, and is an adequate time frame for memory recall. The researcher cross-sectionally examined situations during this time period. This study was conducted to produce information concerning the decision making of incarcerated

offenders and other situational characteristics in the studied situations, which is conducive to a cross-sectional design.

A cross-sectional design is optimal in establishing correlations (Menard, 2002). For this study, the researcher was interested in the correlations between and within the individual and situational variables. As such, there was no need to establish causality, eliminating the need for a longitudinal design. Additionally, cross-sectional research can be done relatively quickly, which is conducive, given the transient nature of the study population and the nature of the study. Re-surveying the research subject multiple times would cause unneeded recall and memory problems. There also would be a problem with locating the individuals. One of the design's benefits is the adequate use of resources (Menard). The researcher can study a large number of people with little resources. These advantages made the cross-sectional research design conducive to and optimal for the purposes of the current research.

Key Variables

The survey items for this study were designed to measure individual and situational variables of respondents who had committed robbery, attempted robbery, assault, and similar situations that did not result in violence. Respondents were asked to report up to three of each of these situations. To answer the five research questions created for this study, the concepts within the questions were identified and operationally defined into dependent and independent variables. The purpose of this section is to introduce the key variables of the study (also refer to Table's 1 and 2) and to briefly discuss the operational definitions of each.

Dependent Variables

Situational outcomes were the dependent variables in the current study. The research questions and hypotheses dictated which situational outcomes were measured. In H_a (1), H_a (2), and H_a (4): robbery, attempted robbery, assault, and avoided violence situations were the dependent variables. For these hypotheses, the researcher was interested in examining the escalation of a situation from an attempted robbery to a completed robbery, an avoided violence situation to an actual assault, as well as the situational differences amongst all four situations. Specifically, the outcome measure attributes were avoided violence versus assault, avoided violence versus robbery, assault versus robbery, avoided violence and assault versus robbery and attempted robbery, and attempted robbery and avoided violence versus robbery and assault. In H_a (4) and H_a (4), an additional dependent variable was injury. In H_a (3) and H_a (5), the primary focus was robbery versus assault.

For this study, robbery was operationally defined as the respondent's use of force or threatened use of force to take anything of value (e.g., money, property, or drugs) from someone else or a business (Jacobs & Wright, 2008; U.S. Department of Justice, Federal Bureau of Investigation, 2009). Attempted robbery was operationally defined as a failed attempt to take something of value from someone else or a business. An assault was defined as a physical confrontation by the respondent upon another person for the purpose of inflicting bodily harm to that person. Assault situations included use of a weapon, hitting, punching, slapping, kicking, choking, or throwing something at someone. Avoided violence situations are similar situations where there was a high risk of violence by the respondent but violence was avoided. Avoided violence might include

situations where the respondent grabbed, pushed, or threatened someone. Avoided violence situations also can be where someone encouraged the respondent to become involved in violence, but he did not, or situations where the respondent was so angry he could have hurt someone but did not. The assault and avoided violence definitions were taken, with permission, from Julie Horney's (2001) study. The line between these two situations was drawn to discern between more serious acts of violence. Being grabbed or pushed was seen as more minor forms of violence and are very different from punching or hitting. This line was drawn to obtain a more adequate sample of violent situations. Respondents were given definitions and examples of each type of situation. Respondents were asked to report whether or not they had been involved in any of these situations. If they had been involved, up to three of each type of situation was examined.

The other situational outcome dependent variable was injury. There were two measures of opponents' injuries employed. The first measure indicated whether or not the opponent(s) was injured in the situation with a simple yes/no response. The second measure indicated the type of injury to the opponent(s). The injuries were coded into three possible responses: minor, moderate, and serious. Minor injuries included bruises, black eye(s), minor cuts, scratches, swelling, and chipped or knocked out teeth. Moderate injuries included being knocked unconscious, internal injuries, and broken bones. Serious injuries included gunshot or bullet wounds and knife or stab wounds. Moderate and serious injury categories were combined in the final analysis due to the lack of variability in each.

For this study, a second approach was utilized to examine situational outcomes through the use of vignettes. All offenders were given three hypothetical scenarios, or

vignettes, with standardized response categories and choices. Each hypothetical scenario represented an ambiguous situation, and the respondent was asked to think about what he would do in these situations. The vignettes utilized were taken from Horney's (2001) study. The three hypothetical scenarios take place in a bar setting, at the respondent's house, and in a parking lot. The situational outcomes for each scenario were categorized into passive or active responses. For example, the fist vignette puts the respondent in a conversation with a woman in a bar. The respondent does not realize it, but she is with her boyfriend. Suddenly, the boyfriend comes from across the room and grabs the respondent by the arm, angrily asking what the respondent is doing. For each vignette, situational anger was measured on an 11 point scale. Zero indicated "Not at All" angry while five indicated "Somewhat" angry, and ten was "Extremely" angry. All respondents were asked to report the same decision making processes (e.g., opponent(s) intent, goals, behavior, and alternative behavior construction) that were asked in the *Situational Report Survey* described in the next section. For instance, a survey item was "At this point in the situation, what would your goal be?" The response was open-ended, and for analysis, responses were coded as interpersonal (0) or intrapersonal (1). Next, the respondent reported how he would react. These response choices were "Apologize and say you didn't know she was with someone," "Walk away," "Shove him and tell him to keep his hands off you," or "Punch him". Then the respondent was asked to choose "yes" or "no" in response to if he thought of other ways to react.

Vignettes were useful in that they provided supplemental information to this study. Very rarely are situations experienced by one person identical to those experienced by another. Vignettes are standardized examples of situations that ask the respondent to

put themselves in the particular situation given, thereby allowing all respondents to artificially experience the same situation that is not bounded by individual opportunities. This allowed the researcher to directly compare the responses across all individuals who participate in the study. Vignettes also were utilized to record decision making processes of all individuals, even those who do not have any situations to report.

Independent Variables

Many variables have to be taken into account to obtain a better understanding of what takes place in social situations. Many of the independent variables in this study were situational; however, there were individual level variables that were included as well. These variables are discussed below.

Concerning the individual level variables, most were concerning the respondent's demographics, education, and arrest information. The respondent's demographical information included age, race, and socioeconomic status. The respondent was asked his current age and with which racial/ethnic group he best identified. Response choices were "African American/Black, Hispanic/Mexican or Spanish American, Caucasian/White, Native American, Asian, or Other." There was one question concerning socioeconomic status, in which the response choices included "Lower Class, Working Class, Middle Class, or Upper Class." Also, pertaining to demographical information, the respondent was asked if he was "Single, Married, or had a Partner." The respondent also was asked "What is the highest level of education you completed?" This was a continuous variable, as was how many times the respondent had been arrested (including current arrest) and convicted of a crime.

Decision making, anger, and hostile attribution bias. Turning attention to the situational level variables, decision making is the cognitive processes of coming to a decision (Dodge & Crick, 1994; Fontaine & Dodge, 2006). Measures of social information processing theory (SIP) were used to tap into the decision making of respondents. Social information processing was defined as the mental operations used to make a decision that creates a behavioral response during social interactions (Crick and Dodge, 1994). Social information processing theory suggests people go through six cognitive processes to enact a behavioral response. Since this is a partial test of SIP, four of the six steps were measured quantitatively. These measures have been taken from prior literature on social information processing theory (see Arsenio & Lemerise, 2004; Losel et al., 2007) and extended by this researcher.

The first SIP item measured step two of the theory, which was the respondent's interpretation of social cues by the opponent(s) in the situation. The survey item asked the respondent to indicate what he felt the opponent's intent was in the situation. This was measured on an 11 point scale from zero to ten. Zero indicated that the opponent's intent was negative, five was neutral, and ten indicated that the respondent felt the opponent's intent was positive. As indicated in the research on SIP, the theory asserts that people are more apt to act aggressively if they perceive the opponent's intent to be negative in the situation. The next SIP item was for descriptive purposes, and asks the respondent to identify how he knew what the opponent's intentions where. The response choices were: past experiences with the opponent(s), past experiences with others, you just knew, the opponent(s) told you, the opponent(s) behavior, or other. The third SIP item measured step three of the theory, which is the goal(s) of the respondent in the

situation. The goal(s) refers to what the respondent wanted to get out of the situation. This question was open-ended to allow the respondent to list any goal(s) they had in the situation. Based on the goal(s), it was then categorized into three response choices: interpersonal, intrapersonal, or both. SIP literature suggests that individuals are more likely to enact a violent behavioral response if they pick goals that are more intrapersonal.

Another SIP item measured step four of the theory, which concerns the respondent's response access or construction. The item asked the respondents if they thought of any other ways to deal with the situation (yes/no). Although there were follow-up questions that were asked to determine what these alternative responses were and the number of alternatives, these were not included in the analysis. Rather, this information was included as descriptive information during analysis. The theory suggests that people who act more violently are less likely to think of alternate ways to deal with situations. The last SIP item measured step six of the theory (behavioral enactment of the decision) and asked the respondent if his behavior got him what he wanted in the situation (yes/no). This question relates back to the goal clarification step. The theory asserts that individuals enact the behavioral response they feel will get them the goal(s) they want to achieve in the situation.

Anger and hostile attribution bias were two other independent variables measured at both the trait and state level. A trait refers to differences among individuals in perceiving a wide range of situations a certain way. A state is a temporary, subjective feeling that varies depending on the situation (see Forgays, Spielberger, Ottaway, & Forgays, 1998; Spielberger, Reheiser, & Sydeman, 1995, Spielberger, Ritterband,

Sydeman, Reheiser, & Unger, 1995). The immediate section below discusses the definitions of anger and how it was measured in the survey, followed by a discussion concerning hostile attribution bias.

Operationally defined, anger is an emotion that "consists of feelings that vary in intensity from mild irritation or annoyance to intense fury or rage" (Spielberger, Jacobs, Russell, & Crane, 1983, p.16). In the current study, anger was measured both at the trait (individual) and state (situational) level. Two scales, the Trait Anger and Feeling Angry Scales, were used to measure anger at these levels. Both scales were originally developed by Spielberger et al. and updated by Spielberger (1999).

Trait anger was measured using a ten item scale with two subscales. The Angry Temperament (T-Anger/T) Subscale measured the respondent's general propensity to experience and express anger, with little or no provocation, with items such as "I am a hot-headed person." The second subscale, Angry Reaction (T-Anger/R), measured individual differences in the disposition to express anger when criticized or treated unfairly by others (e.g., "I feel annoyed when I am not given recognition for doing good work"). The respondent was asked to indicate how he generally feels or reacts with answer choices of "Almost Never (1), Sometimes (2), Often (3), and Almost Always (4)". Score ranges on this scale were from 10 (for a respondent who marked mark "Almost Never" on all items) to 40 (for a respondent who marked "Almost Always" on all items).

This study measured anger at the state, or situational level, using a subscale of the State-Anger Scale. The Feeling Angry scale was a five item scale used to measure how the respondent felt in the situation. It contained items such as "I was furious" and "I was

mad". The answer choices were "Not at All (1), Somewhat (2), Moderately So (3), and Very Much So (4)" and had a score range of 5 (for a respondent who marked "Not at All" on all items) to 20 (for a respondent who marked "Very Much So" on all items).

Unlike anger, hostile attribution is a perception of other people's attitudes or behaviors. Hostile attribution bias was conceptually defined as a perception of other people harboring negative feelings toward you. Operationally, it was defined as the respondent negatively evaluating other individuals' emotions toward the respondent (Topalli & O'Neal, 2003). Two scales, the Trait Hostile Attribution Bias and State Hostile Attribution Bias Scales, were used to measure hostile attribution bias at these levels. Topalli and O'Neal (2003) utilized the state scale in their study on provocation and retaliatory motivation. For the purposes of this study, both scales had the same items; however, the wording was changed accordingly, based on what type of measurement (personal and situational levels).

Trait and state hostile attribution bias were each measured using a six item scale. For the trait scale items, the respondent was asked to report how he perceives most people feel about him most of the time. Examples included, "Most people are angry with you" and "Most people are hostile with you." For the state scale items, the respondents reported how they perceived the opponent(s) felt during the situation. Examples included, "The opponent(s) was angry with you" and "The opponent(s) was hostile towards you." These questions were all answered on a five point Likert scale of "Strongly Disagree (1)" to "Strongly Agree (5)." The score range for both scales was 6 to 30, with higher scores representing more hostile attribution biases.

Motive and victim selection. Motive was another independent variable measured at the situational level. Motives are context specific and conceptualized as reason(s) for a specific behavior. Operationally defined, motive(s) referred to the reason(s) that causes the respondent to get into a situation (Pizarro, 2008). The question measuring respondent's motive was "Why did you get into this situation?" There were ten answer choices created based on the literature reviewed concerning motives for assault and robbery. These answer choices included instrumental motives, such as money and drugs, and expressive motives, such as anger and control. The respondents were to mark all choices that best applied. There was an "Other" option for individuals to add a motive(s) if there was not an appropriate close-ended choice. After the respondent chose his motive(s), then the responses were categorized as instrumental (1), expressive (2), or both (3). As the literature review disclosed, traditional research has suggested motives for robbery are instrumental; whereas, motives for assault are expressive. Newer research on both crimes has indicated that both crimes can have instrumental and expressive motives.

Victim selection referred to the process the respondent goes through when choosing an opponent or multiple opponents. As the literature review indicated, victim selection is the who, what, when, and the where of opponent selection. There were two survey items that measured the process respondents go through when choosing a target. One survey item asked the respondent to report "In the situation, what was most important" with the options: "Selecting the opponent(s)," "Selecting the place *then* the opponent(s)," and "Neither." These options were coded zero through two, respectively. The second item measured the amount of planning the respondent went through before taking part in the situation. The respondent was asked "How much planning did you do

before the situation?" The response choices to this item were measured on an 11 point scale. Zero indicated "No Planning," while five was "Some," and ten was "A Lot."

There were several items measuring the "who" of victim selection. Two survey items measured the relationship between the respondent and the opponent(s). The first item asked the respondent to report "What relationship, prior to the situation, did you and the opponent(s) have?" There were 19 response items including stranger, acquaintances, friends, different family members, and current and former significant others. For descriptive statistic purposes, these response items were categorized as "stranger," "acquaintance," "friend," "family," or "other." Then the respondent was asked "How close were you and the opponent(s)?" on an 11 point scale. Zero indicated "Not at All," while five was "Somewhat," and ten was "Very Close." Other survey items, which were used as descriptive information, were the demographic characteristics of the opponent(s), including: sex, age, race, and socioeconomic status.

There were several survey items that measured the "what" of victim selection. The survey items measuring victim selection were each unique indicators of what makes a victim stand out to the respondent; therefore, all were independent variables. The "what" are the characteristics that drew the respondent to the opponent(s). These characteristics can be specific to the opponent(s) and to the immediate environment. The survey items examining the characteristics of the person are detailed first, followed by the items examining the importance of the environment.

Survey items about the opponent(s) included "Was the opponent(s) an active participant?" with "no" and "yes" as dichotomized responses. This item was answered based on prior questions concerning who started the verbal and physical attacks, and

how, if at all, did the opponent(s) attack the respondent. Another item asked the respondent to report whether the situation involved retaliation against the opponent(s) for a prior situation. This item also was dichotomized as no (0) or yes (1).

There were six final items that consisted of statements about the "what" of the opponent(s). These survey items are original and were developed based on the literature review. The respondent was asked to choose on a five point Likert Scale (Strongly Agree to Strongly Disagree) the most appropriate response for each statement. The statements included, "The opponent(s) was in the wrong place at the wrong time," "The opponent(s) was an easy target," and "The opponent(s) had something you wanted."

There were five items concerning the "what" about the immediate environment the situation took place. One item measured the importance of bystanders. Specifically, if there were bystanders, "Did this change the way you carried out the situation?" The respondent could answer "no" or "yes." The four remaining items were statements with a five point Likert Scale (Strongly Agree to Strongly Disagree). The respondent was to choose the most appropriate response for each statement. These statements were "You felt comfortable in the place," "You knew you would not stick out," "You did not want to be known," and "The area had attractive places (schools, illegal markets, retail business, etc.)". These survey items about the "what" of the opponent(s) and the environment were used to tap into what makes a person and environment stand out to the respondent.

The "when" of victim selection referred to the time of day the situation occurred. There was one survey item measuring this, and the response categories were: (1) Morning (7-11:59 a.m., (2) Afternoon (noon-4:59 p.m.), (3) Evening (5-10 p.m.), (4) Late night

(10:01 p.m.-12 a.m.), and (5) During early morning (12:01-6:59 a.m.). This survey item was used as a descriptive item.

The "where" of victim selection referred to the location the situation took place. It was a descriptive survey item to better understand the situational context. This survey item had18 possible locations to choose from. These locations included home, bar, nightclub, restaurant, hotel, parking lot, bank, convenience store, and workplace. If the situation took place away from the respondent's home, then the respondent was asked "The situation took place within how many miles of your home?" The respondent then identified the mileage.

Substance use, intent to harm, and weaponry. Other independent variables included substance use, intent to harm, and weaponry. There were three survey items measuring substance abuse. The first item concerned the respondent's perception of whether or not the opponent(s) was under the influence of substances. Response categories were "No," "Drinking only," "Drugs only," "Both," "Couldn't tell which," or "Don't know." The remaining two items concerning substance use were about the respondent. Both asked the respondent to report if he was under the influence of alcohol or drugs. Both items' responses were dichotomized into no/yes, where no was coded as zero and yes was coded as one.

Next, one survey item measured how badly the respondent wanted to physically harm the opponent(s). The response was on an 11 point scale. Zero indicated "Not at All," while five was "Somewhat," and ten indicated the respondent wanted to physically harm the opponent(s) "Very Much." The last situational level independent variable was weapons. There were six items examining weaponry: three each concerning the

respondent and opponent(s). The respondent was asked to report if he or the opponent(s) threatened to use a weapon, had a weapon, or used a weapon. All of these questions had answer choices of no (coded as zero) and yes (coded as one), and the items concerning the opponent(s) contained a response of "Don't know." If the respondent or opponent(s) had a weapon, the respondent was asked to report all weapons present in the situation. If the respondent or opponent(s) used a weapon, then the respondent was asked to report the main weapon used in the situation.

Validity

The items on the survey were used to measure the key variables of the study. The degree to which this occurs is the validity or accuracy of the measures. Validity is theoretically driven and refers to the "extent to which an instrument (the survey) measures what it is projected to measure" (Carmines & Zeller, 1979, p.16). The validity of this study was assessed in numerous ways. Several of the survey items were taken from previous studies examining violent situations. Newly created items on the survey instrument were assessed for face validity by examining the survey items to see if items make sense in relation to what the researcher is attempting to measure (Carmines & Zeller; Hagan, 1993). The researcher had others who are knowledgeable in this area review the survey to make sure the survey measured what it was attempting to measure at face value.

Another type of validity that is important to take into account is construct validity. Construct validity refers to the "extent to which the measure being validated is related in theoretically expected ways to other concepts or constructs" (Thornberry& Krohn, 2000, p. 19). For this study, the key was to examine whether the decision making processes of

respondents correlate with situational outcomes in the expected ways. The construct validity of the social information processing theory survey items was assessed once data was collected and analyzed. In the hypotheses, the expected empirical relationship between the measures of the concepts was specified. Once data was collected, the empirical relationship between the measures of the concepts was examined. If the variables were related in expected ways, then the relationship supports the construct validity of the measures.

Internal Validity

The internal validity of any study is crucial to produce worthwhile and usable results. In this study, it was important to take potential threats to internal validity into account. These threats included survey error, respondents' ability and willingness to answer survey items, and respondents' ability to recall past situations. These concerns are discussed below with specific steps taken in this study to enhance internal validity.

When designing a survey, the goal is to reduce potential survey error. Potential threats in this study were measurement and nonresponse error. Measurement error results from an inadequacy of measuring the concepts the survey is intended to measure (Dillman, 2007). This type of error often results from poor question wording and weak response items on the survey. If offenders do not completely understand the question, they may not answer the question(s) accurately, resulting in an inadequacy of measuring the research questions. For this study, questions on the survey were worded for easy comprehension, and any word that might be difficult to understand had another descriptive word or an example next to it to increase a respondent's understanding. Also, the researcher and the assistant read the survey questions to the respondents. In doing

this, the researcher and the assistant were able to answer any questions a respondent had and ensured the respondents understood the meaning of each question. Concerning weak response choice, prior literature guided the construction of response choices to attempt to include all possible options.

Nonresponse error is another type of survey error and refers to the differences in characteristics between individuals who choose not to participate in the study compared to those who do participate. This type of error is difficult since it is out of the control of the researcher. The most the researcher and the assistant could do was to fully explain the purpose of the study and its significance to the potential respondents. These individuals were free to decline participation. However, past research on incarcerated offenders has yielded high response rates (see Junger-Tas & Marshall, 1999).

The respondents' ability to answer survey items can threaten the internal validity of this study. Respondents may lack the knowledge to answer certain survey items (Fowler, 2002). The decision making questions were very step oriented and asked for in-depth analysis of the respondents' decision making processes at the time the violent and avoided violence situations took place. Crick and Dodge (1994) suggest the steps of social information processing might be subconscious, resulting in a lack of respondents being fully aware or able to explain their own cognitive processes. The researcher and the assistant asked questions concerning information about the physical and emotional aspects of the interaction between the respondent and the other person(s) involved in the situation. These questions could increase the ability for the respondent to explain his thoughts. Also, the survey had close-ended responses, including an option of "Don't Know," if the respondent could not verbalize his cognitive processes.

Another concern was respondents' willingness to truthfully answer survey items (Fowler, 2002). The respondents were asked sensitive questions they may view as invasive. Respondents were asked about deviant and illegal behaviors in situations they may not have wanted to report. Every effort was undertaken to reduce the respondents' concerns. The respondents were reminded of strict confidentiality terms. They also were assured no one outside of the research staff would see individual surveys or know who participated in the study. The respondents were reminded the purpose of the research was not for the researcher to judge, but to better understand the activities of the respondents. The researcher and the assistant stressed the importance of the accuracy of the information being given for these purposes. Past research has shown samples of incarcerated offenders accurately report their behaviors (see Junger-Tas & Marshall, 1999).

The last potential threat in this study was possible problems with a respondent's accurate recall. Respondents were asked to report up to three situations for robbery, attempted robbery, assault, and a similar situation were violence was avoided. This could have resulted in as many as 12 situations for each respondent. Therefore, recall could have been a problem (Fowler, 2002). To help with this potential threat, recent situations, those occurring within the last two years, were of focus. Also, these types of situations may be seen as more significant than other life events. These situations can be more dangerous and involve more emotion, increasing the chances of recall. Resources were used to reduce or eliminate this possible threat. Research has shown the resources utilized in this study were effective in reducing this threat (more detailed information is in the Survey Administration section).

Survey Methodology and Construction

Due to the problematic nature of accessing offenders, past situational research has relied on many different methods. Decision making research has utilized surveys, but it has relied heavily on vignettes to indirectly measure decision making and aggression. The robbery literature concerning motives has used the semi-structured interview method with small samples of active offenders. Much of the situational research has relied heavily upon police data and national surveys, including victim reports, to examine victim selection and substance use. Due to the lack of studies comprehensively measuring situational information and the use of multiple research methods across studies, there is a fragmented and inadequate representation of the situational context of robbery and assault.

Data for this study was collected using a self-report survey administered to respondents by the researcher and the assistant. A survey design provides the opportunity for individuals in a sample to self-report about specific behaviors, beliefs, and perceptions, and for the researcher to turn these into quantitative descriptions. This study asked questions concerning the offenders' past behaviors and decision making. Specifically, the offenders were asked about situations that had taken place up to two years earlier.

The self-report method is one of three main sources of gathering criminal information (Thornberry & Krohn, 2000). Questions are often raised about the reliance on offenders' accounts; however, the researcher believes offenders can provide more information and a broader range of situations than other types of sources. Official records do not provide information concerning decision making or victim selection characteristics

of the offender, and they fail to account for the criminal situations that are not reported to police. While victim information is of interest in this study, collecting data from victims provides fewer details concerning interactions in the situation, relies on victim observations about the offender, and provides a limited sample of both violent and avoided violence situations (Wells & Horney, 2002). In addition, victims cannot give accurate information concerning offender decision making processes.

Although there have been questions raised concerning the reliability and validity of a respondent's recall and reporting in self-report surveys, research has shown it to be an acceptable way to collect research (Thornberry & Krohn, 2000; Junger-Tas & Marshall, 1999). Not only is it acceptable, but it is necessary to obtain information about the full context of criminal situations (Horney, 2001). The self-report method is the only way to capture the cognitive processes of offenders, their victim selection processes, and in-depth information concerning substance use in the situation compared to any normal day. Concerning the three main sources of gathering criminal information, self-report is the only source that can provide a comprehensive picture of the criminal situation.

The purpose of this survey was to fill in significant gaps in the situational literature on robbery and assaults. Given the research questions in this particular study, a survey method specifically designed to measure individual characteristics, decision making, and other situational characteristics of violent and avoided violence situations was an appropriate method to employ for numerous reasons. First, and most important, the survey method has the advantage of identifying attributes of the offender population by using a smaller group of offenders (the sample). Second, it is the only way to examine the decision making of offenders. Third, it is economical and provides the researcher with

an efficient way to collect data in a relatively small amount of time (Brewer & Hunter, 2006). This researcher and the assistant had a time limit or a restricted amount of time with each offender, and surveys are conducive under time constraints. Fourth, surveys allow the researcher to ask standardized or uniform questions to all respondents, allowing for respondents' answers to be compared (Fowler, 2002). This study involved a large sample of newly incarcerated offenders and asked each offender about multiple situations. The survey for this study asked uniform questions to allow for different individuals and situations to be compared and analyzed.

For the construction of the survey, Dillman's (2007) Tailored Design Method was referenced. The Tailored Design Method (TDM) was constructed according to principles of social exchange theory to reduce survey error. Although the TDM was originally created in reference to mail surveys, the design was helpful in the construction of researcher administered surveys as well. This design helped to maximize rewards and reduce costs to survey respondents, as well as to establish trust between the researcher (and assistant) and the respondent. Below, is a discussion on the ways to increase respondent rewards, decrease respondent costs, and establish the respondents' trust using the survey method in the current research. The section concludes with details as to the administration of the survey by the researcher and the assistant.

There are many rewards the respondents expected to gain from participation in the current study. First, the respondents were informed about the importance of being a part of the study. This study gave the respondent a chance to reveal crucial information concerning violent and avoided violence situations to increase knowledge in this area of study. Second, when the respondent was taking part in the study, the researcher and the

assistant thanked the respondent for participating in the time-consuming study. Acknowledging the participation in a voluntary research study showed the respondent the appreciation and gratitude of the researcher. Third, by creating an interesting survey, the researcher maximized the reward for the respondent (Dillman, 2007). For this survey, the layout of the questions, the fonts, and the background colors were appropriately changed periodically throughout to increase the appeal of the survey. These small but methodical changes can raise the respondents' attention and increase their interest in the survey.

Reducing social costs to the respondent increases the likelihood the survey will be completed (Dillman, 2007). The researcher implemented a few strategies to reduce social costs to the respondents. First, the researcher avoided the use of condescending language in the survey and in a discussion of the project with the respondents. The use of condescending language can make respondents feel inferior, and people make great efforts to avoid these types of situations (Dillman). Respondents are less likely to participate in survey studies with subordinating language. Second, the researcher avoided complex questions and directions. The researcher and other professionals went over the survey numerous times to eliminate any confusing or complicated questions or directions. Details like these can easily be overlooked; however, if they are not addressed, they can increase feelings of inadequacy and anxiety in the respondent (Dillman) and decrease the likelihood of respondent participation. By reducing these social costs, trust between the respondent and researcher can be increased (Dillman).

Trust is important to form the respondents' belief that the benefits of completing the survey outweigh the costs. Trust may be established by letting respondents know that something useful and important may come out of the study. Trust was established in this

study by conveying this message and detailing information in an informed consent form. Also, with this population, it was crucial to emphasize that the study was being conducted through Indiana University of Pennsylvania, thereby letting the respondents know that a legitimate authority was conducting the research (Dillman, 2007). By providing this information, the respondents were less likely to think the information they disclosed would be used against them by the criminal justice system. The researcher and the assistant also informed the respondents about strict confidentiality measures that took place in this study (discussed in the Human Subjects Protection section). These actions were taken into account to increase respondents' trust.

Survey Administration

The survey administration took place in each county facility. The researcher and the assistant met with respondents in a private room in each county jail or prison to complete the survey. Due to the population being studied and the complexity of the questions being asked, in all but one jail, the survey was administered to respondents by the researcher and the assistant using Microsoft Office Excel 2007 with a laptop computer. One jail did not allow computers, so the survey was administered with a paper and a pen. Offenders' literacy levels tend to be below the national average (Tolbert, 2002). In response to this statistic, the researcher and the assistant sat next to the respondents and read the survey questions and information to the respondents to reduce the chance that offenders misread or misunderstand survey questions. Sitting next to the respondent allowed him to not only see the computer screen but to also watch the researcher and the assistant marking response categories. This technique also increased trust and rapport between the researcher (and the assistant) and respondents since the

respondents were active participants and could see everything being recorded on the laptop (Horney, 2001).

There were two parts to the overall survey. First, all offenders in the sample were asked to complete an *Individual Survey Instrument* (see Appendix A) that asked basic demographic information, arrest and offense information, along with trait anger and hostile attribution bias questions. This survey also contained three hypothetical vignettes with a series of questions concerning respondent decision making. Concluding the survey, screening questions asked the offender if he committed one or more robberies, attempted robberies, or assaults, and similar situations where violence was avoided. If offenders had participated in at least one of these situations, the offender was asked to continue the study by taking the *Situation Report Survey* (see Appendix B). If the respondent agreed, a situation report survey was administered. Offenders had the opportunity to decide to participate only after the details of the study were disclosed.

The respondents were asked to report up to three robbery, attempted robbery, assaults, and avoided violence situations. Therefore, up to twelve situations were recorded. If the respondent had more than three of any one of these situations that occurred in the past two years, then he was asked to report the three most recent situations. Each situation was examined on the *Situation Report Survey*. The respondent gave a narrative description of the situation, which the researcher and the assistant typed into the database. The situation survey then asked the respondent questions regarding his decision making, motive, victim selection characteristics, substance use of the respondent and the victim, and intent to harm, weapons, and injury. The questions were the same for each situation. Upon completion of the situational report survey, the researcher and the

assistant answered any questions the respondent had, and then the respondent was thanked for taking time to complete the survey, finalizing the survey process.

To help determine where in time the different types of situations occurred, the researcher utilized a life event calendar (LEC). Survey research is dependent on the validity of the respondents' reports, in this case, on past situations. Research has indicated individuals use "autobiographical sequences" to organize personal memories, and the recall of specific memories usually improves with cues (see Bradburn et al., 1987). Research suggests life event calendars can help facilitate recall by tapping into this type of memory organization (see Belli, 1998, 2000; Caspi et al., 1996; Roberts & Horney, 2010; Wells & Horney, 2002).

In general, the life event calendar contextualizes events by connecting them to other events to increase recall (Wells & Horney). Belli (1998) described three types of hierarchical organized memories. At the top of the hierarchy is extended events, which are events that last for longer periods of time or have distinct starting and stopping times, such as marriages, employment, or incarceration. These serve as the basic building blocks of memory organization and help to cue lower events in the hierarchy. Summarized events are below extended events, and they last a relatively shorter period of time than extended events. Summarized events might include stints of staying out late and going to the bar. Specific events are the lowest form of the hierarchy, and are the focus of this study. All three types of events were documented on the calendar based on three types of cueing (Belli, 1998, 2000). Sequential cueing allows respondents to report memories organized chronologically. Parallel cueing relies on associations of memories across different life periods. The last method of cueing is the top-down approach, which aids

recall by using broad periods of a respondent's life as cues to remembering more specific events.

For this study, the researcher started with the last month on the calendar (the month that lead to arrest and current incarceration) and worked backwards for 24 months. The researcher used extended events, such as marriages, girlfriends, significant others as well as children, employment, gang membership, and incarceration information on the LEC. Then summarized events, such as using drugs or alcohol, partying, and criminal involvement were recorded. If the respondent thought about anything else to add to help them reference time periods, it too was recorded. These events were utilized to reference specific situations that are of interest in this study and facilitate accurate recall. This method has been found to produce accurate retrospective reports of events over several years (Belli, 1998; Caspi, et al., 1996; Horney, 2001; Roberts & Horney, 2010).

Human Subjects Protection

Researchers have to be conscientious of the ethical manner in which any study utilizing human subjects is employed (Fowler, 2002). Since inmates are a vulnerable population, this researcher adhered to the Office for Human Research Protection through the United States Department of Health and Human Services (2003) guidelines concerning the involvement of prisoners in research. Adhering to these guidelines, this research study was not anything that could not have been studied outside of jail or in society with other individuals.

Inmates are a controlled population, so additional steps were needed to ensure the respondents were adequately protected. For this study, inmates were made aware that their participation would not elicit physical rewards or incentives, positive outcomes

concerning their criminal cases, or special favors from the jail administration or workers. Additional steps included voluntary participation and informed consent, confidentiality, and no harm or deception to participants who chose to complete or not to complete the survey. The details of specific steps taken are addressed below.

The participation of respondents in this study was strictly voluntary. To ensure inmates understood their participation was fully voluntary, the researcher and the assistant read an informed consent form to the respondent. This form included information as to who was conducting the research, a brief but accurate discussion of the purposes of the research, a statement concerning the extent to which answers were protected with respect to confidentiality. In addition, the consent form assured that participation was voluntary, that no consequences, negative or positive, would result from participating in the research, and the respondents could halt participation at any time (Fowler, 2002). The form had to be signed by the respondent if he wished to participate in the study.

Protecting the respondents from any adverse effects was a primary goal. The researcher took several steps to address confidentiality. Each participating respondent was given a number for the survey instrument and situational report. Therefore, all surveys contained numbers only and no other identifying details. The researcher kept a link sheet to connect the name of the respondent (given on the consent form) with the number on the surveys. This sheet was only seen by the researcher and the assistant and was used for study purposes only. For instance, if the researcher found an incomplete survey or needed to follow up with a respondent for any reason, the researcher would be able to contact the respondent. This link sheet was destroyed once the data was cleaned.

Also, the respondents' answers to the surveys were not shared with anyone outside of the research. This data was stored under lock and key so that it was kept confidential. All information gathered, analyzed, and subsequently reported from the study was presented in aggregate form only, so no identifying characteristics could be made. The researcher and the assistant stressed to the respondents to not provide specific names of individuals who participated in the situations reported or locations. Instead, it was emphasized that they should only provide general information. The steps listed above were used to assure the confidentiality of each respondent participating in the study.

Another important protection for respondents was to guard against harming the respondents. Since the research conducted was on a vulnerable population (i.e., inmates), every effort was made to minimize any harm to the participants. The research conducted was not considered harmful. The researcher and the assistant took every effort to make the respondent fully aware of the purpose of the research. The researcher and the assistant stressed the voluntary nature of participating in the study and that participation could cease at any point.

The last protection taken in this study concerned the ethical dilemma of deception. There was no deception used in this research study. Prior to implementing the surveys, the researcher and the assistant disclosed the purpose of the current study and the intentions of the researcher. The researcher and the assistant disclosed that the respondents would not receive any special considerations (e.g., no better job, no getting out sooner) or incentives (e.g., money) for participation. Every possible effort was made to eliminate the possibility of deception. To the contrary, the researcher and the assistant established trust with each respondent to obtain factual and accurate information. All of

the protections listed above were taken to protect the respondents from any adverse outcomes from participating in the study.

Strengths and Weaknesses of the Study

Researchers should choose a research design and methodology that best fits their research questions, with the goal of reducing the challenges of collecting and analyzing data. Reducing those challenges strengthens the research study by increasing its validity and reliability. However, some research obstacles are unavoidable. This section addresses the specific strengths and weaknesses of the research design and methodology for this study.

The utilization of cross-sectional research in this study was ideal and beneficial. It allowed the researcher to adequately address this study's research questions. Utilizing an all inclusion sampling strategy was advantageous because everyone in the population had an equal chance and opportunity for participation in the study. Sampling everyone who met the study criteria and was willing to participate, greatly increased the likelihood the sample was representative of the population, significantly increasing the validity of the study.

An additional strength of the research methodology was that the researcher was administering the survey to the respondents. This generally results in a higher response rate than other forms of survey distribution (Dillman, 2007). It can be the most effective way to enlist a respondent's cooperation (Fowler, 2002) since the researcher is present to answer and discuss any concerns or questions respondents might have about participating in the study. This also may increase trust and rapport between the respondent and the researcher. The presence of the researcher also is ideal when the survey is being

administered because the researcher can answer questions and make sure survey items are understood completely and correctly answered. Due to the length of the survey and the type of questions (i.e., if no, skip two questions), the survey directions can be accurately followed, resulting in a properly completed survey (Fowler).

An important strength to this study was the self-report method. The self-report method has made a significant impact when studying crime (Thornberry & Krohn, 2000). It is the most appropriate method given the agenda of this study. The researcher was interested in situations where the offender was the primary actor, and therefore, the only source who could provide the most complete and accurate information concerning the variables of interest in this study. This method should result in an accurate account of retrospective situations, and therefore, genuine information and valid findings.

Lastly, it also was important to study and compare multiple situations in which individuals took part. Specifically, with offenders, it was imperative to study violent situations as well as similar situations where violence was avoided. By studying and comparing these types of situations, more can be learned about the differences between these situations and possibly the sources of the escalation to violent situations.

Although there were numerous strengths in this study, there was one component of this research design and methodology that may be considered a weakness. The respondents were asked to recall events from two years prior to participating in the survey. Although studies have shown the techniques being used (e.g. Life Event Calendar) in this study increased the likelihood of accurate recall, there are always recall concerns when examining events in the past. If violence is a routine event in offenders' lives, then it may be more difficult to recall the distinct features of any one event.

Analysis Plan

The researcher employed a combination of statistical procedures for this study. Descriptive and inferential statistics were utilized to describe the data and the sample of the study. The section below details the descriptive and inferential statistics used in this study.

Descriptive statistics describe quantitative information through summarizing, organizing, and graphing the information. This type of statistic examines the key features of each variable (Lewis-Beck, 1980). Descriptive statistics, including measures of central tendency and measures of dispersion, were configured, as well as examining frequency and percentage tables, to explain the characteristics of the sample and variables of interest, including the independent variables. Internal consistency (Cronbach's Alpha) was examined and reported for the anger and hostile attribution bias scales. Internal consistency reliability was utilized to examine the consistency among the items on each scale, "and by extension, the extent to which they measure the same thing" (Vogt, p. 156). SPSS was used to examine the internal consistency of each scale used on the survey. SPSS computed the Cronbach's alpha, a measure of internal consistency that varies from 0 to 1. DeVellis (2003) recommended the following alpha level standards to use in the social sciences: an unacceptable alpha is below .60; between .60 and .65 is undesirable; between .65 and .70 is minimally acceptable; between .70 and .80 is respectable; between .80 and .90 is very good; and anything much above .90 may indicate the scale needs fewer items.

Since this study collected data on situations that were nested within individuals, there was a need for a hierarchical modeling statistical technique. Specifically, due to the

dichotomous outcome (dependent) variables, hierarchical generalized linear modeling (HGLM) was used to predict values of the dependent variables based on independent variables (see Raudenbush & Bryk, 2002). This statistical technique was utilized in order to address the lack of independence in situation reports. This study was a contextual analysis that focused on individual behaviors across situations. For this study, one respondent could have experienced different types of situations. The situations analyzed were robbery, attempted robbery, assaults, and avoided violence. These experiences were different for all respondents. Therefore, situations varied within the individual and across individuals, so the situational units of analysis were nested within the individual units of analysis. The level-1 in the current analysis was situational and level-2 was individual.

HGLM was used in this study to separate the variance into components to explain the effects of the different levels of analysis (Johnson, 2010). Logistic regression would be inadequate to use in this study for numerous reasons. First, logistic regression fails to incorporate information both within and across individuals. Second, it fails to take into account the hierarchical structure of data and that different sample sizes are needed at each level of analysis. For this study, there is a need for a larger sample of situations than for individuals. Third, a single level logistic regression model assumes individual predictors exert the same effect in each aggregate grouping. For these reasons, HGLM is the superior analytical strategy.

CHAPTER IV

RESULTS

Before proceeding into the discussion of the statistical models, it is important to describe the interview procedures used (briefly) and the characteristics of the study sample. Two researchers conducted interviews with 330 respondents from four jails in Western Pennsylvania from June to October 2010. The average interview took approximately one hour to complete. In three of the jails, the interviews were conducted in separate, private rooms, with only the interviewer and respondent present. In the fourth and largest jail, the interviews were conducted in one large room designated for attorneys and clients to meet. The attorney client room had approximately eight tables laid out against the walls of the room. In this room, both interviewers were conducting interviews with different respondents, while attorneys (at times) were also meeting with clients. However, the layout of the room optimized the privacy of each respondent. Additionally, correctional officers stayed out of the attorney-client room, and there was a closed door to the room to maximize privacy.

Table 1 provides descriptive statistics regarding the sample of 330 respondents. The average age of respondents was 30 years old. The median for the respondents' arrests was five, and the median for the respondents' convictions was three. The study sample was predominately comprised of Caucasians (60.6%) and African Americans (33.3%). For this reason, the race/ethnicity variable was dichotomized into white and non-white for the analyses that follows. Concerning education, half of all respondents received a high school diploma or GED, while over 27% had not completed eleventh grade. Approximately 22% of respondents had at least attended college. Concerning

socioeconomic status, the majority of respondents identified as either lower or working class (66.1%), with the remainder identifying as middle or upper class (33%). Due to the lack of variance in the financial status, this variable was dichotomized into lower or working class (scored "0") and middle or upper class (scored "1") in subsequent analyses. Concerning marital status, half of the respondents identified themselves as single. Others reported being married (11.50%) or having a partner (37.90%). Lastly, many respondents had multiple charges against them. Of these charges, 19.05% of respondents were charged with a person related offense. These types of charges included attempted homicide, robbery, attempted robbery, assault, and rape. Many respondents had property charges (17.81%), which included burglary or theft, while 17.28% and 6.35% of respondents had drug and alcohol related charges, respectively. Approximately 12% of respondents had been charged with a probation or parole violation, while 27.51% of respondents had other charges. These other charges included harassment, disorderly conduct, and conspiracy.

Table 1

Descriptive Statistics for the Sample of 330 Inmates Who Completed Interviews

VARIABLE	FREQUENCY	PERCENT
RACE/ETHNICITY		
Caucasian/White	200	60.60
African American/Black	110	33.30
Other	20	6.00
EDUCATION		
8^{th} Grade or less	4	1.20
9^{th}-11^{th} Grade	86	26.00
HS Diploma or GED	165	50.00
Some College	65	19.70
College Graduate	5	1.50
Post-Grad Study	5	1.50
FINANCIAL STATUS		
Lower Class	66	20.00
Working Class	152	46.10
Middle Class	100	30.30
Upper Class	9	2.70
MARITAL STATUS		
Single	167	50.60
Partner	125	37.90
Married	38	11.50
OFFENSE TYPE		
Person	108	19.05
Property	101	17.81
Drugs	98	17.28
Alcohol	36	6.35
Probation/Parole Violation	68	11.99
Other	27.51	27.51
VARIABLE	MEAN	STD. DEVIATION
Age	30.41	10.37
VARIABLE	MEDIAN	STD. DEVIATION
Arrests	5	19.35
Convictions	3	5.90

A total of 641 situations were reported by the respondents during the interviews. Of these, 16 did not fit the study's definitions of the situations and were therefore not included, resulting in a total of 625 situations recorded. Table 2 presents the descriptive statistics concerning the four situation types gathered for this study. As shown in the

table, almost half (49.30%) of all situations reported were assaults, followed by avoided violence situations (25.60%) and robberies (20.80%). Attempted robbery represented the lowest category disclosed by respondents (4.30%). Of the 330 respondents who participated in the study, 100 respondents identified 160 avoided violence situations, 196 respondents identified 308 assault situations, 25 respondents reported 27 attempted robbery situations, and 89 respondents reported 130 robbery situations.

Table 2

Situation Types

SITUATION TYPE	FREQUENCY	PERCENT
Robbery	130	20.80
Attempted Robbery	27	4.30
Assault	308	49.30
Avoided Violence	160	25.60
Total	625	100.00

Test of Hypotheses

In the analyses that follow, the above situations were examined. Each hypothesis consisted of numerous models comparing: avoided violence and assault; avoided violence and robbery; assault and robbery; assault and avoided violence versus robbery and attempted robbery; and attempted robbery and avoided violence versus robbery and assault. As a result of the limited frequency of attempted robberies reported in this study, these situations were only included in combination with other situation types. Due to the number of situational outcomes being compared for each of the hypotheses, a variety of models were run[2].

[2]Utilizing the variance inflation factor (VIF) and a correlation matrix , there were no problems with multicollinearity among any of the variables in this study.

Hypothesis One

H_a (1): There will be significant variations in an individual's decision making processes that will affect the outcome of the situation.

Hypothesis one dealt with examining the differences in decision making, using social information processing theory. The variables measuring SIP were: opponent(s) intentions (OppIntent), the respondent's goal (GoalType), if the respondent thought of other ways (OtherWays) to deal with the situation, and if the action got the respondent what he wanted (ActionWanted) in the situation.

Avoided violence vs. assault. The first comparison examined was avoided violence versus assault situations. Table 3 displays the descriptive statistics for decision making variables that were not included in the model[3]. As shown in the table, respondents determined intentions of the opponent(s) from a combination of internal (e.g., prior knowledge or trait variables) and external cues (e.g., cue formed during the situation). In the situation, the majority of cues were external, specifically taken from the opponent's behavior for both types of situations (42.75% in avoided violence and 48.24% in assault situations). The second most retrieved cue was internal, in that the respondents accessed past experiences with the opponent(s) (21.73% in avoided violence and 15.73% in assault situations), followed by the opponent(s) telling the respondent his or her intentions in the situation (17.75% in avoided violence and 14.69% in assault situations).

[3]Variables that were "Mark all that apply" have attribute frequencies that surpass the number of situations. Similarly, missing responses were not included; therefore, some of the variables will not add up to the number of situations.

In 21.25% of the avoided violence situations, respondents thought of other ways to deal with the situation. In those situations, 91.17% of the time respondents admitted violence could have occurred, and 50% admitted they would have gotten what they wanted if they would have acted in other ways in the situation. Conversely, in assault situations, very few of the respondents (13.63%) thought of other ways to deal with the situation. Of those, the majority (61.90%) admitted violence could have been avoided, and 52.38% admitted they would have gotten what they wanted if they would have acted in other ways in the situation.

Table 3

Descriptive Statistics for Decision Making Variables in Avoided Violence Versus Assault Situations

VARIABLE	AVOIDED VIOLENCE		ASSAULT	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
RESP. KNEW OPP.(S) INTENT				
Past Exp. w/ Opp.(s)	60	21.73	76	15.73
Past Exp. w/ Others	6	2.17	17	3.51
You Just Knew	39	14.13	69	14.28
Opp.(s) Told You	49	17.75	71	14.69
Opp.(s) Behavior	118	42.75	233	48.24
Other	4	1.44	17	3.51
RESP. THOUGHT OF OTHER WAYS				
No	126	78.75	266	86.36
Yes	34	21.25	42	13.63
IF RESP. THOUGHT OF OTHER WAYS				
Avoid Violence	3	8.82	26	61.90
Violence Occur	31	91.17	16	38.09
PREDICT ACTION WANTED				
No	17	50.00	20	47.61
Yes	17	50.00	22	52.38

An empirical test of hypothesis one is shown in table 10. The analysis allowed for the examination of which decision making variables influenced the likelihood of assault

(coded 1) versus avoided violence (coded 0). It was hypothesized that in assault situations (compared to avoided situations), respondents would attribute more negative intentions of the opponent(s) at the second step of processing (interpretation of cues) (H_a (1a)), select more intrapersonal goals at step three (H_a (1b)), generate fewer behavioral responses at step four (H_a (1c)), and admit their action got them what they wanted in the situation (H_a (1d)). The analysis for the current hypothesis took the following form[4]:

$$\eta = \beta_{00} + \beta_{10}*\text{OppIntent} + \beta_{20}*\text{GoalType} + \beta_{30}*\text{OtherWays} + \beta_{40}*\text{ActionWanted} + r_0$$

η = type of situational outcome
*OppIntent = Respondent's indication of opponent's intentions on scale 0-10, where 0 was negative intentions, 5 was neutral, and 10 was positive intentions
*GoalType= respondent's goal dichotomized into intrapersonal (0) or interpersonal (1)
*OtherWays= respondent's indication of other ways to deal with the situation (No=0, Yes=1)
*ActionWanted= did the action get the respondent what he wanted (No=0, Yes=1)

If hypotheses H_a (1a-1c) were correct, then $\beta_{10,}$ $\beta_{20,}$ and β_{30} would be statistically significant and negative. To support H_a (1d), β_{40} would be statistically significant. The results for these hypotheses are presented in Table 4, and the findings support the hypotheses. All but one independent variable was statistically significant in the model.

As shown in Table 4, a unit change in opponent(s) intentions yielded an 11.71% decrease in the odds that a situation ended in assault versus an avoided violence[5]. This

[4]In order to isolate the with-in person effects hypothesized, it was necessary to use a centering strategy (see Raudenbush & Bryk, 2002). For this and the remaining analyses, the level-1 predictors were group-mean centered, and level-2 predictors were grand-mean centered, as suggested by Raudenbush & Bryk.
[5]Roncek and Swatt (2006) suggested the direct interpretation of the logit coefficient for continuous variables by multiplying the coefficient by 100, thereby describing the effects of an independent variable in terms of the percentage change in the odds given a unit change in the continuous independent variable. This dissertation models this practice throughout when interpreting all continuous variables.

finding indicates that, in situations where the respondent attributed more positive intentions to the opponent(s), the situational outcome was more likely to be avoided violence rather than assault situations. For the "GoalType" of an individual, an interpersonal goal (rather than intrapersonal) resulted in a 77.31% decrease in the odds a situation ended in assault versus avoided violence. In addition, if the respondent thought of alternative ways to deal with the situation at the time, there was a 54.84% decrease in the odds a situation ended in assault versus avoided violence. Conversely, if the respondent thought he got what he wanted in the situation, there was a 34.41% increase in the odds a situation ended in assault versus avoided violence, although the relationship was not statistically significant.

Table 4

Hierarchical Generalized Linear Model (LaPlace). Impact of Decision Making Variables on Situational Outcome (0=Avoided Violence, 1=Assault)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Between Person			
Intercept, β_{00}	0.6738	.1164	1.9617
OppIntent, β_{10}	-0.1171*	.0567	0.8894
GoalType, β_{20}	-1.4832**	.3701	0.2269
OtherWays, β_{30}	-0.7947*	.3572	0.4516
ActionWanted, β_{40}	0.2957	.2963	1.3441

**p< .01 and *p< .05

Avoided violence vs. robbery. The second comparison made testing hypothesis one examined the situational outcome of avoided violence versus robbery when the same decision making variables were taken into account. Table 5 displays the descriptive statistics for decision making variables not included in the analysis model. As shown in the table, respondents determined intentions of the opponent(s) from a combination of internal and external cues. In the situation, the majority of cues were external, specifically taken from the opponent(s) behavior for both types of situations (42.75% in avoided

violence and 38.65% in robbery situations). The second most retrieved cue was internal, in that the respondent accessed past experiences with the opponent(s) in avoided violence situations (21.73%); whereas in robbery situations, the respondent "just knew" (e.g, respondent knew but could not verbalize how he knew) the opponent(s) intentions (29.38%). Also, the external cue of the opponent(s) telling the respondent his or her intentions occurred in 17.75% of the avoided violence compared to 13.40% in robbery situations.

In 21.25% of avoided violence situations, respondents thought of other ways to deal with the situation. Of those, 91.17% admitted violence could have occurred, and 50% admitted they would have gotten what they wanted if they would have acted in other ways in the situation. Conversely, in 16.61% of robbery situations, respondents thought of other ways to deal with the situation. Of those, the majority (78.94%) admitted violence could have been avoided, and almost half admitted they would have gotten what they wanted if they would have acted in other ways in the situation.

Table 5

Descriptive Statistics for Decision Making Variables in Avoided Violence Versus Robbery Situations

VARIABLE	AVOIDED VIOLENCE		ROBBERY	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
RESP. KNEW OPP.(S) INTENT				
Past Exp. w/ Opp.(s)	60	21.73	22	11.34
Past Exp. w/ Others	6	2.17	11	5.67
You Just Knew	39	14.13	57	29.38
Opp.(s) Told You	49	17.75	26	13.40
Opp.(s) Behavior	118	42.75	75	38.65
Other	4	1.44	3	1.54
RESP. THOUGHT OF OTHER WAYS				
No	126	78.75	111	85.38
Yes	34	21.25	19	16.61
IF RESP. THOUGHT OF OTHER WAYS				
Avoid Violence	3	8.82	15	78.94
Violence Occur	31	91.17	4	21.05
PREDICT ACTION WANTED				
No	17	50.00	10	52.63
Yes	17	50.00	9	47.36

Similar to the hypotheses put forth in the avoided violence and assault model, it was hypothesized that in robbery situations (coded 1) compared to avoided violence situations (coded 0), respondents would have more intrapersonal goals (H_a (1b)), generate fewer behavioral responses (H_a (1c)), and would disclose that their action got them what they wanted (H_a (1d)). However, for this model it was hypothesized that respondents would attribute more positive intentions to the opponent(s) in robbery situations compared to avoided violence situations (H_a (1a)). The analysis for the current hypothesis took the following form:

$$\eta = \beta_{00} + \beta_{10}*\text{OppIntent} + \beta_{20}*\text{GoalType} + \beta_{30}*\text{OtherWays} + \beta_{40}*\text{ActionWanted} + r_0$$

If H_a (1c-1d) were correct, then β_{20} and β_{30} would be statistically significant and negative, while β_{10} and β_{40}would be statistically significant and positive. Table 6 shows the results for this model, and the findings indicate that the hypotheses were supported in the model. All but one independent variable was statistically significant.

As shown in Table 6, a unit change in opponent(s) intentions yielded a 42.22% increase in the odds a situation ended in robbery versus avoided violence. Concerning "GoalType," if the respondent had an interpersonal goal (rather than intrapersonal), there was a 96.88% decrease in the odds a situation ended in robbery versus avoided violence. In addition, if the respondent thought of alternative ways to deal with the situation, there was a 47.35% decrease in the odds a situation ended in robbery versus avoided violence, although the relationship was not statistically significant. Conversely, if the respondent thought he got what he wanted in the situation, there was a 5618% increase in the odds a situation ended in robbery versus avoided violence.

Table 6

Hierarchical Generalized Linear Model (LaPlace). Impact of Decision Making Variables on Situational Outcome (0=Avoided Violence, 1=Robbery)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Between Person			
Intercept, β_{00}	-0.4872	.2205	0.6143
OppIntent, β_{10}	0.4222**	.1419	1.5253
GoalType, β_{20}	-3.4669**	1.1635	0.0312
OtherWays, β_{30}	-0.6413	.8721	0.5265
ActionWanted, β_{40}	4.0462**	1.3855	57.8146

**p< .01 and *p< .05

Assault vs. robbery. The third comparison under hypothesis one examined the situational outcome of assault versus robbery when the same decision making variables were taken into account. Table 7 displays the descriptive statistics for decision making variables not included in the model. As shown in the table, the majority of cues in assault

and robberies interpreted by the respondent in the situation were external cues. Taken together, the opponent's behavior and verbal cues represented over half of the interpretation cues for both situations (62.93% in assaults and 52.05% in robbery situations). The most frequently occurring internal cue accessed in the situation was past experiences with the opponent(s) in assaults (15.73% compared to 11.34%), and the respondent "just knew" the opponents intentions in robbery situations (29.38% compared to 14.28% in assaults). For the goal type of the respondent in the situation, the overwhelming majority of respondents had intrapersonal goals in assaults (78.82%) and robberies (96.20%). Most of the respondents did not think of other ways to deal with the situation at the time (86.36% in assaults and 85.38% in robberies). When respondents did think of other ways to deal with the situation, the majority thought that violence could have been avoided (61.90% in assaults and 78.94% in robberies). In assault situations, the majority of respondents predicted they would have gotten what they wanted in the situation (52.38%); whereas, in robbery situations, respondents predicted they would not have gotten what they wanted (52.63%) if they would have acted the other way.

Table 7

Descriptive Statistics for Decision Making Variables in Assault Versus Robbery Situations

VARIABLE	ASSAULT		ROBBERY	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
RESP. KNEW OPP.(S) INTENT				
Past Exp. w/ Opp.(s)	76	15.73	22	11.34
Past Exp. w/ Others	17	3.51	11	5.67
You Just Knew	69	14.28	57	29.38
Opp.(s) Told You	71	14.69	26	13.40
Opp.(s) Behavior	233	48.24	75	38.65
Other	17	3.51	3	1.54
GOAL TYPE				
Intrapersonal	242	78.82	125	96.20
Interpersonal	51	16.61	4	3.10
Both	14	4.56	1	.80
RESP. THOUGHT OF OTHER WAYS				
No	266	86.36	111	85.38
Yes	42	13.63	19	16.61
IF RESP. THOUGHT OF OTHER WAYS				
Avoid Violence	26	61.90	15	78.94
Violence Occur	16	38.09	4	21.05
PREDICT ACTION WANTED				
No	20	47.61	10	52.63
Yes	22	52.38	9	47.36

It was hypothesized that in robbery situations (coded 1) compared to assault situations (coded 0), the respondent would attribute more positive intentions to the opponent(s) and admit they got what they wanted in the situation (H_a (1a) and (1d)). Due to lack of variability, the variables "GoalType" and "OtherWays" could not be included in the current model. Therefore, the model was run with two of the four decision making variables: opponent(s) intentions (OppIntent) and if the respondents got what they wanted (ActionWanted) in the situation. The analysis took the following form:

$$\eta = \beta_{00} + \beta_{10}*\text{OppIntent} + \beta_{40}*\text{ActionWanted} + r_0$$

If hypotheses H_a (1a) and (1d) were correct, then β_{10} and β_{40} would be statistically significant and positive. The model results are shown in Table 8, and the findings suggest that the hypotheses were supported. A unit change in opponent(s) intentions yielded a 45.79% increase in the odds a situation ended in robbery versus assault. If the respondent got what he wanted in the situation, there was a 474.29% increase in the odds a situation ended in robbery versus assault. Both variables were statistically significant at the .01 level.

Table 8

Hierarchical Generalized Linear Model (LaPlace). Impact of Decision Making Variables on Situational Outcome (0=Assault, 1=Robbery)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Between Person			
Intercept, β_{00}	-1.2760	.1868	0.2791
OppIntent, β_{10}	0.4579**	.0601	1.5807
ActionWanted, β_{40}	1.7479**	.5470	5.7429

**p< .01 and *p< .05

Assault and avoided violence vs. robbery and attempted robbery. The fourth comparison under this hypothesis examined the situational outcome of assault and avoided violence versus robbery and attempted robbery when the same decision making variables were taken into account. Table 9 displays the descriptive statistics for decision making variables not included in the model. In all of the situations, the majority of cues interpreted by the respondent were external. As shown in the table, the opponent's behavior in the situation was the most frequently accessed cue (46.24% in assault and avoided violence and 38.09% in robbery and attempted robbery situations) when the respondent was interpreting the opponent's intentions. Most of the respondents did *not* think of other ways to deal with the situation at the time (i.e., 83.76% in assault and avoided violence situations versus 84.71% in robbery and attempted robbery situations).

In assault and avoided violence situations, the majority of respondents who thought of other ways to deal with the situation felt that violence could have occurred (61.84%). Similarly, in robbery and attempted robbery situations, the majority of respondents who thought of other ways to deal with the situation felt that violence could have been avoided (62.50%). In the situations being compared, respondents predicted the alternative action would have got them what they wanted (51.31% in assaults and avoided violence and 54.16% in robbery and attempted robbery situations) in the situation.

Table 9

Descriptive Statistics for Decision Making Variables in Assault and Avoided Violence Versus Robbery and Attempted Robbery Situations

VARIABLE	ASSAULT/AVOIDED VIOLENCE		ROBBERY/ATTEMPTED ROBBERY	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
RESP. KNEW OPP.(S) INTENT				
Past Exp. w/ Opp.(s)	136	17.91	26	11.25
Past Exp. w/ Others	23	3.03	14	6.06
You Just Knew	108	14.22	69	29.87
Opp.(s) Told Resp.	120	15.81	30	12.98
Opp.(s) Behavior	351	46.24	88	38.09
Other	21	2.76	4	1.73
RESP. THOUGHT OF OTHER WAYS				
No	392	83.76	133	84.71
Yes	76	16.23	24	15.28
IF RESP. THOUGHT OF OTHER WAYS				
Avoid Violence	29	38.15	15	62.50
Violence Occur	47	61.84	9	37.50
PREDICT ACTION WANTED				
No	37	48.68	11	45.83
Yes	39	51.31	13	54.16

It is important to examine the differences in decision making between these situations since two of the four involve taking something from someone else. To achieve this, a model was constructed comparing assault and avoided violence (coded 0)

situations against robbery and attempted robbery situations (coded 1). The same decision making variables were used as in the previous models. Therefore, the analysis for the current hypothesis took the following form:

$$\eta = \beta_{00} + \beta_{10}*\text{OppIntent} + \beta_{20}*\text{GoalType} + \beta_{30}*\text{OtherWays} + \beta_{40}*\text{ActionWanted} + r_0$$

Table 10 shows the results for the model. A unit change in opponent(s) intentions yielded a 34.50% increase in the odds a situation ended in robbery or attempted robbery versus assault or avoided violence. For the "GoalType," an interpersonal goal (rather than intrapersonal) in the situation resulted in an 83.19% decrease in the odds a situation ended in robbery or attempted robbery versus assault or avoided violence. In addition, if the respondent thought of alternative ways to handle the situation at the time, there was a 53.53% increase in the odds a situation ended in robbery or attempted robbery versus assault or avoided violence, although the relationship was not statistically significant. Lastly, if the respondent thought he got what he wanted in the situation, there was a 195.37% increase in the odds a situation ended in robbery or attempted robbery versus assault or avoided violence. The variables OppIntent, GoalType, and ActionWanted were all statistically significant at the .01 level.

Table 10

Hierarchical Generalized Linear Model (LaPlace). Impact of Decision Making Variables on Situational Outcome (0=Assault/Avoided Violence, 1=Robbery/Attempted Robbery)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Between Person			
Intercept, β_{00}	-1.6242	.1901	0.1970
OppIntent, β_{10}	0.3450**	.0476	1.4121
GoalType, β_{20}	-1.7828**	.5683	0.1681
OtherWays, β_{30}	0.4287	.4931	1.5353
ActionWanted, β_{40}	1.0830**	.3917	2.9537

**p< .01 and *p< .05

Attempted robbery and avoided violence vs. robbery and assault. The last model run for hypothesis one was exploratory. Conceptually, attempted robbery and avoided violence are two situations that stop short of completion. Therefore, they could be very different from robbery and assault situations. For this reason, a model was run to examine the potential differences in decision making between attempted robbery and avoided violence (coded 0) situations against robbery and assault (coded 1) situations.

Table 11 displays the descriptive statistics for decision making variables not included in the model. Concerning the respondents' interpretation of the opponent's intentions, respondents most frequently based their interpretation off of the opponent's behavior (41.85% in attempted robbery and avoided violence and 45.49% in robbery and assault situations). During these situations, respondents rarely thought of other ways to handle the situation (20.85% in attempted robbery and avoided violence and 13.29% in robbery and assaults). However, when respondents did think of other ways to deal with the situation, there were differences in the studied outcomes as to what would have occurred. In attempted robbery and avoided violence situations, 92.30% of respondents thought violence could have occurred if they would have acted in other ways. In robbery and assault situations, 67.21% of respondents thought violence could have been avoided if they would have acted in other ways. Of these, 53.84% of people in attempted robbery and avoided violence situations predicted they would have gotten what they wanted, and 50.81% of respondents in robbery and assault situations predicted they would have gotten what they wanted.

Table 11

Descriptive Statistics for Decision Making Variables in Attempted Robbery and Avoided Violence Versus Robbery and Assault Situations

VARIABLE	ATTEMPTED ROBBERY/AVOIDED VIOLENCE		ROBBERY/ASSAULT	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
RESP. KNEW OPP.(S) INTENT				
Past Exp. w/ Opp.(s)	64	20.44	98	14.47
Past Exp. w/ Others	9	2.87	28	4.13
You Just Knew	51	16.29	126	18.61
Opp.(s) Told Resp.	53	16.93	97	14.32
Opp.(s) Behavior	131	41.85	308	45.49
Other	5	1.59	20	2.95
RESP. THOUGHT OF OTHER WAYS				
No	148	79.14	377	86.07
Yes	39	20.85	61	13.29
IF RESP. THOUGHT OF OTHER WAYS				
Avoid Violence	3	7.69	41	67.21
Violence Occur	36	92.30	20	32.78
PREDICT ACTION WANTED				
No	18	46.15	30	49.18
Yes	21	53.84	31	50.81

A model was constructed comparing decision making variables in attempted robbery and avoided violence (coded 0) situations versus robbery and assault (coded 1) situations. The analysis for the current hypothesis took the following form:

$$\eta = \beta_{00} + \beta_{10}*\text{OppIntent} + \beta_{20}*\text{GoalType} + \beta_{30}*\text{OtherWays} + \beta_{40}*\text{ActionWanted} + r_0$$

Table 12 shows the results for the model. A unit change in opponent(s) intentions yielded a 2.46% decrease in the odds a situation ended in robbery or assault versus attempted robbery or avoided violence. This was the first decision making model that the opponent(s) intentions measure did not reach statistical significance. For the "GoalType," an interpersonal goal (rather than intrapersonal) resulted in a 76.74% decrease in the odds

a situation ended in robbery or assault versus attempted robbery or avoided violence. In addition, if the respondent thought of alternative ways to deal with the situation at the time, there was a 52.10% decrease in the odds a situation ended in robbery or assault versus attempted robbery or avoided violence. Lastly, if the respondents thought they got what they wanted in the situation, there was a 175.33% increase in the odds a situation ended in robbery or assault versus attempted robbery or avoided violence. The variables GoalType, OtherWays, and ActionWanted were all statistically significant at the .01 level.

Table 12

Hierarchical Generalized Linear Model (LaPlace). Impact of Decision Making Variables on Situational Outcome (0=Attempted Robbery/Avoided Violence, 1=Robbery/Assault)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Between Person			
Intercept, β_{00}	0.9015	.1015	2.4635
OppIntent, β_{10}	-0.0246	.0390	0.9756
GoalType, β_{20}	-1.4581**	.3163	0.2326
OtherWays, β_{30}	-0.7360**	.2843	0.4790
ActionWanted, β_{40}	1.0128**	.2517	2.7533

**p< .01 and *p< .05

Hypothesis Two and Three

H_a (2): Situational (state) hostile attribution bias and anger will play a significant role in an offender's decision making in certain studied outcomes. Trait anger and hostile attribution bias will be important, but they will not play as significant of a role as situational anger and hostile attribution bias on the studied situations.

H_a (3): Both anger and hostile attribution bias will play a significant role in an offender's decision making in assault situations. Respondents in assault situations will display more angry emotions and attribute opponents' intent as more hostile

than robbery respondents. Neither emotion is hypothesized to play as significant of a role in most robbery situations.

Analyses testing hypotheses two and three included two additional situational level variables and two individual level variables in the models. Trait and state anger, along with trait and state hostile attribution bias scales, were added to examine their importance in decision making in the studied situational outcomes. The following sections will discuss changes in the models with the addition of these four variables.

All four measures consisted of scales. A reliability analysis was run on each of the scales, and the results are listed in Appendix C. All four scales had a Cronbach's alpha above .80. Specifically, the ten item trait anger scale had a Cronbach's alpha of .87, and the five item state anger scale had a Cronbach's alpha of .96. The five item hostile attribution bias scale had a Cronbach's alpha of .81, and the five item hostile attribution bias scale had a Cronbach's alpha of .89. According to DeVellis (2003), scores above .80 are very good.

Avoided violence vs. assault. The first comparison discussed under hypothesis two was avoided violence and assault situations. Table 13 displays the descriptive statistics for emotion variables not included in the model. As the table indicates, respondents in avoided violence and assault situations both admitted to feeling happy (59.37% in avoided violence and 62.01% in assault situations) before the situation. The second most frequently occurring emotion was content. In avoided violence situations, 26.87% of respondents admitted they felt content, and 18.83% of respondents in assault situations admitted they felt content before the situation took place. There were more respondents who reported feeling stressed before assaults (6.16%), compared to avoided

violence situations (3.12%), but the emotion was not greatly reported in either situation. Additionally, the majority of respondents in both situations (88.75% in avoided violence and 87.66% in assaults) did not feel that emotions or the type of day they were having played a key role in getting involved in the situation.

Table 13

Descriptive Statistics for Other Emotions in Avoided Violence Versus Assault Situations

VARIABLE	AVOIDED VIOLENCE		ASSAULT	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
RESP. FEELING BEFORE				
Content	43	26.87	58	18.83
Happy	95	59.37	191	62.01
Upset	7	4.37	11	3.57
Stressed	5	3.12	19	6.16
Other	10	6.25	29	9.41
PLAY KEY ROLE				
No	142	88.75	270	87.66
Kind of Day	0	0.0	0	0.00
Emotions	1	.62	3	.97
Both	17	10.62	35	11.36

H_a (2a) predicted that in assault situations (coded 1) versus avoided violence situations (coded 0), respondents would have higher trait and state anger, as well as higher trait and state hostile attribution bias. The analysis for the current hypotheses took the following form:

$$\eta = {}_{00} + \beta_{01}*\text{TraitAnger} + \beta_{02}*\text{TraitHAB} + \beta_{10}*\text{OppIntent} + \beta_{20}*\text{GoalType} + \beta_{30}*\text{OtherWays} + \beta_{40}*\text{ActionWanted} + \beta_{50}*\text{StateAnger} + \beta_{60}*\text{StateHAB} + r_0$$

*TraitAnger = 10 item scale ranging from 10 to 40; higher numbers indicate more trait (person level) anger
*StateAnger: 5 item scale ranging from 5 to 20; higher numbers indicate more state (situational level) anger
*TraitHAB = 5 item scale ranging from 5-25; higher numbers indicate more trait (person level) hostile attribution bias
* StateHAB= 6 item scale ranging from 6-30; higher numbers indicate more state (situational level) hostile attribution bias

If hypothesis H_a (2a) was correct, then β_{01} and β_{02} would be positive, and β_{50} and β_{60} would be statistically significant and positive. Table 14 shows the results for this hypothesis, and the findings indicated that part of the hypothesis was supported. Contrary to the prediction, trait and state hostile attribution bias (TraitHAB & StateHAB) had a negative relationship with assaults. That is, a unit change in trait hostile attribution bias yielded a 3.15% decrease in the odds that a situation ended in assault versus an avoided violence. However, trait hostile attribution bias was not statistically significant at the .05 level. A unit change in state hostile attribution bias yielded a 5.28% decrease in the odds that a situation ended in assault versus avoided violence. This relationship was statistically significant at the .05 level.

There was partial support for the hypothesis concerning the anger variables. Trait and state anger coefficients had the predicted relationship with assaults. A unit change in trait anger yielded a 4.74% increase in the odds that a situation ended in assault versus avoided violence. A unit change in state anger yielded a 13.63% increase in the odds that a situation ended in assault versus avoided violence. Trait anger approached significance (.055) in this model, while state anger was statistically significant at the .01 level. The addition of these variables did not change the statistical significance of the decision making variables in the model.

Table 14

Hierarchical Generalized Linear Model (LaPlace). Impact of Decision Making Variables with Trait and State Anger and Hostile Attribution Bias on Situational Outcome (0= Avoided Violence, 1= Assault)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	0.7052	.1230	2.0243
TraitAnger, β_{01}	0.0474	.0246	1.0485
TraitHAB, β_{02}	-0.0315	.0258	0.9689
Between Person			
OppIntent, β_{10}	-0.1378*	.0638	0.8712
GoalType, β_{20}	-1.2801**	.3996	0.2779
OtherWays, β_{30}	-0.7963*	.3863	0.4509
ActionWanted, β_{40}	0.5100	.3252	1.6654
StateAnger, β_{50}	0.1363**	.0389	1.1460
StateHAB, β_{60}	-0.0528*	.0259	0.9485

**p< .01 and *p< .05

Avoided violence vs. robbery. The second comparison tested under hypothesis two was avoided violence versus robbery situations. Table 15 displays the descriptive statistics for emotion variables not included in the analysis model. As the table shows, the majority of respondents admitted to feeling happy before the studied situation took place (59.37% in avoided violence and 42.30% in robbery situations). The second most frequently occurring emotion experienced before the situations was content (26.87% in avoided violence and 25.38% in robberies). In addition, as stated in the previous model, most respondents indicated their emotion and the kind of day they were having did not play a key role in the situation (88.75% in avoided violence and 71.53% in robbery situations). However, 24.61% of respondents in robbery situations did admit both their emotion and kind of day they were having played a key role in the situation (compared to only 10.62% in avoided violence).

Table 15

Descriptive Statistics for Other Emotions in Avoided violence Versus Robbery Situations

VARIABLE	AVOIDED VIOLENCE		ROBBERY	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
RESP. FEELING BEFORE				
Content	43	26.87	33	25.38
Happy	95	59.37	55	42.30
Upset	7	4.37	3	2.30
Stressed	5	3.12	13	10.00
Other	10	6.25	26	20.00
PLAY KEY ROLE				
No	142	88.75	93	71.53
Kind of Day	0	0.0	2	1.53
Emotions	1	.62	3	2.30
Both	17	10.62	32	24.61

It was hypothesized that in avoided violence (coded 0) compared to robbery situations (coded 1), respondents would have higher trait and state anger and hostile attribution bias. If this hypothesis was correct, then β_{01} and β_{02} would be negative, and β_{50} and β_{60} would be statistically significant and negative. The analysis for the current hypothesis took the following form:

$$\eta = {}_{00} + \beta_{01}*\text{TraitAnger} + \beta_{02}*\text{TraitHAB} + \beta_{10}*\text{OppIntent} + \beta_{20}*\text{GoalType} + \beta_{30}*\text{OtherWays} + \beta_{40}*\text{ActionWanted} + \beta_{50}*\text{StateAnger} + \beta_{60}*\text{StateHAB} + r_0$$

Table 16 shows the results for this model, and the findings indicate partial support for the hypothesis. Contrary to the prediction, trait and state anger coefficients have a positive relationship with robbery. That is, a unit change in trait anger yielded an 18.82% increase in the odds that a situation ended in robbery versus avoided violence situation. A unit change in state anger yielded a 1.56% increase in the odds that a situation ended in robbery versus avoided violence situation. Although state anger was not statistically significant, trait anger was statistically significant at the .01 level.

Concerning trait and state hostile attribution bias, both coefficients had a negative relationship with robbery. A unit change in trait and state hostile attribution bias yielded a 12.04% and a 24.66% decrease in the odds (respectively) that a situation ended in robbery versus avoided violence. Both trait and state hostile attribution bias reached statistical significance at the .05 level.

Also, it is important to note that unlike the model presented in hypothesis one, with the addition of the anger and HAB variables, the variable "opponent(s) intentions" was no longer statistically significant. The p-value of that variable went from .004 to .211, with the addition of the anger and hostile attribution bias variables. All other decision making variables' p-values went up as well; however, they maintained a statistically significant relationship with the studied outcomes in the model.

Table 16

Hierarchical Generalized Linear Model (LaPlace). Impact of Decision Making Variables with Trait and State Anger and Hostile Attribution Bias on Situational Outcome (0= Avoided Violence, 1= Robbery)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	-0.6812	.2824	0.5059
TraitAnger, β_{01}	0.1882**	.0584	1.2071
TraitHAB, β_{02}	-0.1204*	.0552	0.8865
Between Person			
OppIntent, β_{10}	0.2332	.1858	1.2627
GoalType, β_{20}	-4.2551*	1.6959	0.0141
OtherWays, β_{30}	-0.4477	1.2543	0.6390
ActionWanted, β_{40}	4.7022*	1.9593	110.1975
StateAnger, β_{50}	0.0156	.1008	1.0157
StateHAB, β_{60}	-0.2466*	.1018	0.7814

**p< .01 and *p< .05

Assault vs. robbery. The third comparison examined under hypotheses two and three was assault versus robbery situations. Table 17 displays the descriptive statistics for emotion variables not included in the model. As shown in the table, the frequencies for

each studied outcome are similar to one another and to the previous descriptive statistics shown for these variables. Before the situation took place, many of the respondents reported feeling happy (62.01% in assaults and 42.30% in robberies) and content (18.83% in assaults and 25.38% in robberies). When compared to the avoided violence descriptive statistics displayed in Tables 13 and 15, there were higher percentages of individuals who admitted that both their emotions and the kind of day they were having before the situation played a key role in the situation outcome (11.36% in assault and 24.61% in robbery situations).

Table 17

Descriptive Statistics for Other Emotions in Assault Versus Robbery Situations

VARIABLE	ASSAULT		ROBBERY	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
RESP. FEELING BEFORE				
Content	58	18.83	33	25.38
Happy	191	62.01	55	42.30
Upset	11	3.57	3	2.30
Stressed	19	6.16	13	10.00
Other	29	9.41	26	20.00
PLAY KEY ROLE				
No	270	87.66	93	71.53
Kind of Day	0	0.00	2	1.53
Emotions	3	.97	3	2.30
Both	35	11.36	32	24.61

It was hypothesized that in assault situations (coded 0) compared to robbery situations (coded 1), respondents would have higher trait and state anger and hostile attribution bias. If these hypotheses were correct, then β_{01} and β_{02} would be negative, and β_{50} and β_{60} would be statistically significant and negative. The analysis for the current hypotheses took the following form:

$$\eta = \beta_{00} + \beta_{01}*\text{TraitAnger} + \beta_{02}*\text{TraitHAB} + \beta_{10}*\text{OppIntent} + \beta_{40}*\text{ActionWanted} + \beta_{50}*\text{StateAnger} + \beta_{60}*\text{StateHAB} + r_0$$

Table 18 shows the results for this model, and the findings indicate that most of the hypotheses were supported for this model. Every variable's coefficient was in the expected direction except trait anger. A unit change in trait anger yielded a 7.27% increase in the odds that a situation ended in robbery versus assault. This relationship was statistically significant at the .05 level. As expected, a unit change in trait hostile attribution bias yielded a 4.40% decrease in the odds that a situation ended in robbery versus assault. Concerning the situational level variables, a unit change in state anger yielded a 14.01% decrease in the odds that a situation ended in robbery versus assault. A unit change in state hostile attribution bias yielded a 16.39% decrease in the odds that a situation ended in robbery versus assault. Both relationships were statistically significant at the .01 level.

The decision making variables did not change significantly from the model presented in hypothesis one. The two decision making variables' (OppIntent and ActionWanted) p-vales did increase slightly. However, "OppIntent" held statistically significant at the .01 level, while "ActionWanted" went from being statistically significant at the .01 level to approaching significance (.051) with the inclusion of the anger and hostile attribution bias variables.

Table 18

Hierarchical Generalized Linear Model (LaPlace). Impact of Decision Making Variables with Trait and State Anger and Hostile Attribution Bias on Situational Outcome (0= Assault, 1= Robbery)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	-1.6644	.2618	0.1892
TraitAnger, β_{01}	0.0727*	.0347	1.0754
TraitHAB, β_{02}	-0.0440	.0420	0.9569
Between Person			
OppIntent, β_{10}	0.2570**	.0954	1.2931
ActionWanted, β_{40}	1.3417	.6871	3.8256
StateAnger, β_{50}	-0.1401**	.0412	0.8692
StateHAB, β_{60}	-0.1639**	.0278	0.8488

**p< .01 and *p< .05

Assault and avoided violence vs. robbery and attempted robbery. The fourth comparison examined under hypothesis two was assault and avoided violence compared to robbery and attempted robbery situations. Table 19 displays the descriptive statistics for the emotion variables not included in the model. As shown in the table, there were some noticeable differences between the studied outcomes. Respondents in robbery and attempted robbery situations were more likely to experience other types of emotions (21.65%) compared to assault and avoided violence (8.33%). The survey had many types of emotions listed, including frustrated, overwhelmed, angry, resentful, alone, and worthless, as well as an "other" category if the respondent felt the listed emotions did not capture how he was feeling before the situation. All of these emotions were categorized into the "other" category due to the lack of reported frequency for the attributes. Respondents in robbery and attempted robbery also had higher frequencies of feeling stressed (11.46%) compared to assault and avoided violence (5.12%). Also, respondents in robbery and attempted robbery situations were more likely to admit that both the day

they were having and their emotions played a key role in the situation taking place (26.11%) compared to assault and avoided violence situations (11.11%).

Table 19

Descriptive Statistics for Other Emotions in Avoided Violence and Assault Versus Robbery and Attempted Robbery

VARIABLE	ASSAULT/AVOIDED VIOLENCE		ROBBERY/ATTEMPTED ROBBERY	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
RESP. FEELING BEFORE				
Content	101	21.58	36	22.92
Happy	286	61.11	65	41.40
Upset	18	3.84	4	2.54
Stressed	24	5.12	18	11.46
Other	39	8.33	34	21.65
PLAY KEY ROLE				
No	412	88.03	111	70.70
Kind of Day	0	0.00	2	1.27
Emotions	4	.85	3	1.91
Both	52	11.11	41	26.11

It was hypothesized that in assault and avoided violence situations (coded 0) compared to robbery and attempted robbery situations (coded 1), respondents would have higher trait and state anger and hostile attribution bias. If these hypotheses were correct, then β_{01} and β_{02} would be negative, and β_{50} and β_{60} would be statistically significant and negative. The analysis for the current hypotheses took the following form:

$$\eta = {}_{00} + \beta_{01}*\text{TraitAnger} + \beta_{02}*\text{TraitHAB} + \beta_{10}*\text{OppIntent} + \beta_{20}*\text{GoalType} + \beta_{30}*\text{OtherWays} + \beta_{40}*\text{ActionWanted} + \beta_{50}*\text{StateAnger} + \beta_{60}*\text{StateHAB} + r_0$$

Table 20 shows the results for the analysis model, and the findings indicate that most of the hypotheses were supported for this model. Every variable's coefficient had the expected relationship with the studied outcomes except trait anger. A unit change in trait anger yielded an 11.14% increase in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence. This relationship was statistically

significant at the .01 level. As expected, a unit change in trait hostile attribution bias yielded a 5.18% decrease in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. A unit change in state anger yielded a 13.68% decrease in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. A unit change in state hostile attribution bias yielded a 15.99% decrease in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence. Both relationships were statistically significant at the .01 level.

The decision making variables' p-values changed with the addition of trait and state anger and hostile attribution bias variables. The p-value of the "OppIntent" changed from .000 to .031. There was an even more significant change in the variable "ActionWanted." The variable's p-value went from .002 in the hypothesis one model to .117, with the addition of the anger and hostile attribution variables, rendering it statistically insignificant in the current model.

Table 20

Hierarchical Generalized Linear Model (LaPlace). Impact of Decision Making Variables with Trait and State Anger and Hostile Attribution Bias on Situational Outcome (0= Assault & Avoided Violence, 1= Robbery & Attempted Robbery)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	-2.0620	.2601	0.1271
TraitAnger, β_{01}	0.1114**	.0319	1.1178
TraitHAB, β_{02}	-0.0518	.0410	0.9494
Between Person			
OppIntent, β_{10}	0.1529*	.0709	1.1652
GoalType, β_{20}	-1.8607**	.6664	0.1555
OtherWays, β_{30}	0.8861	.6090	2.4256
ActionWanted, β_{40}	0.7810	.4976	2.1836
StateAnger, β_{50}	-0.1368**	.0384	0.8721
StateHAB, β_{60}	-0.1599**	.0259	0.8521

**p< .01 and *p< .05

Attempted robbery and avoided violence vs. robbery and assault. The fifth and final comparison examined under hypothesis two was attempted robbery and avoided violence compared to robbery and assault situations. Table 21 displays the descriptive statistics for emotion variables that were not included in the model. As shown in the table, the descriptive statistics were similar to the other models. In assault and robbery situations, more respondents reported feeling stressed (7.30%) before the situation, compared to respondents in attempted robbery and avoided violence situations (5.34%). However, the overwhelming majority of respondents in both studied outcomes reported feeling happy (56.14% in attempted robbery and avoided violence and 56.16% in robbery and assault situations) before the situation. Similarly, most respondents admitted that their emotions and the day they were having did not play a key role in the situation taking place (85.56% in attempted robbery and avoided violence and 82.87% in robbery and assault situations).

Table 21

Descriptive Statistics for Other Emotions in Attempted Robbery and Avoided Violence Versus Robbery and Assault

VARIABLE	ATTEMPTED ROBBERY/AVOIDED VIOLENCE		ROBBERY/ASSAULT	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
RESP. FEELING BEFORE				
Content	46	24.59	91	20.77
Happy	105	56.14	246	56.16
Upset	8	4.27	14	3.19
Stressed	10	5.34	32	7.30
Other	18	9.62	55	12.55
PLAY KEY ROLE				
No	160	85.56	363	82.87
Kind of Day	0	0.00	2	.45
Emotions	1	.53	6	1.36
Both	26	13.90	67	15.29

The last model run for hypothesis two, like hypothesis one, was exploratory due to the lack of research comparing the studied situations. A model was run to examine the potential importance of trait and state anger in these situations and examine the effects they had on the decision making variables on attempted robbery or avoided violence (coded 0) versus robbery or assault (coded 1). The analysis for the current hypotheses took the following form:

$$\eta = {}_{00} + \beta_{01}*\text{TraitAnger} + \beta_{02}*\text{TraitHAB} + \beta_{10}*\text{OppIntent} + \beta_{20}*\text{GoalType} + \beta_{30}*\text{OtherWays} + \beta_{40}*\text{ActionWanted} + \beta_{50}*\text{StateAnger} + \beta_{60}*\text{StateHAB} + r_0$$

Table 22 shows the results for this model. Trait and state anger had a positive relationship with robbery and assault, while trait and state hostile attribution bias had a negative relationship with the situations. Specifically, a unit change in trait and state anger yielded a 4.10% and 9.25% increase in the odds (respectively) that a situation ended in robbery or assault versus attempted robbery or avoided violence. These relationships were both statistically significant. Conversely, a unit change in trait and state hostile attribution bias yielded a 4.61% and 5.99% decrease in the odds (respectively) that a situation ended in robbery or assault versus attempted robbery or avoided violence. These relationships were both statistically significant.

The decision making variables did not change significantly with the inclusion of the trait and state anger and hostile attribution bias variables. “GoalType” and “ActionWanted” remained statistically significant at the .01 level. However, “OtherWays” went from being statistically significant at the .01 level in the previous model to the .05 level in the current model.

Table 22

Hierarchical Generalized Linear Model (LaPlace). Impact of Decision Making Variables with Trait and State Anger and Hostile Attribution Bias on Situational Outcome (0= Attempted Robbery & Avoided Violence, 1= Robbery & Assault)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	0.9289	.1077	2.5318
TraitAnger, β_{01}	0.0410*	.0205	1.0418
TraitHAB, β_{02}	-0.0461*	.0213	0.9548
Between Person			
OppIntent, β_{10}	-0.0529	.0454	0.9483
GoalType, β_{20}	-1.3030**	.3419	0.2717
OtherWays, β_{30}	-0.7601*	.3066	0.4675
ActionWanted, β_{40}	1.0933**	.2625	2.9842
StateAnger, β_{50}	0.0925**	.0294	1.0969
StateHAB, β_{60}	-0.0599**	.0209	0.9418

**p< .01 and *p< .05

Hypotheses Four and Five

H_a (4): The significance of individual level and situational level variables will be different depending on the situational outcomes.

H_a (5): The individual level and situational level variables will be different in assault and robbery situations. Anger, hostile attribution bias, and substance use will play a more significant role in assault situations than in robbery situations. Motives and victim selection will be more important in robbery versus assault situations.

Hypotheses four and five examined the majority of studied situational variables, as well as important individual level variables, on each studied outcome (Refer to the Key Variables section in the previous chapter for a complete list of these variables and how they were measured). The following discussion will highlight important descriptive information and key findings in each model. Due to slight differences in each model, the analysis equations for the models will be detailed under each model.

Avoided violence vs. assault. The first comparison examined under hypothesis four was avoided violence versus assault situations. Table 23 shows the descriptive statistics for the situational level variables that were not included in the model. As mentioned above, avoided violence situations involved pushing, shoving, grabbing, and other types of high risk situations, but the situations did not escalate beyond that. Therefore, there could be attack descriptive listed in the avoided violence situations.

In both types of situations, verbal threats were made (66.25% in avoided violence and 52.27% in assaults). In both situations, respondents admitted that the opponent(s) was most likely to make the first threat (74.20% in avoided violence and 62.50% in assault situations). In many avoided violence situations, there was not physical contact by anyone (68.12%). If there was any type of action taken by the respondent or opponent(s) in avoided violence situations, there were verbal attacks (45.53% by the respondent and 72.62% by the opponent(s)) and only pushing, shoving, and grabbing (5.63% by the respondent and 16.75% by the opponent(s)). In assault situations, the opponent(s) was most likely to make the first physical attack (50.00%), with the respondent being the second most likely individual (42.20%). Many of the assault situations consisted of the respondents and the opponents punching, slapping, or scratching one another (35.28% for the respondent and 31.59% for the opponent(s)). The most serious form of violence, the use of a weapon, took place in considerably fewer situations (6.85% by the respondent and 10.41% by the opponent(s)).

Avoided violence situations were more likely to take place in the afternoon hours (12:00-4:59 p.m.); whereas, assault situations tended to occur more in the evening (5-10 p.m.). Avoided violence and assault situations were more likely to occur at the

respondents' home (33.12% and 25.97%) and take place against one opponent (70.62% in avoided violence and 75.32% in assault situations). The opponent(s) was usually someone who was an acquaintance (33.13% in avoided violence and 32.82% in assault situations). In avoided violence and assault situations, many of the opponents were white, male, and of working class. In avoided violence and assault situations, bystanders were prevalent (63.12% in avoided violence and 73.05% in assault situations), and the presence of bystanders did not change the way respondents acted in the situations (79.20% in avoided violence and 89.77% in assault situations). In avoided violence situations, the opponent(s) was more likely to be under the influence of alcohol (48.48%) than drugs (37.61%); whereas, the respondent was more likely to be under the influence of drugs (29.37%) than alcohol (28.75%). In assault situations, the opponent(s) was more likely to be under the influence of alcohol (50.32%) than drugs (27.77%), as was the respondent (50.48% under the influence of alcohol compared to 36.03% under the influence of drugs). Of the situations where the respondents and/or the opponent(s) were under the influence of substances, the respondents in 63.47% of the avoided violence situations and 58.56% of the assault situations thought that substances played a key role in the situation. Specifically, the opponents' alcohol influence (45.91% in avoided violence and 43.42% in assault situations) played a key role.

Table 23

Situational Descriptive Statistics for the Avoided Violence Versus Assault Situations

VARIABLE	AVOIDED VIOLENCE		ASSAULT	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
THREAT BEFORE ATTACK				
No	54	33.75	147	47.72
Yes	106	66.25	161	52.27
IF YES, WHO MADE FIRST THREAT				
Resp.	25	23.80	49	30.62
Opp.(s)	78	74.20	100	62.50
Other	2	1.90	11	6.87
FIRST ATTACK				
No One	109	68.12	4	1.29
Resp.	7	4.37	130	42.20
Opp.(s)	42	26.25	154	50.00
Other	2	1.25	20	6.49
RESP. ATTACK TYPE				
Did Not Attack	103	48.35	22	3.67
Verbal	97	45.53	149	24.91
Punch/Slap/Scratch	0	.00	211	35.28
Throw Something	1	.46	18	3.01
Kick	0	.00	65	10.86
Choke	0	.00	35	5.85
Weapon	0	.00	41	6.85
Other	12	5.63	57	9.53
OPP.(S) ATTACK TYPE				
Did Not Attack	17	9.49	45	8.07
Verbal	130	72.62	159	28.54
Punch/Slap/Scratch	0	.00	176	31.59
Throw Something	2	1.11	20	3.59
Kick	0	.00	37	6.64
Choke	0	.00	28	5.02
Weapon	0	.00	58	10.41
Other	30	16.75	34	6.10
TIME OF DAY				
Morning	8	5.00	26	8.44
Afternoon	64	40.00	69	22.40
Evening	39	24.37	80	25.07
Late Night	29	18.12	59	19.15
Early Morning	20	12.50	74	24.02

TOOK PLACE				
Resp.'s Home	53	33.12	80	25.97
Opp.'s Home	13	8.12	37	12.01
Third Party Home	12	7.50	29	9.41
Bar	24	15.00	66	21.42
Street	22	13.75	41	13.31
Other	36	22.50	55	17.85
RESP. ACTED ALONE				
No	21	13.12	60	19.48
Yes	139	86.87	248	80.51
MULTIPLE OPPONENTS				
No	113	70.62	232	75.32
Yes	47	29.37	76	24.67
RELATIONSHIP				
Stranger	32	18.93	91	27.65
Acquaintance	56	33.13	108	32.82
Friend	31	18.34	66	20.06
Sign. Other/Family	33	19.52	46	13.98
Other	17	10.05	18	5.47
OPP.(S) SEX				
Male	129	80.12	258	83.76
Female	26	16.14	35	11.36
Both	6	3.72	15	4.87
OPP.(S) RACE				
White	106	63.47	186	58.86
Non-White	61	36.52	130	41.13
OPP.(S) FINANCIAL STAT.				
Lower	45	31.03	83	32.54
Working	55	37.93	108	42.35
Middle	34	23.44	52	20.39
Upper	11	7.58	12	4.70
MOST IMPORTANT				
Opp.(s)	28	17.50	95	30.84
Place	2	1.25	3	.97
Neither	130	81.25	210	68.18
BYSTANDERS				
No	59	36.87	83	26.94
Yes	101	63.12	225	73.05
IF YES, CHANGE BEHAVIOR				
No	80	79.20	202	89.77

Yes	21	20.79	23	10.22
OPP.(S) ALCOHOL				
No	68	51.51	152	49.67
Yes	64	48.48	154	50.32
OPP.(S) DRUGS				
No	68	62.38	221	72.22
Yes	41	37.61	85	27.77
RESP. ALCOHOL				
No	114	71.25	152	49.51
Yes	46	28.75	155	50.48
RESP. DRUGS				
No	113	70.62	197	63.96
Yes	47	29.37	111	36.03
SUB. PLAYED KEY ROLE				
No	42	36.52	104	41.43
Yes	73	63.47	147	58.56
IF YES, WHOSE				
Opp.(s) Alcohol	45	45.91	99	43.42
Opp.(s) Drugs	23	23.46	38	16.66
Resp. Alcohol	18	18.36	69	30.26
Resp. Drugs	12	12.24	22	9.64

An empirical test of hypothesis four is shown in Table 24. It was predicted (H_a (4a)) that the respondents' trait anger and hostile attribution bias would play a more significant role in assault (coded 1) compared to avoided violence (coded 0) situations. At the situational level, it was also predicted (H_a (4a)) that anger, hostile attribution bias, and the respondents' alcohol use before and during the situation would have the most impact on assault, compared to avoided violence situations. If this prediction is correct, then β_{02} and β_{03} would be positive, and β_{70}, β_{80}, and β_{140} would be statistically significant and positive. Conversely, it was predicted (H_a (4b)) that decision making variables would play the most significant role in avoided violence, compared to assault situations. Specifically, individuals would be less likely to attribute negative intent to the opponent(s) and would generate more behavioral responses in avoided violence situations, compared to violent.

If this prediction is correct, then β_{30} and β_{50} would be statistically significant and negative. The analysis for this studied outcome took the following form:

$$\eta = \beta_{00} + \beta_{01}*\text{Age} + \beta_{02}*\text{TraitAnger} + \beta_{03}*\text{TraitAnger} + \beta_{10}*\text{ThreatsBefore} + \beta_{20}*\text{MotiveType} + \beta_{30}*\text{OppIntent} + \beta_{40}*\text{GoalType} + \beta_{50}*\text{OtherWays} + \beta_{60}*\text{DayHaving} + \beta_{70}*\text{StateAnger} + \beta_{80}*\text{StateHAB} + \beta_{90}*\text{OppWith} + \beta_{100}*\text{RespAlone} + \beta_{110}*\text{Bystanders} + \beta_{120}*\text{OppAlcohol} + \beta_{130}*\text{OppDrugs} + \beta_{140}*\text{RespAlcohol} + \beta_{150}*\text{RespDrugs} + \beta_{160}*\text{IntendHarm} + \beta_{170}*\text{OppWeapon} + \beta_{180}*\text{RespWeapon} + \beta_{190}*\text{OppInjured} + \beta_{200}*\text{PreviousSit} + r_0$$

Table 24 shows the results for these hypotheses, and the findings indicate the majority of hypotheses (all but hostile attribution bias) have the expected relationship with the situational outcomes; however, most were not statistically significant. There were four variables that were statistically significant and two that approached statistical significance in the model. At the individual level, a unit change in age yielded a 3.90% decrease in the odds that a situation ended in assault versus avoided violence. This relationship was statistically significant at the .05 level. Also, a unit change in trait anger yielded a 7.64% increase in the odds that a situation ended in assault versus avoided violence. This relationship was statistically significant at the .05 level. One individual level variable approached significance in the model. A one unit change in trait hostile attribution bias yielded a 6.43% decrease in the odds that a situation ended in assault versus avoided violence. The direction of the relationship was not expected, but it did approach statistical significance with a p-value of .078.

At the situational level, there were two variables that were statistically significant and one that approached significance in the model. If the respondent thought the opponent(s) had a weapon in the situation, there was a 597.76% increase in the odds that a situation ended in assault versus avoided violence. This relationship was statistically significant at the .05 level. If the opponent(s) was injured in the situation, there was a

4012.3% increase in the odds that a situation ended in assault versus avoided violence. This relationship was statistically significant at the .01 level.

Concerning hypothesis H_a (4a), the situational variables (anger, state hostile attribution bias, and respondent's alcohol) coefficients were not statistically significant in the model. Given a unit change in situational anger, there was a 2.12% increase in the odds that a situation ended in assault versus avoided violence. Unexpectedly, given a unit change in state hostile attribution bias, there was a .45% decrease in the odds that a situation ended in assault versus avoided violence. If the respondent had been under the influence of alcohol during the situation, there was a 467.83% increase in the odds that a situation ended in assault versus avoided violence. Although this variable was not statistically significant as hypothesized, it did approach statistical significance with a p-value of .085.

Under hypothesis H_a (4b), it was predicted that decision making variables would play an important role in avoided violence versus assault situations. While these variables' coefficients had the expected relationship with the situational outcomes, they were not statistically significant in the model. Given a one unit change in opponent(s) intentions, there was a 13.92% decrease in the odds that a situation ended in assault versus avoided violence. If the goal type was interpersonal in a situation, there was a 36.38% decrease in the odds that a situation ended in assault versus avoided violence. If the respondent thought of other ways to handle the situation, there was a 21.62% decrease in the odds that a situation ended in assault versus avoided violence.

There were other situational level variables that, although did not approach significance, warrant discussion. When respondents' motives were expressive (compared

to instrumental), there was a 91.63% increase in the odds that a situation ended in assault versus avoided violence. Given a unit change concerning the number of individuals with the opponent(s), there was a 4.91% increase in the odds that a situation ended in assault. If the respondent acted alone, there was a 41.77% increase in the odds that a situation ended in assault versus avoided violence. If there were bystanders around, there was a 41.50% increase in the odds that a situation ended in assault versus avoided violence.

Conversely, if the respondent thought that the opponent(s) was under the influence of substances in the situation, there was a decrease in the odds of an assault versus avoided violence. Specifically, if the respondent thought the opponent(s) was under the influence of alcohol, there was a 48.19% decrease in the odds that a situation ended in assault versus avoided violence. If the respondent thought the opponent(s) was under the influence of drugs, there was a 12.01% decrease in the odds that a situation ended in assault versus avoided violence. Similarly, if the respondent was under the influence of drugs, there was a 24.69% decrease in the odds that a situation ended in assault versus avoided violence. Concerning weaponry, if the respondent had a weapon in the situation, there was a 29.72% decrease in the odds that a situation ended in assault versus avoided violence. If the respondent and opponent(s) had been involved in previous disputes, there was a 28.46% decrease in the odds that a situation ended in assault versus avoided violence.

Table 24

Hierarchical Generalized Linear Model (LaPlace). Impact of Individual and Situational Level Variables on Situational Outcome (0= Avoided Violence, 1= Assault)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	0.9303	.2324	2.5353
Age, β_{01}	-0.0390*	.0173	0.9617
TraitAnger, β_{02}	0.0764*	.0342	1.0794
TraitHAB, β_{03}	-0.0643	.0364	0.9377
Between Person			
ThreatsBefore, β_{10}	0.0039	.6433	1.0039
MotiveType, β_{20}	0.6504	1.0071	1.9163
OppIntent, β_{30}	-0.1392	.1400	0.8699
GoalType, β_{40}	-0.4521	1.1623	0.6362
OtherWays, β_{50}	-0.2435	.8095	0.7838
DayHaving, β_{60}	-0.0998	.1499	0.9050
StateAnger, β_{70}	0.0212	.0692	1.0214
StateHAB, β_{80}	-0.0045	.0578	0.9954
OppWith, β_{90}	0.0491	.0804	1.0504
RespAlone, β_{100}	0.3490	.9386	1.4177
Bystanders, β_{110}	0.3471	.7699	1.4150
OppAlcohol, β_{120}	-0.6574	1.0382	0.5181
OppDrugs, β_{130}	-0.1278	.7693	0.8799
RespAlcohol, β_{140}	1.7366	1.0063	5.6783
RespDrugs, β_{150}	-0.2835	.8883	0.7531
IntendHarm, β_{160}	0.2194	.2095	1.2453
OppWeapon, β_{170}	1.9427*	.9100	6.9776
RespWeapon, β_{180}	-0.3525	.8865	0.7028
OppInjured, β_{190}	3.7165**	.9113	41.1237
PreviousSit, β_{200}	-0.3348	.7028	0.7154

**p< .01 and *p< .05

Avoided violence vs. robbery. The second comparison examined under hypothesis four was avoided violence versus robbery situations. Table 25 shows the descriptive statistics for several situational variables that give a more comprehensive picture for the avoided violence and robbery situations that took place. For instance, in avoided violence situations, respondents stated that, on average, there were threats in the situation (66.25% in avoided violence compared to only 33.84% in robbery situations). In the majority of robbery situations, there were no threats made before the physical attack

(66.15% compared to 33.75% in avoided violence). In many avoided violence situations[6], there was no physical contact in the situation (68.12%); whereas, the respondent was most likely to make the first physical attack in robbery situations (60.76% compared to 4.37% in avoided violence). In robbery situations, the respondents were more likely to use a weapon (26.90%), and the opponent(s) did not attack (62.25%). In avoided violence situations, there were verbal attacks by the respondent (45.53%) and opponent(s) (72.62%).

In the studied situations, robbery tended to occur more in the evening (5-10 p.m.), compared to avoided violence situations, which were more likely to occur in the afternoon (12-4:59 p.m.). Robbery situations were most likely to take place in the opponent's home (33.84% compared to only 8.12% in avoided violence). Both situations were more likely to take place against one opponent (84.61% in robbery and 70.62% in avoided violence situations) and someone who was an acquaintance of the respondent (38.63% in robbery and 33.13% in avoided violence situations). These situations were more likely to have opponents who were white males (white: 63.47% in robbery and 55.55% in avoided violence situations; males: 80.12% in robbery and 87.59% in avoided violence situations) of working class (37.93% in robbery and 43.69% in avoided violence situations). Unlike avoided violence, in robbery situations, selecting the opponent(s) was most important (75.96% compared to only 17.50% of avoided violence situations) to the respondents. Neither the opponent(s) nor the place was important in the majority of avoided violence situations (81.25% compared to only 12.40% of the robbery situations).

[6]In avoided violence situations, the only physical contact that took place was pushing, shoving, and grabbing.

Avoided violence situations were more likely to have bystanders present (63.12% compared to 40% in robbery situations). Surprisingly, if there were bystanders around, the respondents reported not changing their behavior in either situation type (96.15% in robbery and 79.20% in avoided violence situations). Concerning substances, respondents thought that opponents were more likely to be under the influence of alcohol in avoided violence (48.48% compared to only 15.62% in robbery situations); whereas, in robberies, they thought opponents were under the influence of drugs (46.87% compared to 37.61% of avoided violence situations). In avoided violence and robbery situations, the respondent was more likely to be under the influence of drugs (29.37% in avoided violence and 58.46% in robbery situations) than alcohol (28.75% in avoided violence and 20% in robbery situations). Of the situations where the respondents and/or the opponents were under the influence of substances, the respondents in robbery situations did not feel that substances played a key role in the situation (66.98% compared to only 36.52% of avoided violence situations). For those respondents who did feel substances played a key role (33.01%), they felt that their own drug influences were key to the situation taking place (44.18%).

Table 25

Situational Descriptive Statistics for the Avoided Violence Versus Robbery Situations

VARIABLE	AVOIDED VIOLENCE		ROBBERY	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
THREAT BEFORE ATTACK				
No	54	33.75	86	66.15
Yes	106	66.25	44	33.84
IF YES, WHO MADE FIRST THREAT				
Resp.	25	23.80	33	75.00
Opp.(s)	78	74.20	5	11.36
Other	2	1.90	6	13.63
FIRST ATTACK				
No One	109	68.12	27	20.76
Resp.	7	4.37	79	60.76
Opp.(s)	42	26.25	8	6.15
Other	2	1.25	16	12.30
RESP. ATTACK TYPE				
Did Not Attack	103	48.35	21	10.65
Verbal	97	45.53	50	25.38
Punch/Slap/Scratch	0	.00	45	22.84
Throw Something	1	.46	0	0.00
Kick	0	.00	10	5.07
Choke	0	.00	4	2.03
Weapon	0	.00	53	26.90
Other	12	5.63	14	7.10
OPP.(S) ATTACK TYPE				
Did Not Attack	17	9.49	94	62.25
Verbal	130	72.62	23	15.23
Punch/Slap/Scratch	0	.00	16	10.59
Throw Something	2	1.11	1	0.66
Kick	0	.00	5	3.31
Choke	0	.00	2	1.32
Weapon	0	.00	4	2.64
Other	30	16.75	6	3.97
TIME OF DAY				
Morning	8	5.00	14	10.76
Afternoon	64	40.00	31	23.84
Evening	39	24.37	40	30.76
Late Night	29	18.12	20	15.38
Early Morning	20	12.50	25	19.23
TOOK PLACE				
Resp.'s Home	53	33.12	15	11.53

Opp.'s Home	13	8.12	44	33.84
Third Party Home	12	7.50	13	10.00
Bar	24	15.00	6	4.61
Street	22	13.75	22	16.92
Other	36	22.50	30	23.07
RESP. ACTED ALONE				
No	21	13.12	57	43.84
Yes	139	86.87	73	56.15
MULTIPLE OPPONENTS				
No	113	70.62	110	84.61
Yes	47	29.37	20	15.38
RELATIONSHIP				
Stranger	32	18.93	42	31.81
Acquaintance	56	33.13	51	38.63
Friend	31	18.34	29	21.96
Sign. Other/Family	33	19.52	6	4.54
Other	17	10.05	4	3.03
OPP.(S) SEX				
Male	129	80.12	113	87.59
Female	26	16.14	13	10.07
Both	6	3.72	3	2.32
OPP.(S) RACE				
White	106	63.47	75	55.55
Non-White	61	36.52	60	44.44
OPP.(S) FINANCIAL STAT.				
Lower	45	31.03	32	26.89
Working	55	37.93	52	43.69
Middle	34	23.44	24	20.16
Upper	11	7.58	11	9.24
MOST IMPORTANT				
Opp.(s)	28	17.50	98	75.96
Place	2	1.25	15	11.62
Neither	130	81.25	16	12.40
BYSTANDERS				
No	59	36.87	78	60.00
Yes	101	63.12	52	40.00
IF YES, CHANGE BEHAVIOR				
No	80	79.20	50	96.15
Yes	21	20.79	52	3.84

OPP.(S) ALCOHOL				
No	68	51.51	108	84.37
Yes	64	48.48	20	15.62
OPP.(S) DRUGS				
No	68	62.38	68	53.12
Yes	41	37.61	60	46.87
RESP. ALCOHOL				
No	114	71.25	104	80.00
Yes	46	28.75	26	20.00
RESP. DRUGS				
No	113	70.62	54	41.53
Yes	47	29.37	76	58.46
SUB. PLAYED KEY ROLE				
No	42	36.52	71	66.98
Yes	73	63.47	35	33.01
IF YES, WHOSE				
Opp.(s) Alcohol	45	45.91	6	13.95
Opp.(s) Drugs	23	23.46	9	20.93
Resp. Alcohol	18	18.36	9	20.93
Resp. Drugs	12	12.24	19	44.18

Next, the analysis model comparing avoided violence and robbery is discussed. H_a (4b) assumed the individual level and situational level anger and hostile attribution bias would play a more significant role in avoided violence (coded 0) compared to robbery situations (coded 1). If this prediction was correct, then β_{03}, β_{04}, β_{100}, and β_{110} would be statistically significant and negative. Additionally, it was hypothesized that all other studied situational variables would play a different role in avoided violence compared to robbery situations. H_a (4c) assumed victim selection variables and motive (instrumental) would play a more important role in robbery situations than in avoided violence situations. If this was correct, victim selection (β_{150}, β_{160}, β_{170}, β_{180}, β_{190}, β_{200}, β_{210}, β_{220}, β_{230}, and β_{240}) and motive (β_{40}) variables would be positive. The analysis for the current studied outcome took the following form:

$\eta = \beta_{00} + \beta_{01}$*Age + $_{B02}$*EdLevel + β_{03}*TraitAnger + β_{04}*TraitHAB + β_{10}*ThreatsBefore + β_{20}*OppActive + β_{30}*Retaliation + β_{40}*MotINST + β_{50}*MotiveBOTH + β_{60}*OppIntent + β_{70}*GoalType + β_{80}*OtherWays + β_{90}*DayHaving + β_{100}*StateAnger + β_{110}*StateHAB + β_{120}*OppWith+ β_{130}*RespAlone + β_{140}*Planning + β_{150}*WrongPlace + β_{160}*OppProtect + β_{170}*OppSome + β_{180}*OppRoutine + β_{190}*OppEasy + β_{200}*OppIllAct + β_{210}*ComPlace + β_{220}*NotStickOut + β_{230}*NotKnown + β_{240}*AttractPlaces + β_{250}*Bystanders + β_{260}*OppAlcohol + β_{270}*OppDrugs + β_{280}*RespAlcohol + β_{290}*RespDrugs + β_{300}*IntendHarm + β_{310}*RespWeapon + β_{320}*OppInjured + β_{330}*PreviousSit + r_0

Table 26 shows the results for the analysis model. Concerning the hypotheses, the findings are mixed, and most relationships were not statistically significant. There were eight variables that were statistically significant and three variables that approached statistical significance in the model. In support of hypothesis H_a (4b), all but one of the individual level variables (trait anger) played a more significant role in avoided violence situations. Specifically, a unit change in age yielded a 7.02% decrease in the odds that a situation ended in robbery versus avoided violence. This relationship was statistically significant at the .01 level. Also, a unit change in the respondent's education level yielded a 29.93% decrease in the odds that a situation ended in robbery versus assault. Whereas, a unit change in trait anger yielded a 12.47% increase in the odds that a situation ended in robbery versus avoided violence. This relationship was statistically significant at the .01 level. A unit change in trait hostile attribution bias yielded a 12.50% decrease in the odds that a situation ended in robbery versus avoided violence. This relationship was statistically significant at the .05 level.

At the situational level, there were four variables that were statistically significant in the model. If the opponent(s) was an active participant in the situation, there was a 75.51% decrease in the odds that a situation ended in robbery versus avoided violence. This relationship was statistically significant at the .05 level. If the respondent thought of other ways to handle the situation, there was a 92.96% decrease in the odds that a

situation ended in robbery versus avoided violence. This relationship was statistically significant at the .01 level. Two victim selection variables were statistically significant; however, only one had the anticipated relationship predicted by hypothesis H_a (4c). For a unit change in the respondent's view that the opponent(s) had something he wanted, there was a 122.93% increase in the odds that a situation ended in robbery versus avoided violence. This relationship was statistically significant at the .01 level. Whereas, for a unit change in the respondent's perception that the place was comfortable, there was a 71.26% decrease in the odds that a situation ended in robbery versus avoided violence. This relationship was statistically significant at the .05 level.

There were three variables, all at the situational level, that approached significance in the model. For a unit change in opponent(s) intentions, there was a 31.43% increase in the odds that a situation ended in robbery versus avoided violence. This relationship approached statistical significance with a p-value of .053. If the respondent's goal was interpersonal (compared to intrapersonal), there was an 86.15% decrease in the odds that a situation ended in robbery versus avoided violence. This relationship approached statistical significance with a p-value of .070. If the respondent thought the opponent(s) was under the influence of drugs during the situation, there was a 64.13% decrease in the odds that a situation ended in robbery versus avoided violence. This relationship approached significance with a p-value of .075.

There were other situational variables that, although did not approach significance, warrant discussion. H_a (4b) hypothesized that state anger and hostile attribution bias would have a more significant relationship with avoided violence. Although neither variable had a statistically significant relationship with the situational

outcomes, the hostile attribution bias coefficient was in the anticipated direction. For a unit increase in state hostile attribution bias, there was a 7.07% decrease in the odds that a situation ended in robbery versus avoided violence. Conversely, for a unit increase in state anger, there was a 1.87% increase in the odds that a situation ended in robbery versus avoided violence.

H_a (4c) predicted that victim selection and motive variables would be significant and have a positive relationship with robbery. The findings concerning victim selection variables were mixed, and most were not statistically significant in the analyses. Additionally, many of the variables' coefficients have a negative relationship with robbery. The variables that had the anticipated relationship with robbery (that have not been discussed) were "WrongPlace," "OppRoutine," and "OppEasy." That is, a unit change in "WrongPlace" (whether the opponent(s) was in the wrong place at the wrong time) yielded a 13.56% increase in the odds that a situation ended in robbery versus avoided violence. Also, a unit change in "OppRoutine" (whether the opponent's routine put him or her at risk for the situation to occur) yielded a 24.11% increase in the odds that a situation ended in robbery versus avoided violence. Lastly, a unit change in "OppEasy" (whether the opponent(s) was an easy target in the situation) yielded a 35.76% increase in the odds that a situation ended in robbery versus avoided violence.

The variables that had a negative relationship with robbery, that have not been discussed, were "OppProtect," OppIllAct," "NotStickOut," "NotKnown," and "ActtractPlaces." A unit change in "OppProtect" (whether the opponent(s) protected him or herself in the situation) and "OppIllAct" (whether the opponent(s) participated in illegal activity) yielded a 20.41% and 2.76% decrease in the odds (respectively) that a

situation ended in robbery versus avoided violence. Also, a unit change in "NotStickOut" (whether the respondent thought he stuck out in the situation) yielded 18.05% decrease in the odds that a situation ended in robbery versus avoided violence. Similarly, a unit change in "NotKnown" (whether the respondent did not want to be known in the situation) yielded a 48.58% decrease in the odds that a situation ended in robbery versus avoided violence. Lastly, a unit change in "AttractPlaces" (whether there were attractive places in the immediate area of where the situation took place) yielded a 2.53% decrease in the odds that a situation ended in robbery versus avoided violence. H_a (4c) predicting motive findings were not supported. When the respondent had an instrumental motive (compared to expressive), there was a 17.90% decrease in the odds that a situation ended in robbery versus avoided violence. However, when the motive was both instrumental and expressive (compared to expressive alone), there was a 521.71% increase in the odds that a situation ended in robbery versus avoided violence.

The results concerning substance use, weaponry, and previous disputes by the respondent and opponent(s), though not statistically significant, are worth noting. Although the opponent's drug influence has been discussed, if the opponent(s) was under the influence of alcohol, there was a 41.38% decrease in the odds that a situation ended in robbery versus avoided violence. If the respondent was under the influence of alcohol or drugs, there was a 31.03% and 51.70% decrease in the odds of both, respectively, that a situation ended in robbery versus avoided violence. If the respondent had a weapon, there was a 29.28% decrease in the odds that a situation ended in robbery versus avoided violence. Conversely, if the respondent and opponent(s) had been involved in previous

disputes, there was a 71.03% decrease in the odds that a situation ended in robbery versus avoided violence.

Table 26

Hierarchical Generalized Linear Model. Impact of Individual and Situational Level Variables on Situational Outcome (0= Avoided Violence, 1= Robbery)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	-0.5260	.2073	0.5909
Age, β_{01}	-0.0702**	.0253	0.9321
EdLevel, β_{02}	-0.2993*	.1391	0.7413
TraitAnger, β_{03}	0.1247**	.0374	1.1329
TraitHAB, β_{04}	-0.1250*	.0613	0.8824
Between Person			
ThreatsBefore, β_{10}	-0.6803	.5327	0.5064
OppActive, β_{20}	-1.4066*	.6542	0.2449
Retaliation, β_{30}	0.7471	.8565	2.1108
MotiveINST, β_{40}	-0.1971	1.1127	0.8210
MotiveBOTH, β_{50}	1.8273	1.4075	6.2171
OppIntent, β_{60}	0.3143	.1618	1.3693
GoalType, β_{70}	-1.9765	1.0874	0.1385
OtherWays, β_{80}	-2.6547**	.9620	0.0703
DayHaving, β_{90}	0.1067	.1304	1.1126
StateAnger, β_{100}	0.0187	.0774	1.0189
StateHAB, β_{110}	-0.0707	.0435	0.9316
OppWith, β_{120}	0.0919	.1020	1.0963
RespAlone, β_{130}	0.5041	.6164	1.6556
Planning, β_{140}	0.1837	.1174	1.2017
WrongPlace, β_{150}	0.1356	.2104	1.1452
OppProtect, β_{160}	-0.2041	.2175	0.8153
OppSome, β_{170}	1.2293**	.3182	3.4190
OppRoutine, β_{180}	0.2411	.3219	1.2726
OppEasy, β_{190}	0.3576	.2365	1.4298
OppIllAct, β_{200}	-0.0276	.2566	0.9727
ComPlace, β_{210}	-0.7126*	.2884	0.4903
NotStickOut, β_{220}	-0.1805	.1762	0.8348
NotKnown, β_{230}	-0.4848	.3092	0.6158
AttractPlaces, β_{240}	-0.0253	.2185	0.9749
Bystanders, β_{250}	0.5547	.5065	1.7414
OppAlcohol, β_{260}	-0.5339	1.0412	0.5862
OppDrugs, β_{270}	-1.0250	.5733	0.3587
RespAlcohol, β_{280}	-0.3714	1.0897	0.6897
RespDrugs, β_{290}	-0.7277	.8072	0.4830
IntendHarm, β_{300}	-0.0457	.2650	0.9552
RespWeapon, β_{310}	-0.3464	.7901	0.7072
OppInjured, β_{320}	0.7792	.6869	2.1797
PreviousSit, β_{330}	-1.2388	.8114	0.2897

**p< .01 and *p< .05

Assault vs. robbery. The third comparison examined under hypothesis four and five was assaults compared to robbery situations. Table 27 shows the descriptive statistics for several situational variables that were not included in the analysis model. In assault situations, it was more likely that the respondent and opponent(s) threatened one another (52.27% in assaults compared to only 33.84% in robbery situations) before the first physical attack. In the majority of the assault situations, opponents were more likely to attack in the situations (50.00%); whereas, the respondents were most likely to make the first physical attack in robbery situations (60.76%). In robbery situations, the respondents were more likely to use a weapon (26.90%) compared to assault situations (6.85%). In robbery situations, the opponent(s) rarely had a weapon (2.64%); whereas, it was a little more prevalent in assault situations (10.41%). Also, in many of the robbery situations, the opponent(s) did not attack (62.25%) the respondent, which was very different from the assault situations, in which very few of the opponents (8.07%) did not attack the respondent. In assault situations, both the respondents (35.28%) and opponents (31.59%) were more likely to physically attack by punching, slapping, and scratching compared to robbery situations (respondents in 22.84% and opponents in 10.59% situations).

Robbery and assault situations tended to occur more in the evening time (5-10 p.m.). In robbery situations, the situation was more likely to take place at the opponent's home (33.84%); whereas, assault situations tended to take place at the respondent's home (25.97%). Assault and robbery situations were more likely to take place against one opponent (75.32% in assaults and 84.61% in robbery situations) and against someone who was an acquaintance (32.82% in assaults and 38.63% in robbery situations). Both situations were more likely to have opponent(s) who were white males (white: 58.86% in

assaults and 55.55% in robbery situations; males: 83.76% in assaults and 87.59% in robbery situations) of working class (42.35% in assaults and 43.69% in robbery situations). Surprisingly, if there were bystanders around in either situation, the respondents did not change their behavior (89.77% in assaults and 96.15% in robbery situations). Unlike in assault situations where neither selecting the opponent(s) or the place was important (68.18%), in robbery situations selecting the opponent(s) was most important (75.96%) to the respondents. Of the situations where the respondents and/or the opponents were under the influence of substances, the respondents in robbery situations did not feel that substances played a key role in the situation (66.98%); however, in assault situations the respondents felt it played a key role (58.56%). In robbery situations, those respondents who thought substance use played a key role (33.01%), the respondents felt that their own drug influence was key to the situation taking place (44.18%). Whereas, in assault situations, the respondents felt that the opponent's alcohol influence (43.42%) played a key role in the situation.

Table 27

Situational Descriptive Statistics for Assault Versus Robbery Situations

VARIABLE	ASSAULT		ROBBERY	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
THREAT BEFORE ATTACK				
No	147	47.72	86	66.15
Yes	161	52.27	44	33.84
IF YES, WHO MADE FIRST THREAT				
Resp.	49	30.62	33	75.00
Opp.(s)	100	62.50	5	11.36
Other	11	6.87	6	13.63
FIRST ATTACK				
No One	4	1.29	27	20.76
Resp.	130	42.20	79	60.76
Opp.(s)	154	50.00	8	6.15
Other	20	6.49	16	12.30
RESP. ATTACK TYPE				
Did Not Attack	22	3.67	21	10.65
Verbal	149	24.91	50	25.38
Punch/Slap/Scratch	211	35.28	45	22.84
Throw Something	18	3.01	0	0.00
Kick	65	10.86	10	5.07
Choke	35	5.85	4	2.03
Weapon	41	6.85	53	26.90
Other	57	9.53	14	7.10
OPP.(S) ATTACK TYPE				
Did Not Attack	45	8.07	94	62.25
Verbal	159	28.54	23	15.23
Punch/Slap/Scratch	176	31.59	16	10.59
Throw Something	20	3.59	1	.66
Kick	37	6.64	5	3.31
Choke	28	5.02	2	1.32
Weapon	58	10.41	4	2.64
Other	34	6.10	6	3.97
TIME OF DAY				
Morning	26	8.44	14	10.76
Afternoon	69	22.40	31	23.84
Evening	80	25.07	40	30.76
Late Night	59	19.15	20	15.38
Early Morning	74	24.02	25	19.23
TOOK PLACE				

Resp.'s Home	80	25.97	15	11.53
Opp.'s Home	37	12.01	44	33.84
Third Party Home	29	9.41	13	10.00
Bar	66	21.42	6	4.61
Street	41	13.31	22	16.92
Other	55	17.85	30	23.07
RESP. ACTED ALONE				
No	60	19.48	57	43.84
Yes	248	80.51	73	56.15
MULTIPLE OPPONENTS				
No	232	75.32	110	84.61
Yes	76	24.67	20	15.38
RELATIONSHIP				
Stranger	91	27.65	42	31.81
Acquaintance	108	32.82	51	38.63
Friend	66	20.06	29	21.96
Sign. Other/Family	46	13.98	6	4.54
Other	18	5.47	4	3.03
OPP.(S) SEX				
Male	258	83.76	113	87.59
Female	35	11.36	13	10.07
Both	15	4.87	3	2.32
OPP.(S) RACE				
White	186	58.86	75	55.55
Non-White	130	41.13	60	44.44
OPP.(S) FINANCIAL STAT.				
Lower	83	32.54	32	26.89
Working	108	42.35	52	43.69
Middle	52	20.39	24	20.16
Upper	12	4.70	11	9.24
MOST IMPORTANT				
Opp.(s)	95	30.84	98	75.96
Place	3	.97	15	11.62
Neither	210	68.18	16	12.40
BYSTANDERS				
No	83	26.94	78	60.00
Yes	225	73.05	52	40.00
IF YES, CHANGE BEHAVIOR				
No	202	89.77	50	96.15

Yes	23	10.22	52	3.84
OPP.(S) ALCOHOL				
No	152	49.67	108	84.37
Yes	154	50.32	20	15.62
OPP.(S) DRUGS				
No	221	72.22	68	53.12
Yes	85	27.77	60	46.87
RESP. ALCOHOL				
No	152	49.51	104	80.00
Yes	155	50.48	26	20.00
RESP. DRUGS				
No	197	63.96	54	41.53
Yes	111	36.03	76	58.46
SUB. PLAYED KEY ROLE				
No	104	41.43	71	66.98
Yes	147	58.56	35	33.01
IF YES, WHOSE				
Opp.(s) Alcohol	99	43.42	6	13.95
Opp.(s) Drugs	38	16.66	9	20.93
Resp. Alcohol	69	30.26	9	20.93
Resp. Drugs	22	9.64	19	44.18

Next, the analysis model comparing assault and robbery situations is discussed. Under this hypothesis, H_a (5) predicted that at the individual level, trait anger and hostile attribution bias would play the most significant role in assault (coded 0) compared to robbery (coded 1) situations. At the situational level, anger, hostile attribution bias, and substance use would be more important in assault situations compared to robberies. If this prediction was correct, then β_{02}, β_{03}, β_{80}, β_{90}, β_{240}, β_{250}, β_{260}, and β_{270} would be significant and negative. Conversely, it was predicted that victim selection and motive (instrumental compared to interpersonal) would play a more important role in robbery compared to assault situations (H_a (5)). If this prediction was correct, victim selection (β_{130}, β_{140}, β_{150}, β_{160}, β_{170}, β_{180}, β_{190}, β_{200}, β_{210}, and β_{220}) and motive (β_{40}) would be positive. The analysis for this model took the following form:

$\eta = \beta_{00} + \beta_{01}$*Age + β_{02}*TraitAnger + β_{03}*TraitHAB + β_{10}*ThreatsBefore + β_{20}*OppActive + β_{30}*Retaliation + β_{40}*MotINST + β_{50}*MotiveBOTH + β_{60}*OppIntent + β_{70}*DayHaving + β_{80}*StateAnger + β_{90}*StateHAB + β_{100}*OppWith+ β_{110}*RespAlone + β_{120}*Planning + β_{130}*WrongPlace + β_{140}*OppProtect + β_{150}*OppSome + β_{160}*OppRoutine + β_{170}*OppEasy + β_{180}*OppIllAct + β_{190}*ComPlace + β_{200}*NotStickOut + β_{210}*NotKnown + β_{220}*AttractPlaces + β_{230}*Bystanders + β_{240}*OppAlcohol + β_{250}*OppDrugs + β_{260}*RespAlcohol + β_{270}*RespDrugs + β_{280}*IntendHarm + β_{290}*OppWeapon + β_{300}*RespWeapon + β_{310}*OppInjured + β_{320}*PreviousSit + r_0

Table 28 shows the results for the model. Most of the hypothesized relationships were not statistically significant in the analysis model. Overall, there were eight variables, all situational, that were statistically significant in the model. Concerning the individual level variables, this study predicted (H_a (4a)) that trait anger and hostile attribution bias would have a negative relationship with robbery and be statistically significant. Although the variables were not statistically significant, trait hostile attribution bias had the anticipated relationship with the situational outcome; however, trait anger's coefficient had a positive relationship with robbery. A unit change in trait hostile attribution bias yielded a 4.58% decrease in the odds that a situation ended in robbery versus assault. Conversely, a unit change in trait anger yielded a 5.48% increase in the odds that a situation ended in robbery versus assault.

Concerning the situational level variables that were statistically significant, if the opponent(s) was an active participant in the situation, there was a 78.47% decrease in the odds that a situation ended in robbery versus assault. If the situation involved getting back at the opponent(s) for something, there was a 68.63% decrease in the odds that a situation ended in robbery versus assault. For a unit change in planning (how much planning took place by the respondent on a 0-10 scale), there was a 15.47% increase in the odds that a situation ended in robbery versus assault. All three relationships were statistically significant at the .05 level. For a unit change in the opponent's intentions,

there was a 24.70% increase in the odds that a situation ended in robbery versus assault. If the opponent(s) was injured, there was an 86.76% decrease in the odds that a situation ended in robbery versus assault. Both relationships were significant at the .01 level.

Although H_a (5) predicted all victim selection variables would be more important in robbery situations, three of the variables were statistically significant in the model. A unit change in "OppSome" yielded a 104.50% increase in the odds that a situation ended in robbery versus assault. Similarly, a unit change in "OppEasy" yielded a 62.65% increase in the odds that a situation ended in robbery versus assault. Lastly, a unit change in "NotKnown" yielded a 58.51% increase in the odds that a situation ended in robbery versus assault. These relationships were statistically significant at the .01 level.

There were other victim selection variables that had a positive and anticipated relationship with robbery, although they did not have statistically significant relationships with the outcome situations. A unit change in "WrongPlace" yielded a 13.75% increase in the odds that a situation ended in robbery versus assault. Also, a unit change in "OppRoutine" and "OppIllAct" yielded an 11.46% and 7.32% increase in the odds of both, respectively, that a situation ended in robbery versus assault. Additionally, a unit change in "AttractPlaces" yielded a 17.74% increase in the odds that a situation ended in robbery versus assault. There were three victim selection variables that had a negative relationship with robbery. A unit change in "OppProtect" yielded a 5.43% decrease in the odds that a situation ended in robbery versus assault. Also, a unit change in "ComPlace" and "NotStickOut" yielded a 3.34% and 29.78% decrease in the odds of both, respectively, that a situation ended in robbery versus assault.

H_a (5) also predicted that motive would have a positive relationship with robbery. The motive variables were not statistically significant in the model; however, the relationships with the studied outcomes were anticipated. If the respondent had an instrumental motive (compared to expressive) in a situation, there was a 65.11% increase in the odds that a situation ended in robbery versus assault. Similarly, if the respondent had both instrumental and expressive motives (compared to expressive alone), there was a 95.53% increase in the odds that a situation ended in robbery versus assault.

There were other variables that, although were not statistically significant, warrant discussion. H_a (5) hypothesized that at the situational level, anger, hostile attribution bias, and substance use would be more important in assault situations compared to robberies. A unit change in state hostile attribution bias yielded a 3.71% decrease in the odds that a situation ended in robbery versus assault. However, a unit change in state anger yielded a 3.10% increase in the odds that a situation ended in robbery versus assault. All substance use variables' coefficients, except "OppDrugs", were in the anticipated direction. For example, if the respondent and opponent(s) were under the influence of alcohol, there was a 52.09% and 7.29% decrease in the odds of both, respectively, that a situation ended in robbery versus assault. If the respondent was under the influence of drugs, then there was a 1.29% decrease in the odds that a situation ended in robbery versus assault. Conversely, if the opponent(s) was under the influence of drugs, there was a 59.15% increase in the odds that a situation ended in robbery versus assault.

The results concerning weaponry and previous disputes by the respondent and opponent(s) are worth noting. If the opponent(s) had a weapon, there was a 23.07% decrease in the odds that a situation ended in robbery versus assault. Conversely, if the

respondent had a weapon, there was an 80.27% increase in the odds that a situation ended in robbery versus assault. If the respondent and opponent(s) had prior disputes, there was a 2.5% increase in the odds that a situation ended in robbery versus assault. Again, these variables failed to reach statistical significance.

Table 28

Hierarchical Generalized Linear Model. Impact of Individual and Situational Level Variables on Situational Outcome (0= Assault, 1= Robbery)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	-1.7008	.2065	0.1825
Age, β_{01}	-0.0266	.0250	0.9737
TraitAnger, β_{02}	0.0548	.0355	1.0563
TraitHAB, β_{03}	-0.0458	.0523	0.9551
Between Person			
ThreatsBefore, β_{10}	-0.2420	.4150	0.7850
OppActive, β_{20}	-1.5353*	.6014	0.2153
Retaliation, β_{30}	-1.1590*	.5858	0.3137
MotiveINST, β_{40}	0.5014	.7149	1.6511
MotiveBOTH, β_{50}	0.6705	.7313	1.9553
OppIntent, β_{60}	0.2470**	.0858	1.2802
DayHaving, β_{70}	0.0366	.0891	1.0372
StateAnger, β_{80}	0.0310	.0469	1.0315
StateHAB, β_{90}	-0.0371	.0396	0.9635
OppWith, β_{100}	-0.0958	.0829	0.9085
RespAlone, β_{110}	0.4647	.5179	1.5916
Planning, β_{120}	0.1547*	.0673	1.1674
WrongPlace, β_{130}	0.1375	.1327	1.1474
OppProtect, β_{140}	-0.0543	.2054	0.9471
OppSome, β_{150}	1.0450**	.2307	2.8434
OppRoutine, β_{160}	0.1146	.2309	1.1215
OppEasy, β_{170}	0.6265**	.1727	1.7810
OppIllAct, β_{180}	0.0732	.2028	1.0759
ComPlace, β_{190}	-0.0334	.2027	0.9670
NotStickOut, β_{200}	-0.2978	.1863	0.7424
NotKnown, β_{210}	0.5851**	.2233	1.7952
AttractPlaces, β_{220}	0.1774	.1512	1.1941
Bystanders, β_{230}	0.8045	.5019	2.2357
OppAlcohol, β_{240}	-0.0756	.5317	0.9271
OppDrugs, β_{250}	0.4647	.5502	1.5915
RespAlcohol, β_{260}	-0.7357	.6419	0.4791
RespDrugs, β_{270}	-0.0128	.4457	0.9871
IntendHarm, β_{280}	-0.0580	.1425	0.9436
OppWeapon, β_{290}	-0.2621	.5908	0.7693
RespWeapon, β_{300}	0.5893	.6167	1.0827
OppInjured, β_{310}	-2.0213**	.5566	0.1324
PreviousSit, β_{320}	0.0247	.5866	1.0250

**p< .01 and *p< .05

Assault and avoided violence vs. robbery and attempted robbery. The fourth comparison examined under hypothesis four was assaults and avoided violence compared to robbery and attempted robbery situations. Table 29 shows the descriptive statistics for several situational variables that were not included in the analysis model. In robbery and attempted robbery, it was more likely that before the first physical attack, no one threatened one another (64.96% compared to 42.94% in assault and avoided violence situations). In many of the assault and avoided violence situations, opponents were more likely to physically attack in the situations (41.88% compared to 8.91% in robbery and attempted robbery situations); whereas, the respondents were most likely to make the first physical attack in robbery and attempted robbery situations (59.87% compared to 29.27% in assaults and avoided violence situations). In both studied outcomes, the respondents were more likely to use verbal attacks (30.33% in assault and avoided violence situations and 25.31% in robbery and attempted robbery situations), followed by punching, slapping, and scratching in assault and avoided violence situations (26.01% compared to 21.99% in robbery and attempted robbery situations), and the use of a weapon in robbery and attempted robbery situations (24.06% compared to 5.05% in assaults and avoided violence situations). The opponent(s) was more likely to attack the respondent verbally in assault and avoided violence situations (29.71% compared to 17.09% in robbery and attempted robbery situations); whereas, the opponent(s) did not attack the respondent in robbery and attempted robbery situations (54.40% compared to only 9.74% in assaults and avoided violence situations).

Robbery and attempted robbery situations tended to occur more in the evening (5-10 p.m.) (31.84% compared to 25.42% in assaults and avoided violence situations) and in

the opponent's home (36.30% compared to 10.68% in assault and avoided violence situations); whereas, assault and avoided violence situations tended to take place in the afternoon (12:00-4:59 p.m.) (28.41% compared to 24.20% in robbery and attempted robbery situations), and in the respondent's home (28.41% compared to 10.19% in robbery and attempted robbery situations). The studied situations were more likely to take place against one opponent (73.87% in assault and avoided violence and 82.80% in robbery and attempted robbery situations) and someone who was an acquaintance or someone the respondent knew by sight or by name (32.93% in assault and avoided violence and 39.37% in robbery and attempted robbery situations). Both studied outcomes were more likely to have opponents who were white males (white: 60.45% in assault and avoided violence and 54.60% in robbery and attempted robbery situations; males: 82.51% in assault and avoided violence and 86.62% in robbery and attempted robbery situations) of working class (40.85% in assaults and avoided violence and 41.95% in robbery and attempted robbery situations).

Surprisingly, if there were bystanders around in either outcome (69.65% in assault and avoided violence and 40.76% in robbery and attempted robbery situations), the respondents did not change their behavior (86.50% in assault and avoided violence and 89.06% in robbery and attempted robbery situations). Unlike in assault and avoided violence situations, in robbery and attempted robbery situations, selecting the opponent(s) was most important (72.43% compared to only 26.28% in assault and avoided violence situations). Of the situations where the respondents and/or the opponents were under the influence of substances, the respondents in robbery and attempted robbery situations did not feel that substances played a key role in the situation (63.56%); however, in assault

and avoided violence situations, the respondents thought substances played a key role (60.10%). For those respondents who did feel that it played a key role in robberies (36.43%), the respondents felt that their own drug influences was key to the situation taking place (44.26%). Whereas, in assault and avoided violence situations, the respondents felt that the opponent's alcohol influence (44.17%) played the most significant role in the situation.

Table 29

Situational Descriptive Statistics for Assault and Avoided Violence Versus Robbery and Attempted Robbery Situations

VARIABLE	ASSAULT/AVOIDED VIOLENCE		ROBBERY/ATTEMPTED ROBBERY	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
THREAT BEFORE ATTACK				
No	201	42.94	102	64.96
Yes	267	57.05	55	35.03
IF YES, WHO MADE FIRST THREAT				
Resp.	74	27.92	40	72.72
Opp.(s)	178	67.16	9	16.36
Other	13	4.90	6	10.90
FIRST ATTACK				
No One	113	24.14	32	20.38
Resp.	137	29.27	94	59.87
Opp.(s)	196	41.88	14	8.91
Other	22	4.70	17	10.82
RESP. ATTACK TYPE				
Did Not Attack	125	15.41	28	11.61
Verbal	246	30.33	61	25.31
Punch/Slap/Scratch	211	26.01	53	21.99
Throw Something	19	2.34	0	0
Kick	65	8.01	13	5.39
Choke	35	4.31	9	3.73
Weapon	41	5.05	58	24.06
Other	69	8.50	19	7.88
OPP.(S) ATTACK TYPE				
Did Not Attack	62	9.74	105	54.40
Verbal	189	29.71	33	17.09
Punch/Slap/Scratch	176	26.67	27	13.98
Throw Something	22	3.45	1	.51
Kick	37	5.81	8	4.14
Choke	28	4.40	3	1.55
Weapon	58	9.11	9	4.66
Other	64	10.06	7	3.62
TIME OF DAY				
Morning	34	7.26	15	9.55
Afternoon	133	28.41	38	24.20
Evening	119	25.42	50	31.84

Late Night	88	18.80	26	16.56
Early Morning	94	20.08	28	17.83
TOOK PLACE				
Resp.'s Home	133	28.41	16	10.19
Opp.'s Home	50	10.68	57	36.30
Third Party Home	41	8.76	15	9.55
Bar	90	19.23	7	4.45
Street	63	13.46	28	17.83
Other	91	19.44	34	21.65
RESP. ACTED ALONE				
No	81	17.30	74	47.13
Yes	387	82.69	83	52.86
MULTIPLE OPPONENTS				
No	345	73.87	130	82.80
Yes	122	26.12	27	17.19
RELATIONSHIP				
Stranger	123	24.69	51	31.87
Acquaintance	164	32.93	63	39.37
Friend	97	19.47	34	21.25
Sign. Other/Family	79	15.86	7	4.37
Other	35	7.02	5	3.12
OPP.(S) SEX				
Male	387	82.51	136	86.62
Female	61	13.00	16	10.19
Both	21	4.47	5	3.18
OPP.(S) RACE				
White	292	60.45	89	54.60
Non-White	191	39.54	74	45.39
OPP.(S) FINANCIAL STAT.				
Lower	127	31.82	35	24.47
Working	163	40.85	60	41.95
Middle	86	21.55	34	23.77
Upper	23	5.76	14	9.79
MOST IMPORTANT				
Opp.(s)	123	26.28	113	72.43
Place	5	1.06	23	14.74
Neither	340	72.64	20	12.82
BYSTANDERS				
No	142	30.34	93	59.23
Yes	326	69.65	64	40.76
IF YES, CHANGE				

BEHAVIOR				
No	282	86.50	57	89.06
Yes	44	13.49	7	10.93
OPP.(S) ALCOHOL				
No	220	50.22	227	89.72
Yes	218	49.77	26	10.27
OPP.(S) DRUGS				
No	289	69.63	87	57.23
Yes	126	30.36	65	42.76
RESP. ALCOHOL				
No	266	56.95	127	80.89
Yes	201	43.04	30	19.10
RESP. DRUGS				
No	310	66.23	64	40.76
Yes	158	33.76	93	59.23
SUB. PLAYED KEY ROLE				
No	146	39.89	82	63.56
Yes	220	60.10	47	36.43
IF YES, WHOSE				
Opp.(s) Alcohol	144	44.17	10	16.39
Opp.(s) Drugs	61	18.71	11	18.03
Resp. Alcohol	87	26.68	13	21.31
Resp. Drugs	34	10.42	27	44.26

Next, this section discusses the analysis model that compared assault and avoided violence (coded 0) to robbery and attempted robbery situations (coded 1). Under this hypothesis, it was assumed (H_a (4c)) that at the situational level, victim selection and instrumental motive (compared to interpersonal) would play a more important role in robbery and attempted robbery situations than in assault and avoided violence situations (coded 0). If this was correct, victim selection (B_{150}, B_{160}, B_{170}, B_{180}, B_{190}, B_{200}, B_{210}, B_{220}, B_{230}, and B_{240}) and motive (B_{40}) variables would be positive. The model for the current analysis took the following form:

$\eta = \beta_{00} + \beta_{01}$*Age + β_{02}*EdLevel+ β_{03}*TraitAnger + β_{04}*TraitHAB + β_{10}*ThreatsBefore + β_{20}*OppActive + β_{30}*Retaliation + β_{40}*MotiveINST + β_{50}*MotiveBOTH + β_{60}*OppIntent + β_{70}*GoalType + β_{80}*Otherways +β_{90}*DayHaving + β_{100}*StateAnger + β_{110}*StateHAB + β_{120}*OppWith+ β_{130}*RespAlone + β_{140}*Planning + β_{150}*WrongPlace + β_{160}*OppProtect + β_{170}*OppSome + β_{180}*OppRoutine + β_{190}*OppEasy + β_{200}*OppIllAct + β_{210}*ComPlace + β_{220}*NotStickOut + β_{230}*NotKnown + β_{240}*AttractPlaces + β_{250}*Bystanders + β_{260}*OppAlcohol + β_{270}*OppDrugs + β_{280}*RespAlcohol + β_{290}*RespDrugs + β_{300}*IntendHarm + β_{310}*OppWeapon + β_{320}*RespWeapon + β_{330}*OppInjured + β_{340}*PreviousSit + r_0

Table 30 shows the results for this model. There were nine variables that were statistically significant in the model. At the individual level, a unit change in the respondent's educational level yielded a 26.27% decrease in the odds that a situation ended in robbery and attempted robbery versus assault and avoided violence. This relationship was significant at the .05 level. Conversely, a unit change in trait anger yielded a 10.85% increase in the odds that a situation ended in robbery and attempted robbery versus assault and avoided violence. This relationship was significant at the .01 level. Although it did not approach statistical significance, a unit change in trait HAB yielded a 7.66% decrease in the odds that a situation ended in robbery or attempted robbery versus an assault or avoided violence situation.

At the situational level, there were seven variables that were statistically significant. If the respondent saw the opponent(s) as an active participant in the situation, there was a 72.57% decrease in the odds that a situation ended in robbery and attempted robbery versus assault and avoided violence. However, a unit change in planning yielded a 16.18% increase in the odds that a situation ended in robbery and attempted robbery versus assault and avoided violence. Both relationships were statistically significant at the .01 level. However, a unit change in the number of people with the opponent(s) yielded a 19.50% decrease in the odds that a situation ended in robbery and attempted robbery

versus assault and avoided violence. This relationship was statistically significant at the .05 level. Similarly, if the opponent(s) was injured, there was a 61.70% decrease in the odds that a situation ended in robbery and attempted robbery versus assault and avoided violence. This relationship was statistically significant at the .01level.

The remaining three variables that were statistically significant were victim selection variables. It was hypothesized (H_a (4c)) that victim selection variables would have a positive relationship with robbery. The findings concerning this hypothesis were mixed. Concerning the statistically significant relationships, a unit change in "OppSome" yielded a 127.28% increase in the odds that a situation ended in robbery and attempted robbery versus assault and avoided violence. This relationship was statistically significant at the .01 level. A unit change in "OppEasy" yielded a 29.85% increase in the odds that a situation ended in robbery and attempted robbery versus assault and avoided violence. Conversely, a unit change in "NotStickOut" yielded a 29.95% decrease in the odds that a situation ended in robbery and attempted robbery versus assault and avoided violence. Both relationships were statistically significant at the .05 level. An additional victim selection variable approached statistical significance. A unit change in "OppRoutine" yielded a 25.94% increase in the odds that a situation ended in robbery and attempted robbery versus assault and avoided violence. This relationship approached significance with a p-value of .082.

Although the remaining victim selection measures were not statistically significant, they do warrant discussion. The other victim selection variables that support the hypothesis included "WrongPlace" and "NotKnown"; however, "OppProtect," "OppIllAct," "ComPlace," and "AttractPlaces" coefficients had a stronger relationship

with assault and avoided violence. A unit change in "WrongPlace" yielded an 11.94% increase in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. Similarly, a unit change in "NotKnown" yielded a 17.57% increase in the odds that a situation ended in robbery and attempted robbery versus assault and avoided violence. Conversely, a unit change in "OppProtect" yielded a 22.49% decrease in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. Additionally, a unit change in "OppIllAct" yielded a 2.95% decrease in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. Also, a unit change in "ComPlace" yielded a 26.62% decrease in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence. Lastly, a unit change in "AttractPlaces" yielded a 4.14% decrease in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation.

There were three other variables, all at the situational level, that approached significance. If there were threats made before the physical attack, there was a 44.74% decrease in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. This relationship approached statistical significance at .070. Also pertaining to the hypothesis (H_a (4c)), the motive coefficient was in the anticipated direction. When respondents had an instrumental motive (compared to expressive), there was a 117.19% increase in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. This relationship approached significance with a p-value of .079. Lastly, a unit change in "DayHaving"

yielded a 12.25% decrease in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation.

There are other situational variables that, although they did not approach significance, warrant discussion. When respondents had an instrumental and expressive motive (compared to expressive alone), there was a 10.68% increase in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. Additionally, a unit change in state hostile attribution bias yielded a 2.03% increase in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. If the respondent acted alone, there was a 28.51% increase in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. Similarly, if there were bystanders, there was an 81.87% increase in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation.

The results concerning substance use, weaponry, and previous disputes by the respondent and opponent(s) are also worth noting. If the opponent(s) was under the influence of alcohol or drugs, there was a 14.86% and 4.87% decrease in the odds of both (respectively) that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. However, if the respondent was under the influence of alcohol or drugs, there was a 26.11% and 49.86% increase in the odds of both (respectively) that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. If the opponent(s) had a weapon, there was an 8.49% decrease in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. Conversely, if the respondent had a weapon, there was a 41.80% increase in the

odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation. If the respondent and opponent(s) had been in previous disputes, there was a 7.49% increase in the odds that a situation ended in robbery or attempted robbery versus assault or avoided violence situation.

Table 30

Hierarchical Generalized Linear Model. Impact of Individual and Situational Level Variables on Situational Outcome (0= Assault & Avoided Violence, 1= Robbery & Attempted Robbery)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	-2.1903	.2138	0.1118
Age, β_{01}	-0.0304	.0214	0.9699
EdLevel, β_{02}	-0.2627*	.1283	0.7689
TraitAnger, β_{03}	0.1085**	.0332	1.1146
TraitHAB, β_{04}	-0.0766	.0491	0.9261
Between Person			
ThreatsBefore, β_{10}	-0.5930	.3268	0.5526
OppActive, β_{20}	-1.2932**	.4878	0.2743
Retaliation, β_{30}	-0.4153	.5779	0.6601
MotiveINST, β_{40}	0.7756	.4416	2.1719
MotiveBOTH, β_{50}	0.1015	.6321	1.1068
OppIntent, β_{60}	0.2186**	.0658	1.2443
GoalType, β_{70}	-0.0271	.5061	0.9732
OtherWays, β_{80}	0.0892	.3657	1.0933
DayHaving, β_{90}	-0.1225	.0697	0.8846
StateAnger, β_{100}	-0.0328	.0384	0.9676
StateHAB, β_{110}	0.0203	.0320	1.0205
OppWith, β_{120}	-0.1950*	.0861	0.8227
RespAlone, β_{130}	0.2508	.5391	1.2851
Planning, β_{140}	0.1618**	.0606	1.1756
WrongPlace, β_{150}	0.1194	.1065	1.1268
OppProtect, β_{160}	-0.2249	.1670	0.7985
OppSome, β_{170}	1.2728**	.1515	3.5711
OppRoutine, β_{180}	0.2594	.1491	1.2961
OppEasy, β_{190}	0.2985*	.1302	1.3479
OppIllAct, β_{200}	-0.0295	.1292	0.9708
ComPlace, β_{210}	-0.2662	.1960	0.7662
NotStickOut, β_{220}	-0.2995*	.1367	0.7411
NotKnown, β_{230}	0.1757	.1604	1.1921
AttractPlaces, β_{240}	-0.0414	.1220	0.9593
Bystanders, β_{250}	0.5981	.4083	1.8187
OppAlcohol, β_{260}	-0.1608	.4737	0.8514
OppDrugs, β_{270}	-0.0499	.4032	0.9513
RespAlcohol, β_{280}	0.2320	.5946	1.2611
RespDrugs, β_{290}	0.4045	.4201	1.4986
IntendHarm, β_{300}	0.0674	.1188	1.0697
OppWeapon, β_{310}	-0.0886	.4752	0.9151
RespWeapon, β_{320}	0.3493	.5110	1.4180
OppInjured, β_{330}	-0.9596**	.3702	0.3830
PreviousSit, β_{340}	0.0722	.3995	1.0749

**p< .01 and *p< .05

Attempted robbery and avoided violence vs. robbery and assault. The final comparison examined under hypothesis four was exploratory and compares attempted robbery and avoided violence (coded 0) to robbery and assault situations (coded 1). Table 31 shows the descriptive statistics for several situational variables that were not included in the analysis model. In attempted robbery and avoided violence, it was more likely that the opponent(s) threatened (70.68% compared to 51.47% in robbery and assault situations) before the first physical attack. However, in robbery and assault situations, it was more likely that no one threatened before the first physical attack (53.19% compared to 37.43% in attempted robbery and avoided violence situations). In many of the attempted robbery and avoided violence situations, no one attacked in the situations (7.07% compared to 60.96% in robbery and assault situations); whereas, the respondents made the first physical attack most often in robbery and assault situations (47.71% compared to 11.76% in attempted robbery and avoided violence situations). In attempted robbery and avoided violence situations, the respondents, more often, did not attack (42.80% compared to 5.40% in robbery and assault situations), and the opponent(s) attacked the respondent verbally (63.34% compared to 25.70% in robbery and assault situations). In robbery and assault situations, the respondents were more likely to punch, slap, and scratch (32.20% compared to 3.11% in attempted robbery and avoided violence situations), as well as the opponents (27.11% compared to 4.97% in attempted robbery and avoided violence situations).

All studied outcomes tended to occur in the evening (5- 10 p.m.) (51.91% of attempted robbery and avoided violence compared to 27.39% of robbery and assault situations) and in the respondent's home (28.87% of attempted robbery and avoided

violence compared to 21.68% of robbery and assault situations). Additionally, the studied outcomes were more likely to take place against one opponent (71.12% in attempted robbery and avoided violence and 78.08% in robbery and assault situations) and against someone who was an acquaintance or someone the respondent knew by sight or by name (34.51% in attempted robbery and avoided violence and 34.49% in robbery and assault situations). Similarly, the situations were more likely to have opponents who were white males (white: 61.53% in attempted robbery and avoided violence and 57.87% in robbery and assault situations; male: 80.42% in attempted robbery and avoided violence and 84.89% in robbery and assault situations) of working class (37.27% in attempted robbery and avoided violence and 42.78% in robbery and assault situations). Surprisingly, if there were bystanders around in either outcome, the respondents did not change their behavior (76.99% in attempted robbery and avoided violence and 90.97% in robbery and assault situations). To the respondents, neither the opponent(s) nor place was most important in choosing a target (71.65% in attempted robbery and avoided violence and 51.71% in robbery and assault situations). Of the situations where the respondents and/or the opponents were under the influence of substances, the respondents in both studied outcomes felt that substances played a key role in the situation (61.59% in attempted robbery and avoided violence and 50.98% in robbery and assault situations). The respondents felt that the opponent's alcohol influence was key to the situation taking place (42.24% in attempted robbery and avoided violence and 38.74% in robbery and assault situations).

Table 31

Situational Descriptive Statistics for Attempted Robbery and Avoided Violence Versus Robbery and Assault Situations

VARIABLE	ATTEMPTED ROBBERY/AVOIDED VIOLENCE		ROBBERY/ASSAULT	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
THREAT BEFORE ATTACK				
No	70	37.43	233	53.19
Yes	117	62.56	205	46.80
IF YES, WHO MADE FIRST THREAT				
Resp.	32	27.58	82	40.19
Opp.(s)	82	70.68	105	51.47
Other	2	1.72	17	8.33
FIRST ATTACK				
No One	114	60.96	31	7.07
Resp.	22	11.76	209	47.71
Opp.(s)	48	25.66	162	36.98
Other	3	1.60	36	8.21
RESP. ATTACK TYPE				
Did Not Attack	110	42.80	43	5.40
Verbal	108	42.02	199	25.03
Punch/Slap/Scratch	8	3.11	256	32.20
Throw Something	1	.71	18	9.89
Kick	3	1.16	75	9.43
Choke	5	1.94	39	4.90
Weapon	5	1.94	94	11.82
Other	17	6.61	71	8.93
OPP.(S) ATTACK TYPE				
Did Not Attack	28	12.66	139	19.63
Verbal	140	63.34	182	25.70
Punch/Slap/Scratch	11	4.97	192	27.11
Throw Something	2	.90	21	2.96
Kick	3	1.35	42	5.93
Choke	1	.45	30	4.23
Weapon	5	2.26	62	8.75
Other	31	14.02	40	5.64
TIME OF DAY				
Morning	9	3.13	40	9.13
Afternoon	71	24.73	100	22.83
Evening	149	51.91	120	27.39

Late Night	35	12.19	79	18.03
Early Morning	23	8.01	99	22.60
TOOK PLACE				
Resp.'s Home	54	28.87	95	21.68
Opp.'s Home	26	13.90	81	18.49
Third Party Home	14	7.48	42	9.58
Bar	25	13.36	72	16.43
Street	28	14.97	63	14.38
Other	40	21.39	85	19.40
RESP. ACTED ALONE				
No	38	20.32	117	26.71
Yes	149	79.67	321	73.28
MULTIPLE OPPONENTS				
No	133	71.12	342	78.08
Yes	54	28.87	96	21.91
RELATIONSHIP				
Stranger	41	20.81	133	28.85
Acquaintance	68	34.51	159	34.49
Friend	36	18.27	95	20.60
Sign. Other/Family	34	17.25	52	11.27
Other	18	9.13	22	4.77
OPP.(S) SEX				
Male	152	80.42	371	84.89
Female	29	15.34	48	10.98
Both	8	4.23	18	4.11
OPP.(S) RACE				
White	120	61.53	261	57.87
Non-White	75	38.46	190	42.12
OPP.(S) FINANCIAL STAT.				
Lower	48	28.40	115	30.74
Working	63	37.27	160	42.78
Middle	44	26.03	76	20.32
Upper	14	8.28	23	6.14
MOST IMPORTANT				
Opp.(s)	43	22.99	193	44.16
Place	10	5.34	18	4.11
Neither	134	71.65	226	51.71
BYSTANDERS				
No	74	39.57	161	36.75
Yes	113	60.42	277	63.24
IF YES, CHANGE BEHAVIOR				

No	87	76.99	252	90.97
Yes	26	23.00	25	9.02
OPP.(S) ALCOHOL				
No	87	55.41	260	59.90
Yes	70	44.58	174	40.09
OPP.(S) DRUGS				
No	87	65.41	289	66.58
Yes	46	34.58	145	33.41
RESP. ALCOHOL				
No	137	73.26	156	46.29
Yes	50	26.73	181	53.70
RESP. DRUGS				
No	123	65.77	251	57.30
Yes	64	34.22	187	42.69
SUB. PLAYED KEY ROLE				
No	53	38.40	175	49.01
Yes	85	61.59	182	50.98
IF YES, WHOSE				
Opp.(s) Alcohol	49	42.24	105	38.74
Opp.(s) Drugs	25	21.55	47	17.34
Resp. Alcohol	22	18.96	78	28.78
Resp. Drugs	20	17.24	41	15.12

Next, the analysis model for this comparison is shown in Table 32. The analysis for this outcome took the following form:

$\eta = \beta_{00} + \beta_{01}$*Age + β_{02}*TraitAnger + β_{03}*TraitHAB + β_{10}*ThreatsBefore + β_{20}*OppActive + β_{30}*Retaliation + β_{40}*MotiveINST + β_{50}*MotiveBOTH + β_{60}*OppIntent + β_{70}*GoalType + β_{80}*Otherways +β_{90}*DayHaving + β_{100}*StateAnger + β_{110}*StateHAB + β_{120}*OppWith+ β_{130}*RespAlone + β_{140}*Planning + β_{150}*WrongPlace + β_{160}*OppProtect + β_{170}*OppRoutine + β_{180}*OppEasy + β_{190}*OppIllAct + β_{200}*ComPlace + β_{210}*NotStickOut + β_{220}*NotKnown + β_{230}*AttractPlaces + β_{240}*Bystanders + β_{250}*OppAlcohol + β_{260}*OppDrugs + β_{270}*RespAlcohol + β_{280}*RespDrugs + β_{290}*IntendHarm + β_{300}*OppWeapon + β_{310}*RespWeapon + β_{320}*OppInjured + β_{330}*PreviousSit + r_0

As shown in Table 32, there were eight variables that were statistically significant in the model. At the individual level, a unit change in age yielded a 5.00% decrease in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. This relationship was statistically significant at the .01 level. A unit change in trait anger yielded a 4.73% increase in the odds that a situation ended in a robbery or

assault versus attempted robbery or avoided violence. A unit change in trait HAB yielded a 6.26% decrease in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. Both of these relationships were statistically significant at the .05 level.

At the situational level, there were five variables that were statistically significant. When the respondent had both instrumental and expressive motives (compared to expressive alone), there was a 361.77% increase in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. This relationship was statistically significant at the .01 level. A unit increase in state HAB yielded a 5.84% decrease in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. A unit increase in "OppProtect" yielded a 26.79% increase in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. If the opponent(s) had a weapon, there was a 180.43% increase in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. All three of these variables were statistically significant at the .05 level. If the opponent(s) was injured, there was a 2436.13% increase in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. This relationship was statistically significant at the .01 level.

There were two variables, both at the situational level, that approached significance. If the opponent(s) was an active participant, there was a 58.86% decrease in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. This relationship approached significance with a p-value of .057. If the respondent had an interpersonal (compared to intrapersonal) goal, there was a 55.33%

decrease in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. This relationship approached statistical significance with a p-value of .060.

There were other situational variables that, although they did not approach significance, warrant discussion. A unit change in the number of individuals with the opponent(s) yielded a 4.59% increase in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. Conversely, if the respondent acted alone, there was a 28.65% decrease in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. Also, a unit change in planning that took place in the situation yielded a 3.90% decrease in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence.

The results concerning substance use, weaponry, and previous disputes by the respondent and opponent(s) are also worth noting. If the opponent(s) was under the influence of alcohol, there was a 30.08% decrease in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. However, if the opponent(s) was under the influence of drugs, there was a 35.83% increase in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. Similarly, if the respondent was under the influence of alcohol, there was a 161.89% increase in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. However, if the respondent was under the influence of drugs, there was a 32.47% decrease in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence. If the opponent(s) and respondent had a weapon, there was a 180.43% and 2.40% increase in the odds of both,

respectively, that the situation ended in a robbery or assault versus attempted robbery or avoided violence. Lastly, if the respondent and opponent(s) had been involved in previous disputes, there was a 44.86% decrease in the odds that a situation ended in a robbery or assault versus attempted robbery or avoided violence.

Table 32

Hierarchical Generalized Linear Model. Impact of Individual and Situational Level Variables on Situational Outcome (0= Attempted Robbery & Avoided Violence, 1= Robbery & Assault)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	1.2370	.1276	3.4454
Age, β_{01}	-0.0500**	.0150	0.9511
TraitAnger, β_{02}	0.0473*	.0212	1.0485
TraitHAB, β_{03}	-0.0626*	.0286	0.9392
Between Person			
ThreatsBefore, β_{10}	0.0886	.3305	1.0927
OppActive, β_{20}	-0.8881	.4655	0.4114
Retaliation, β_{30}	-0.3952	.4597	0.6735
MotiveINST, β_{40}	0.2561	.5187	1.2919
MotiveBOTH, β_{50}	1.5298**	.5158	4.6177
OppIntent, β_{60}	-0.0816	.0657	0.9215
GoalType, β_{70}	-0.8057	.4280	0.4467
OtherWays, β_{80}	-0.2487	.4320	0.7797
DayHaving, β_{90}	-0.0247	.0655	0.9755
StateAnger, β_{100}	0.0183	.0378	1.0184
StateHAB, β_{110}	-0.0584*	.0261	0.9432
OppWith, β_{120}	0.0459	.0482	1.0470
RespAlone, β_{130}	-0.3374	.4525	0.7135
Planning, β_{140}	-0.0390	.0602	0.9616
WrongPlace, β_{150}	0.0606	.1015	1.0625
OppProtect, β_{160}	0.2679*	.1266	1.3072
OppRoutine, β_{170}	0.0731	.1515	1.0759
OppEasy, β_{180}	-0.0443	.1341	0.9566
OppIllAct, β_{190}	-0.0700	.1327	0.9323
ComPlace, β_{200}	-0.1281	.1738	0.8797
NotStickOut, β_{210}	0.1303	.1644	1.1391
NotKnown, β_{220}	0.0825	.1659	1.0860
AttractPlaces, β_{230}	0.0622	.1115	1.0641
Bystanders, β_{240}	0.3636	.3592	1.4385
OppAlcohol, β_{250}	-0.3577	.4623	0.6992
OppDrugs, β_{260}	0.0362	.4298	1.3583
RespAlcohol, β_{270}	0.9627	.5996	2.6189
RespDrugs, β_{280}	-0.3924	.4040	0.6753
IntendHarm, β_{290}	0.0764	.1029	1.0794
OppWeapon, β_{300}	1.0311*	.4285	2.8043
RespWeapon, β_{310}	0.0237	.4806	1.0240
OppInjured, β_{320}	3.2332**	.4272	25.3613
PreviousSit, β_{330}	-0.5952	.4513	0.5514

**p< .01 and *p< .05

The descriptive and analyses models examined for hypotheses four and five give a more complete depiction of the situational context of the studied outcomes. Next, the attention is turned to injuries in assault and robbery situations. Specifically, these models examine whether an injury occurred and which, if any, variables have a statistically significant relationship with an injury outcome.

Injury models.

H_a (4d): Injury will be another situational outcome analyzed as a dependent variable. The offender's desire to harm the opponent(s) will play the most significant, positive role in whether or not the opponent(s) is injured in violent situations. The more harm the offender wants to physically inflict on the opponent(s), the more likely possibility injury will occur.

A model was run for both assault and robbery situations to examine what, if any, individual and situational level variables had a significant impact on whether or not the opponent(s) was injured in the violent situations. In both models, the opponent's injury variable was the outcome measure. The variable was dichotomized into 'no injury' (coded 0) and 'injury' (coded 1).

Assault injury model. Before the assault injury model is discussed, the descriptive statistics for situational variables warrant discussion. Table 33 shows the descriptive statistics for situational variables that were not included in the analysis model. The opponents and respondents rarely threatened to use a weapon (12.70% and 5.50% of the time respectively) during the situation. There were times when both the opponent(s) and the respondent had weapons on them but did not threaten to use them (opponent(s) had weapon(s) 24.70% of the time, and respondents had weapon(s) 20.50% of the time).

Similarly, in assault situations, the opponents used a weapon more often than the respondents (22.40% compared to 17.20%). The opponents were more likely than respondents to use a gun in these situations (46.37% compared to 42.30%). Respondents were more likely to use some "other" weapon (46.15% compared to 39.13%). Other weapons included sharp or blunt objects and bottles or glass. Respondents who had a weapon on them during a situation most often admitted they had it for protection (36.36%). The majority of respondents who had a weapon admitted they would have gone into the same situation without a weapon (74.13%). Most of the injuries sustained in the situation by the opponent(s) were minor (55.29%) and did not require any medical treatment (57.84%).

Table 33

Situational Variables for Assault Injury Model (0=No Injury, 1=Injury)

VARIABLE	FREQUENCY	PERCENT
OPP.(S) THREATENED WEAPON		
No	269	87.30
Yes	39	12.70
RESP. THREATENED WEAPON		
No	291	94.50
Yes	17	5.50
OPP. HAD WEAPON		
No	232	75.30
Yes	76	24.70
IF YES, TYPE		
Gun	40	46.51
Knife	14	16.27
Other	32	37.20
RESP. HAD WEAPON		
No	245	79.50
Yes	63	20.50
IF YES, TYPE		
Gun	27	42.18
Knife	10	15.62
Other	27	42.18
REASON RESP. HAD WEAPON		
Routine	10	18.18
Protection	20	36.36
Control	8	14.54
Other	17	30.90
RESP. GO W/O WEAPON		
No	15	25.86
Yes	43	74.13
OPP. USED WEAPON		
No	235	76.30
Yes	69	22.40
IF YES, TYPE		
Gun	32	46.37
Knife	10	14.49
Other	27	39.13
RESP. USED WEAPON		
No	255	82.80
Yes	53	17.20
IF YES, TYPE		

Gun	22	42.30
Knife	6	11.53
Other	24	46.15
OPP.(S) INJURED		
No	103	33.40
Yes	205	66.60
INJUTY TYPE		
Minor	120	55.29
Moderate	85	39.17
Serious	12	5.52
RESULT		
No Treatment	118	57.84
Hospitalization	62	30.39
Resp. Thought Hosp. Needed	5	2.45
Does Not Know	19	9.31

A model was run with individual and situational level variables concerning an opponent(s) injury in assault situations. If H_a (4d) was correct, then B_{90} would be statistically significant and positive. The analysis for the current studied outcome took the following form:

$$\eta = \beta_{00} + \beta_{01}*\text{TraitAnger} + \beta_{02}*\text{TraitHAB} + \beta_{10}*\text{OppIntent} + \beta_{20}*\text{GoalType} + \beta_{30}*\text{StateAnger} + \beta_{40}*\text{StateHAB} + \beta_{50}*\text{OppAlcohol} + \beta_{60}*\text{OppDrugs} + \beta_{70}*\text{RespAlcohol} + \beta_{80}*\text{RespDrugs} + \beta_{90}*\text{Harm} + \beta_{100}*\text{OppWeapon} + \beta_{110}*\text{RespWeapon} + r_0$$

Table 34 shows the results for this hypothesis. Desire to harm (Harm) was measured on a 0 to 10 scale, where 10 indicated that the respondent wanted to physically harm the opponent(s) really badly, and 0 indicated that the respondent did not want to hurt the opponent(s) at all. A unit change in desire to harm yielded a 26.92% increase in the odds that the opponent(s) was injured (compared to no injury). This relationship was statistically significant at the .05 level. Additionally, if the opponent(s) had a weapon in the situation, there was a 94.83% decrease in the odds that the opponent(s) was injured (compared to no injury). This relationship was statistically significant at the .01 level.

There are other situational variables that, although were not statistically significant in the model, also warrant discussion. A unit change in the opponent's intentions yielded a 22.37% increase in the odds that the opponent(s) was injured (compared to no injury). Also, if the respondent had an interpersonal goal (compared to intrapersonal), there was a 294.07% increase in the odds that the opponent(s) was injured in assault situations. A unit increase in state hostile attribution bias yielded a 7.74% decrease in the odds that the opponent(s) was injured in assault situations. Lastly, if the respondent had a weapon, there was a 42.39% decrease in the odds that the opponent(s) was injured in assault situations.

Table 34

Hierarchical Generalized Linear Model (Laplace). Impact of Individual and Situational Level Variables on Assault Injury (0= No, 1= Yes)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	0.9786	.2408	2.6607
TraitAnger, β_{01}	0.0436	.0309	1.0446
TraitHAB, β_{02}	0.0052	.0434	1.0052
Between Person			
OppIntent, β_{10}	0.2237	.1760	1.2507
GoalType, β_{20}	1.3713	1.3343	3.9407
StateAnger, β_{30}	0.1388	.0884	1.1489
StateHAB, β_{40}	-0.0774	.0647	0.9254
OppAlcohol, β_{50}	1.4622	1.1508	4.3157
OppDrugs, β_{60}	1.4620	1.0588	4.3146
RespAlcohol, β_{70}	0.0275	1.0561	1.0279
RespDrugs, β_{80}	-0.0376	.8822	0.9630
Harm, β_{90}	0.2692*	.1287	1.3090
OppWeapon, β_{100}	-2.9608**	.9250	0.0517
RespWeapon, β_{110}	-0.5514	1.4493	0.5761

**p< .01 and *p< .05

Robbery injury model. Before the robbery injury model is discussed, the descriptive statistics for situational variables warrant discussion. Table 35 shows the descriptive statistics for several situational variables that were not included in the analysis

model. In robbery situations, the opponent(s) rarely threatened to use a weapon (3.10%), had a weapon (20.00%), or used a weapon (6.20%). Although respondents only occasionally threatened to use a weapon (24.60%), they had a weapon (50%) and used a weapon (40.80%) with higher frequency than the opponent(s).

It is interesting to note the differences reported between the assault and robbery situations. For example, respondents in robbery situations were more likely to have and use a weapon than in assault situations. Additionally, respondents in robbery situations brought a weapon to the situation for control (56.92%); whereas, respondents in assaults were more likely to carry a weapon for protection (36.36%). The majority of robbery respondents who brought a weapon said they would not go into the same situation without one (60.00%). Concerning injury, robbery opponents were less likely to be injured (42.30) than opponents in assault situations; however, if robbery opponents were injured then it resulted in more moderate (45.45%) injury types (i.e., knocked unconscious or internal injuries) than assault situations. Of the opponents who were injured, 43.63% did not receive any treatment and 38.18% were hospitalized.

Table 35

Situational Variables for Robbery Injury Model (0=No Injury, 1=Injury)

VARIABLE	FREQUENCY	PERCENT
OPP.(S) THREATENED WEAPON		
No	126	96.90
Yes	4	3.10
RESP. THREATENED WEAPON		
No	97	74.60
Yes	32	24.60
OPP. HAD WEAPON		
No	104	80.00
Yes	26	20.00
IF YES, TYPE		
Gun	19	70.37
Knife	5	18.51
Other	3	11.11
RESP. HAD WEAPON		
No	65	50.00
Yes	65	50.00
IF YES, TYPE		
Gun	50	73.52
Knife	9	13.23
Other	9	13.23
REASON RESP. HAD WEAPON		
Routine	12	18.46
Protection	14	21.53
Control	37	56.92
Other	2	3.07
RESP. GO W/O WEAPON		
No	39	60.00
Yes	26	40.00
OPP. USED WEAPON		
No	122	93.80
Yes	8	6.20
IF YES, TYPE		
Gun	3	37.50
Knife	3	37.50
Other	2	25.00
RESP. USED WEAPON		
No	77	59.20
Yes	53	40.80
IF YES, TYPE		

Gun	38	71.69
Knife	7	13.20
Other	8	15.09
OPP.(S) INJURED		
No	75	57.70
Yes	55	42.30
INJUTY TYPE		
Minor	30	54.54
Moderate	25	45.45
Serious	0	.00
RESULT		
No Treatment	24	43.63
Hospitalization	21	38.18
Resp. Thought Hosp. Needed	4	7.27
Does Not Know	6	10.90

A model was run with individual and situational level variables concerning opponent(s) injury in robbery situations. It was hypothesized that the desire to harm would be the most statistically significant variable in the model run concerning injury in violent situations (H_a (4d)). It was also hypothesized that desire to harm would have a more significant relationship with injury in assault compared to robbery situations (H_a (4e)). The analysis for the current studied outcome took the following form:

$$\eta = \beta_{00} + \beta_{01}*\text{TraitAnger} + \beta_{02}*\text{TraitHAB} + \beta_{10}*\text{OppIntent} + \beta_{20}*\text{DayHaving} + \beta_{30}*\text{StateAnger} + \beta_{40}*\text{StateHAB} + \beta_{50}*\text{OppAlcohol} + \beta_{60}*\text{OppDrugs} + \beta_{70}*\text{RespAlcohol} + \beta_{80}*\text{RespDrugs} + \beta_{90}*\text{Harm} + \beta_{100}*\text{OppWeapon} + \beta_{110}*\text{RespWeapon} + r_0$$

Table 36 shows the results for this model. This model did not have any statistically significant variables. However, there are variables that warrant discussion. A unit change in trait anger yielded a 7.04% decrease in the odds that the opponent(s) was injured in robbery situations. A unit increase state anger yielded a 6.10% decrease in the odds that the opponent(s) would be injured in robbery situations. Also, a unit change in the "DayHaving" measure yielded a 13.97% increase in the odds that the opponent(s) would be injured. If the opponent(s) was under the influence of drugs in the situation,

there was a 60.84% decrease in the odds that the opponent(s) would be injured. Likewise, if the respondent was under the influence of alcohol or drugs, there was a 1.11% and 9.44% decrease in the odds of both (respectively) that the opponent(s) was injured. If the opponent(s) had a weapon, there was a 14.26% increase in the odds that the opponent(s) was injured. Similarly, if the respondent had a weapon, there was a 104.05% increase in the odds that the opponent(s) was injured.

Also, it was hypothesized (H_a (4e)) that desire to harm an opponent(s) would be more significant in assault than robbery situations. As Tables 34 and 36 display, this hypothesis was upheld. Desire to harm was not statistically significant in the robbery model (shown below).

Table 36

Hierarchical Generalized Linear Model (Laplace). Impact of Individual and Situational Level Variables on Robbery Injury (0= No, 1= Yes)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	-0.3303	.3187	0.7186
TraitAnger, β_{01}	-0.0704	.0576	0.9319
TraitHAB, β_{02}	0.0545	.0790	1.0560
Between Person			
OppIntent, β_{10}	0.3989	.9283	1.4901
DayHaving, β_{20}	0.1397	.4374	1.1499
StateAnger, β_{30}	-0.0610	.2903	0.9408
StateHAB, β_{40}	0.1249	0.4028	1.1330
OppAlcohol, β_{50}	1.3505	4.1710	3.8596
OppDrugs, β_{60}	-0.9374	3.7239	0.3916
RespAlcohol, β_{70}	-0.0111	5.1607	0.9889
RespDrugs, β_{80}	-0.0991	1.8050	0.9056
Harm, β_{90}	0.1552	.7766	1.1687
OppWeapon, β_{100}	0.1333	4.9650	1.1426
RespWeapon, β_{110}	0.7132	4.2052	2.0405

**p< .01 and *p< .05

Vignette Models

Every respondent interviewed was asked to respond to three standardized vignettes (refer to Appendix D or to the previous chapter, in the Key Variables section, for a detailed description of each measurement). Therefore, there were 990 responses. Respondents were asked a number of questions concerning the vignettes, including how they would react. Table 37 displays the descriptive results for the vignettes. Concerning the vignettes, the overwhelming majority of respondents predicted they would have intrapersonal goals in the situations (92.92%). Also, concerning the predicted outcome, most of the respondents identified they would act in a passive manner in the situations (62.18%). In only 37.20% of the vignettes did respondents think of other ways to respond in the situations. Of those, most respondents said they would respond in another passive (53.26%), rather than active, (39.40%) manner.

Table 37

Descriptive Statistics for the Vignettes (n=990)

VARIABLE	FREQUENCY	PERCENT
RESPONDENT GOALS		
Intrapersonal	920	92.92
Interpersonal	67	67.67
Both	3	.37
REACTION TYPE		
Passive	615	62.18
Active	374	37.81
OTHER WAYS		
No	622	62.80
Yes	368	37.20
IF YES, WHICH REACTION TYPE		
Passive	196	53.26
Active	145	39.40
Both	27	7.33

An analysis was run to examine the effect the individual and situational level variables had on the studied outcomes in the vignettes. The outcome variable was reaction type. The reactions were dichotomized into passive (coded 0) and active (coded 1) reactions. Passive reactions were reactions in which the respondent admitted he would apologize, walk away, or settle the situation in an amicable way. Active reactions included any action that would be deviant or confrontational (e.g., slam the door in his face) or produce violence (shove or punch him). The analysis for the vignettes' outcome took the following form:

$$\eta = \beta_{00} + \beta_{01}*\text{Age} + \beta_{02}*\text{TimesArrested} + \beta_{03}*\text{TimesConv} + \beta_{04}*\text{RaceEthnicity} + \beta_{05}*\text{EdLevel} + \beta_{06}*\text{FinStatus} + \beta_{07}*\text{TraitAnger} + \beta_{08}*\text{TraitHAB} + \beta_{10}*\text{StateAnger} + \beta_{20}*\text{OppIntent} + \beta_{30}*\text{OtherWays} + r_0$$

As shown in Table 38, there were numerous in dividual and situational level variables that were statistically significant in the model. There were four individual level variables that had a statistically significant relationship with the reaction type. For example, a unit change in age yielded a 5.38% decrease in the odds that the respondent would react in an active versus passive reaction. However, a unit change in the number of times the respondent had been arrested yielded a 4.08% increase in the odds that the respondent would react in an active versus passive reaction. A unit change in trait anger yielded an 8.60% increase in the odds that the respondent would react in an active versus passive reaction. All three variables were statistically significant at the .01 level. The last individual level variable that was statistically significant, at the .05 level, was the financial status of the respondent. Respondents who identified their financial status as middle or upper class (compared to lower or working class), had a 53.82% increase in the odds that the respondent would react in an active versus passive reaction.

All three situational level variables were statistically significant in the model at the .01 level. A unit change in respondent anger yielded a 41.87% increase in the odds that the respondent would react in an active versus passive manner. However, a unit change in opponent's intentions yielded a 13.72% decrease in the odds that the respondent would react in an active versus passive reaction. Lastly, if the respondent thought of other ways to deal with the situation, there was a 100.40% increase in the odds that the respondent would react in an active versus passive reaction.

There were other individual level variables that, although were not statistically significant in the model, warrant discussion. Although times arrested increased the odds that an active reaction would occur, a unit change in convictions yielded a 2.66% decrease in the odds that the respondent would react in an active versus passive reaction. Lastly, a unit change in trait hostile attribution bias yielded a .85% decrease in the odds that the respondent would react in an active versus passive reaction.

Table 38

Hierarchical Generalized Linear Model (Laplace). Impact of Individual and Situational Level Variables on Reaction Type (0= Passive, 1= Active)

Fixed Effect	Coefficient	Standard Error	Exp(b)
Within Person			
Intercept, β_{00}	-0.7823	.1070	0.4573
Age, β_{01}	-0.0538**	.0105	0.9475
TimesArrest, β_{02}	0.0408**	.0117	1.0416
TimesConvict, β_{03}	-0.0266	.0222	0.9737
RaceEthnicity, β_{04}	0.2616	.1876	1.2990
EdLevel, β_{05}	0.0233	.0546	1.0235
FinStatus, β_{06}	0.4306*	.1883	1.5382
TraitAnger, β_{07}	0.0860**	.0162	1.0898
TraitHAB, β_{08}	-0.0085	.0210	0.9915
Between Person			
StateAnger, β_{10}	0.4187**	.0458	1.5200
OppIntent, β_{20}	-0.1372**	.0469	0.8717
OtherWays, β_{30}	0.6951**	.2242	2.0040

**p< .01 and *p< .05

CHAPTER V

DISCUSSIONS AND CONCLUSIONS

This research sought to examine the situational context of robbery, attempted robbery, assault, and avoided violence situations to gain a better understanding of the complexity of these situations. Specifically, social information processing theory was utilized to examine the cognitive processes that take place in these situations. Additionally, other important situational factors, such as motive, victim selection, substance use, intentions to harm, weaponry, and injury were studied to gain insight into the contextual factors surrounding these situations. The individual and situational level variables included in the study were derived from past literature dedicated to the subject areas. Different from past literature; however, the current research explored all of these factors to depict the criminal situation in its entirety. To gather this information, jailed offenders provided detailed accounts of these situations.

The following section begins by discussing the limitations and strengths of the current study. This is followed by a discussion of the limitations of rational choice perspective and the utility of social information processing theory in studying decision making. Then, a section is dedicated to the importance of studying the situational context of crime. Lastly, suggestions for future research are presented, as well as concluding thoughts concerning the study.

Limitations and Strengths of Current Study

This study attempted to further research concerning the situational context of crime. The research methods utilized to achieve this undertaking had limitations that

should be taken into consideration. This section is dedicated to the discussion of these limitations, as well as the strengths of the current study.

There are four limitations to note. First, the researcher originally intended to interview all available inmates who met the sampling criterion. However, due to security purposes, only one jail allowed the researchers to be on the pod with the inmates. A second jail gave the researchers a list, containing the sampling frame of potential respondents, and made all of these inmates available for the interviews. In the remaining jails, the researchers were not privy to the list of potential respondents. If an inmate was called but decided not to meet with the researchers, then the researchers were not privileged to this information and, thereby could not count these individuals as respondents who declined to participate. Therefore, in these two jails, there was no way to know if, or how many, individuals declined to participate in the study, which could have affected the response rate. However, it should be noted that 93% of the jailed inmates who met with the researcher (or assistant) agreed to participate. This is similar to previous studies that also report a high degree of participation in institutionalized settings.

Second, this study originally set out to compare all four studied situations to one another. However, there was a lack of reported attempted robberies; therefore, these situations could not be examined, except in combination with other studied situations. More knowledge concerning this situation could produce needed information concerning its differences from robbery situations. Third, statistical power could be a problem. Although the sample size was large, the models run for hypotheses four and five were ambitious and included a large number of situational level variables. This, in turn, could

make it harder to find statistically significant relationships. There were many situational level variables in the models that approached significance with the studied outcomes. Future studies should attempt to collect more situational level cases to address this issue.

Finally, generalizability for the current study is limited. Although four jails were utilized for this study, approximately 48 percent of the respondents came from the largest participating jail, and another 29 percent came from the smallest participating jail. Replication of the study within other Pennsylvania county facilities, as well as in other facilities throughout the U.S., would substantially increase the generalizability of the findings. Also, the use of inmates as respondents instead of the general population limits the generalizability of the study. As mentioned in chapter three, the general population does not participate in assault and robbery frequently enough to conduct an adequate study. Therefore, this study's findings are limited to the population studied. However, the individuals studied had substantial contact with the criminal justice system (on average), and they represent an interesting and compelling group for researchers to study. A strength of the study is that all inmates, despite their charges, were sampled to add to the scope of the study, offering a vast array of offenders. Most participants had not been arrested for the situation(s) disclosed to the researchers. This type of sampling resulted in ideal coverage of potential respondents and studied situations.

An additional strength of the current study is that very few instruments have been designed to measure and compare more than one violent criminal situation or high risk situation to another. This study compared the situational components of two violent crimes, robbery and assault, to examine the significance of the studied variables in each. This study also compared each situation to avoided violence situations to examine the

differences between the situations. Lastly, the instrument used for this study measured individual and situational level variables. Most instruments do one or the other, rarely studying both. Additionally, few instruments have examined decision making in criminal situations using a psychological theory. Specifically, the complexity of the cognitive processes that take place in criminal situations has been missing in the criminological literature. This research promotes the importance of situational examinations, while integrating individual level measurements as well. The next section shifts focus to the decision making that takes place in the studied situations.

Decision Making

Situational analysis allows researchers to pay attention to offenders' decision making. Decision making is unique to the social context in which it occurs. This research set out to examine how individuals come to a decision to enact a specific behavioral response in high risk situations and whether these cognitive processes differ in the studied situations. Crick and Dodge's (1994) reformulated social information processing (SIP) theory was utilized to examine these cognitive processes.

Previous studies conducted in the discipline of psychology have shown continual support for using social information processing theory in explaining decision making in children and early adolescents. This body of research has found positive relationships between atypical SIP processes and aggression in this population. However, for reasons unknown, past research on social information processing theory has almost exclusively focused on children and adolescents. Although some researchers have suggested extending this theory to adult samples, this has not been completed.

Additionally, while situational decision making has experienced years of examination in the discipline of psychology, criminologists have been rather limited in explaining decision making in the criminal situational context. Since the 1980's, rationality (or the reasonableness) of offenders' decision making capabilities has been assumed, and little research has been conducted on the decision making processes that take place in criminal situations. The domination of the rational choice perspective in this discipline has offered little insight into decision making in the situational context of crime; rather, it has left researchers with the conclusion that people's decision making across situations is based on a rational, cost benefits analysis.

As discovered in the current study, decision making is a complex phenomenon. However, one cannot disregard the appeal of rationality in decision making. First, it is extremely difficult for people to try to understand and explain the workings of decision making. Second, society likes for explanations to be simple. Not much is simpler than the notion that people consider the costs and benefits of an action and then enact the action that results in the most benefits for the person. This assertion makes crime control measures seem like a walk in the park. However, human behavior is much more complicated. Therefore, the basic assumptions and central concepts of rational choice perspective should be questioned.

Rational choice perspective portrays an offender who is lucid and capable of thinking through consequences and does not extend details as to the offender's and the opponent's interactions in the situational context. These interactions are often complicated and difficult to understand. The studied situations consist of a give and take of verbal and non verbal communication (or cues) between all people involved. These

people are constantly assessing the situation, using potentially biologically limited capabilities, past experiences stored in their "database," and cues from the immediate social environment to come to a decision. All of these cognitive processes are continually taking place with little or no conscious effort. In the majority of avoided violence and assault situations reported in this study, respondents considered the opponent(s) to be an active participant in the situation. In these situations, when an attack was made, respondents identified the opponent(s) as initiating the attack. Rational choice perspective fails to take into account the activeness of the opponent(s), or how it can influence the decision making of respondents in the situation.

Also, rational choice perspective depicts people as instrumentally driven, wanting to attain certain goals. This not only assumes people's motivations, but it also suggests a planning element. As found in this study, people have many motives, or reasons, for getting involved in a situation. By automatically assuming instrumentality, an inaccurate portrayal of motives in a situation is established. This study found that in avoided violence and assault situations, people were most likely driven by expressive motives. These motives included anger, righting a wrong, disrespect, and thrill. Additionally, although many of the robbery and attempted robbery situations were driven by instrumentality, many had an expressive element as well. These expressive motives were similar to the motives expressed in avoided violence and assault situations. The expressive motives identified at higher frequencies for robbery and attempted robbery included anger, righting a wrong, and thrill. Additionally, rational choice perspective suggests that a somewhat objective assessment of situations takes place by the offender. This study's findings suggest that situational anger was high and played an important role

in the outcome of the studied situations. In approximately 20 percent of all robbery and attempted robbery situations, respondents maxed out on the anger scale, exhibiting strong support for an emotional component. Descriptive statistics found that other emotions played a role in some of these situations as well. Rational choice perspective fails to account for this expressive element of crime.

Rational choice perspective assumes planning takes place before a behavior is enacted. In the current study, all situations involved little to no planning. Robbery situations had more planning than assault and avoided violence situations; however, even in these situations, respondents identified almost no planning. Many admitted that, if there was planning, it happened minutes before or even while the situation was unfolding. In this context, rationality is severely bounded or does not exist.

Similar to Wright, Brookman, and Bennetts' (2006) conclusion, this study found that individuals commit their criminal acts in an immediate social environment in which they could identify very limited alternatives. Across situations, the majority of respondents did not think of other ways to deal with the situation. Rational choice perspective suggests individuals weigh costs and benefits of actions and choose the action that will produce the most benefits. However, if the individuals are not planning and cannot think of alternative ways to deal with the situation, this would suggest that they lack the capability to weigh costs and benefits of multiple actions. As such, it is difficult to view these decisions as truly rational.

As the results of the current study display, the decision making process is complicated and involves multiple cognitive processes that take place in a situation. Although these processes are extremely complicated, rational would be an inaccurate

word and depiction of this multi-step process in individuals. Rather, decision making is a subjective assessment of the events transpiring and unfolding in a situation. By incorporating social information processing theory to the criminology discipline, researchers are able to overcome the limitations of rational choice perspective and more accurately measure a complex and multi-step process of decision making.

It would be shortsighted only to focus on the limitations of rational choice perspective and to use these reasons as evidence to explain why social information processing theory is a better theory. Ultimately, a good theory can adequately explain a specific process that is being studied. The results of this study suggest that in the studied situations, offenders had multiple cognitive processes they went through in making a decision. Social information processing theory includes measures that help to understand how offenders make decisions in real-life settings and circumstances.

As the previous discussion has made clear, the cognitive processes of offenders in criminal situations are relatively unknown. This study offered insight into this line of research. Specifically, in all studied situations, respondents utilized both internal cues (e.g., brought into the situation) and external cues (e.g., taken from the immediate environment). Although the respondents, across situations, continually identified external cues as the main cause for interpreting the opponent's intentions, many accessed their "database" concerning past experiences with the same opponent(s). Concerning interpretation of these cues, respondents in avoided violence and assault situations tended to interpret the opponent's intentions as more negative. These findings could be interpreted a couple of ways. First, these individuals may have cognitive deficits in interpreting situations adequately. For example, Crick and Dodge (1994) suggested that

as people get older, their cognitive processing and tendencies in situations may become more rigid. Additionally, compared to the general population, these individuals in the current study are under educated; therefore, they may not have the cognitive skills to adequately interpret a situation. Furthermore, many of these situations had substances involved. The immediate influence of substances could also explain why these individuals may not adequately interpret the situations. These individual and situational-level factors could have an impact on the misinterpretation of cues in the studied situations.

A second interpretation could be that individuals may choose to selectively interpret cues, particularly more negative cues, from the environment, disregarding the positive social cues present in a situation. Many of the respondents in this study admitted that, although they knew most of the opponents, they did not have a close relationship with them. Some of the respondents admitted that they had previous disputes with the opponents. In the studied situations, these individuals may access internal cues from past negative experiences with these opponents. They also may be choosing to interpret more negative cues in the studied situation and to the opponents due to disliking the opponents or not feeling comfortable with the opponents in a situation. Future research should examine this issue more closely to shed more light on negative interpretations of internal and external cues in the environment.

After interpreting the social situation, social information processing theory suggests that people formulate or clarify a goal. Overall, in this study, intrapersonal goals (e.g., to win the fight, to hurt the opponent as much as possible) were reported more than interpersonal goals. Many of the respondents in assault and avoided violence situations

identified that they constructed new goals during the social situation. For example, if a respondent was at a bar, the respondent originally went there to have a good time and hang with friends. When he got into an argument with an opponent, his goal then changed to making sure the opponent knew he could not treat the respondent that way. For all studied outcomes, the majority of the respondents' goals reported were self-enhancing, rarely taking the opponent(s), or anyone else, into consideration when formulating their goals, except for negative purposes. These findings suggest that in these situations, people might be more interested in dominating the situation rather than having positive interactions with others. These goals may support the use of aggression, as aggression was interpreted as being an effective tool for intrapersonal gains.

Social information processing theory hypothesizes that after individuals formulate goals, they access or construct responses that help them obtain their goals. The respondents' ability to generate multiple responses in the studied situations was severely limited. Very rarely did respondents think of alternative ways of dealing with the studied situations. In violent situations (robbery and assault), respondents were more likely to admit that they got what they wanted in the situation. These findings suggest that these respondents positively evaluated their violent thoughts and behaviors. These individuals participate in more high risk situations than the general population. Therefore, they may be accustomed to these situations, and the expression of aggression is linked with positive outcomes in these situations.

Crick and Dodge (1994) admitted that the exact role that emotions and perceptions play in decision making in social situations is unclear. In the current study, anger was the primary emotion examined. Anger, both at the trait and state level, played

an important role in the studied situations. What is interesting is that higher levels of anger were present (at the trait and state level) in robbery situations. Specifically, trait anger consistently had a significant relationship with robbery situations. Therefore, anger could have an important impact on decision making in these situations. Past research has failed to study anger and its relationship with cognitive processing. This study's findings suggest this relationship warrants further examination.

Concerning decision making, the respondent's perception of the opponent's hostility also was examined in this study. Topalli (2005) suggested that more research needs to be conducted to explore hostile attribution bias' relationship with violence. Hostile attribution bias had consistent statistically significant relationships with the situational outcomes in the current study. In this study, individuals in avoided violence and assault situations consistently attributed more negative attributions to the opponent(s) than in robbery and attempted robbery situations. Many times, avoided violence and assault situations involve more interaction between the respondent and the opponent(s) (than robbery and attempted robbery situations). Concerning robbery and attempted robbery situations in this study, the opponent(s) rarely threatened or physically attacked the respondent. However, in avoided violence and assault situations, the opponent(s) played a more active role; many times it was hard to tell who was the initiator or the aggressor. Additionally, there were more verbal and non-verbal communications, by all individuals involved, that took place in these situations, in turn giving the respondents more to process and little time to do it in. In these situations, ambiguous behaviors by the opponent(s) may get interpreted as more hostile. It is important to note that higher amounts of hostile attribution bias were consistently statistically significant with avoided

violence situations (compared to assault and robbery situations). This finding contradicts past research suggesting that interpretations of higher levels of hostility could increase levels of aggression. The consistent significant findings of hostile attribution bias in all situations, particularly avoided violence, warrant further examination to more clearly understand its importance in decision making in these situations.

Studying the Situational Components of Crime

In the study of criminology, there is an overarching tendency to search for an underlying trait that explains criminal behavior in individuals (Horney2006). Past research has almost exclusively studied individual criminality. The study of the situational context in which criminal behavior occurs offers a different approach. However, past research has examined individual level components and the situational context of crime as completely separate entities. They can and should be integrated in the examination of criminal behavior to provide a comprehensive depiction of criminal situations.

In this line of inquiry, it is imperative to study the situation in its entirety. Past research has focused too narrowly on certain aspects of the situation (e.g., motive or victim selection). While these variables are important contextually, this narrow focus gives an incomplete depiction of the criminal situation. Motivation, for example, is an important component in the studied situations. For a crime to occur, a person has to be motivated to enact a behavior. Motives are unique to the person and the situation. Past research concerning motivation has focused, almost exclusively, on a primary motive or just assumed motivation, rather than accounting for it. Newer research has suggested that there may be multiple motives in both robbery and assault situations. Bennett and

Brookman (2007) suggested both situations have similar motives. This research did find similar themes (e.g., anger, thrill); however, the situations were fueled by different motivations. Overall, robbery and attempted robbery situations were more likely to have instrumental motives; whereas, assault and avoided violence situations had more expressive motives. However, in approximately 38 percent of robbery situations, respondents identified emotional and instrumental motives. Past research has looked at street robbery as one's business, so motives such as debt collection and righting a wrong were seen as business driven and purely instrumental. However, over 28% of all robbery situations involved retaliation against the opponent(s) for a prior situation. Additionally, over 70% of the situations involved opponents that the respondents had prior dealings with (e.g., family, friends, and acquaintances). This research suggests that these situations may involve more personal dimensions as well. Concerning assaults and avoided violence situations, most were driven by expressive motivations, such as anger; however, approximately 40 percent of avoided violence situations had an instrumental component. This study found that prior literature might be too presumptive in disregarding expressive motives in robbery and instrumental motives in assault and avoided violence situations. Both types of motives play an important role in the studied situations. Without studying the interactions of both, or the full array of reasons why people get involved in these situations, researchers will be unable to fully explain the criminal situation.

Past research concerning victims (opponents) has relied on a variety of sources. Specifically, lifestyle research has relied on surveying victims. However, this research set out to understand victim selection from the offender's perspective. Particularly, what were characteristics about the place and the victim that played an important role in the

situation? Past research on victim selection has been focused primarily in the robbery literature. This research expanded the subject to other criminal and high risk situations.

In approximately 30 percent of assault situations, the respondents admitted selecting the target was most important in the situation. Specifically, in assault situations, respondents continually reported the behaviors of the opponent(s) (e.g., being disrespectful, trying to intimidate people, running his/her mouth) got their attention in the situations. The opponents in the majority of these situations were seen as active participants. Therefore, it may not be the vulnerability of the opponent(s) (at least what victimization theories have constituted as vulnerability) that attracts the attention of the respondent in assault situations; rather, it may be the verbal and physically threatening demeanor of the opponent(s) in the situations. This information is important in understanding these types of situations, and other methods of research cannot provide this much detail into the situation.

Also concerning victim selection, some robbery studies have suggested that the place can be more important than selecting the target. However, this research found this rarely was the case. In over 75% of situations, the respondents identified selecting the opponent(s) as important. Additionally, many of the selection variables measuring the characteristics about the place had a decreased likelihood for a robbery situation to occur; whereas, many of the variables concerning the victim had an increased likelihood for a robbery situation to occur; however, most were not statistically significant in the models. This could be for a variety of reasons. First, these victim selection measures may not be as important as previous research has suggested. Past research on victim selection has not examined the entire situational context, thereby failing to consider other alternatives.

Second, this study and past research may not be asking the right questions concerning victim selection. It may be more about the interaction with the opponent(s) (victim(s)) and the immediate behaviors and less about vulnerability. Third, and conversely, these variables may be important in all of the studied situations. Therefore, there may not be statistically significant differences in victim selection in the studied situations because the selection variables studied may be important in all situations.

Concerning the influence of substances, there is an abundance of research that suggests these are important to take into account when studying violence. The substance use variables were not statistically significant in any of the models in this study. Therefore, past research has placed too much emphasis on alcohol and drug influences in violent situations and may be misleading. The explanation for this is simple. Past research has failed to account for other situational factors that take place.

Consistent with past research, most of the robbery situations studied revolved around drugs. In this study, the robbery situations typically took place to get more drugs for the respondent or to get money to buy more drugs. These findings suggest that the immediate influence of the respondent's drug use is not as important as the immediate need to get more drugs. Therefore, drugs are important in robbery situations; however, research should focus on the need to get drugs and the opportunities people have in robbery situations to obtain these drugs.

Lastly, this study examined intentions, weaponry, and injury in assault and robbery situations to gain a better understanding of these characteristics in situations. With the exception of Wells and Horney (2002), there has been inadequate attention paid to intentions and injury. Most research fails to account for intentions towards harming the

opponent(s) and instead focuses on the correlation between weapons and injury. This research followed in Wells and Horney's footsteps to try to disentangle intentions and weaponry concerning injury, and it found similar results concerning assault situations. Specifically, the degree to which the respondent wanted to harm the opponent(s) was significantly related to the injury outcome. However, so too, was the opponent's weaponry in the opposite direction. This finding suggests that the opponent's weaponry can serve as protection against injury in assault situations. The findings in this study suggest that robbery situations are different. Unlike assaults, most respondents in robbery situations reported they did not want to harm the victim. The goals of robbery are different, and individuals in these situations use guns for different reasons. In the assaults, respondents had weapons for protection purposes; whereas, respondents in robbery situations had weapons for control purposes. Also, respondents in robbery situations were more likely to admit that they would not have gone into the same situations without a weapon. The majority of respondents in assault situations admitted they would have gone into the same situations again. Without the inclusion of intentions and why the offender brings a weapon, there could be an inaccurate conclusion concerning weapons and injury. The inclusion of intentions and descriptive information concerning the offender's choice of having a weapon in these situations disentangles the complexity of the subject.

The ability to examine the above information allows for a better understanding of the situational context of crime. The only way to obtain this situational information is to go to the source, the offender. Studies that have utilized offender samples have failed to comprehensively study the situational context of crime, while other research in this area has relied on different sources (e.g., victim accounts or official documents). In turn,

conclusions regarding the criminal situation have been incomplete and misleading. In the paragraphs that follow, the discussion turns to suggestions for future research.

Suggestions for Future Research

Social information processing theory measures decision making through an examination of cognitive processes that take place within a social context. The variables measuring social information processing theory were statistically significant in the model testing hypotheses one, two, and three. To fully assess steps one and two of social information processing theory, encoding of cues and interpretation of cues, researchers need to examine not only the respondent's interpretation, but the opponent's as well. In this study, and in past social information processing literature, respondents were more likely to attribute negative intentions and hostile attribution bias to the opponent(s) in the studied situations. Examining the opponent's interpretation of the environment and his or her intentions during the situation would allow for a comparison to examine whether or not the respondent accurately encodes and interprets the situation.

Concerning step three of social information processing theory, goal formulation, future research needs to explore why these situations are dominated by intrapersonal goals. Past research has not taken into account motives; hence, future research should measure the impact that motives have on these goals. It may be that certain motives may drive the formulation of specific goals. The first three steps of social information processing theory are said to impact the later steps, in that changes in these steps alter the response access or construction, the response decision, and behavioral enactment response. Therefore, future research devoted to the previously discussed information

could shed light into differences, if any, in the cognitive processes at steps four, five, and six of social information processing theory.

Clearly, it is important for future research to consider the role emotions play, at the trait and state level, in decision making and the situational context of crime. Topalli and O'Neal (2003) suggested anger could bias individuals towards making hostile attributions towards others in situations. Anger and hostile attribution bias could have a direct or indirect relationship with the respondents' interpretations of the opponents' intentions, the respondents' goals, and the respondents' motives. Future studies need to examine what specific relationship(s) these emotions have with decision making across situations.

Researchers should continue to incorporate social information processing theory into criminological research to examine its importance and significance in measuring decision making. Recently, there has been an increase in research suggesting important limitations to rational choice perspective (see Bennett & Brookman, 2008; De Haan & Vos, 2003; Wright, Brookman & Bennett, 2006). To examine which theory better explains decision making, future research should test both theories to study which accounts for more variance. This would produce solid evidence and support for continued use of rational choice perspective or for the need to travel in a new theoretical direction.

Also, future research should examine decision making not only in known criminal populations, but with the general population to compare differences, if any, in each of the cognitive processes. Research like this could provide valuable insight into possible atypical decision making in individuals who commit criminal acts. Vignettes might be the best means available for this type of research, since the general population does not get

involved in high risk situations as frequently. Vignettes would produce adequate sample sizes and possess the ability to standardize situations and measures. This type of research has been conducted on children and has produced a wealth of information. In this study, the vignette research did produce similar results compared to the real life situations (except for the "otherways" variable).

Future research should continue to study avoided violence and other high risk situations, as well as other types of criminal situations, to compare the situations against one another. For example, concerning assault situations, future research needs to examine more domestic violence related situations to see if the findings are similar to this study's or to add to the research suggesting that domestic violence is a specialized crime. Research cannot identify unique characteristics of situations if these characteristics are not compared against multiple types of situations. This type of research can only advance theory and the criminological field's understanding of deviant and criminal behavior.

Lastly, many types of research and data have a hierarchical structure. Criminological research and data are no exception. Future research needs to focus on the situational context of crime, while integrating the study of individual level characteristics as well. This will entail more frequent use of multi-level modeling, such as hierarchical linear modeling, to explain both crime and criminality. The study of criminal behavior is complex, and more sophisticated statistics must be utilized to get closer to understanding this type of behavior.

Conclusions

Although Sutherland (1947) acknowledged the study of the situational context of crime could provide a "superior" explanation of criminal behavior, past research and

theory building has continued to focus almost exclusively on criminality. Due to the focus on criminality, the current literature is left with gaping holes in regards to explanations of crime. The study of the situational context of crime can provide more opportunities for researchers to unveil the complexities of criminal behavior in attempts to fill these holes in the literature.

Past research concerning the criminal situation is scant and, in turn, has provided the field of criminology with an incomplete portrayal of crime. This study attempted to take steps towards remedying this by studying the criminal situation in its entirety and comparing high risk and criminal situations to one another. Like Katz (1988), the current research illustrates the importance of studying high risk and criminal situations through the subjective experiences of those individuals involved in these situations. Through this study, greater understanding of the decision making process of offenders and other contextual characteristics of the criminal situation were gained, allowing for a more precise understanding of crime.

Additionally, studying the situational context of crime allows for the integration of individual and situational level components, which can only further our understanding of both crime and criminality. To completely understand the situational context of crime and who participates in these situations, researchers must continue to utilize the multilevel modeling statistical techniques. Multilevel modeling techniques provide researchers with the tools to effectively integrate and understand crime and criminality. An understanding of criminal situations and the individuals involved in them might help researchers predict future and subsequent criminal behavior.

The criminal situation is similar to a jigsaw puzzle. It has many small and unique pieces, each containing important information. However, without interlocking all of the pieces, one is left with misleading information and an inadequate representation of the criminal situation. This research demonstrated the need to examine crime comprehensively by including individual and situational level data. When the puzzle is pieced together in its entirety, a more complete picture of crime is presented.

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APPENDIX A

Individual Survey Instrument

Individual Survey Instrument

Study number: Inmate ID#

1. What was the arrest date for the offense that got you in here? _____

2. What was the offense? _____

3. How old were you when the crime took place? _____ yrs. old.

4. How many times have you been arrested (including this current time)? _____

5. How many times have you been convicted of any crime? _____

What follows is a series of questions regarding your characteristics. Please choose the most appropriate response for each question.

---

6. With which racial/ethnic group do you identify?

- African American/Black
- Hispanic/Mexican or Spanish-American
- Caucasian/White
- Native American
- Asian
- Other

7. What is the highest level of education you have completed? _____

8. What was your financial status when you committed the crime?

- Lower Class
- Working Class
- Middle Class
- Upper class

- Don't know

SURVEY CONTINUES ON NEXT PAGE

9. Are you married or with someone you think of as a partner?

- No
- Yes Married
- Yes with Partner

Please read the following statements that people have used to describe themselves, and then circle the one that best describes how you generally feel or react. There are no right or wrong answers.

---

10. You are quick tempered.

Almost Never	Sometimes	Often	Almost Always
1	2	3	4

11. You have a fiery temper.

Almost Never	Sometimes	Often	Almost Always
1	2	3	4

12. You are a hotheaded person.

Almost Never	Sometimes	Often	Almost Always
1	2	3	4

13. You get angry when you are slowed down by others' mistakes.

Almost Never	Sometimes	Often	Almost Always
1	2	3	4

14. You feel annoyed when you are not given recognition for doing good work.

Almost Never	Sometimes	Often	Almost Always
1	2	3	4

15. You fly off the handle.

Almost Never	Sometimes	Often	Almost Always
1	2	3	4

16. When you get mad, you say nasty things.

Almost Never	Sometimes	Often	Almost Always
1	2	3	4

17. It makes you furious when you are criticized in front of others.

Almost Never	Sometimes	Often	Almost Always
1	2	3	4

18. When you get frustrated, you feel like hitting someone.

Almost Never	Sometimes	Often	Almost Always
1	2	3	4

19. You feel infuriated when you do a good job and get a poor evaluation.

Almost Never	Sometimes	Often	Almost Always
1	2	3	4

Please read the following statements that people have used to describe other people, and then circle the one that best describes other people's behaviors. There are no right or wrong answers.

---

20. Most people always want to start something with you.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

21. Most people are always angry with you.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

22. Most people are always hostile towards you.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

23. Most people are always in a bad mood towards you.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

24. Most people are always happy with you.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
1	2	3	4	5

HYPOTHETICALS

Now I'd like to read 3 descriptions of situations that could occur in real life. Although you may not have ever been in a situation like the ones described below, please pick the response that best fits what you think you would do.

Scenario #1
You start a conversation with an attractive woman at the bar. You don't realize she's with somebody. Suddenly her boyfriend comes from across the room and grabs your arm. He angrily asks what you are doing. You've never seen this guy before.

25. How angry would this make you?

Not at All					Somewhat					Extremely Angry
0	1	2	3	4	5	6	7	8	9	10

26. How positive or negative was the persons intent?

Negative					Neutral					Positive
0	1	2	3	4	5	6	7	8	9	10

27. At this point in the situation, what would your goal be?

28. How would you react?

- Apologize and say you didn't know she was with someone
- Walk away
- Shove him and tell him to keep his hands off you
- Punch him

29. Are there other ways you would react?

- ☐ No (If no, SKIP to 31)
- ☐ Yes

30. If yes, would those other ways be:

- ☐ Non-confrontational
- ☐ Confrontational
- ☐ Both

Scenario #2
You and several friends are listening to music at night with the volume turned up pretty high. A neighbor you don't know well comes to your door and starts yelling "turn the music down before I have to do something about it."

31. How angry would this make you?

Not at All					Somewhat					Extremely Angry
0	1	2	3	4	5	6	7	8	9	10

32. How positive or negative is the neighbor's intent?

Negative					Neutral					Positive
0	1	2	3	4	5	6	7	8	9	10

33. At this point in the situation, what would your goal be?

34. How would you react?

- ☐ Apologize and turn the music down
- ☐ Invite him in for a beer
- ☐ Slam the door in his face
- ☐ Tell him to make you turn the music down
- ☐ Push him off the porch

SURVEY CONTINUES ON NEXT PAGE

35. Are there other ways you would react?

- ☐ No (If no, SKIP to 37)
- ☐ Yes

36. If yes, would those other ways be:

- ☐ Non-confrontational
- ☐ Confrontational
- ☐ Both

Scenario #3
You are waiting in your car in a parking lot. A man you don't know gets out. He's not paying attention and bangs his car door into yours leaving a big dent. You yell at the man to come back. He looks back and then ignores you and continues to walk into the store.

37. How angry would this make you?

Not at All					Somewhat					Extremely Angry
0	1	2	3	4	5	6	7	8	9	10

38. How positive or negative is the guys intent?

Negative					Neutral					Positive
0	1	2	3	4	5	6	7	8	9	10

39. At this point in the situation, what would your goal be?

40. How would you react?

- ☐ Shrug it off, you've done the same thing yourself
- ☐ Write down his license plate number and call the police
- ☐ Follow him in the store and calmly tell him what he's done
- ☐ Kick his car leaving a similar dent
- ☐ Wait for him to come out of the store and punch him

SURVEY CONTINUES ON NEXT PAGE

41. Are there other ways you would react?

- □ No (If no, SKIP to 43)
- □ Yes

42. If yes, would those other ways be:

- □ Non-confrontational
- □ Confrontational
- □ Both

Screening Questions:

43. During the calendar period, were you involved in a situation where you used force to take money, property, or drugs from someone else?

- □ 0. No
- □ 1. Yes

If yes, please show me the months in which you took something from someone or some place and tell me how many times you did this in each month.

44. During the calendar period, were you involved in a situation where you attempted to use force to take money, property, or drugs from someone else?

- □ 0. No
- □ 1. Yes

If yes, please show me the months in which you took something from someone or some place and tell me how many times you did this in each month.

45. During the calendar period, were you involved in a physical confrontation involving any of these things:--------use of a weapon, hitting, punching, slapping, kicking, or choking someone or throwing something at someone. Include bar or street fights. This does not include pushing, shoving, or grabbing, but does include throwing someone to the ground or against the wall.

- □ 0. No
- □ 1. Yes

If yes, please show me the months in which you took something from someone or some place and tell me how many times you did this in each month.

AVOIDED VIOLENCE SITUATIONS

Similar situations that did not result in you or others committing violence
Now I want to ask you about situations you have been involved in that had a high risk for violence, but you did not attack anyone. These might include situations in which:

**Someone grabbed, pushed, shoved, or threatened you
**You threatened someone
**Someone else encouraged you to be involved in violence but you didn't
**You were so angry you could have hurt someone
**There were other reasons for a high risk of violence

46. During the calendar period, were you involved in any of these situations?

- ☐ 0. No
- ☐ 1. Yes

→ If yes, please show me the months in which you took something from someone or some place and tell me how many times you did this in each month.

If you answered yes to any of these questions, I would like to ask you more information about these situations. This would involve answering detailed questions related to your decision making and questions about each situation. Specifically, these questions will be about the opponent(s), you, and reasons for the situation.

APPENDIX B

Situation Report Survey

Situation Report Survey

Study number: Inmate ID#

Situation #

1. What month (1-24) did this situation occur in:

2. Respondents Description of Situation:

3. What did this situation involve:

- Use of force or threat of force to get something
- Attempted use of force or threat to get something
- Physical confrontation
- Avoided violence

Use of Force or Attempted Use of Force

4. Did you:

- Take something from someone
- Attempt to take something from someone
- Take something from a business (SKIP to 6)
- Attempt to take something from a business (SKIP to 6)

5. If you took or attempted to take something from someone, did this grow out of an assault?

- No
- Yes

6. What did you take or attempt to take? (Check all that apply)

- Money
- Wallet
- Purse
- Check(s)
- Personal identification
- Credit card(s)
- Clothing
- Food
- Drugs
- Weapon
- Other (Please Specify):

7. If completed, what was the money value of what was taken?

- ☐ Less than $50
- ☐ $50-$99
- ☐ $100-$149
- ☐ $150-$199
- ☐ $200-$249
- ☐ $250-$299
- ☐ $300-$349
- ☐ $350-$399
- ☐ $400-$449
- ☐ $450-$499
- ☐ $500-$549
- ☐ $550-$599
- ☐ $600-$649
- ☐ $650-$699
- ☐ $700-$749
- ☐ $750-$799
- ☐ $800-$849
- ☐ $850-$899
- ☐ $900-$949
- ☐ $950-$999
- ☐ Other (Please Specify):

8. If completed, how successful did you feel about what you came away with?

Not at all					Enough					Very Much
0	1	2	3	4	5	6	7	8	9	10

9. If attempted, what stopped you from completing the robbery?

Attack

10. Who made the first physical attack?

- ☐ Respondent
- ☐ Someone with respondent
- ☐ The Opponent(s)
- ☐ Someone with the opponent(s)
- ☐ Other (Please Specify):

SURVEY CONTINUES ON NEXT PAGE

11. Did explicit threats precede the attack?

- ☐ No (If no, SKIP to 13)
- ☐ Yes

12. If yes, who made the first threat of attack?

- ☐ Respondent
- ☐ Someone with respondent
- ☐ The Opponent(s)
- ☐ Someone with the opponent(s)
- ☐ Other (Please Specify):

13. How did you attack the opponent(s)? (Please check all that apply)

- ☐ Did not attack
- ☐ Verbally
- ☐ Punch/Hit/Slap/Scratch/Bite
- ☐ Throw something (rock, bottle, chair)
- ☐ Kick (with any part of the leg)
- ☐ Choke
- ☐ Use of a weapon
- ☐ Other (please specify):

14. How did the opponent(s) attack you? (Please check all that apply)

- ☐ Did not attack
- ☐ Verbally
- ☐ Punch/Hit/Slap/Scratch/Bite
- ☐ Throw something (rock, bottle, chair)
- ☐ Kick (with any part of the leg)
- ☐ Choke
- ☐ Use a weapon
- ☐ Other (please specify):

Based on prior answers, was the opponent(s) an active participant? NO YES

15. Did this situation involve getting back at the opponent(s) for a prior situation?

- ☐ No
- ☐ Yes

If yes, for what?

16. Why did you get involved in this situation? (Please check all that apply)

- ☐ Money (ask for what?--- Drugs, pay bills, to party)
  For:_____
- ☐ Drugs
- ☐ Debt Collection
- ☐ Anger
- ☐ Control
- ☐ Thrill
- ☐ Keeping up appearance
- ☐ Righting a Wrong (Informal Justice)
- ☐ Other Gang issue (hazing, initiation)
- ☐ Status Enhancement
- ☐ Other(s) (Please Specify):

If more than one, which was the primary reason?

SURVEY CONTINUES ON NEXT PAGE

What follows is a series of questions concerning your decision making in this situation. Please answer each question as best as you can.

17. How positive or negative was the opponents intent?

Negative					Neutral					Positive
0	1	2	3	4	5	6	7	8	9	10

In your own words, what do you think the opponent's intent was?

18. Why do you feel that was the opponent's intent? (Check all that apply)

- ☐ Past experiences with the opponent(s) (Internal)
- ☐ Past experiences with other people (Internal)
- ☐ You just knew (Internal)
- ☐ The opponent(s) told you (External)
- ☐ The opponent's behavior (External)
- ☐ Other (Please Specify):

- ☐ Don't Know

19. What did you want to achieve in this situation?

20. At that time, did you think of other ways to deal with the situation?

- ☐ No (If no, SKIP to 24)
- ☐ Yes

If yes, what are the other ways you could have reacted? (Please list)

1.	3.
2.	4.

(DON'T ASK IF THEY SAY NO TO STEP 4)

21. What do you think would have happened if you __(other reactions)__?

- ☐ Violence could have been avoided
- ☐ Violence could have occurred
- ☐ Other (Please Specify):

[ ]

- ☐ Don't know

22. Do you think you would have gotten what you wanted?

- ☐ No
- ☐ Yes

23. Why did you decide to __(action)___ instead of the other options?

[ ]

24. Did __(action)_ get you what you wanted in this situation?

- ☐ No
- ☐ Yes

25. What kind of day were you having up until the situation occurred?

Really Bad					So-So					Really Good	Don't Know
0	1	2	3	4	5	6	7	8	9	10	11

26. Before the situation, what emotion best described how you were feeling?

- ☐ Happy
- ☐ Content
- ☐ Upset
- ☐ Frustrated
- ☐ Overwhelmed
- ☐ Stressed
- ☐ Angry
- ☐ Resentful
- ☐ Alone
- ☐ Worthless
- ☐ Other (Please Specify):

[ ]

27. Did the kind of day you were having or your emotion(s) play a key role in your decision to get involved in this situation?

- No
- Yes, both did
- Yes, emotion(s) did
- Yes, the kind of day you were having did

A number of statements that people use to describe themselves are given below. Read each statement and then circle what best describes how you felt during the situation. There are no right or wrong answers.

---

28. You were furious.

Not at all	Somewhat	Moderately So	Very Much So
1	2	3	4

29. You were irritated.

Not at all	Somewhat	Moderately So	Very Much So
1	2	3	4

30. You were angry.

Not at all	Somewhat	Moderately So	Very Much So
1	2	3	4

31. You felt mad.

Not at all	Somewhat	Moderately So	Very Much So
1	2	3	4

32. You felt annoyed.

Not at all	Somewhat	Moderately So	Very Much So
1	2	3	4

SURVEY CONTINUES ON NEXT PAGE

Please read the following statements that people have used to describe other people's behavior, and then circle the one that best describes the opponent's behaviors in this situation. There are no right or wrong answers.

33. The opponent(s) meant to have an effect on your feelings by his behavior.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

34. The opponent's behavior could be described as domineering or intimidating.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

35. The opponent(s) was hostile towards you.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

36. The opponent(s) was angry.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

37. The opponent(s) was in a bad mood.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

38. The opponent(s) was happy.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
1	2	3	4	5

SURVEY CONTINUES ON NEXT PAGE

What follows is a series of questions regarding the situation and the opponent's characteristics. Please choose the most appropriate response for each question.

39. During what time of day did the situation occur?

- ☐ Morning (7 - 11:59 a.m.)
- ☐ Afternoon (noon- 4:59 p.m.)
- ☐ Evening (5 – 10 p.m.)
- ☐ Late night (10:01 p.m. - 12 a.m.)
- ☐ During early morning (12:01-6:59 a.m.)

40. Where did the situation take place?

- ☐ At your home (If chosen, SKIP to 42)
- ☐ In the opponent's home
- ☐ In a third parties home
- ☐ Bar/pub/tavern
- ☐ Nightclub
- ☐ Restaurant
- ☐ Bank
- ☐ Gas station/convenience store
- ☐ Office/factory/warehouse
- ☐ Mall
- ☐ Hotel/Motel
- ☐ Workplace
- ☐ Parking lot/garage
- ☐ School
- ☐ Street (other than immediately adjacent to respondent, opponent(s), or third party's home)
- ☐ City or state park
- ☐ Public transportation or in a station
- ☐ Car
- ☐ Taxi
- ☐ Other (Please Specify):

  [ ]

41. The situation took place within how many miles of your home: _____ miles

42. How many people were with the opponent(s)? _____

43. Did you act alone in this situation?

- ☐ Yes (If yes, SKIP to 45)
- ☐ No

→ 44. If no, how many other people knowingly took part? _____

(IF MORE THAN ONE OPPONENT, SKIP TO 51)

45. What relationship, prior to the situation, did you and the opponent have? (Please choose the most accurate choice)

- ☐ Stranger
- ☐ Acquaintance: Knew by sight
- ☐ Acquaintance: Knew by name
- ☐ Friend
- ☐ Girlfriend/Boyfriend
- ☐ Ex-girlfriend/boyfriend
- ☐ Live-in partner
- ☐ Ex-live in partner
- ☐ Mom
- ☐ Dad
- ☐ Son
- ☐ Stepson
- ☐ Daughter
- ☐ Stepdaughter
- ☐ Brother
- ☐ Sister
- ☐ Spouse
- ☐ Ex-spouse
- ☐ Other (Please Specify):

46. How close were you and the opponent?

Not Close				Somewhat						Really Close	Don't Know
0	1	2	3	4	5	6	7	8	9	10	11

47. What was the sex of the opponent?

- ☐ Female
- ☐ Male

48. What would you say was the primary race/ethnicity of the opponent?

- ☐ African American/Black
- ☐ Hispanic/Mexican or Spanish-American
- ☐ Caucasian/White
- ☐ Native American
- ☐ Asian
- ☐ Other

49. How old would you say was the opponent? _____

SURVEY CONTINUES ON NEXT PAGE

50. What would you say was the financial class of the opponent?

- ☐ Working class
- ☐ Middle Class
- ☐ Upper Class

- ☐ Don't Know

IF MORE THAN ONE OPPONENT (IF NOT SKIP TO 58)

51. How many opponents? _____

52. How were the opponents in this situation related to you? (Check all that apply)

- ☐ Stranger
- ☐ Acquaintance: Knew by sight
- ☐ Acquaintance: Knew by name
- ☐ Friend
- ☐ Girlfriend/Boyfriend
- ☐ Ex-girlfriend/boyfriend
- ☐ Live-in partner
- ☐ Ex-live in partner
- ☐ Mom
- ☐ Dad
- ☐ Son
- ☐ Stepson
- ☐ Daughter
- ☐ Stepdaughter
- ☐ Brother
- ☐ Sister
- ☐ Spouse
- ☐ Ex-spouse
- ☐ Other (Please Specify): ☐

53. Overall, how close were you and the opponents?

Not Close					Somewhat					Really Close	Don't Know
0	1	2	3	4	5	6	7	8	9	10	11

54. Were they male or female?

- ☐ All Male
- ☐ All Female
- ☐ Both male and female

SURVEY CONTINUES ON NEXT PAGE

55. What would you say was the primary race/ethnicity of the opponent(s)? (Mark all that apply)

- ☐ African American/Black
- ☐ Hispanic/Mexican or Spanish-American
- ☐ Caucasian/White
- ☐ Native American
- ☐ Asian
- ☐ Other

56. How old would you say the youngest was? _____

57. What would you say was the financial class of the opponents (circle all that apply)?

- ☐ Working class
- ☐ Middle Class
- ☐ Upper Class

- ☐ Don't Know

---

58. How much planning did you do before the situation?

None					Some					A Lot
0	1	2	3	4	5	6	7	8	9	10

59. In the situation, which was most important:

- ☐ Selecting the opponent(s)
- ☐ Selecting the place *then* the opponent(s)
- ☐ Neither

The following are statements about the opponent. Please choose the most appropriate response for each statement.

---

60. The opponent(s) was in the wrong place at the wrong time.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

61. The opponent(s) did not protect himself/herself from having the situation take place.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

62. The opponent(s) had something you wanted.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

63. The opponent's routine put them at risk for having the situation take place.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

64. The opponent(s) was an easy target.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

65. The opponent(s) was involved in illegal activities.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

66. Is there anything else about the opponent(s) that might be important to mention?

67. What could the opponent(s) have done differently to prevent the situation?

SURVEY CONTINUES ON NEXT PAGE

The following are statements about the place. Please choose the most appropriate response for each statement.

68. You felt comfortable in the place.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

69. You knew you would not stick out.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

70. You did not want to be known.

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

71. It had attractive places (schools, illegal markets, retail business, etc.).

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

72. Is there anything else about the place that might be important to mention?

73. Were there bystanders around during the situation?

- □ No (If no, SKIP to 76)
- □ Yes

74. If yes, how many bystanders? _____

75. If yes, did this change the way you behaved in the situation?

- □ No
- □ Yes

The following questions concern substance use during the situation. Please answer the questions to the best of your ability.

76. Was the opponent(s) drinking or on drugs?

- ☐ No
- ☐ Drinking only
- ☐ Drugs only
- ☐ Both
- ☐ Couldn't tell which

- ☐ Don't Know

77. Were you under the influence of alcohol when the situation happened?

- ☐ No (If no, SKIP to 80)
- ☐ Yes

→ 78. If yes, how many standard drinks?

- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10-12
- ☐ 13-15
- ☐ 16-18
- ☐ 19-21
- ☐ 22-24
- ☐ 25+

79. If yes, was it more than normal?

- ☐ No
- ☐ Yes

80. Were you under the influence of drugs when the situation happened?

- ☐ No (If not, SKIP to 83)
- ☐ Yes

→ 81. If yes, what drug(s)? (Check all that apply)

- ☐ Marijuana
- ☐ Crack/Cocaine
- ☐ Heroine
- ☐ Speed
- ☐ Acid
- ☐ Meth
- ☐ Prescription Medication
- ☐ Other (Please Specify):

82. If yes, was it more than normal?

- ☐ No
- ☐ Yes

(IF NO ONE USED SUBSTANCES, SKIP TO 84)
83. Did yours or the opponent(s) substance use play a role in whether the situation took place or not? (Check all that apply)

- ☐ No
- ☐ Yes, the opponents alcohol use
- ☐ Yes, the opponents drug use
- ☐ Yes, the respondents alcohol use
- ☐ Yes, the respondents drug use

The following questions concern harm to the opponent(s), weapons, and opponent injury. Please answer the questions to the best of your ability.

---

84. You intended to physically harm the opponent(s).

Strongly Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Strongly Disagree
5	4	3	2	1

85. How bad did you want to physically harm the opponent(s)?

Not at all				Somewhat						Very Much
0	1	2	3	4	5	6	7	8	9	10

86. Did the opponent(s) threaten to use a weapon?

- ☐ No
- ☐ Yes

SURVEY CONTINUES ON NEXT PAGE

87. Did the opponent(s) have a weapon?

- □ No (If no, SKIP to 89)
- □ Yes
- □ Don't Know (If you don't know, SKIP to 91)

88. If yes, what kinds of weapons did the opponent(s) have during the situation (list all that apply):

- □ Gun
- □ Knife
- □ Other sharp object (scissors, ice pick, axe, etc.)
- □ Blunt object (rock, club, blackjack, bat, metal pipe, etc.)
- □ Bottle/Glass
- □ Other (Please Specify):

89. Did the opponent(s) use a weapon?

- □ No (If no, SKIP to 91)
- □ Yes

90. If yes, please choose the main weapon the opponent(s) used?

- □ Gun
- □ Knife
- □ Other sharp object
- □ Blunt object
- □ Bottle/Glass
- □ Other (Please Specify):

91. Did you threaten to use a weapon?

- □ No
- □ Yes

92. Did you have a weapon?

- □ No (If no, SKIP to 94)
- □ Yes

93. If yes, what kinds of weapons did you have (list all that apply):

- ☐ Gun
- ☐ Knife
- ☐ Other sharp object (scissors, ice pick, axe, etc.)
- ☐ Blunt object (rock, club, blackjack, bat, metal pipe, etc.)
- ☐ Bottle/Glass
- ☐ Other (Please Specify):

94. Did you use a weapon?

- ☐ No (If no, SKIP to 96)
- ☐ Yes

95. If yes, please choose the main weapon used during the situation?

- ☐ Gun
- ☐ Knife
- ☐ Other sharp object
- ☐ Blunt object
- ☐ Bottle/Glass
- ☐ Other (Please Specify):

96. If you brought a weapon, why did you bring the weapon to the situation?

- ☐ Everyday routine
- ☐ For protection
- ☐ To control the situation
- ☐ Other (Please Specify):

97. If you brought a weapon, would you have gone into this situation without a weapon?

- ☐ No
- ☐ Yes

98. Was the opponent(s) injured during the situation?

- ☐ No (If no, SKIP to 101)
- ☐ Yes

→ 99. If yes, what kind of injury?

- ☐ Bruises, black eye, minor cuts, scratches, swelling, chipped teeth
- ☐ Knocked unconscious
- ☐ Internal injuries
- ☐ Broken bones or teeth knocked out
- ☐ Gun shot, bullet wounds
- ☐ Knife or stab wounds
- ☐ Other (Please specify):

100. What resulted from the injuries?

- ☐ Opponent died
- ☐ Opponent was hospitalized
- ☐ Opponent received no medical attention
- ☐ Opponent lived, but don't know about medical attention
- ☐ Respondent believes medical attention was necessary
- ☐ Respondent does not know
- ☐ Other (Please specify):

The following questions concern previous disputes with the opponent(s). Please answer the questions to the best of your ability.

---

101. Have you been involved in disputes with this person(s) before this situation?

- ☐ No (If no, survey is finished)
- ☐ Yes

→ 102. If yes, how many times have you been involved in disputes with this person(s)? _____

103. If yes, how recently?

- In past week
- In past month
- In past year
- More than a year

104. If yes, have you described a situation with this person(s) in a situation you have already described?

- No
- Yes

105. If yes, which situation?

APPENDIX C

Anger and Hostile Attribution Bias Scale items and Reliability

Scale	Items	Cronbach's Alpha
Trait Anger		.875
	You are quick tempered.	
	You have a fiery temper.	
	You are a hotheaded person.	
	You get angry when you are slowed down by others' mistakes.	
	You feel annoyed when you are not given recognition for doing good work.	
	You fly off the handle.	
	When you get mad, you say nasty things.	
	It makes you furious when you are criticized in front of others.	
	When you get frustrated, you feel like hitting someone.	
	You feel infuriated when you do a good job and get a poor evaluation.	
Trait Hostile Attribution Bias		.814
	Most people always want to start something with you.	
	Most people are always angry with you.	
	Most people are always hostile towards you.	
	Most people are always in a bad mood towards you.	
	Most people are always happy with you.*	
State Anger		.962
	You were furious.	
	You were irritated.	
	You were angry.	
	You felt mad.	
	You felt annoyed.	

State Hostile Attribution Bias		.898
	The opponent meant to have an effect on your feelings by his behavior.	
	The opponent's behavior could be described as domineering or intimidating.	
	The opponent was hostile towards you.	
	The opponent was angry.	
	The opponent was in a bad mood.	
	The opponent was happy.*	

* Reverse Coded

APPENDIX D

Vignettes

VIGNETTES OR HYPOTHETICALS

Now I'd like to read 3 descriptions of situations that could occur in real life. Although you may not have ever been in a situation like the ones described below, please pick the response that best fits what you think you would do.

Scenario #1
You start a conversation with an attractive woman at the bar. You don't realize she's with somebody. Suddenly her boyfriend comes from across the room and grabs your arm. He angrily asks what you are doing. You've never seen this guy before.

Scenario #2
You and several friends are listening to music at night with the volume turned up pretty high. A neighbor you don't know well comes to your door and starts yelling "turn the music down before I have to do something about it."

Scenario #3
You are waiting in your car in a parking lot. A man you don't know gets out. He's not paying attention and bangs his car door into yours leaving a big dent. You yell at the man to come back. He looks back and then ignores you and continues to walk into the store.