SOCIAL COGNITIVE PROCESSES UNDERLYING VICTIM SELF AND IDENTITY:
EVIDENCE OF EXPLICIT AND IMPLICIT VICTIM IDENTITY AND SELF-
STEREOTYPING

by

NICOLE MARIE SACHS

A Dissertation submitted to the

Graduate School-Newark

Rutgers, The State University of New Jersey

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

School of Criminal Justice

written under the direction of

Dr. Bonita M. Veysey

and approved by

Bonita M. Veysey

Joel Miller

Elizabeth Griffiths

Luis M. Rivera

Newark, New Jersey

May 2018
Personal experiences affect the groups with which individuals identify. A single event can lead an individual to associate the self with a novel group; this process can occur both explicitly, or consciously, and implicitly, or automatically and nonconsciously. The overarching goals of this doctoral dissertation research are to examine whether a past violent victimization experience leads individuals to explicitly and/or implicitly identify with the group victims and its attributes, what this dissertation refers to as victim identity and victim self-stereotyping, respectively, and to examine under what conditions victim identity may be strengthened. Specifically, the general hypotheses tested were that participants with past violent victimization experience will exhibit stronger explicit and implicit victim identity and self-stereotyping compared to participants without such experience, and that participants who are reminded of their victimization experience will exhibit stronger explicit and implicit victim identity compared to those who are not reminded of their experience. The relations between explicit and/or implicit victim identity, and mental health, psychological well-being, and
behavioral patterns (i.e., routine activities) associated with victim experiences and identity were also explored. Results showed that those with past violent victimization experience exhibited greater explicit (but not implicit) victim identity and self-stereotyping, that reminders of a victimization experience strengthen explicit victim identity, and that measures of explicit and implicit victim identity and self-stereotyping are unrelated. Further, explicit victim identity mediates the relation between past violent victimization experience and mental health and psychological well-being, and explicit victim identity is related to several routine activities linked to risk of (re)victimization. Collectively, this dissertation research may support future intervention efforts to decrease the negative consequences of victimization that, in turn, empowers those with violent victimization experience with a sense of agency and promotes their overall mental health and well-being.

*Keywords:* violent victimization, social identity, self-stereotyping, explicit, implicit
Acknowledgment and Dedication

I would like to dedicate this dissertation to my Poppy and Nana, my two guardian angels who I know have been cheering me on from above for the past five years. I miss you both every day, and I am thankful for the strength and humor you both provided me while you were here – it has carried me through this program, and I know these memories will stay with me for life. I am so incredibly fortunate to have received an infinite amount of support from many loving family members and friends. Mom and dad, thank you for molding me into a strong, organized, assertive, independent woman who was never afraid to follow her dreams. You both always told me, “as long as you do your best, it’s okay.” Well, I did my best, and I hope I have made you both as proud of me as I am to have you as my parents. To my brother Cody, who has also made tremendous strides personally and professionally over the past few years – your commitment and dedication to everything you do is truly inspiring. To grandma, who at one time thought I was completing my Associate’s degree, thank you for providing me with endless laughs, lightheartedness, and much-needed lunchtime distractions. And to all of my extended family – aunts, uncles, cousins, friends who I call family – you have all had some hand, big or small, in shaping who I am today. I appreciate each and every one of you and am looking forward to spending my upcoming (though short-lived) down-time with you all! I would be remiss if I did not mention our late family dog, Morgan, who sat tirelessly by my bedside while I worked and provided me with comfort during the inescapable bouts of turbulence that arise in a Doctoral program. And to our newest furry family member, Stella Marie, you too have sat by my side, rather loudly, though I appreciate the love.
To the man who joined me on this wild ride over five years ago, who had no idea what he was getting himself into (or what I was getting myself into), and, who about two years ago decided to propose in the midst of it all – Johnny, I cannot thank you enough for your unwavering and unconditional support and love throughout this journey. You, and our now-famous four-legged fur baby Polo, have been my rocks, my lights at the end of the tunnel, my sources of strength on some of the most trying days. I love you, and I cannot wait to be your wife. If we can get through a PhD program together, I have no doubt we can handle whatever married life throws at us!

I would like to give special thanks to Dr. Bonita Veysey, my advisor and “academic mother,” who has challenged me to reach and exceed all of my goals beyond my wildest expectations. Thank you for always reminding me to “be my own boss!” On days when I thought I was not cut out for this, or wanted to give up, you pushed me to keep on going, restored my confidence, and reminded me of the importance of our work and our passion for what we do, and I am beyond grateful for that. I would like to thank Dr. Luis Rivera, my “academic dad,” who took on an extra graduate student from a different department and who has fostered a collaborative group of scholars who have helped me grow as an academic in unimaginable ways. Thank you for expanding my horizons and introducing me to the world of social psychology. To Dr. Joel Miller – a steadfast supporter who has believed in me since my Master’s program days and has allowed me to mature academically and professionally – thank you for including me in many of your projects, especially our work with parole, and for teaching me about logic models and databases! I must also thank you, Joel, for single-handedly keeping me employed these past few years. To Beth Griffiths, my hockey buddy and confidant,
especially in the early years of this program, thank you for all of your sociological
insights during this process and for reminding me to think on a larger scale. And to the
RISC Lab family – my academic sisters future Dr. Marina Saad and Dr. Alexandra
Margevich, future Drs. Tina Riefsteck and Pamela Gomez, Ethan Motschmann, and our
various research assistants past and present – thank you for your thoughtful feedback on
manuscripts and presentations, your help with programming, and for being a wonderful
extended family I never knew I needed.

To say that I am thankful for all of you who have helped me through this process
is a gross understatement. But I will say it again anyway – thank you, thank you, thank
you, for helping me and cheering me on as I cross the finish line to obtain my Ph.D.
Table of Contents

Abstract .................................................................................................................. ii
Acknowledgement ................................................................................................ iv
Chapter 1: Introduction ....................................................................................... 1
Chapter 2: Literature Review of Violent Victimization ...................................... 8
  Defining Violent Victimization and Victim ....................................................... 8
  Measuring Violent Victimization ................................................................. 11
  Risk of Initial (Violent) Victimization ......................................................... 14
  Consequences of Violent Victimization ....................................................... 19
Chapter 3: Theoretical Framework ................................................................... 27
  Social Identity and Self-Categorization Theories ......................................... 27
  Implicit Social Cognition Theory ................................................................. 33
  Chronic versus Contextually Salient Identities ........................................... 36
Chapter 4: Overview, Methodology, and Results ............................................. 40
  Pretest Study A ........................................................................................... 40
  Pretest Study B ........................................................................................... 42
  Study 1 ....................................................................................................... 45
  Study 2 ....................................................................................................... 54
  Study 3 ....................................................................................................... 60
  Study 4 ....................................................................................................... 67
Chapter 5: Exploratory Analyses of the Relations between IVI and/or EVI and Mental Health, Psychological Well-Being, and Behavioral Patterns .................... 78
  Analytic Strategy for Mental Health and Psychological Well-being Measures... 78
Results for Mental Health and Psychological Well-being Measures…………… 80

Analytic Strategy for Behavioral Patterns Measures………………………… 85

Results for Behavioral Patterns Measures……………………………………… 87

Chapter 6: Discussion…………………………………………………………….. 100

Meta-analysis of findings………………………………………………………….. 107

Chapter 7: Implications and Conclusion……………………………………………… 121

References………………………………………………………………………….. 129

Footnotes……………………………………………………………………………… 145

Appendix………………………………………………………………………………. 147
Lists of Tables

Table 1……………………………………………………………………………………... 53

Nested Regression Model for Implicit Victim Identity (IVI) Predicting Implicit Victim Self-Stereotyping (IVSS) as a Function of Violent Victimization Experience (N=101)

Table 2……………………………………………………………………………………... 58

Zero-order Correlations among Demographic and Explicit and Implicit Victim Identity and Self-Stereotyping Measures, Study 2 (N=142)

Table 3……………………………………………………………………………………... 65

Zero-order Correlations among Demographic, and Explicit and Implicit Victim Identity Measures, Study 3 (N=181)

Table 4……………………………………………………………………………………... 66

Zero-order Correlations among Demographic, and Explicit and Implicit Victim Identity Measures among Control Condition Participants Only, Study 3 (N=91)

Table 5……………………………………………………………………………………... 74

Zero-order Correlations among Demographic, and Explicit and Implicit Victim Identity Measures, Study 4 (N=153)

Table 6……………………………………………………………………………………... 75

Zero-order Correlations among Demographic, and Explicit and Implicit Victim Identity Measures among Control Condition Participants Only, Study 4 (N=58)

Table 7……………………………………………………………………………………...
Routine Activities Factor Loadings, Studies 2 and 3 (N = 58)....................... 91

Table 8.................................................................................................................

Correlation Matrix of Routine Activities, Studies 2 and 3 (N = 58)....................... 91

Table 9.................................................................................................................

Zero-Order Correlations of Routine Activities, Past Violent Victimization
Experience, EVI, and IVI, Studies 2 and 3 (N = 58).............................................. 92

Table 10.................................................................................................................

Routine Activities Factor Loadings, Study 4 (N = 152)....................................... 94

Table 11.................................................................................................................

Zero-Order Correlations of Routine Activities Factor Scores, Past Violent
Victimization Experience, EVI, and IVI, Study 4 (N = 152)............................... 96

Table 12.................................................................................................................

Zero-Order Correlations of Separate Routine Activities Items, Past Violent
Victimization Experience, EVI, IVI, and Age, Study 4 (N = 152)...................... 97

Table 13.................................................................................................................

Summary of hypotheses by study, indicating support................................. 106

Table 14.................................................................................................................

Zero-order Correlations among Demographic and Implicit Victim Self-
Stereotyping Measures, Studies 1 and 2 (N=243).............................................. 107
Lists of Figures

Figure 1………………………………………………………………………………………………………..

*Chain of events from a previous violent victimization to revictimization,*

*according to state dependence theory*…………………………………………………………….2

Figure 2A…………………………………………………………………………………………………..

*Cognitive network of associations between the self, social groups, and group attributes*……………………………………………………………………………………………………………………………..4

Figure 2B

*Cognitive network of associations post-victimization experience (new association group, attribute, and lines bolded for emphasis)*………………………………………………………………..5

Figure 3………………………………………………………………………………………………………..

*Risk factors for violent victimization and revictimization*…………………………………20
Lists of Appendices

Appendix A.........................................................................................................................

Pretest Vignettes and Questionnaires................................................................. 147

Appendix B.........................................................................................................................

Manipulation Check Materials................................................................. 153
Chapter 1: Introduction

Violent victimization is tantamount to violent crime, which is defined as completed or attempted assault (both simple and aggravated), robbery, and sexual assault or rape (Truman & Morgan, 2016). Over 2.2 million individuals ages 18 and older experienced over five million violent victimizations in the United States in 2015 (Truman & Morgan, 2016). Among persons ages 18 to 24, the rate of violent victimization was 25.1 per 1,000 in 2015; this rate was not significantly different than the previous year (Truman & Morgan, 2016). Also, in 2015, approximately 120,000 children ages 17 and under suffered physical abuse, defined as any act that could have or did cause physical injury to a child; nearly 60,000 experienced sexual abuse, defined as involvement of a child in any sexual activity that provides financial benefit and/or sexual gratification to the offender (U.S. Department of Health & Human Services, 2017). Further, Finkelhor and colleagues (2013) found a 9.5% lifetime sexual assault rate and a 54.5% lifetime physical assault rate with a national sample of youth ages one month to 17 years (Finkelhor, Turner, Shattuck, & Hamby, 2013). Indeed, violent victimization has been identified as a public health issue since 1996 (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002).

The consequences of violent victimization are far-reaching, ranging from acute physical pain to long-term health and behavioral health outcomes (e.g., depression, substance abuse, low educational attainment; Macmillan, 2001, and also see below discussion). Of most relevance to this dissertation are the cognitive consequences of violent victimization. That is, how individuals view themselves, others, or the social world may change following a violent victimization experience. Indeed, the state
dependence hypothesis (Sparks, 1981) suggests that a (violent) victimization experience changes a person and changes him or her in ways that make him or her more susceptible to revictimization. This chain of events is included in Figure 1. While revictimization is not the focus of the present dissertation, this figure underscores the importance of why it is necessary to understand the effects of violent victimization. What is less well understood, at least from a cognitive standpoint, is how violent victimization might affect individuals.

**Figure 1.** Chain of events from a previous violent victimization to revictimization, according to state dependence theory.

Thus far, research on cognitive consequences of violent victimization has focused on self-blame (i.e., blaming oneself for the harm incurred), reduced belief in a just and fair world, and self-esteem (Dignan, 2005; Herman, 1992; Janoff-Bulman, 1979; Janoff-Bulman & Frieze, 1983; Phillips & Daniluk, 2004; Whiston, 1981). However, at the most fundamental level, what is left unanswered is how individuals, specifically adults, view themselves, their identity(ies) and associated attributes following a violent victimization experience. In other words, do these individuals see themselves as victims? While there is some evidence to suggest that individuals label themselves as victims, no known research to date has examined this through the theoretical lens of social identity and implicit social cognition theories. This gap in knowledge is addressed by adopting these theories to understand self and identity processes following violent victimization.
Social psychological theories of social identity (Hogg, 2006; Hogg, Terry, & White, 1995; Tajfel & Turner, 1979; 1986), self-categorization (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), and implicit social cognition (Greenwald & Banaji, 1995; Greenwald, Banaji, Rudman, Farnham, Nosek, & Mellott, 2002) assert that experiences can lead individuals to identify with new social groups. These theories posit that in individuals’ memories is a network of associations that links the self to social groups and these groups’ attributes. Some of these associations individuals are aware of (i.e., explicit or conscious) while other associations individuals may not be aware of, and therefore may be unable to control (i.e., implicit or nonconscious). An example of this cognitive network is displayed in Figure 2A. In the center of the cognitive network, and in bold text, is the self (or self-concept). Social groups are represented in all-caps; a line extending from the self to the social group(s) represents a mental association between the self and social group (i.e., social identity). Attributes of social groups are represented in lowercase letters; again, lines between the attributes and groups, and the attributes and self, represent associations. It is worth noting that social groups may share attributes (as demonstrated in Figure 2 with the attribute ‘loving’ associated with ‘female’ and ‘daughter’). In Figure 2A, the self is associated with social groups female, daughter, and scholar, and with all of the attributes of those groups.

Following a new experience, new associations may be made; that is, the self becomes linked to a new group. Applying this to violent victimization, following a violent victimization experience it is expected that an association will be formed between the self and the social group victim. The addition of this association in the cognitive network is displayed in Figure 2B. The social group ‘VICTIM,’ and the lines connecting
self and victim, are bolded to represent an association with a new social group.

Additionally, and like the other associations in the cognitive network, it is expected that an association will form between the self and victim attributes. This is represented by the word ‘hurt’ in the cognitive network, which is associated with ‘victim’ and ‘self.’ Again, these associations have been bolded to emphasize that they are new associations made following a violent victimization experience.

![Cognitive network of associations between the self, social groups, and group attributes.](image)

*Figure 2A. Cognitive network of associations between the self, social groups, and group attributes.*
The goal of the present dissertation is to examine whether individuals who have experienced violent victimization exhibit similar associations between the self, victim group (i.e., victim identity), and victim group attributes (i.e., victim self-stereotyping).

This dissertation examines the relation between violent victimization and state dependence (i.e., a cognitive change in a person following a violent victimization) displayed in Figure 1. To measure these social cognitive processes, both explicit and implicit measures are utilized. Explicit processes are generally measured through self-report surveys and implicit processes are measured using the Implicit Association Test (Fazio & Olson, 2003). Because no Implicit Association Test has been developed to study implicit victim identity and self-stereotyping among adults, pretests were first conducted to elicit stimuli for these measures. Then, over the course of four studies, this
dissertation examined whether previous violent victimization experience leads individuals to identify with the group victims and its associated stereotypes, and under what conditions victim identity might be strengthened.

It was expected, consistent with social identity theory, that individuals who self-report past violent victimization experience will exhibit stronger explicit victim identity (Hypothesis 1) and explicit victim self-stereotyping (Hypothesis 2) compared to those who do not report having experienced violent victimization. Further, it was expected that those who strongly explicitly identify as victims will also strongly associate with victim stereotypes (Hypothesis 3). Consistent with implicit social cognition theory, it was predicted that individuals who self-reported past violent victimization experience will exhibit stronger implicit victim identity (Hypothesis 4) and implicit victim self-stereotyping (Hypothesis 5) compared to those without violent victimization experience. And, those who strongly implicitly associate the self with victim will also strongly implicitly associate the self with victim stereotypes (Hypothesis 6). Explicit and implicit measures of victim identity were not expected to be related, as the stigma associated with victim may motivate individuals to distance themselves explicitly from the victim group and implicit measures tend to bypass these conscious processes (Hypothesis 7). The final two hypotheses are related to the effect of context on identities. Specifically, it was hypothesized that being reminded of a past victimization will result in stronger explicit (Hypothesis 8) and implicit (Hypothesis 9) victim identities.

This dissertation is organized to first present a general overview of violent victimization, including defining and measuring violent victimization, risk factors of violent victimization, brief descriptions of theories of victimization and their
shortcomings in addressing the current research questions, and a description of the consequences of violent victimization (Chapter 2). At the conclusion of Chapter 2, a new set of cognitive consequences are proposed. Chapter 3 details the theoretical framework of the dissertation focusing on social psychological theories of self and identity processes. Chapter 4 presents the results of the two pretests and the four main studies. The format of the results chapter follows the outline of multi-study reporting, presenting methods and results of one study before proceeding to the next. Chapter 5 presents results from exploratory analyses of the relations between past violent victimization experience, explicit and implicit victim identity, and mental health and behavioral patterns. This chapter is included because poor mental health and a potential change in behavior patterns are consequences of violent victimization, and these consequences may also be influenced by identity-related cognitions. Chapter 6 discusses the implications of this dissertation and includes a meta-analysis of the studies. Finally, Chapter 7 concludes the dissertation by discussing limitations, future research directions, and policy recommendations.
Chapter 2: Literature Review of Violent Victimization

This chapter provides an overview of violent victimization, beginning with the definitions of violent victimization and victim for the purposes of this dissertation. The ways in which researchers have measured and continue to measure violent victimization and their relevance to this dissertation are then outlined. Following that is a discussion of what is currently known about violent victimization, including risk factors and theories of (violent) victimization, which are used to inform the analyses in Chapters 4 and 5. The chapter concludes by introducing the consequences of violent victimization as well as unanswered questions about cognitive consequences.

Defining Violent Victimization and Victim

Researchers conceptualize and operationalize concepts based on their research questions and sample. Conceptualization and operationalization in research is important so that readers and other researchers know exactly how one has defined a concept, and then how he or she measured the concept based on its definition. Ultimately, this provides clarity in the research process and allows for study replication (Maxfield & Babbie, 2015). With this in mind, definitions and measurements of violent victimization and victim are outlined below.

Violent victimization, synonymous with violent crime, is defined as robbery, sexual assault or rape, and simple or aggravated assault (Truman & Morgan, 2016). The Bureau of Justice Statistics (BJS; 2017a), the same agency that provides the aforementioned definition of violent victimization, defines robbery as attempted or completed theft, directly from a person, of property or cash by threat or use of force, with or without a weapon, and with or without injury. Simple assault is defined as an
attempted or completed attack without a weapon, resulting in no injury, minor injury, or some injury requiring less than two days of hospitalization. Conversely, aggravated assault is defined as attempted or completed attack with a weapon regardless of whether injury results, or attempted or completed attack without a weapon in which serious injury results (e.g., broken bones, hospitalization of two or more days) (BJS, 2017b). Sexual assault includes attempted or completed attacks or verbal threats that include unwanted sexual contact, that may or may not include force. Rape is defined as attempted or completed forced sexual intercourse; force may be psychological or physical, and sexual intercourse means penetration by the perpetrator (BJS, 2017c).

The BJS’s (2008) operational definition of violent victimization asks study participants to report whether they have been attacked or threatened with any weapon, with something thrown, by any grabbing, punching, or choking, by any rape or sexual assault, by any face to face threat, or by any threat or use of force at all. Response categories provided to participants are ‘yes’ and ‘no.’ This question is included in the BJS’s National Crime Victimization Survey (see below), which is used to gather information on individuals and incidents, and often reports estimates of victimization (and violent victimization) rates (Maxfield & Babbie, 2015). The individuals who report having these experiences are considered victims by the BJS (Truman & Morgan, 2016); however, this is assumed as no explicit definition of a victim specific to violent victimization is provided. Rather, the BJS (2017d) defines victim as “the recipient of a criminal act.”

The concept of a victim is often assumed to be known or defined by the reader. Such subjectivity creates varied definitions of victims. Indeed, several scholars note that
the concept/status of victim is socially constructed; one must be regarded by others as a victim to ‘deserve’ the status (Holstein & Miller, 1990; Madriz, 1997). Holstein and Miller (1990) define the term in such a way that suggests persons are labeled as victims by others: “persons believed to have been unjustly harmed or damaged by exogenous forces beyond their control” (emphasis added; p. 105). However, this definition of victim is largely subjective, and this subjectivity creates problems for measurement as it leaves room for bias and can vary from person to person and study to study.

Rather than rely on the above views and definitions of victims, several studies have operationalized victim by asking participants specific questions about having experienced, directly or vicariously, a completed or attempted crime (i.e., they take a more objective approach). For example, Palm and Follette (2011) define victims of interpersonal violence (a term sometimes used interchangeably with violent victimization) as those who report a history of any of the following crimes: rape, sexual molestation, physical assault, physical abuse, being threatened with a weapon or kidnapped, domestic violence, sexual harassment, and stalking (for other examples see Boney-McCoy & Finkelhor, 1995; Humphrey & White, 2000; Kilpatrick, Best, Veronen, Amick, Villeponteaux, & Ruff, 1985). This dissertation takes a similar approach in conceptualizing and operationalizing victim.

In this dissertation, victim is defined as an individual who has experienced violent victimization (according to the BJS definition of violent victimization, see below). This approach is used because the BJS clearly defines and has clear measures of violent victimization. A victim, then, is an individual who responds ‘yes’ to having experienced one or more of the incidents on the violent victimization question. This method allows
participants to report their own experiences, which mitigates the subjectivity issues above. Further, because this work, like the BJS, will obtain data from individuals, this allows for comparisons to be made between victims and non-victims (i.e., individuals who have not experienced violent victimization).

**Measuring Violent Victimization**

There are many ways of measuring violent victimization depending on the nature and purpose of a study and its sample. Nevertheless, two of the most notable measures of violent victimization are the Federal Bureau of Investigation’s (FBI) Uniform Crime Report (UCR) and the Bureau of Justice Statistic’s National Crime Victimization Survey (NCVS). The UCR measures crimes reported to the police. It separates crimes into two categories: Part I offenses and Part II offenses. Many violent crimes, and therefore violent victimizations, are captured under Part I offenses: homicide, rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson (the latter four types of crimes are *not* typically considered violent). The benefit of the UCR is that it captures most major crimes, some of which are violent (however, simple assault is included as a Part II offense in the UCR). Further, the UCR is often geographically specific (Maxfield & Babbie, 2015).

Despite having some advantages, the UCR has been criticized for several reasons, namely that it does not capture the “dark figure” of crime; crimes not reported to the police. Further, not all agencies report their statistics to the FBI, and even among those that do report, the UCR relies on agencies accurately recording crimes. Some agencies also abide by the hierarchy rule; that is, they only report the most serious offense in an event with multiple offenses. Finally, different locales may also have varying definitions
of crimes (Maxfield & Babbie, 2015). To address some of the UCR’s limitations, the National Incident-Based Reporting System (NIBRS) has been developed to eventually replace the UCR. Agencies employing the NIBRS report each incident (rather than the aggregate the UCR reports). However, the NIBRS is rather new and has not yet been adopted by many agencies. And, again, the NIBRS relies on incidents reported to the police.

Contrary to the UCR and NIBRS, the National Crime Victimization Survey (NCVS) measures victimizations, including those that may not have been reported to the police. The NCVS is a self-report measure designed to establish rates of victimization experiences using a random sample of household resident(s) in the United States (Peytchev, Caspar, Neely, & Moore, 2012). The survey is conducted in-person with the same household resident(s) every six months, for a period of three years. Some argue that the NCVS is a more accurate measure of victimization, as it does not depend on crime reported to law enforcement agencies (Karmen, 2016). The NCVS enquires about the following crimes in its Basic Screen Questionnaire: burglary, robbery, larceny (personal and other), motor vehicle theft, assault (aggravated and simple), threats, and sexual assault or rape. Thus, the NCVS captures most of the UCR’s Part I offenses, including all violent crime offenses (except homicide, see below). If a respondent answers ‘yes’ to experiencing any of these crimes over the past six months (i.e., the six months before the interview date), he or she is then asked how many times the act was experienced and is then asked to describe the event. Additional questions ask respondents to report where the incident took place and, for some crimes, the respondent’s relationship to the offender(s).
Respondents also are asked whether they called the police to report an incident that they thought was a crime that occurred to them (BJS, 2012).

Like the UCR, the NCVS has also been criticized on several fronts. First, the NCVS does not capture crimes that do not have a victim respondent, including homicide (because the victim is deceased and cannot be interviewed). Second, the NCVS relies on respondents’ accurate recall of information (e.g., date of victimization). Third, some respondents may choose not to participate in the survey (resulting in potential bias) and, among those that do participate, they may be motivated to not report or minimize their experiences. The NCVS also runs the risk of either over- or under-counting crime if the sample is not representative, and this potential bias is unknowable. Finally, unlike the UCR, and because of privacy concerns, the NCVS does not typically record the geographic location of respondents (Maxfield & Babbie, 2015).

Additional measures of violent victimization are the National Violence Against Women Survey (NVAWS) and a variety of single studies that reply on telephone calls to the police, offender and/or community surveys, and emergency room visits (Ruback & Thompson, 2001). However, the NVAWS only queries respondents about assaults, rape, and stalking (not robbery or more general sexual assault; Tjaden & Thoennes, 1998). Telephone calls to the police or police incident or arrest reports have similar advantages and disadvantages as the UCR. Offender surveys may capture unreported crimes, both major and minor, and are likely to provide more information on the offender. On the other hand, offender surveys have received critiques similar to those of the NCVS (e.g., dependent upon respondents’ memories and willingness to disclose). Community surveys might capture crimes respondents were not involved in and can provide information on
perceptions of crime. They are not, however, the best or most accurate measure of crime or victimization. Emergency room visits may capture crimes not reported to the police, but they will only capture the incidents where the victims are identified through a hospital or emergency service provider (Maxfield & Babbie, 2015).

Other specific surveys measuring subtypes of violent victimization are the Child Exposure to Domestic Violence Scale (Edleson, Shin, & Johnson Armendariz, 2008), Domestic Violence Inventory (Behavior Data Systems, Ltd., 1996), HITS Tool for Intimate Partner Violence (Sherin, Sinacore, Li, Zitter, & Shakil, 1998), and the Karolinska Interpersonal Violence Scale (Jokinen, Forslund, Ahnemark, Gustavsson, Nordstrom, & Asberg, 2010). The three former measures focus largely on one type of violent victimization – domestic violence. The latter scale, unlike the NCVS, is not as widely utilized by practitioners in criminology, and is primarily used to predict suicide among those exposed to childhood or adult violence (see Jokinen et al., 2010 for an example).

In the present work, items from the NCVS were used to measure violent victimization because it is the primary national measure of victimization in the United States (Jennings, 2016) in use since the 1990s and because it encompasses a greater breadth of victimizations compared to other measures. Further, because this work utilizes the BJS’s definition of violent victimization, the NCVS is the analogue measure of violent victimization.

**Risk of Initial Violent Victimization**

In this section the risk factors of violent victimization are described. Attention is focused on individual level risk factors, and these risk factors informed the analytic
chapters of this dissertation. The World Health Organization (WHO) includes individual factors in its ecological model of violence, and defines violence as, “The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation” (Krug et al., 2002, p. 4). Individual factors in this model that can influence behavior or increase one’s likelihood of experiencing violent victimization include age, socioeconomic status, education level, employment status, mental health, and substance abuse (Krug et al., 2002).

While the WHO’s definition of violence and the BJS’s definition of violent victimization are not the same, many of the individual factors identified by WHO are also noted in the BJS’s report on violent victimization. Indeed, the most recent report from the NCVS suggests that those with the highest rates of violent victimization are African American, male, between 25 and 34 years of age, separated, and/or earn less than $15,000 per year (Morgan & Kena, 2017). Consistent with this, Sampson and Lauritsen (1994) identify those at greatest risk of violent victimization (except for sexual victimization) as male, under age 25, unemployed, and/or African American. Further, those who are unmarried, receive little support from family, and/or have delinquent friends are those most at risk of victimization (Goldbaum, Craig, Pepler, & Connolly, 2003; Sampson & Lauritsen, 1994).

Ruback and Thompson (2001) identify two theories of victimization that blend individual- and contextual-level explanations – lifestyle-exposure theory and routine activities theory. Again, aspects of these theories will be used to inform the following
analytic chapters. Lifestyle-exposure theory (Hindelang, Gottfredson, & Garofolo, 1987) states that some places are more dangerous than others, and individuals whose lifestyles put them in these more dangerous places (due to work, hobbies, school, etc.) are, by consequence, more susceptible to victimization. Further, those who spend more time at home (e.g., women) are less likely to be victims of certain types of crimes (e.g., robbery) than those who spend more time in public places (e.g., men) (Felson, 1998).

Mental health problems and substance abuse may increase one’s risk of violent victimization, either directly or through lifestyle factors. Indeed, past research shows that those with mental health problems are more likely to experience violent victimization compared to the general population (e.g., Maniglio, 2009). Azimi and Daigle (2017) demonstrate that Attention Deficit Hyperactivity Disorder (ADHD) has a direct effect on violent victimization, such that those with ADHD have an increased risk of experiencing violent victimization. They also find that the relation between depression and anxiety, and violent victimization is fully mediated by drug use and sexual activity (Azimi & Daigle, 2017). Both drug use and sexual activity (specifically sexual activity at a young age) are associated with greater risk of violent victimization in the general population, as they may indicate risk-taking behavior and engagement in risky activities that expose individuals to motivated offenders (see below, Azimi & Daigle, 2017; Sells, Rowe, Fisk, & Davidson, 2003). Similarly, those who use alcohol and/or substances are more likely to experience violent victimization (Begle et al., 2011; Hiday, Swartz, Swanson, Borum, & Wagner, 1999). This may be because those who use alcohol or substances are more exposed to motivated offenders and are more often in places with less guardianship (see below), or because any impairment associated with alcohol or substance abuse may make
them more suitable targets (e.g., because they may not be able to defend themselves, because they may provoke an offender) (Felson & Burchfield, 2004; Koo, Chitwood, & Sanchez, 2008). The relation between mental health problems and/or substance use, and violent victimization is sometimes bidirectional. That is, mental health problems and/or substance use may increase one’s risk of violent victimization, or a violent victimization may increase one’s risk of mental health issues and/or substance use, leading to increased risk of revictimization (Begle et al., 2011).

Routine activities theory (RAT; Cohen & Felson, 1979) holds that direct contact predatory crime results when a motivated offender, suitable target, and absence of a capable guardian intersect in space and time. Direct contact predatory crimes are “illegal acts in which ‘someone definitely and intentionally takes or damages the person or property of another’” (Cohen & Felson, 1979, p. 589). Drawing in part from ecological theory, RAT suggests that offenders capitalize on the everyday, legal routine activities of individuals when they (offenders) carry out crimes. Routine activities are defined as, “any recurrent and prevalent activities which provide for basic population and individual needs, whatever their biological or cultural origins” (Cohen & Felson, 1979, p. 593). Examples of routine activities include work, school, grocery shopping, and social interaction (Cohen & Felson, 1979).

RAT does not provide a very detailed depiction of a motivated offender because the theory “take[s] criminal inclination as given” (Cohen & Felson, 1979, p. 589). Nevertheless, some assumptions can be made of the motivated offender from the RAT literature. The motivated offender is one who is self-interested; this draws from classical
theorists and theories, most notably that of rational choice, in the assumption that man is hedonistic (see Bentham, 1789).

A suitable target is one, according to Felson (1998), that is considered valuable, is low in inertia, is highly visible, and is highly accessible, insofar as she, he, or it is perceived as such by the offender. The value of a target is its “material or symbolic desirability” as judged by the offender and the inertia (for human targets) is the physical size of the target, including height and weight, that may influence a target’s ability to resist (Cohen & Felson, 1979, p. 591). Visibility refers to the opportunity(ies) for a target to be discovered. Offenders tend to select targets that are close to their homes (Cohen & Felson, 1979; Felson & Cohen, 1980). Accessibility refers to the location where a potential victimization may take place; places (or locations of targets) where offenders will be hidden and where they may escape easily are considered more accessible (Felson & Cohen, 1980). Further, and consistent with lifestyle exposure theory, Cohen and Felson (1979) find that those who spend most of their time at home (e.g., stay-at-home spouse, retired or disabled persons) are less likely to be targets compared to those who are employed, in school, or in the military (likely because their visibility and/or accessibility is low).

There is one exception to the above finding regarding lower chances of victimization for those spending most of their time at home, which is domestic violence. In incidents of domestic violence, the motivated offender and suitable target are at home together, and a capable guardian is unlikely to be present or brought in, as domestic violence incidents often go unreported to police (e.g., Felson, Messner, Hoskin, & Deane, 2002; Mannon, 1997). Gelles and Strauss (1988) find that domestic violence is most
common during late evening hours and on weekends, when dating couples and/or family members are most likely to be home with one another (i.e., not engaging in outside routine activities). Victims of domestic violence are highly visible and accessible to their attackers. They may be valuable insofar as the perpetrator is able to exert control over them. Given that most domestic violence victims are women, they may also be perceived as low in inertia, as their perpetrators are often males (Mannon, 1997). Thus, while people who spend most of their time at home may be less likely to experience violent victimization outside of the home, they may be more likely to experience domestic violence.

Capable guardians are those whose presence alone may protect the target against victimization (Felson, 1995). Guardians deter offenders from acting against a target, whether their presence is intentional or unintentional (Hollis, Felson, & Welsh, 2013). Examples of capable guardians (which can be both formal or informal) are family members, friends, co-workers, and police (Cohen & Felson, 1979). Capable guardians are different from target hardening, which includes protective measures taken by potential targets to make them or their belongings less suitable to offenders (Hollis et al., 2013).

Cohen and Felson (1979) note that potential targets may take actions to divert offenders away from themselves or their personal belongings, known as target hardening. These tactics could make initial (or repeat) victimization more difficult, and, presumably, the offender will have little information about preventative measures. Examples of target hardening include installing security systems, installing ample lighting around one’s home, installing better doors and locks, having a dog, and/or owning a firearm (Garofalo & Clark, 1992; Meier & Meithe, 1993; Tewksbury & Mustaine, 2003). Individuals may
also change their behavior patterns (e.g., take a new route to work, avoid going out at night, change jobs, avoid a place where one was previously victimized) to reduce their risk of (re)victimization (Averdijk, 2011; Hindelang et al., 1978; Janoff-Bulman, 1985).

The above discussion suggests a variety of risk factors associated with violent victimization. As a result, these risk factors have been added as predictors of both initial violent victimization and revictimization, displayed in Figure 3.

![Figure 3](image.png)

**Figure 3.** Risk factors for violent victimization and revictimization.

**Consequences of Violent Victimization**

Violent victimization is an event imposed on an individual. It occurs without a person’s consent or control. Violent victimization experiences may cause immediate, acute physical and emotional pain, and they often lead to many long-term consequences. Health consequences might include problems with digestion, cardiac and respiratory complications (e.g., heart attack, stroke, bronchitis), chronic pain, headaches or migraines, fatigue, arthritis, and reproductive issues (Draper, Pfaff, Pirkis, & Almeida,
Long-term mental health issues often resulting from victimization are depression, anxiety, and Post-Traumatic Stress Disorder (PTSD; Resick, 1987; Rowan & Foy, 1993; Boney-McCoy & Finkelhor, 1995; Macmillan, 2001). Additional issues related to mental health and linked to victimization include alcohol and substance abuse and dependence, eating disorders, self-cutting, and suicide attempts (Macmillan, 2001; Resick, 1987; van der Kolk, Perry, & Herman, 1991). Collectively, these health consequences may lead to early death among those who have experienced violent victimization (Brown, Anda, Tiemeier, Felitti, Edwards, Croft, & Giles, 2009).

Violent victimization can significantly affect other life outcomes, especially among those who have been victimized younger in life. For example, children and adolescents who have been victimized tend to have more problems with teachers, lower IQs, and less educational self-efficacy and attainment (Boney-McCoy & Finkelhor, 1995; Macmillan & Hagan, 2004). In turn, those who have experienced violent victimization are also less likely to hold or seek out a job, earn lower wages when employed, and are more likely to receive public assistance (Macmillan & Hagan, 2004). In their qualitative study, Moe and Bell (2004) found that both women who had been gainfully employed and women who were unemployed at the time of battering experienced difficulties post-violence finding and maintaining employment. Prior violent victimization also serves as a risk factor for criminal involvement and subsequent victimization (Macmillan, 2001).

Consistent with the above findings, research on adverse childhood experiences (ACEs), which include childhood physical and/or sexual abuse, also have been linked to long-term consequences, including suicide attempts in adulthood, though this is in part mediated by depressed affect, drug use, and alcoholism, all of which are also linked to
ACEs (Dube et al., 2001; Dube et al., 2002; Chapman et al., 2003). Those who have experienced ACEs are more likely to marry alcoholics (Dube et al., 2002) and are more likely to be victims and perpetrators of intimate partner violence (Whitfield, Anda, Dube, & Felitti, 2003). Further, as the number of ACEs experienced increases, the negative effects of ACEs accumulate. Similarly, children who experience poly-victimization, or multiple types of violent victimization, display PTSD, more severe behavioral and emotional issues, are more likely to use alcohol and marijuana, and have less personal and social resources to cope with their experiences (Turner, Shattuck, Finkelhor, & Hamby, 2017). Taken together, the consequences of violent victimization are far-reaching and long-lasting.

**State dependence.** Much research has shown that a small proportion of victims experience a large percentage of violent victimizations, and that the best predictor of repeat victimization is prior victimization (Farrell, 1992; Farrell, 1995; Gottfredson, 1984; Hindelang et al., 1987; Lauritsen & Rezey, 2013; Zeigenhagen, 1976). While revictimization was not examined in this dissertation, theories of revictimization are nevertheless reviewed to better understand the effects of violent victimization on individuals. Specifically, Sparks (1981) suggests that a previous victimization changes a person in such a way that may make him or her more vulnerable to revictimization (also see Lauritsen & Quinet, 1995). This is known as the state dependence hypothesis.

State dependence (or boost account) is one possible explanation of revictimization.¹ In support of the state dependence hypothesis, Ruback and colleagues (2014) find evidence that behavioral changes following a victimization increase the risk of revictimization. Specifically, they find that for males, an initial victimization
experience increases offending behavior, which in turn increases the risk of revictimization. For females, an initial victimization experience results in a number of behavioral changes (e.g., increased offending, heavy drinking, substance use, depression) that increase their risk of revictimization. Overall, Ruback and colleagues’ (2014) study suggests that the negative consequences stemming from a previous victimization can increase one’s risk of revictimization.

Other researchers have found limited support for the state dependence hypothesis, concluding instead that it is more likely that some third factor (e.g., age, race, socioeconomic status) explains the link between a previous and past victimization (known as the heterogeneity hypothesis) (Finkelhor, Ormrod, Turner, & Holt, 2009; Lauritsen & Quinet, 1995; Turanovic & Pratt, 2014; Wittebrood & Nieuwbeerta, 2000). However, even these studies acknowledge that there are other, unmeasured factors not included in their analyses that may help explain the victimization-revictimization relation. This dissertation suggests that previously unmeasured cognitive consequences of violent victimization, specifically explicit and implicit victim identity (see Chapter 3), that are measures of state dependence, may help explain this phenomenon.

**Cognitive effects of victimization.** Violent victimization experience(s) also affects the way one perceives him- or herself; for example, one may make attributions of self-blame (Dignan, 2005; Herman, 1992; Janoff-Bulman, 1979; Phillips & Daniluk, 2004; Whiston, 1981). Janoff-Bulman (1982) distinguishes between behavioral and characterological self-blame. In the former, individuals blame themselves for their own behavior (e.g., “I should not have walked alone after dark”); in the latter, individuals blame themselves for their character or personality (e.g., “I am a weak person”). Self-
blame may also include blaming oneself for causing the violent victimization, blaming oneself for tolerating the violence, or blaming oneself for not being able to change the violence (Miller & Porter, 1983). Further, individuals may blame the offender, blame society, or blame God or a higher being (Ruback & Thompson, 2001).

Janoff-Bulman and Frieze (1983) find that assumptions of personal invulnerability, perception of the world as meaningful, and positive self view change as a result of experiencing victimization. Generally, while individuals acknowledge that negative events (like victimization) occur, they believe that these events will not happen to them. However, following victimization, this assumption of invulnerability is challenged. As a result, individuals may feel less safe, and may suffer from anxiety or feelings of helplessness. They may also fear that they will be (re)victimized in the same way in the future, more so than individuals who have not been victimized (Calhoun, Atkeson, & Resick, 1982; Janoff-Bulman & Frieze, 1983).

Individuals typically believe in a just world; that is, good things happen to good people, individuals can prevent bad things from happening to themselves, and people get what they deserve. However, when a person who believes he or she is good is victimized, the victimization experience challenges the just world belief. This can create confusion and a search for answers as to why the victimization happened to the individual (Janoff-Bulman & Frieze, 1983). Victimization can also challenge the way people feel about themselves. Generally, individuals have a positive view of themselves, but those who have experienced victimization report decreased self-esteem, reported as a less positive view of themselves (Cascardi & O’Leary, 1992; Janoff-Bulman & Frieze, 1983; Resick, 1993). Further, they may feel helpless or powerless (Janoff-Bulman & Frieze, 1983).
Finally, violent victimization may also affect people’s association with the social group victims.

**Cognitively associating with a new social identity group following a victimization experience.** Experiencing violent victimization may lead individuals to associate themselves with the group victim. Indeed, this dissertation specifically focuses on violent victimization, as the “victim” may be most likely to recognize him- or herself as such, being that he or she is in direct contact with the perpetrator. There is some evidence demonstrating that those who have experienced violent victimization will call themselves victims, acknowledge their violent victimization, or acknowledge stereotypes of victims in qualitative interviews (Burcar & Åkerström, 2009; Dunn, 2012; Leisenring, 2006). However, no known self-report measures directly asking individuals to report their association with victim and victim attributes exist (i.e., there are no known measures of explicit victim identity and self-stereotyping); therefore, such measures are created in this dissertation to better understand cognitive consequences of violent victimization.

Given the empirical research to date, there is still much to be learned about how violent victimization impacts individuals. This dissertation suggests that one set of factors resulting from a violent victimization experience may be self and identity processes that occur outside of one’s conscious awareness, or implicitly. As such, the present research asks two unanswered questions: 1) Does a past violent victimization lead a person to explicitly (i.e., conscious or controlled) and/or implicitly (i.e., outside of conscious awareness or the absence of control) self-identify as a victim, and 2) Under what conditions might victim identity be strengthened? To address these questions, this dissertation looks beyond current criminological explanations of victimization (e.g.,
routine activities theory) and adopts a social psychological framework to understand the impact of past violent victimization on people’s cognitive associations, namely the association between self and victims. Specifically, social psychological theories of social identity (Hogg, 2006; Hogg, Terry, & White, 1995; Tajfel & Turner, 1979), self-categorization (Turner et al., 1987), and implicit social cognition (Greenwald & Banaji, 1995; Greenwald et al., 2002) were used to guide the exploration of the effects of violent victimization on the self-concept. The following chapter elucidates these theories and applies them to violent victimization.
Chapter 3: Theoretical Framework

The focus of this dissertation is the investigation of the cognitive effects of violent victimization. Current criminological theories of (re)victimization do not attend much (if at all) to cognitive consequences of violent victimization and are therefore insufficient in addressing the aforementioned research questions and hypotheses. Thus, this dissertation turns to social identity, self-categorization, and implicit social cognition theories as frameworks to understand the previously unmeasured cognitive consequences of violent victimization.

Social Identity and Self-Categorization Theories

Social identity theory distinguishes between identities that people use to describe themselves individually (i.e., personal identities) versus as social group members (i.e., social identities). Specifically, social identities are formed by the groups to which a person belongs (Hogg, Terry, & White, 1995; Tajfel & Turner, 1979); in other words, social identities represent individuals as social group members (Hogg, 2006; Tajfel & Turner, 1979; 1986). Moreover, while people categorically identify with a social group, they vary in their subjective identification with that group (Luhtanen & Crocker, 1992; Phinney, 1992; Sellers, Rowley, Chavous, Shelton, & Smith, 1997). That is, some group members consider their social identity as more central and important to their self-concept than other group members.

Turner and colleagues (1987) extended social identity theory to self-categorization theory and focused on the contexts that increase or decrease the relative salience of social (versus personal) identities. The representations individuals hold of social categories, such as of gender (e.g., male, female) and race (e.g., White, Black),
remain in their cognitive structure for quick reference in social situations. By utilizing social self-categorizations, many of which have been learned since infancy and are influenced by individuals’ social environments, individuals are able to define their ingroups (i.e., the groups to which they belong) and gain a better understanding of the social world. Ingroups are social groups that consist of three or more people who are similar on a particular attribute that can be distinguished from others (Hogg, 2006; Tajfel & Turner, 1979). As this relates to victims, it would be expected that individuals consider victims their ingroup if the individual, and at least two others, have experienced violent victimization (i.e., a shared attribute).^2

Ingroup identification can occur quickly and with limited contact to other group members (Devos & Banaji, 2003). Therefore, victim identification, like any group identification, can occur quickly following a single violent victimization experience and with minimal contact with other victim group members (see Baumeister, 1986; Tajfel & Turner, 1979). One possible consequence of group identification is that people would behave in line with group norms or stereotypes (Turner et al., 1987). This governs, to some degree, how individuals act when a particular group identity is activated. Self-categorization, therefore, allows us to predict future interpersonal interactions, and behavior (Tajfel & Turner, 1979). When individuals self-categorize with their social (group) identity, they mentally represent their self-concept in terms of their group and its attributes, even if these are negative and cultural stereotypes (Hogg & Turner, 1987). Put differently, individuals associate stereotypes of their group with the self, a process referred to as self-stereotyping. Because this process occurs after the adoption of a social
identity, it follows that an identity and its associated stereotypes will not be related unless a person has adopted that particular identity.

**Explicit victim identity and self-stereotyping.** When individuals are able to reflect on their past violent victimization experience(s) and can acknowledge (or not) a victim identity, this represents an *explicit* self and identity cognitive process (see Greenwald et al., 2002). This dissertation refers to the conscious association between the self and the group victims as an *explicit victim identity*. Moreover, when individuals identify as a victim and consequently perceive themselves as possessing attributes typically associated with victims, this dissertation refers to this conscious association between the self and victim stereotypes as *explicit victim self-stereotyping*. Following social identity and self-categorization theories described above, this dissertation expects that individuals with past violent victimization experience will be able to reflect on such an experience and explicitly categorize themselves as victims and explicitly characterize themselves with attributes of victims, when compared to individuals who have not experienced violent victimization. In other words, those with past violent victimization experience will exhibit stronger explicit victim identity (Hypothesis 1) and explicit victim self-stereotyping (Hypothesis 2) compared to those without such experience.

Hogg and Turner (1987) demonstrated that situation-specific self-stereotyping is dependent upon the salience of an identity. They found that the relationship between identity salience and self-stereotyping is mediated by self-categorization (Hogg & Turner, 1987). Further, variation in subjective identification with a group should correspond to strength of applying the attributes of that group to the self; therefore, individuals who strongly self-categorize as victims (explicit victim identity) should also
strongly self-characterize with victim stereotypes (explicit victim self-stereotyping; Hypothesis 3). If individuals have not experienced a violent victimization, they should not exhibit evidence of the explicit victim identity—self-stereotyping relation.

Some support for the above hypotheses comes from the limited extant victim identity research, which demonstrates that some individuals who have a violent victimization experience do consciously associate the self with victim, but only in some contexts (Dunn, 2012; Holstein & Miller, 1990; Leisenring, 2006). Leisenring’s (2006) qualitative study on battered women in the United States demonstrated that approximately three-quarters of participants who experienced domestic violence acknowledged a victim identity (e.g., participant Tammy, “Well, a victim is someone who got abused and I’m definitely a victim with this situation.”; p. 361). However, they primarily did so in contexts where they wanted to signal lack of control over their situation, or where they were seeking sympathy. Similarly, Holstein and Miller (1990) demonstrated that individuals may identify as victims to distinguish themselves from a perpetrator or to suggest a lack of agency.

In-line with the above research, though outside of the United States, Burcar and Äkerström (2009) found in their study of Swedish male crime victims that while most men rejected a victim identity, those who identified as victims did so when criticizing court actors (e.g., participant Henry, “…I don’t think you know that she should judge me because I’m the victim it’s he who’s the perpetrator then she should not look at him as an angel or something like that.”; p. 48). Similarly, in the United Kingdom, Dunn (2012) found, in his sample of male homosexual victims, that some men identified as victims as ways to remove blame (e.g., participant Adrian, “Yes, I would say I’m a victim of hate
crime because I did nothing to warrant that kind of abusive treatment. Their actions were wrong and were against me, so yes, I was a victim.”; p. 3450) and to face their past experience(s) head-on (e.g., participant George, who was victimized by family members, “Yes, I was a victim; I was a victim of my family, a victim of police failure to act appropriately.”; p. 3449).

Additional benefits may also arise for those who explicitly self-identify as victims, such as gaining concrete assistance from law enforcement, social and psychological services, and victim compensation funds (Leisenring, 2006; Paull, 2013; Zverina, Stam, & Babins-Wagner, 2011). Taken together, this research demonstrates that those with past violent victimization experience do sometimes explicitly identify as victims, but this varies situationally.

Limitations of explicit measures. The above review on social identities and self-categorization theories suggests that those who have experienced a violent victimization will explicitly self-identify as a victim. Indeed, criminologists have largely relied on self-report methods to determine violent victimization experience. However, there are a number of limitations of self-report measures. Scholte and colleagues (2013) list three limitations of victimization self-report, including 1) bias or misinterpretation of the experience, 2) “distortions caused by intrapersonal influences,” and 3) minimizing the experience to preserve one’s self-esteem (p. 1790).

While those with past violent victimization experience can explicitly self-identify as victims, they also may be motivated to reject or minimize this identity because victim is a stigmatized identity (Dignan, 2005; Herman, 1992; Lamb, 1999; Leisenring, 2006). An identity is stigmatizing if it taints or devalues an individual in a general or specific
way or context (Crocker, Major, & Steele, 1998; Goffman, 1963). Indeed, individuals who have experienced domestic violence, sexual assault, or childhood abuse may conceal these identities because of the stigma associated with such experiences (Quinn et al., 2014). Further, victims are associated with victim-related attributes such as powerless, helpless, and weak; a relation that has been recognized by people with and without victimization experience (see Holstein & Miller, 1990; Leisenring, 2006; Minow, 1993; von Hentig, 1948; Wood & Rennie, 1994). Thus, the challenge with studying victim as an identity that is stigmatized is that, like other stigmatized identities, some individuals with violent victimization experiences may explicitly distance themselves from the group victims on self-reports or during interviews.

To the extent that self-report methods (e.g., interviews, questionnaires) may reflect the above self-presentation concerns, they limit the degree to which researchers are able to measure the effect of experience on the self-concept. In other words, self-report measures of violent victimization may be providing researchers and others with an incomplete picture of victim identity. It is important, therefore, to adopt methodology that can tap into identity processes outside of conscious awareness. Indeed, social psychologists suggest that past experiences may influence people in ways that they do not recognize or in ways that they cannot control (Greenwald & Banaji, 1995). Applying such arguments to those with past violent victimization experience, perhaps such individuals do not fully comprehend or are unable to control cognitions and behaviors, for example, how a violent victimization experience impacts their self-concepts, their attitudes, or their behaviors. In order to determine if a violent victimization experience influences one’s implicit associations between the self and victim, this dissertation turns
to implicit social cognition theory and indirect measures of violent victimization. This approach not only adds to current dialogue in criminology surrounding how criminologists and victimologists think about violent victimization, but it also adds to social psychology by extending some of its theories, namely implicit social cognition, to violent victimization.

**Implicit Social Cognition Theory**

Self-categorization and social identity theories apply to explicit, or conscious, identities. However, Greenwald and Banaji (1995) argue that these associations between the self and some identity construct (e.g., the group victims) develop implicitly, or non-consciously, as well. Several studies have provided evidence to support this claim (for example, see Lun, Sinclair, & Cogburn, 2009). Implicit social cognition theory assumes that past experiences automatically and nonconscious affect beliefs and judgments outside of one’s conscious awareness (Greenwald & Banaji, 1995). Further, implicit social cognition theory assumes that a single significant event can automatically and non-consciously create associations between the self and a new social group (Otten & Moskowitz, 2000).

Cognitive structures are represented by a series of associations between the self and concepts, attitudes, traits, and groups related to the self (Devos & Banaji, 2003). When one experiences violent victimization, it is expected that a cognitive association is formed between the self-concept and the group victims. This dissertation refers to the automatic association between self and victim as *implicit victim identity*. Further, when one identifies with a social group, they also associate with the attributes of the group, and apply them to the self (Greenwald et al., 2002). Put differently, after one identifies with a
group, in this case, victim, he or she engages in self-stereotyping, that is, applying victim characteristics to the self. This dissertation refers to the automatic association between self and victim stereotypes as *implicit victim self-stereotyping*. It is expected that individuals with past violent victimization experience will exhibit stronger implicit victim identity (Hypothesis 4) and implicit victim self-stereotyping (Hypothesis 5) compared to individuals without past violent victimization experience. Further, Greenwald and colleagues (2002) find that the stronger one implicitly identifies with a group, the more likely one is to implicitly associate with group stereotypes. As such, individuals who exhibit strong implicit victim identity should also exhibit strong implicit victim self-stereotyping (Hypothesis 6).

**Implicit victim identity and implicit victim self-stereotyping.** To the author’s knowledge, there exists one study on implicit victim identity in the context of childhood bullying (Rosen, Milich, & Harris, 2007). The study employed an Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998) to measure how fast child participants responded to words when self words were simultaneously paired with victim words. More specifically, children were presented with ‘Me’ versus ‘Not Me’ (e.g., human vs. dog) and ‘Victim’ (e.g., victim, tease) versus ‘Non-Victim’ (e.g., friend, buddy) words and asked to categorize the words into either “me or victim” and “not me or not victim” categories in one part of the task, or “me or not victim” and “not me or victim” categories in another part. Rosen and colleagues (2007) found that children who reported more frequent victimization, and who expressed more distress in a victimization narrative (as rated by five independent raters), exhibited stronger implicit associations between self
and victim compared to children who reported less frequent victimization and who did not display distress.

This dissertation differs from and builds on Rosen and colleagues’ (2007) study in several important ways. First, this dissertation adopts a different theoretical approach; as reviewed above, it is guided by the perspectives of social identity and self-categorization theories as they relate to identities and self-stereotyping (Hogg & Turner, 1987; Tajfel & Turner, 1979). Second, to develop measures to assess these constructs and their interrelation, this dissertation pretests stimuli for inclusion in the Implicit Association Tests. Researchers tend to assume content validity if the Implicit Association Test stimuli have face validity. However, Bluemke and Friese (2006) suggest that testing the content validity of stimuli is an important precursor to establishing the predictive validity of an Implicit Association Test. Therefore, this dissertation seeks to adopt a rigorous pretest of stimuli for inclusion in the Implicit Association Test measures of implicit victim identity and self-stereotyping. Third, this dissertation research recruits participants with one or more distinct types of violent victimization experiences (e.g., robbery, assault, rape), as opposed to Rosen and colleagues’ (2007) examination of one type of experience – bullying. Fourth, this dissertation extends the study of violent victimization from child (in Rosen et al., 2007) to adult victims of violence, as risk of violent victimization tends to be highest from adolescence through early adulthood (Macmillan, 2001). Finally, this dissertation research includes measures of explicit victim identity and self-stereotyping to examine the relation between implicit and explicit self and identity processes.

The relation between implicit measures and explicit measures. In their meta-analysis, Greenwald and colleagues (2009) examined implicit-explicit correlations for
potentially socially sensitive identity constructs. Generally, the authors found that for socially sensitive topics, including self and identity constructs such as identities with sexuality and anxiety, the correlation between implicit and explicit measures was weak or non-existent (also see Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005). Given that violent victimization is a socially sensitive topic, weak or null correlations between measures of explicit and implicit victim identity and self-stereotyping, regardless of past violent victimization experience, are expected (Hypothesis 7).

**Chronic versus Contextually Salient Identities**

Individuals typically associate themselves with multiple identities and enact related roles and behaviors depending on the context and/or centrality of the identity at any given time (Deaux & Major, 1987; Ellemers, Spears, & Doosje, 2002; Hopkins & Reicher, 2011; Oakes, 1987; Schnabel & Asendorpf, 2010; Turner, Oakes, Haslam, & McGarty, 1994). Indeed, individuals are reminded of some identities more frequently than others (Oakes, 1987). For example, offenders may receive reminders of their criminal identity when meeting with a parole officer, attending a day reporting center, applying for jobs or benefits, or spending time with criminal peers. Constant reminders of a particular identity increase the salience of that identity, or the likelihood that this identity will be activated in a given context (Oakes, 1987). This is akin to identity hierarchies, whereby individuals’ various identities are ranked, and those at the top of the hierarchy are more likely to be activated across different contexts (Stryker, 1968; 1980). Identities of which individuals are constantly reminded, and by consequence think of more often, are referred to as chronically salient identities. Eventually, these individuals do not need many cues to be reminded of (and activate) chronically salient identities.
Conversely, there are some identities that are important to people that they may not think of constantly, but contextual cues can remind people of them. These are referred to as contextually salient identities. Contextually salient identities are those that are acute, or salient, in the moment (cf. Crocker, 1999; Deaux & Major, 1987; Oakes, 1987).

Past research suggests that context can make a particular identity salient. Gaither and colleagues (2013) asked participants, previously identified as having one White and one Black parent, to write about the ethnic identity of either their mother or their father (depending on the condition to which the participants were assigned), and to write about how this ethnic identity played a role in their lives. They then asked participants to rate, on a Likert-type scale (1 = not at all; 7 = very much), how much they identified with biracial Black/White people, Black people, and White people at that moment. Results showed that Black/White biracial individuals who wrote about their White parent were more likely to self-report that they identified more with Whites. Similarly, Black/White biracial individuals who wrote about their Black parent were more likely to self-report that they identified more with Blacks (Gaither, Sommers, & Ambady, 2013). Gaither and colleagues (2013) provided evidence that context can affect the activation of a specific identity (over others) among participants instructed to write about a particular identity; however, they only examined contextual effects on explicit (not implicit) identities.

Additional research finds that context can make identities salient implicitly. Rudman and Phelan (2010) primed female participants with traditional (male: professor, surgeon, businessman; female: teacher, nurse, homemaker) and nontraditional (reversing male and female) gender roles, and examined their effect on implicit power-warmth stereotypes and gender-conforming career aspirations. They measured implicit gender
stereotypes using the stereotype IAT, which included target constructs “Female” and “Male” and attribute constructs “Power” and “Warmth.” For half of the task, participants were instructed to categorize “Female” stimuli with “Warmth” stimuli and “Male” stimuli with “Power” stimuli. For the other half of the task, the attributes were switched. Higher scores indicated greater gender stereotyping (i.e., more quickly associating males with power and females with warmth). Rudman and Phelan (2010) concluded that their results were “consistent with the hypothesis that women primed with typical gender roles showed gender-conforming career aspirations because the primes increased their automatic [implicit] power-warmth stereotypes” (p. 198). Stereotypes are one way of measuring identity, as they are part of the self—group—attribute associative network; once identifying with a group, individuals then identify with the group’s stereotypes (see discussion on self-categorization theory, above) (Greenwald et al., 2002).

The underlying assumption of the above research is that those who are reminded of a specific identity in a particular context will more strongly associate the self with that identity (both explicitly and implicitly), at least temporarily, compared to those who are not reminded. There are some contexts that are more likely than not to prime, or make salient, victim identity, including those that remind the individual of the violent victimization experience or contexts that directly require the individual to confront memories of being victimized (e.g., support or treatment groups or events such as Take Back the Night, an international event typically held on college campuses where individuals often share their domestic and sexual abuse experiences during marches or vigils). One may also be reminded of his or her victim identity via media, such as viewing a television show involving violent victimization (Elliott, 1997). Nevertheless,
individuals are unlikely to find themselves in these environments frequently, and can (and often do) actively avoid places or things that remind them of their violent victimization experience (Finkelhor, Wolak, & Berliner, 2001; Herman, 1992; Saunders, 1994). In the absence of being in these contexts, previous researchers have utilized experimental primes as contextual cues to make identities salient (see, for example, Chiao, Heck, Nakayama, & Ambady, 2006; Coleman & Williams, 2013; Veysey & Rivera, 2017). This technique is employed in two of the studies below.
Chapter 4: Overview, Methodology, and Results

Overview of the Present Research

This dissertation research addressed the following two questions: 1) Does a past violent victimization lead a person to explicitly and implicitly self-identify as a victim, and 2) Under what conditions might victim identity be strengthened? To explore these questions, two pretest studies and four main studies were completed. The two pretest studies were completed to establish valid measures of implicit victim identity and self-stereotyping. The goal of Studies 1 and 2 was to address the first question by examining the relation between past violent victimization experience and explicit and implicit victim identity and self-stereotyping. The goal of Studies 3 and 4 was to address the second question by testing the effect of a contextual cue (i.e., victimization experience salience prime) on implicit and explicit victim identity. Study 4 replicated and extended Study 3 utilizing a national sample.

Consistent with multiple study reporting, the following sections were organized so that the methods and results sections are presented together, by pretest or study.

Pretest Study A

Bias in stimuli selection can affect the magnitude, direction, and validity of Implicit Association Test effects. Thus, pretesting stimuli was important to reduce bias (Bluemke & Frieses, 2006). Indeed, Bluemke and Fries (2006) emphasized the importance of testing the content validity of stimuli to establish the predictive validity of an Implicit Association Test. Stimuli should therefore be representative of their respective category (Teige-Mocigemba, Klauer, & Sherman, 2010); in the present study, this means victims and victim stereotypes. Further, rigorous testing of stimuli allows for
more control over the categories to which these stimuli are categorized (Steffens & Plewe, 2001).

While some researchers have utilized others’ pre-established Implicit Association Test stimuli, this was not possible in the present study because the one known Implicit Association Test developed to measure implicit victim identity applied only to child victims of bullying; stimuli for this measure were not pretested; and this measure was a double-category Implicit Association Test (versus a Single-Category Implicit Association Test, which was more appropriate for the present work). Prior to this dissertation, there was no known Single-Category Implicit Association Test measuring implicit victim identity and self-stereotyping among adults. Pretest Study A was designed to elicit both nouns and adjectives that described victims in hypothetical vignettes to be considered as stimuli for Implicit Association Test inclusion. Participants in both pretests were adults, as all primary studies recruited adult participants only.

Method.

Participants. One hundred twenty-two students from undergraduate introductory criminal justice and psychology courses at an urban public university participated for extra course credit. Three participants’ responses were dropped because they did not adhere to instructions. The final sample size was $N=119$ (70 female, 49 male; $M_{age} = 19.2$ years, $SD = 2.12$, age range: 18-29). Thirty-six percent of participants identified as Hispanic, 26% were African-American, 16% were White, 13% were Asian, 4% were multiracial, and 5% did not identify with any of the race/ethnicity options.

Measures and procedure. Participants completed three paper surveys during the first or last 15 minutes of their class time. The first survey asked participants to read one
of five randomly assigned vignettes in which a violent victimization event was described. Vignettes included short descriptions of five fictitious violent victimization events: robbery, assault, gang violence, rape, and domestic violence. After reading the vignette, participants were asked to write down five words to describe the victim(s), labeled “person A,” “gang A,” or “spouse A.” Participants then completed a demographics questionnaire and brief violent victimization experience questionnaire (see Appendix A for all materials).

**Results.** Participants provided a total of 585 words and phrases. Repeated words, plural versions of words, and phrases (e.g., subject of crime, fearful of death) were combined, resulting in a total of 248 words and phrases. Of these, the top 45 most frequently elicited words included only eight nouns. Because both nouns and adjectives were needed to develop two Single-Category Implicit Association Tests (to measure IVI and IVSS, respectively), an additional five nouns found on Thesaurus.com (prey, casualty, scapegoat, survivor, pushover) were included. Selection of words from a thesaurus is a method adopted when identifying Implicit Association Test word stimuli (e.g., Knutson, Mah, Manly, & Grafman, 2007; Rosen et al., 2007). A total of 50 words were then evaluated in Pretest Study B.

**Pretest Study B**

In Pretest Study B, a sub-set of the elicited nouns and adjectives from Pretest Study A were evaluated on victim relatedness and valence. Collectively, Pretest Studies A and B elicited stimuli for the development of implicit victim identity and implicit victim self-stereotyping measures – the Single-Category Implicit Association Test (SC-IAT; Karpinski & Steinman, 2006).
Method.

Participants. Seventy-two undergraduate students from one psychology course at an urban public university participated for extra course credit (three did not report demographic information; 54 female, 15 male; $M_{age} = 23.3$ years, $SD = 7.12$, age range: 18-57). Thirty percent of participants identified as Hispanic, 24% were African-American, 21% were Asian, 14% were White, and 10% were multiracial.

Measures and procedure. Participants completed two questionnaires during the last 15 minutes of class time. In the victim relatedness questionnaire, participants rated how well the 50 words from Pretest Study A described a crime victim on a Likert-type scale ranging from 0 to 6 ($0 = $ Definitely does NOT describe a victim of crime; $3 = $ Somewhat describes a victim of crime; $6 = $ Definitely describes a victim of crime). In the valence questionnaire, participants rated the same 50 words on a Likert-type scale ranging from -3 to 3 ($-3 = $ Very Negative; $0 = $ Neutral; $3 = $ Very Positive). The questionnaires were counterbalanced between participants on two factors: the order of words was reversed and the order of the two questionnaires. Therefore, participants were randomly assigned to complete one of four possible set of questionnaires, followed by the same brief demographics questionnaire from Pretest Study A (see Appendix A for all materials).

Results.

Nouns. The goal was to select nouns related to victim and as similar as possible to each other on valence to be included in the implicit victim identity SC-IAT. One-sample $t$-tests were utilized to determine which of the nouns were rated significantly higher than the midpoint ($3 = $ Somewhat describes a victim of crime) on the victim relatedness scale.
Then, the nouns that met this criterion were compared to each other on valence (-3 = Very Negative, 0 = Neutral, 3 = Very Positive) using paired sample t-tests. These tests yielded a total of three nouns: *victim* ($M_{\text{victim-relatedness}} = 5.46, SD = 1.04; M_{\text{valence}} = -1.96, SD = 1.31$), *prey* ($M_{\text{victim-relatedness}} = 4.22, SD = 1.97; M_{\text{valence}} = -2.09, SD = 1.33$), and *survivor* ($M_{\text{victim-relatedness}} = 4.13, SD = 1.84; M_{\text{valence}} = 2.27, SD = 1.26$). However, only *victim* and *prey* were statistically similar to each other on valence, $t(67) = .93, p = .355$.

Both *victim* ($t(68) = 17.60, p < .001$) and *prey* ($t(68) = 17.50, p < .001$) were more negative than the third noun, *survivor*. Nosek and colleagues (2005) recommended that the minimum number of stimuli in an Implicit Association Test is two and that four is the “ideal” number of stimuli per category. Furthermore, they noted that Implicit Association Test effect sizes increase (albeit slightly) when the number of stimuli is larger than two. Therefore, the third noun (*survivor*) was included because its mean score on victim-relatedness was the third highest among the remainder of the nouns (see Table 1).

**Adjectives.** The goal was to select adjectives related to victim and as similar as possible to each other on valence to be included in the implicit victim self-stereotyping SC-IAT. One-sample $t$-tests were utilized to determine which of the adjectives were rated significantly higher than the midpoint (3 = Somewhat describes a victim of crime) on victim relatedness. Twenty-three adjectives met this criterion, so additional one-sample $t$-tests were conducted setting the test value at four to narrow down the number of adjectives. Then, the adjectives that met this criterion were compared to each other on valence (-3 = Very Negative, 0 = Neutral, 3 = Very Positive) using paired sample $t$-tests. These tests yielded a total of five adjectives that were strongly related to victim and
similarly negative: victimized ($M_{\text{victim-relatedness}} = 5.17, SD = 1.20; M_{\text{valence}} = -2.10, SD = 1.39$), traumatized ($M_{\text{victim-relatedness}} = 5.01, SD = 1.55; M_{\text{valence}} = -2.23, SD = 1.19$), assaulted ($M_{\text{victim-relatedness}} = 5.15, SD = 1.33; M_{\text{valence}} = -2.26, SD = 1.31$), violated ($M_{\text{victim-relatedness}} = 5.03, SD = 1.42; M_{\text{valence}} = -2.21, SD = 1.40$) and hurt ($M_{\text{victim-relatedness}} = 4.65, SD = 1.50; M_{\text{valence}} = -2.00, SD = 1.23$). There were no significant difference in means for victimized and traumatized, $t(70) = 1.07, p = .290$; victimized and violated, $t(71) = 1.21, p = .230$; victimized and assaulted, $t(69) = 1.37, p = .176$; victimized and hurt, $t(70) = .61, p = .541$; traumatized and assaulted, $t(69) = .49, p = .683$; traumatized and violated, $t(70) = .09, p = .850$; traumatized and hurt, $t(69) = .18, p = .065$; assaulted and violated, $t(69) = .40, p = .692$; assaulted and hurt, $t(68) = .77, p = .081$; and violated and hurt, $t(70) = .23, p = .222$.

**Study 1**

Study 1 recruited a sample of adult college students who either experienced a violent victimization (e.g., physical assault, robbery, domestic violence, sexual assault/rape) or not. This study administered the two newly developed SC-IAT measures of implicit victim identity and implicit victim self-stereotyping, as well as their corresponding self-report measures of explicit victim identity and explicit victim self-stereotyping. This allowed for the examination of differences in, and the relation among, implicit and explicit victim identity and self-stereotyping as a function of violent victimization experience.

As described in the previous chapter, Study 1 tested the following hypotheses: those with past violent victimization experience will exhibit stronger explicit victim identity (Hypothesis 1) and explicit victim self-stereotyping (Hypothesis 2) compared to
those without such experience; individuals who strongly self-categorize as victims (explicit victim identity) will also strongly self-characterize with victim stereotypes (explicit victim self-stereotyping; Hypothesis 3); individuals with past violent victimization experience will exhibit stronger implicit victim identity (Hypothesis 4) and implicit victim self-stereotyping (Hypothesis 5) compared to individuals without past violent victimization experience; individuals who exhibit strong implicit victim identity will also exhibit strong implicit victim self-stereotyping (Hypothesis 6); there will be weak or null correlations between measures of explicit and implicit victim identity and self-stereotyping, regardless of past violent victimization experience (Hypothesis 7).

**Method.**

**Participants.** One hundred six students from undergraduate criminal justice and psychology courses at an urban university participated for extra course credit. Five participants were dropped from analysis: data from three participants were outliers on one SC-IAT measure, one participant committed too many errors on one SC-IAT, and one participant did not follow the study’s procedure. The final $N = 101$ (68 female, 32 male, 1 other; $M_{age} = 20.4$ years, $SD = 5.12$, age range: 18-55). Nineteen percent of participants identified as Hispanic, 25% were Black, 22% were Asian or Pacific Islander, 19% were White, 7% were multiracial, and 9% did not select any of the race/ethnicity options. Thirty-seven percent of participants reported prior violent victimization experience (see below for measure). This rate is within the range from a 9.5% lifetime sexual assault rate to a 54.5% lifetime physical assault rate reported in previous research with a national sample of youth ages one month to 17 years (Finkelhor, Turner, Shattuck, & Hamby, 2013).
Measures.

Implicit victim identity (IVI). Implicit victim identity was measured using a Single Category Implicit Association Test (SC-IAT; Karpinski & Steinman, 2006), which uses reaction time to measure the strength of the mental association between the self and victims. Words that represented the self (I, me, my, mine, myself); others (they, them, their, theirs, other); and victims (victim, prey, survivor; see Pretest Study B above) randomly appeared one after the other, centered in the computer screen. Category labels were simultaneously placed at the top left and top right of the screen. For half of the task, participants were instructed to press the “A” key to classify “self” and “victim” words, and the “K” key to classify “other” words. For the other half, participants were instructed to press the “A” key to classify “other” and “victim” words, and the “K” key to classify “self” words. The order of tasks was counterbalanced within participants. For each task, participants first read a set of instructions then completed 17 practice trials, followed by 51 critical trials. For each trial, the target words remained on the screen until participants pressed a key. If the participant pressed the correct key, a new target word appeared. If the participant pressed the wrong key, the word “ERROR” appeared in red in place of the centered target word until the participant properly categorized the target word.

Following Karpinski and Steinman’s (2006) scoring algorithm, only critical SC-IAT blocks were scored. A SC-IAT score is the difference in standardized reaction times between the self+victim trials and other+victim trials. A relatively high SC-IAT score indicates faster reaction times when self word stimuli are paired with victim word stimuli than when other word stimuli are paired with victim word stimuli, or a relatively strong IVI.
Implicit victim self-stereotyping (IVSS). The SC-IAT to measure IVSS followed the same measurement and scoring procedure of the IVI SC-IAT above, except that the word stimuli for the category victim were traumatized, victimized, violated, assaulted, and hurt (see Pretest Study B above).

Explicit victim identity (EVI) and Explicit Victim Self-Stereotyping (EVSS). The measures of EVI and EVSS were created for this study following past research on implicit and explicit criminal identities (see Rivera & Veysey, 2014; Veysey & Rivera, 2017). Participants were asked to self-report the extent to which they associated themselves with the eight victim identity and self-stereotyping words in the SC-IATs described above on a 7-point scale ranging from 0 (Not at all characteristic of me) to 6 (Extremely characteristic of me). Also, participants were also asked to rate themselves on three words (pushover, stupid, passive) from Pretest Study B that were unrelated to a victim. All words were randomly presented. As expected, ratings on the words unrelated to victim did not vary as a function of violent victimization experience, F(1, 99) = 1.10, \( p = .297 \), so they are no longer discussed in this dissertation.

Depression. Depression was assessed using the Center for Epidemiologic Studies Depression Scale (CESD; Radloff, 1977). The CESD is a 20-item measure that includes questions that pertain to a wide range of depressive symptoms. Participants were asked to rate the frequency of occurrence of each symptom in the past week on a 4-point scale, which ranged from rarely or none of the time (less than 1 day) to most or all of the time (5-7 days). Higher scores indicate greater depression. This scale is a reliable and valid measure of depression (\( \alpha = .86 \); Orme, Reis, & Herz, 1986).
Anxiety. State and trait anxiety were measured using a scale modified from the State Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, Lushene, & Vagg, 1983; Spielberger, 1989). The STAI is comprised of 18-items in which participants were instructed to “indicate how you feel right now, that is, at this very moment.” More specifically, participants were asked to rate the frequency of occurrence of each calm or anxiety related symptom on a 3-point scale, which ranged from not at all to very much. Higher scores indicate greater anxiety (α = .91).

Self-esteem. Self-esteem was measured using Rosenberg’s Self-Esteem Scale (Rosenberg, 1965). This measure is comprised of ten items in which participants were asked to rate their level of agreement with positive or negative self-views on a 5-point scale, ranging from disagree very much to agree very much. Higher scores indicate greater self-esteem (α = .87).

Life satisfaction. Life satisfaction was measured using the Satisfaction With Life Scale (Diener, Emmons, Larsen, and Griffin, 1985). This measure is comprised of five items in which participants were asked to rate their level of agreement with statements of life satisfaction on a 7-point scale, ranging from strongly disagree to strongly agree. Higher scores indicate greater satisfaction with life (α = .86).

Violent victimization experience. Modified questions from the National Crime Victimization Survey (NCVS; BJS, 2008), a widely-used self-report measure that assesses past violent victimization (Peytchev et al., 2012), were administered. The NCVS inquires about multiple victimization events, including where they took place, and in some cases the respondent’s relationship to the offender. This dissertation was primarily interested in participants’ responses to the questions that captured the types of
violent victimization described in the first chapter. Specifically, participants were asked if they were ever attacked or threatened: a) with any weapon (e.g., a gun or a knife), b) by something thrown (e.g., a rock or a bottle), c) with anything like a baseball bat, frying pan, or scissors, d) by physical force, including any grabbing, punching, or choking, e) by rape, attempted rape, or other type of sexual attack, or f) none of the above. From this question, a dichotomous violent victimization experience variable was created: participants who selected one or more of responses (a) – (e) versus who selected response (f).4

Demographics. Participants were asked to identify their gender, age, race/ethnicity, income level, parents’ education level, employment status, citizenship status, primary language and marital status.

Procedure. A research assistant informed participants that the study’s purpose was to examine “people’s beliefs about their identity and experiences.” All participants completed the study on a computer. They were first presented with the SC-IAT measures of IVI and IVSS (counterbalanced between participants), followed by the measure of EVI and EVSS, and then the questionnaires of depression, anxiety, self-esteem, life satisfaction, violent victimization experience and demographics. Finally, all participants were debriefed, which included an explanation of the study’s purpose (“Today you have completed a study that is examining the extent to which a person's past experiences with victimization influences the development of an identity with a crime victim. To this end, you have completed a series of procedures and measures.”), a reminder that their information was being kept confidential, contact information of the researchers, and a
phone number for the on-campus counseling center. Participants also had the opportunity to withdraw from the study and have their recorded data deleted at the time of debriefing.

**Results.** First, descriptive statistics for all dependent measures were calculated: EVI ($M = 1.65, SD = 1.14$), EVSS ($M = 1.06, SD = 1.17$), IVI ($M = -0.26, SD = 0.27$), and IVSS ($M = -0.26, SD = 0.24$). Following this were hypothesis tests. To test Hypotheses 1 and 2, an analysis of variance (ANOVA) was conducted to determine if participants with violent victimization experience differed in EVI (Hypothesis 1) or EVSS (Hypothesis 2). Hypothesis 1 was partially supported – those with violent victimization experience ($M_{EVI} = 1.91, SD = 1.17$) were more likely to characterize themselves with victims in general compared to those without violent victimization experience ($M_{EVI} = 1.49, SD = 1.09$), but this difference was marginally significant, $F(1, 99) = 3.20, p = .077$. In support of Hypothesis 2, those with violent victimization experience ($M_{EVSS} = 1.42, SD = 1.31$) were significantly more likely to characterize themselves with stereotypes of victims compared to those without violent victimization experience ($M_{EVSS} = .86, SD = 1.04$), $F(1, 99) = 5.57, p = .020$.

To test Hypothesis 3, a nested regression analysis was performed to examine violent victimization experience as a moderator of the relation between EVI and EVSS. The dichotomous violent victimization experience variable was coded 1 for those with violent victimization experience and 0 for those without violent victimization experience. Based on the criminological literature, those at highest risk of experiencing violent victimization (excluding rape and sexual assault) are young, African American, male, and/or from economically disadvantaged neighborhoods (Sampson & Lauritsen, 1994). Therefore, several demographic covariates were included in the first step of the
regression model (gender, age, race/ethnicity, income, employment status). Then, EVSS scores were regressed on the mean-centered EVI scores and dichotomized violent victimization experience in the second step, and their interaction in the third step. This model was not significant, $p = .941$; Hypothesis 3 was not supported.

To test Hypotheses 4 and 5, the same ANOVA analyses were conducted as in Hypotheses 1 and 2, but EVI was replaced with IVI, and EVSS was replaced with IVSS. Neither of these hypotheses were supported – IVI and IVSS did not differ as a function of violent victimization experience, IVI: $F(1, 99) = .37, p = .545$; IVSS: $F(1, 99) = 1.26, p = .264$.

To test Hypothesis 6, the same nested regression analyses were conducted as they were to test Hypothesis 3, but EVI was replaced with IVI, and EVSS was replaced with IVSS. Regression analysis yielded a marginally significant Violent Victimization Experience X IVI interaction, $\Delta F(1, 86) = 3.81, p = .054$, $R^2 = .21$. Table 1 summarizes regression results by model. Simple slopes analyses were employed to unpack interactions by calculating the relations (betas) among IVI and IVSS among those with and without violent victimization experience (Aiken & West, 1991). Among people with violent victimization experience, strong IVIs were associated with strong IVSS, $\beta = .43, p = .011$. By comparison, among people without violent victimization experience, IVI did not significantly explain variation in IVSS, $\beta = .13, p = .360$.5
Table 1

* Nested Regression Model for Implicit Victim Identity (IVI) Predicting Implicit Victim Self-Stereotyping (IVSS) as a Function of Violent Victimization Experience (N=101). *

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (1 male, 0 female/other)</td>
<td>.112</td>
<td>.146</td>
<td>.154</td>
</tr>
<tr>
<td>Age</td>
<td>.025</td>
<td>.076</td>
<td>.052</td>
</tr>
<tr>
<td>Race/Ethnicity (White, non-Hispanic excluded)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/Pacific Islander (1 yes, 0 no)</td>
<td>.232†</td>
<td>.289*</td>
<td>.279</td>
</tr>
<tr>
<td>African American/Black (1 yes, 0 no)</td>
<td>.025</td>
<td>.065</td>
<td>.047</td>
</tr>
<tr>
<td>Hispanic/Latino(a) (1 yes, 0 no)</td>
<td>.260†</td>
<td>.277*</td>
<td>.269*</td>
</tr>
<tr>
<td>Multi-racial (1 yes, 0 no)</td>
<td>.115</td>
<td>-.05</td>
<td>-.027</td>
</tr>
<tr>
<td>Other (1 yes, 0 no)</td>
<td>.122</td>
<td>.025</td>
<td>.045</td>
</tr>
<tr>
<td>Employment Status (Unemployed excluded)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed 20 hours or less (1 yes, 0 no)</td>
<td>.117</td>
<td>.100</td>
<td>.112</td>
</tr>
<tr>
<td>Employed 21-30 hours (1 yes, 0 no)</td>
<td>.112</td>
<td>-.047</td>
<td>.108</td>
</tr>
<tr>
<td>Employed 31-40 hours (1 yes, 0 no)</td>
<td>.110</td>
<td>.017</td>
<td>.106</td>
</tr>
<tr>
<td>Income (1 $0-$10,000, 11 $100,001 or more)</td>
<td>.112</td>
<td>.001</td>
<td>.108</td>
</tr>
<tr>
<td>Victimization Experience (1 victim, 0 non-victim)</td>
<td>-.121</td>
<td>.109</td>
<td></td>
</tr>
<tr>
<td>IVI</td>
<td></td>
<td>.265*</td>
<td>-.125</td>
</tr>
<tr>
<td>Victimization Experience X IVI</td>
<td></td>
<td>.247†</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* *p < .05; † p < .10.

Finally, to test Hypothesis 7, zero-order correlations were conducted to determine if there was a relation between measures of explicit and implicit victim identity and self-stereotyping among all participants. Explicit measures (EVI and EVSS) were positively, significantly correlated, $r(101) = .768, p < .001$. EVI was not significantly correlated with IVI, $r(101) = .047, p = .642$, nor with IVSS, $r(101) = .013, p = .897$. Similarly, EVSS was not significantly correlated with IVI, $r(101) = .140, p = .162$, but was positively, marginally correlated with IVSS, $r(101) = .165, p = .098$. Implicit measures (IVI and IVSS) were positively, significantly correlated, $r(101) = .206, p = .039$.

Correlations between explicit and implicit measures among the subsample of participants with violent victimization experience were also conducted. In general, the patterns were similar to those for the full sample. Explicit measures were positively,
significantly correlated, $r(37) = .729, p < .001$. EVI was not significantly correlated with IVI, $r(37) = .105, p = .536$, nor with IVSS, $r(37) = -.027, p = .872$. EVSS was positively, marginally correlated with IVI, $r(37) = .297, p = .074$, but not with IVSS, $r(37) = .239, p = .155$. Implicit measures were positively, significantly correlated, $r(37) = .411, p = .011$. Overall, Hypothesis 7 was supported.

**Post hoc power analysis.** G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009) was used to conduct a *post hoc* power analysis of main effects and interactions. The primary goal of Study 1 was to examine the effects of past violent victimization experience on implicit victim identity and self-stereotyping. Therefore, results for this model are reported. For a linear multiple regression, fixed model, $R^2$ increase with a sample size of 101, two tested predictors, seven total predictors, effect size $f$ of $f^2$ at .266, and alpha at .05, G*Power calculated a robust power of .997 (IVI/IVSS nested regression model). An additional power analysis for the significant EVSS ANOVA model was conducted. For an ANOVA, fixed effects, omnibus, one-way with a sample size of 101, two groups, effect size $f$ of .270, and alpha at .05, G*Power calculated a power of .766.

**Study 2**

Study 2 recruited a sample of adult college students who either experienced a violent victimization (e.g., physical assault, robbery, domestic violence, sexual assault, or rape) or not. This study administered the SC-IAT measures of IVI and IVSS, as well as their corresponding self-report measures of EVI and EVSS. However, in Study 2 the original IVI measure was modified by replacing the word “survivor” with the word “abused.” Originally, the term survivor was included to meet the suggested number of stimuli for an IAT (Nosek et al., 2005). Survivor was included as it was the third highest-
rated *true noun* (i.e., a word that was only a noun, as opposed to one that could be either a noun or adjective) regarding victim relatedness (see Pretest Study B). However, survivor differed from the other two IVI IAT stimuli, victim and prey, on valence; *t*-test results showed that the mean valence rating of survivor (*M* = 2.27) was statistically different from the average valence ratings of victim and prey (*M* = -1.96 and *M* = -2.09, respectively). The word abused, though not a true noun (i.e., can be both a noun and adjective), was rated higher than survivor in regard to victim-relatedness (*M* = 5), and was rated as more negative than survivor in valence (*M* = -2.48). While this word also differed significantly in valence from “victim” (*t*(69) = -3.66, *p* < .001) and “prey” (*t*(67) = -2.92, *p* = .0048) it was nevertheless negative in valence and more similar to the other words. As such, abused replaced survivor in all IVI SC-IAT and EVI measures from Study 2 onward.

**Method.**

**Participants.** One hundred fifty-three undergraduate students from psychology courses at an urban public university participated for extra course credit. Eleven (7.2%) participants’ responses were excluded from analyses due to IAT (described below) error rates that were either greater than 30% overall or 40% for any response block (as recommended by Greenwald, Nosek, & Banaji, 2003). The final *N* = 142 (104 female, 38 male; *M*<sub>age</sub> = 20.98 years, *SD* = 4.64, age range: 18-44). Twenty-five percent of participants identified as Hispanic, 24% were Asian or Pacific Islander, 20% were White, 19% were African American/Black, 2% were multiracial, and 9% did not identify with any of the race/ethnicity options. Forty-seven percent of participants reported prior violent victimization experience.
**Measures.**

**IVI.** This was the same SC-IAT used in Study 1, except for the survivor word (see above).

**IVSS.** See Study 1.

**EVI and EVSS.** This was the same measure used in Study 1, except for the survivor word (EVI: $\alpha = .86$; EVSS: $\alpha = .85$).

**Depression.** See Study 1 ($\alpha = .87$; Orme, Reis, & Herz, 1986).

**Anxiety.** See Study 1 ($\alpha = .91$).

**Self-esteem.** See Study 1 ($\alpha = .91$).

**Life satisfaction.** See Study 1 ($\alpha = .84$).

**Violent victimization experience.** See Study 1; however, note that each type of violent victimization experience was now presented on a separate screen (as opposed to the same screen).

**Demographics.** See Study 1.

**Procedure.** A research assistant informed participants that the study’s purpose was to examine “people’s beliefs about their identity and experiences.” All participants completed the study on a computer. They first completed SC-IAT measures of IVI and IVSS (counterbalanced between participants), followed by a corresponding, combined explicit victim identity (EVI) and explicit victim self-stereotyping (EVSS) measure, mental health and psychological well-being questionnaires, the violent victimization experience questionnaire, and demographics questionnaire. Participants were then fully debriefed (see Study 1 for description). Prior to leaving the lab, the research assistant
asked participants to provide follow-up information (phone number and/or e-mail address); this was voluntary.

**Results.** First, descriptive statistics for all dependent measures were calculated: EVI ($M = 0.85$, $SD = 1.05$), EVSS ($M = 1.04$, $SD = 1.10$), IVI ($M = -0.20$, $SD = 0.29$), and IVSS ($M = -0.21$, $SD = 0.29$). Following this were hypothesis tests. Hypotheses 1 and 2 were analyzed the same as in Study 1. In support of Hypothesis 1, those with violent victimization experience ($M_{EVI} = 1.13$, $SD = 1.22$) were significantly more likely to characterize themselves with victims compared to those without violent victimization experience ($M_{EVI} = .53$, $SD = .79$), $F(1, 140) = 12.38, p < .001$. Similarly, and in support of Hypothesis 2, those with violent victimization experience ($M_{EVSS} = 1.42$, $SD = 1.18$) were significantly more likely to characterize themselves with victim stereotypes compared to those without violent victimization experience ($M_{EVSS} = .71$, $SD = .90$), $F(1, 140) = 16.35, p < .001$.

As an extension to Study 1’s analysis of Hypotheses 1 and 2, the same demographic covariates related to risk for violent victimization (gender, age, race/ethnicity, income, employment status) that were included in Study 1’s regression analysis were examined by conducting zero-order correlations between these variables and outcome variables EVI and EVSS. Table 2 lists the zero-order correlations. This analysis revealed that income was negatively, statistically significantly related to the outcome variables EVSS and EVI, and also gender and age were negatively, statistically significantly related to EVSS. Thus, additional analyses were conducted for Hypotheses 1 and 2 using ANCOVAs whereby the significant demographic measures were entered as controls, violent victimization experience was entered as the independent variable, and
EVI and EVSS were entered as the dependent variables. These results held; those with violent victimization experience were significantly more likely to characterize themselves with victims in general and with stereotypes of victims compared to those without violent victimization experience, EVI: F(1, 139) = 12.17, p = .001; EVSS: F(1, 138) = 17.82, p < .001.

Table 2

Zero-order Correlations among Demographic and Explicit and Implicit Victim Identity and Self-Stereotyping Measures, Study 2 (N=142).

<table>
<thead>
<tr>
<th></th>
<th>IVI</th>
<th>IVSS</th>
<th>EVI</th>
<th>EVSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.007</td>
<td>-.053</td>
<td>-.100</td>
<td>-.166*</td>
</tr>
<tr>
<td>Age</td>
<td>.114</td>
<td>.046</td>
<td>-.049</td>
<td>-.168*</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>-.047</td>
<td>.144†</td>
<td>-.012</td>
<td>.087</td>
</tr>
<tr>
<td>Income</td>
<td>.020</td>
<td>.017</td>
<td>-.167*</td>
<td>-.226**</td>
</tr>
<tr>
<td>Employment</td>
<td>.020</td>
<td>.011</td>
<td>-.053</td>
<td>.039</td>
</tr>
</tbody>
</table>

Note. *** p < .001; ** p < .01; * p < .05; † p < .10

To test Hypothesis 3, a nested regression analysis was performed to examine violent victimization experience as a moderator of the relation between EVI and EVSS. The dichotomous victimization experience variable was coded 1 for those with victimization experience and 0 for those without victimization experience. Gender, age, and income were entered as control variables (as per the discussion in the previous paragraph). EVSS scores were regressed on the mean-centered EVI scores and dichotomized violent victimization experience in the second step, and their interaction in the third step. This model was not significant, ΔF (1, 135) = .940, p = .334; Hypothesis 3 was not supported.

As in Study 1, Hypotheses 4 and 5 were not supported – IVI and IVSS did not differ as a function of violent victimization experience, IVI: F(1, 140) = 1.12, p = .292; IVSS: F(1, 140) = 2.49, p = .117. Like Hypotheses 1 and 2, correlations between
demographic variables and IVI and IVSS were also examined (see Table 2); however, no variables were statistically significantly related to IVI or IVSS, so no additional analyses were conducted.

To test Hypothesis 6, the same nested regression analyses as above sans control variables were conducted, replacing EVI with IVI, and EVSS with IVSS. Unlike in Study 1, this model was not significant in Study 2, ΔF(1, 138) = .719, p = .398. Hypothesis 6 was not supported.

To test Hypothesis 7, zero-order correlations were conducted to determine if there was a relation between measures of explicit and implicit victim identity and self-stereotyping among all participants. Explicit measures (EVI and EVSS) were positively, significantly correlated, r(142) = .782, p < .001. EVI was not significantly correlated with IVI, r(142) = .020, p = .809, nor with IVSS, r(142) = .027, p = .747. Similarly, EVSS was not significantly correlated with IVI, r(142) = .038, p = .657, nor with IVSS, r(142) = .036, p = .674. Implicit measures (IVI and IVSS) were positively, significantly correlated, r(142) = .254, p = .002.

Correlations between explicit and implicit measures among the subsample of participants with violent victimization experience were also conducted. In general, the patterns were similar to those for the full sample. Explicit measures were positively, significantly correlated, r(66) = .768, p < .001. EVI was not significantly correlated with IVI, r(66) = -.085, p = .498, nor with IVSS, r(66) = .122, p = .329. EVSS was not significantly correlated with IVI, r(66) = .018, p = .884, nor with IVSS, r(66) = .080, p = .522. Implicit measures were positively, significantly correlated, r(66) = .328, p = .007.
Overall, Hypothesis 7 was supported, and findings for all hypotheses, with the exception of Hypothesis 6, were replicated in Study 2.

**Post hoc power analysis.** G*Power 3.1 (Faul et al., 2009) was used to conduct a post hoc power analysis of the main effect of violent victimization experience. For an ANCOVA, fixed effects, main effects and interactions, with a sample size of 142, two groups, three covariates, effect size $f$ of .360, and alpha at .05, G*Power calculated a robust power of .989 (EVSS ANOVA model).

**Study 3**

Study 3 was conducted simultaneously with Study 2. Study 3 recruited a sample of adult college students who either experienced a violent victimization (e.g., physical assault, robbery, domestic violence, sexual assault, or rape) or not. This study administered the SC-IAT measure of IVI as well as its corresponding EVI measure. Explicit and implicit measures of victim self-stereotyping were not included in Study 3 due to the overall length of the study, but also because, theoretically, association with a social group precedes self-stereotyping, so the IVI SC-IAT should have been sufficient in hypothesis testing.

Studies 1 and 2 relied on chronic victim salience; that is, they relied on the assumption that an association is made between self and victim in one’s implicit memory following a violent victimization experience. However, individuals have multiple identities, some of which are activated more frequently and are therefore more accessible than others. Which identity is activated is partially dependent upon the situation or context in which one finds him- or herself (for examples see Gaither, Sommers, & Ambady, 2013; Hong, Morris, Chiu, & Benet-Martinez, 2000). To ensure that the victim
identity would be activated among participants, an experimental victimization salience manipulation was utilized. The assumption of this salience manipulation was that it would prime, or activate, the implicit identity of interest temporarily, or contextually. Therefore, the goal of Study 3 was to extend Studies 1 and 2 by examining the effect of context on explicit and implicit victim identities.

First, Study 3 tested the effects of violent victimization experience (versus no violent victimization experience) on explicit and implicit victim identities. This allowed for replication of the previous studies’ findings (see Results for Studies 1 and 2). Second, Study 3 tested the effects of victimization salience (versus no salience) on explicit and implicit victim identities (see Chapter 2 above for discussion on identity salience). Thus, Study 3 included two additional hypotheses. Specifically, it was expected that participants who were reminded of a past victimization (i.e., those in the victimization salience condition) would exhibit stronger explicit (Hypothesis 8) and implicit (Hypothesis 9) victim identities compared to those who were not reminded of a past victimization (i.e., those in the control condition).

Method.

Participants. G*Power 3.1 (Faul et al., 2009) was used to conduct an a priori power analysis to determine minimum sample size. The primary goal of Study 3 was to examine the effect of victimization experience salience on explicit and implicit victim identity. Therefore, the following parameters were chosen: ANOVA, fixed effects, omnibus, one-way with a medium effect size f of .250, two groups, power of .8, and alpha at .05. G*Power calculated a total sample size of 128.
One-hundred eighty-nine undergraduate students at an urban public university participated in exchange for course credit. Eight (4.2%) participants’ responses were excluded from analyses due to IAT (described below) error rates that were either greater than 30% overall or 40% for any response block as recommended by Greenwald, Nosek, and Banaji (2003). The final $N = 181$ (132 female, 49 male; $M_{age} = 20.7$ years, $SD = 5.52$, age range: 18-63). Twenty-five percent of participants were White, 24% were Asian or Pacific Islander, 19% were Hispanic/Latino, 18% percent were African-American/Black, 12% did not identify with any of the listed ethnicity-racial groups, 3% were multi-racial, and 1% were American Indian/Alaskan Native. The experiment adopted a 2
(Victimization salience: yes vs. no) X 2 (Past violent victimization experience: yes vs. no) between-participants design.

*Measures.*

*Victimization salience.* Participants randomly assigned to the victimization salience condition first read the following brief statement: “Sometimes in life there are people who harm others. Think about the worst time in your life when you were seriously threatened or badly hurt by someone.” Participants were required to remain on this screen for a minimum of one minute before prompted to describe the event on the next screen. Following this, on a separate screen, participants were prompted to describe their feelings about the event. The goal of this manipulation procedure was to allow participants to vividly re-experience a past violent victimization. Participants in the no salience control condition did not complete this procedure; they proceeded directly from the informed consent to the measured variables.

*IVI.* See Study 2.
EVI. See Study 2 (α = .78).

Violent victimization experience. See Study 2.

Depression. See Study 1 (α = .90).

Anxiety. See Study 1 (α = .90).

Self-esteem. See Study 1 (α = .90).

Life satisfaction. See Study 1 (α = .88).

Demographics. See Study 1.

Procedure. A female research assistant informed participants that the study was examining “people’s beliefs about their identity and experiences.” All participants completed the study on a computer. After completing the victimization salience procedure described above, participants completed the SC-IAT measure of IVI, followed by the measure of EVI, mental health and psychological well-being questionnaires, the violent victimization experience questionnaire, and the demographics questionnaire. Finally, all participants were debriefed (see Study 1 for description).

Results.

Coding of responses to the victimization salience condition. To identify whether the victimization salience manipulation was effective in having participants write about a past violent victimization experience, two undergraduate research assistants coded participants’ responses. The raters were asked to code responses based on whether they described a violent victimization (attacked or threatened with a weapon, by something thrown, by an object, by an assault, or by rape), vicarious victimization, threat only, more general attack or threat not covered in the violent victimization categories (e.g., “Middle school, bullying”), nonviolent victimization, emotional hurt (e.g., “My ex-boyfriend of a
year cheated on me”), none of the above, or no response written. The author of this dissertation first reviewed the coding instructions with the raters, then conducted practice coding on five different cases. The raters then completed the coding in batches of 10 responses, and the author and raters reviewed the ratings either in-person or online to address any discrepancies.

A total of 90 responses (i.e., the number of participants in the victimization salience condition) were coded; the interrater reliability was 87.29%. Of the 90 responses, the first rater identified 18 of the cases as reflecting some type of violent victimization and the second rater identified 17 of the cases as reflecting some type of violent victimization. Conversely, the first rater identified 46 of the cases as reflecting an emotional hurt; the second rater identified 36 of the cases as reflecting an emotional hurt. Results showed that most participants wrote about an experience unrelated to violent victimization, suggesting that the prompt captured a greater breadth of victimization experiences.

Raters were also asked to code whether the responses regarding participants’ feelings about the victimization experience were negative, positive, or neither (no response written). The interrater reliability for the 90 cases was 91.33%. The first rater coded 81 feelings (90%) as negative, while the second rater coded 80 feelings (89%) as negative.

**Hypothesis tests.** First, the means of the dependent variables were calculated for the entire sample: EVI ($M = 1.21, SD = 1.26$) and IVI ($M = -0.22, SD = 0.31$). Then, hypothesis testing was conducted. Hypotheses 1, 4, and 7 were analyzed in the same manner as in Studies 1 and 2. As a reminder, ANOVAs were conducted to determine if
participants with violent victimization experience differed in EVI and IVI. In support of Hypothesis 1, those with violent victimization experience ($M_{EVI} = 1.40, SD = 1.33$) were significantly more likely to characterize themselves with victims compared to those without violent victimization experience ($M_{EVI} = 0.93, SD = 1.10$), $F(1, 179) = 6.33, p = .013$. Hypothesis 4 was not supported – IVI did not differ as a function of violent victimization experience, $F(1, 179) = .22, p = .642$. As in Study 2, zero-order correlations between demographic variables (age, gender, race, income, education) and outcome variables EVI and IVI were conducted, and the results are included in Table 3. This analysis revealed that no demographic variables were statistically significantly related to the outcome variables EVI and IVI. No additional analyses related to these hypotheses were conducted. As in the previous two studies, Hypothesis 7 was supported. Zero-order correlations revealed that EVI and IVI were not significantly correlated, $r(181) = .13, p = .073$.

**Table 3**

*Zero-order Correlations among Demographic, and Explicit and Implicit Victim Identity Measures, Study 3 (N=181).*

<table>
<thead>
<tr>
<th></th>
<th>IVI</th>
<th>EVI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.139†</td>
<td>.120</td>
</tr>
<tr>
<td>Age</td>
<td>-.019</td>
<td>-.057</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>.023</td>
<td>-.016</td>
</tr>
<tr>
<td>Income</td>
<td>-.010</td>
<td>.050</td>
</tr>
<tr>
<td>Employment</td>
<td>-.025</td>
<td>.028</td>
</tr>
</tbody>
</table>

*Note.* † $p < .10$

Next, only the subset of participants who did *not* receive the victimization experience salience manipulation ($N = 91$) were examined. This subset was most comparable to the participants in Studies 1 and 2, as all participants were not exposed to the victimization salience manipulation. Additional ANOVAs with EVI and IVI as the dependent variables
were conducted. Results for each of these models were not statistically significant, EVI: F(1,89) = 1.70, \(p = .196\), IVI: F(1,89) = 0.04, \(p = .832\). Hypotheses 1 and 4 were not supported among this subset of participants. There were no statistically significant relations between demographic variables and EVI or IVI (see Table 4), so no additional ANOVA analyses were conducted for this subsample. Further, and in support of Hypothesis 7, EVI and IVI were not related, \(r(91) = .04, p = .697\).

Table 4

<table>
<thead>
<tr>
<th></th>
<th>IVI</th>
<th>EVI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>.022</td>
<td>-.002</td>
</tr>
<tr>
<td>Age</td>
<td>-.190†</td>
<td>-.142</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>-.079</td>
<td>.041</td>
</tr>
<tr>
<td>Income</td>
<td>-.128</td>
<td>-.020</td>
</tr>
<tr>
<td>Employment</td>
<td>-.021</td>
<td>.071</td>
</tr>
</tbody>
</table>

Note. *** \(p < .001\); ** \(p < .01\); * \(p < .05\); † \(p < .10\)

To test Hypotheses 8 and 9, ANOVAs were conducted in which EVI and IVI were entered as the dependent variables, and condition (victimization salience versus control) was entered as the factor. In support of Hypothesis 8, those in the victimization salience condition (\(M_{\text{EVI}} = 1.42, SD = 1.40\)) were significantly more likely to characterize themselves with victims compared to those in the control condition (\(M_{\text{EVI}} = 1.00, SD = 1.07\)), F(1, 179) = 5.10, \(p = .025\). Further, and in support of Hypothesis 9, those in the victimization salience condition (\(M_{\text{IVI}} = -0.18, SD = 0.32\)) were marginally significantly more likely to implicitly characterize themselves with victims compared to those in the control condition (\(M_{\text{IVI}} = -0.26, SD = 0.29\)), F(1, 179) = 3.83, \(p = .052\).

Next, Victimization Salience X Past Violent Victimization Experience ANOVAs on EVI and IVI were conducted. However, the Victimization Salience X Past Violent Victimization Experience interaction was not significant in either model, EVI: F(1,177) =
0.99, \( p = .321 \), IVI: \( F(1,177) = 0.48, p = .487 \). Then, zero-order correlations were conducted among the salience condition subsample. EVI and IVI remained unrelated, \( r(90) = .16, p = .128 \).

**Study 4**

Pretest Studies A and B, and Studies 1 through 3, relied solely on undergraduate student samples. Study 4 addressed the limitation of generalizability in the above studies by employing a national sample of those with and without violent victimization experience through Amazon’s Mechanical Turk (hereafter MTurk). MTurk consists of a 500,000-person workforce in 190 countries who complete online research studies and other tasks for a small monetary remuneration, typically under one dollar per hour (Amazon.com, Inc., 2017). Importantly, MTurk participants are more demographically diverse than college students and other internet samples, are reliable in their responses to self-report measures, and perform similarly to those who have completed in-person laboratory experiments (Berinsky, Huber, & Lenz, 2012; Buhrmester, Kwang, & Gosling, 2011).6

Study 4 included all measures and hypotheses from Study 3. However, there was a slight modification in the educational attainment question, such that participants were asked about their highest level of education achieved (versus their parents’ highest level of education). The routine activities questionnaire was also included in Study 4 (versus in a follow-up). Further, Study 4 included a second experimental condition (see below). It was expected that the findings from the undergraduate samples would hold for the national sample.

**Method.**
Participants. G*Power 3.1 (Faul et al., 2009) was used to conduct an a priori power analysis to determine minimum sample size. The primary goal of Study 4 was to examine the effect of victimization experience salience on explicit and implicit victim identity. Therefore, the following parameters were chosen: ANOVA, fixed effects, omnibus, one-way with a medium effect size f of .250, three groups, power of .8, and alpha at .05. G*Power calculated a total sample size of 159.

One hundred and ninety Amazon Mechanical Turk Workers from the United States participated in exchange for a nominal remuneration. Eight (4.2%) participants dropped out of the study. Another 29 participants were dropped due to IAT error rates that were either greater than 30% overall or 40% for any response block as recommended by Greenwald, Nosek, and Banaji (2003). The final N = 153 (94 female, 59 male; M_{age} = 36.48 years, SD = 12.39, age range: 18-72). Seventy-one percent of participants were White, 12% percent were African-American/Black, 6% were Asian or Pacific Islander, 6% were multi-racial, 4% were Hispanic/Latino, and 1% were American Indian/Alaskan Native. The experiment adopted a 3 (Victimization salience: self v. stranger v. control) X 2 (Past violent victimization experience: yes vs. no) between-participants design.

Measures.

Victimization experience salience. Participants randomly assigned to the victimization salience condition first read the following brief statement: “Sometimes in life there are people who harm others. Think about the worst time in your life when YOU were seriously threatened physically or badly hurt physically by someone” (italic emphasis added to reflect the difference between this salience manipulation from Study 3’s salience manipulation). Participants were then prompted to describe the event on the
next screen. Following this, on a separate screen, participants were prompted to describe their feelings about the event. The goal of this manipulation procedure was to allow participants to vividly re-experience a past violent victimization related to the self.

*Indirect victimization experience salience.* Participants randomly assigned to the indirect victimization salience condition first read the following brief statement: “Sometimes in life there are people who harm others. Think about the worst time when a STRANGER on the news (or on social media) was seriously threatened physically or badly hurt physically by someone.” Participants were then prompted to describe the event on the next screen. Following this, on a separate screen, participants were prompted to describe their feelings about the event. The goal of this manipulation procedure was to examine whether remembering someone else’s victimization would affect the strength of EVI and/or IVI. Theoretically, because a stranger is not associated with self, the self-victim association should not be made or strengthened by this indirect victimization experience salience manipulation. In other words, participants in the indirect victimization experience salience condition are expected to exhibit similar EVI and IVI scores as participants in the no salience control condition. Participants in the no salience control condition did not complete either manipulation procedure; they proceeded directly from the informed consent to the measured variables.

*IVI.* See Study 2.

*EVI.* See Study 2 ($\alpha = .85$).

*Violent victimization experience.* See Study 2.

*Depression.* See Study 1 ($\alpha = .94$).

*Anxiety.* See Study 1 ($\alpha = .94$).
Self-esteem. See Study 1 (α = .94).

Life satisfaction. See Study 1 (α = .93).

Demographics. See Study 1 (but note that this questionnaire asks for participant’s highest level of education achieved, not their parents).

Procedure. MTurk Workers were informed that the study, titled “The Identity and Experience Study,” consisted of a “30-45 minute study including categorization tasks and brief surveys.” All participants completed the study on a computer. After completing either victimization salience procedure described above, participants completed the SC-IAT measure of IVI, followed by the measure of EVI, mental health and psychological well-being questionnaires, the violent victimization experience questionnaire, the routine activities questionnaire, and the demographics questionnaire. Finally, all participants were debriefed (see Study 1 for description).

Results.

Manipulation check between salience conditions. A manipulation check was conducted to ensure that, in the victimization experience salience condition, participants who read the prompt would think about *themselves* and about *victims or victimization*; and, in the indirect victimization experience salience condition, that participants who read the prompt would think about *victims or victimization* but not themselves. To this end, twenty-five undergraduate criminal justice students from an urban public university completed the manipulation check for extra credit (see Appendix B for manipulation check materials). Participants were asked to read and respond to either of the salience conditions (participants were randomized into conditions), and then to rate, on a 7-point
scale, how much they thought about themselves and about victims or victimization (0 = Not At All, 3 = Somewhat, 6 = Very Much).

An independent samples t-test was conducted to compare how much people thought about victims or victimization in the victimization experience salience and indirect victimization experience salience conditions. There was no significant difference in the scores between the victimization experience salience ($M = 4.73, SD = 1.42$) and indirect victimization experience salience conditions ($M = 4.71, SD = 1.68$), $t(23) = .02, p = .984$. This suggests that participants in both conditions thought similarly about victims or victimization. Indeed, the objective was to have participants think similarly about victims and victimization but not about themselves, such that those in the victimization experience salience condition would think more about themselves and those in the indirect victimization experience salience condition would not think about themselves or would think about themselves less compared to those in the victimization experience salience condition. This would demonstrate that the victimization experience salience manipulation was priming both self and victim, while the indirect victimization experience salience manipulation was priming victim only.

Another independent samples t-test was conducted to compare how much people thought about themselves in the victimization experience salience and indirect victimization experience salience conditions. There was no significant difference in the scores between the victimization experience salience ($M = 4.18, SD = 1.33$) and indirect victimization experience salience conditions ($M = 3.43, SD = 1.99$), $t(23) = .02, p = .292$. This suggests that participants in both conditions thought similarly about themselves. However, there was a clear distinction in the raw means of each condition, and with a
small sample size it would be difficult to secure significant results, so the decision was made to proceed with the indirect victimization experience salience condition.

**Coding of responses to the victimization salience condition.** To identify whether both victimization salience manipulations were effective in having participants write about *violent* victimization experiences, the author of this dissertation coded participants’ responses twice. Responses were coded based on whether they described a violent victimization (attacked or threatened with a weapon, by something thrown, by an object, by an assault, or by rape) or nonviolent victimization, or whether no response was provided. For responses in the victimization experience salience condition, responses were coded based on whether they described the participant’s past victimization; for the indirect victimization experience salience condition, responses were coded based on whether they described a stranger’s victimization.

A total of 95 responses (i.e., the number of participants in the victimization experience salience condition [N = 51] and indirect victimization experience salience condition [N = 44]) were coded; the agreement between the two rounds of codes was 90.5%. Results showed that the majority of participants wrote about a violent victimization experience (78 in the first round of coding; 83 in the second round of coding), suggesting that the prompts captured incidents that fit this dissertation’s definition of violent victimization. Additionally, the majority of participants in the victimization experience salience condition (47 in the first round of coding; 49 in the second round of coding) wrote about their own personal experiences with violent victimization. Similarly, the majority of participants in the indirect victimization
experience salience condition (42 in both rounds of coding) wrote about strangers’
violent victimization experiences.

The author also coded whether the responses regarding participants’ feelings
about the victimization experience were negative, positive, or neither (no response
written). The agreement between the two sets of codes was 92.6%. In round one of
coding, 88 feelings (92.6%) were coded as negative; in round two of coding, 90 feelings
(94.7%) were coded as negative.

**Hypothesis tests.** First, the means of the dependent variables were calculated for
the entire sample: EVI ($M=1.00$, $SD=1.28$) and IVI ($M=-0.25$, $SD=0.36$). Then,
hypothesis testing was conducted. Hypotheses 1, 4, and 7 were analyzed in the same
manner as in Studies 1, 2, and 3. As a reminder, ANOVAs were conducted to determine
if participants with violent victimization experience differed in EVI and IVI. In support
of Hypothesis 1, those with violent victimization experience ($M_{EVI}=1.26$, $SD=1.42$)
were significantly more likely to characterize themselves with victims compared to those
without violent victimization experience ($M_{EVI}=0.58$, $SD=0.89$), $F(1, 151)=10.70$, $p=.001$.
Hypothesis 4 was not supported – IVI did not differ as a function of violent
victimization experience, $F(1, 151)=1.10$, $p=.295$. As in Studies 2 and 3, zero-order
correlations between demographic variables (age, gender, race, income, education) and
outcome variables EVI and IVI were conducted, and the results are included in Table 5.
This analysis revealed that income was negatively statistically significantly related to the
outcome variable EVI. Thus, an additional analysis was conducted for Hypothesis 1 using
an ANCOVA whereby income was entered as a control variable, violent victimization
experience was entered as the independent variable, and EVI was entered as the
dependent variable. These results held; those with violent victimization experience were
significantly more likely to characterize themselves with victims compared to those
without violent victimization experience, EVI: \( F(2, 150) = 10.32, p = .002 \). As in the
previous three studies, Hypothesis 7 was supported. Zero-order correlations revealed that
EVI and IVI were not significantly correlated, \( r(153) = -.01, p = .912 \).

Table 5

<table>
<thead>
<tr>
<th>IVI</th>
<th>EVI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-0.020</td>
</tr>
<tr>
<td>Age</td>
<td>-0.131</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>-0.134</td>
</tr>
<tr>
<td>Income</td>
<td>-0.134†</td>
</tr>
<tr>
<td>Employment</td>
<td>0.023</td>
</tr>
</tbody>
</table>

Note. ** p < .01; † p < .10

Next, only the subset of participants who did not receive either victimization experience
salience manipulation (\( N = 58 \)) were examined. This subset was most comparable to the
participants in Studies 1 and 2, as all participants were not exposed to the victimization
salience manipulation. Additional ANOVAs with EVI and IVI as the dependent variables
were conducted. Results for the EVI model were marginally significant, \( F(1,56) = 3.28, p = .075 \); results for the IVI model were not statistically significant, \( F(1,56) = 1.74, p = .192 \). Hypotheses 1 and 4 were not supported among this subset of participants. There
were no statistically significant relations between demographic variables and EVI or IVI
(see Table 6), so no additional ANOVA analyses were conducted for this subsample.

Further, and in support of Hypothesis 7, EVI and IVI were not related, \( r(58) = .01, p = .960 \).
Table 6

Zero-order Correlations among Demographic, and Explicit and Implicit Victim Identity Measures among Control Condition Participants Only, Study 4 (N=58).

<table>
<thead>
<tr>
<th></th>
<th>IVI</th>
<th>EVI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-004</td>
<td>.005</td>
</tr>
<tr>
<td>Age</td>
<td>.015</td>
<td>-.191</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>-.181</td>
<td>.041</td>
</tr>
<tr>
<td>Income</td>
<td>-.177</td>
<td>-.220†</td>
</tr>
<tr>
<td>Employment</td>
<td>.022</td>
<td>-.032</td>
</tr>
</tbody>
</table>

Note. † p < .10

To test Hypotheses 8 and 9, ANOVAs were conducted in which EVI and IVI were entered as the dependent variables, and condition (victimization salience versus indirect victimization salience versus control) was entered as the factor. For the EVI model only, income was entered as a control variable. Those in the victimization salience condition (M_{EVI} = 1.27, SD = 1.48) were not significantly more likely to characterize themselves with victims compared to those in the indirect victimization experience salience condition (M_{EVI} = 0.98, SD = 1.23) and those in the control condition (M_{EVI} = 0.78, SD = 1.10), F(3, 149) = 2.78, p = .065. Hypothesis 8 was not supported. Further, those in the victimization salience condition (M_{IVI} = -0.26, SD = 0.39) were not significantly more likely to implicitly characterize themselves with victims compared to those in the indirect victimization experience salience condition (M_{IVI} = -0.28, SD = 0.34) and those in the control condition (M_{IVI} = -0.22, SD = 0.27), F(2, 150) = 0.33, p = .722. Hypothesis 9 was not significant.

A second series of ANOVAs was conducted to test Hypotheses 8 and 9. For this, conditions were recoded so that participants in the indirect victimization experience salience condition and participants in the control condition were pooled into one group and compared to the participants in the victimization experience salience condition. In the EVI model, and in support of Hypothesis 8, those in the victimization salience condition
(MEVI = 1.27, SD = 1.48) were significantly more likely to characterize themselves with victims compared to those in the indirect victimization experience salience/control condition (MEVI = 0.86, SD = 1.16), controlling for income, F(2, 150) = 4.58, p = .034. However, in the IVI model, those in the victimization salience condition (MIVI = -0.26, SD = 0.39) were not significantly more likely to implicitly characterize themselves with victims compared to those in the indirect victimization experience salience/control condition (MIVI = -0.25, SD = 0.35), F(1, 151) = 0.03, p = .864. Hypothesis 9 was (still) not supported.

A third series of ANOVAs was conducted to test Hypotheses 8 and 9. For this, participants in the indirect victimization experience salience condition were excluded from analyses so only the participants in the victimization experience salience and control conditions were compared. These analyses are most similar to those in Study 3. In the EVI model, and in support of Hypothesis 8, those in the victimization salience condition (MEVI = 1.27, SD = 1.48) were significantly more likely to characterize themselves with victims compared to those in the control condition (MEVI = 0.78, SD = 1.10), controlling for income, F(2, 106) = 5.50, p = .021. However, in the IVI model, those in the victimization salience condition (MIVI = -0.26, SD = 0.39) were not significantly more likely to implicitly characterize themselves with victims compared to those in the control condition (MIVI = -0.22, SD = 0.37), F(1, 107) = 0.24, p = .623. Hypothesis 9 was (still) not supported.

A fourth and final series of ANOVAs was conducted to test Hypotheses 8 and 9. For this, participants in the control condition were excluded from analyses so only the participants in the victimization experience salience and indirect victimization experience
salience conditions were compared. In the EVI model, those in the victimization salience condition ($M_{EVI} = 1.27, SD = 1.48$) were not significantly more likely to characterize themselves with victims compared to those in the indirect victimization experience salience condition ($M_{EVI} = 0.98, SD = 1.23$), controlling for income, $F(2,92) = 1.36, p = .247$. Hypothesis 8 was not supported in this model. Similarly, in the IVI model, those in the victimization salience condition ($M_{IVI} = -0.26, SD = 0.39$) were not significantly more likely to implicitly characterize themselves with victims compared to those in the indirect victimization experience salience condition ($M_{IVI} = -0.28, SD = 0.34$), $F(1,93) = 0.09, p = .768$. Hypothesis 9 was (still) not supported.

Next, Victimization Salience X Past Violent Victimization Experience ANOVAs on EVI and IVI were conducted. However, the Victimization Salience X Past Violent Victimization Experience interaction was not significant in either model, EVI: $F(6,146) = 0.49, p = .614$, IVI: $F(5,147) = 0.85, p = .430$. Then, zero-order correlations were conducted among the victimization experience salience condition subsample and indirect victimization experience salience condition subsample. EVI and IVI remained unrelated; victimization experience salience: $r(51) = .24, p = .095$, indirect victimization experience salience: $r(44) = .25, p = .095$. In sum, the results for Hypotheses 1, 4, 7, and (partially) 8 were replicated in Study 4. However, support for Hypothesis 9 in Study 4 was different from its support in Study 3. Chapter 6 provides a summary of all study results. Preceding Chapter 6 is Chapter 5, which introduces additional, exploratory analyses of the relations between past violent victimization experience, IVI, and EVI, and mental health, psychological well-being, and behavioral patterns.
Chapter 5: Exploratory Analyses of the Relations between IVI and/or EVI and Mental Health, Psychological Well-Being, and Behavioral Patterns

The goal of this chapter was to explore the relations between explicit and/or implicit victim identities and self-stereotyping and mental health (depression and anxiety), psychological well-being (self-esteem and life satisfaction), and behavioral patterns (i.e., routine activities). To this end, secondary analyses of existing data from Studies 1 through 4 described in the previous chapter were conducted. Each of the Studies 1 through 4 included measures of mental health (depression and anxiety) and psychological well-being (self-esteem and life satisfaction) (see Study 1 measures in the previous chapter). As such, data from all four studies was pooled for these analyses, which explored the relation between past violent victimization experience, EVI and/or IVI, and the mental health and psychological well-being variables.

Analytic Strategy for Mental Health and Psychological Well-being Measures

First, data from all four studies was pooled ($N = 577$), as the past violent victimization experience, EVI, IVI, and mental health and psychological well-being variables were all scored in the same way. EVI and IVI were explored as possible mediators of the relation between past violent victimization experience and depression, anxiety, self-esteem, and/or life satisfaction. First, however, zero-order correlations were conducted between demographic variables (age, gender, race/ethnicity, employment status, income) and the mental health and psychological well-being variables; any demographic variables significantly correlated with the mental health and psychological well-being measures were included as covariates in every step of the mediation test. For
example, if gender was significantly correlated with self-esteem only, then gender would be included in all models that explored self-esteem as the outcome.

The analytic strategy of Baron and Kenny (1986) was followed for mediation testing. In step one of the mediation test, zero-order correlations were examined between depression, anxiety, self-esteem, life satisfaction, and past violent victimization experience. If control variables were added, then a multiple regression model was used in place of zero-order correlations whereby the mental health and psychological well-being variables were entered as the dependent variables, past violent victimization experience was entered as the independent variable, and demographic variables were entered as control variables. These correlations or regressions determined next steps; if past violent victimization experience was significantly related to depression, anxiety, self-esteem, or life satisfaction, then the mediation test proceeded with step two. If past violent victimization experience was not significantly related to depression, anxiety, self-esteem, or life satisfaction, then no further analyses were conducted. For example, if past violent victimization experience was significantly related to depression but not to anxiety, step two of the mediation test would be conducted for depression only.

In step two, EVI (or IVI) was regressed on past violent victimization experience. If past violent victimization experience was significantly related to EVI (or IVI), then the mediation test proceeded with step three. If past violent victimization experience was not significantly related to EVI (or IVI), then no further analyses were conducted.

In step three, zero-order correlations were examined between the mental health and psychological well-being variables, and EVI (or IVI). If control variables were added, then a multiple regression model was used in place of zero-order correlations
whereby the mental health and psychological well-being variables were entered as the
dependent variables, EVI (or IVI) was entered as the independent variable, and
demographic variables were entered as control variables. If EVI (or IVI) was
significantly related to depression, anxiety, self-esteem, or life satisfaction, then the
meditation test proceeded with step four. If EVI (or IVI) was not significantly related to
depression, anxiety, self-esteem, or life satisfaction, then no further analyses were
conducted.

Finally, in step four, the mental health or psychological well-being variable was
regressed on past violent victimization experience and EVI (or IVI). The purpose of step
four was to determine whether EVI (or IVI) remained significant, controlling for past
violent victimization experience (and any relevant demographic variable(s)). If EVI was
significant and past violent victimization experience was no longer significant, this
supported full mediation; if past violent victimization experience remained significant,
this supported partial mediation.

Results for Mental Health and Psychological Well-being Measures

Mental health (depression and anxiety) and psychological well-being (self-esteem
and life satisfaction) measures were included in Studies 1 through 4 given their relation to
violent victimization as demonstrated in past research and in this dissertation research.
Not only are mentally ill individuals more likely to experience violent victimization,
individuals who experience violent victimization are more likely to develop mental health
issues following the incident (see, for example, Bagley, Wood, & Young, 1994; Kamsner
& McCabe, 2000; Macmillan, 2001; Resick, 1987; Zlotnick, Johnson, & Kohn, 2006).
The exploratory analyses below looked at EVI and/or IVI as potential mediators in the
relation between past violent victimization and mental health or psychological well-being.

**Depression.** First, zero-order correlations were conducted between depression and demographic variables. Depression was negatively and significantly related to gender, $r(577) = -.12, p = .005$, age, $r(577) = -.264, p < .001$, employment status, $r(577) = -.174, p < .001$, and income, $r(577) = -.125, p = .003$. As such, these demographic variables were included as control variables in the following analyses. First, a multiple linear regression model was conducted whereby depression was entered as the dependent variable, past violent victimization experience was entered as the independent variable, and gender, age, employment status, and income were entered as control variables. This model was significant, $F(5,571) = 16.15, p < .001$, $R^2 = .12$. Past violent victimization experience was a significant predictor of depression.

Next, EVI and IVI were (separately) regressed on past violent victimization experience; the demographic covariates were also entered into this model. When EVI was entered as the dependent variable, the model was significant, $F(5,571) = 9.11, p < .001$, $R^2 = .07$. Past violent victimization experience was a significant predictor of EVI. When IVI was entered as the dependent variable, the model was *not* significant, $F(5,570) = .98, p = .428, R^2 = .01$. Past violent victimization experience was not a significant predictor of IVI; no further analyses including IVI were conducted.

Analyses continued to examine EVI as a mediator of the relation between past violent victimization experience and depression. In the third step, a multiple linear regression model was conducted whereby depression was entered as the dependent variable, EVI was entered as the independent variable, and the demographic variables
were entered as covariates. This model was significant, $F(5, 571) = 38.14, p < .001, R^2 = .25$. EVI was a significant predictor of depression. Finally, past violent victimization experience was added to this model. Both EVI ($\beta = .38, p < .001$) and past violent victimization experience ($\beta = .09, p = .019$) remained significant predictors of depression, and the overall model was significant, $F(6, 570) = 32.95, p < .001, R^2 = .26$. These results suggest that EVI is a partial mediator of the relation between past violent victimization experience and depression.

**Anxiety.** First, zero-order correlations were conducted between anxiety and demographic variables. Anxiety was negatively and significantly related to gender, $r(577) = -.126, p = .002$, age, $r(577) = -.271, p < .001$, and employment status, $r(577) = -.174, p < .001$. As such, these demographic variables were included as control variables in the following analyses. First, a multiple linear regression model was conducted whereby anxiety was entered as the dependent variable, past violent victimization experience was entered as the independent variable, and gender, age, and employment status were entered as control variables. This model was significant, $F(4, 572) = 18.13, p < .001, R^2 = .11$. Past violent victimization experience was a significant predictor of anxiety.

Next, EVI and IVI were (separately) regressed on past violent victimization experience; the demographic covariates were also entered into this model. When EVI was entered as the dependent variable, the model was significant, $F(4, 572) = 9.02, p < .001, R^2 = .06$. Past violent victimization experience was a significant predictor of EVI. When IVI was entered as the dependent variable, the model was not significant, $F(4, 571) = 1.18, p = .317, R^2 = .01$. Past violent victimization experience was not a significant predictor of IVI; no further analyses including IVI were conducted.
Analyses continued to examine EVI as a mediator of the relation between past violent victimization experience and anxiety. In the third step, a multiple linear regression model was conducted whereby anxiety was entered as the dependent variable, EVI was entered as the independent variable, and the demographic variables were entered as covariates. This model was significant, $F(4,572) = 36.22, p < .001, R^2 = .20$. EVI was a significant predictor of anxiety. Finally, past violent victimization experience was added to this model. Both EVI ($\beta = .32, p < .001$) and past violent victimization experience ($\beta = .09, p = .024$) remained significant predictors of anxiety, and the overall model was significant, $F(5,571) = 30.20, p < .001, R^2 = .21$. These results suggest that EVI is a partial mediator of the relation between past violent victimization experience and anxiety.

**Self-esteem.** Self-esteem scores were multiplied by -1 so that higher scores reflected lower self-esteem. First, zero-order correlations were conducted between self-esteem and demographic variables. Self-esteem was negatively and significantly related to gender, $r(577) = -.111, p = .008$, age, $r(577) = -.202, p < .001$, employment status, $r(577) = -.138, p = .001$, and income $r(577) = -.102, p = .014$. As such, these demographic variables were included as control variables in the following analyses. First, a multiple linear regression model was conducted whereby self-esteem was entered as the dependent variable, past violent victimization experience was entered as the independent variable, and gender, age, employment status, and income were entered as control variables. This model was significant, $F(5,571) = 9.41, p < .001, R^2 = .08$. Past violent victimization experience was a significant predictor of low self-esteem.

EVI and IVI were already regressed on past violent victimization experience (see Depression subsection for results). As a reminder, past violent victimization experience
was a significant predictor of EVI, but not IVI; no further analyses including IVI were conducted. Analyses continued to examine EVI as a mediator of the relation between past violent victimization experience and low self-esteem. In the third step, a multiple linear regression model was conducted whereby self-esteem was entered as the dependent variable, EVI was entered as the independent variable, and the demographic variables were entered as covariates. This model was significant, F(5,571) = 22.14, \( p < .001 \), \( R^2 = .16 \). EVI was a significant predictor of low self-esteem. Finally, past violent victimization experience was added to this model. EVI (\( \beta = .31, p < .001 \)) remained a significant predictor of low self-esteem; however, past violent victimization experience was no longer a significant predictor of low self-esteem (\( \beta = .06, p = .141 \)). The overall model was significant, F(6,570) = 18.85, \( p < .001 \), \( R^2 = .17 \). These results suggest that EVI fully mediates the relation between past violent victimization experience and low self-esteem.

**Life satisfaction.** Life satisfaction scores were multiplied by -1 so that higher scores reflected less satisfaction with life. First, zero-order correlations were conducted between life satisfaction and demographic variables. Life satisfaction was negatively and significantly related to age, \( r(577) = -.146, p < .001 \), employment status, \( r(577) = -.092, p = .028 \), and income \( r(577) = -.155, p < .001 \). As such, these demographic variables were included as control variables in the following analyses. First, a multiple linear regression model was conducted whereby life satisfaction was entered as the dependent variable, past violent victimization experience was entered as the independent variable, and age, employment status, and income were entered as control variables. This model was significant, F(4,572) = 11.13, \( p < .001 \), \( R^2 = .07 \). Past violent victimization experience was a significant predictor of less satisfaction with life.
Next, EVI and IVI were (separately) regressed on past violent victimization experience; the demographic covariates were also entered into this model. When EVI was entered as the dependent variable, the model was significant, $F(4,572) = 11.38, p < .001, R^2 = .07$. Past violent victimization experience was a significant predictor of EVI. When IVI was entered as the dependent variable, the model was not significant, $F(4,571) = 1.08, p = .367, R^2 = .01$. Past violent victimization experience was not a significant predictor of IVI; no further analyses including IVI were conducted.

Analyses continued to examine EVI as a mediator of the relation between past violent victimization experience and less satisfaction with life. In the third step, a multiple linear regression model was conducted whereby life satisfaction was entered as the dependent variable, EVI was entered as the independent variable, and the demographic variables were entered as covariates. This model was significant, $F(4,572) = 17.19, p < .001, R^2 = .11$. EVI was a significant predictor of less satisfaction with life. Finally, past violent victimization experience was added to this model. Both EVI ($\beta = .23, p < .001$) and past violent victimization experience ($\beta = .11, p = .005$) remained significant predictors of less satisfaction with life. The overall model was significant, $F(5,571) = 15.53, p < .001, R^2 = .12$. These results suggest that EVI is a partial mediator of the relation between past violent victimization experience and less satisfaction with life. In sum, EVI partially mediated the relation between past violent victimization experience and depression, anxiety, and less satisfaction with life; EVI fully mediated the relation between past violent victimization experience and low self-esteem.

**Analytic Strategy for Behavioral Patterns Measures**
Studies 2 and 3 from the previous chapter included a follow-up component (described below) utilizing Rutgers Qualtrics online survey platform so that participants could be asked about new violent victimization experience(s) up to eighteen months after study participation. In this follow-up, a routine activities measure was included and is detailed below (see Routine Activities, Studies 2 and 3). The analysis exploring the relation between EVI, IVI, and routine activities was conducted using a pooled sample of the Study 2 and Study 3 follow-up participants. Thus, this is a secondary analysis, and given the time lapse only correlational results were examined. First, a factor analysis on the routine activities was first conducted. Then, correlations were explored between past violent victimization experience, EVI, IVI, and the factors.

In Study 4, participants completed a revised routine activities measure (see Routine Activities, Study 4) at the same time that they completed all other study measures (i.e., there was no follow-up component to Study 4). Further, Studies 2 and 3 consisted of college students only, while Study 4 included a sample of U.S. citizens, the majority of whom were not college students (as was determined by examining reported time spent in class or at the library on a college campus; 114 of 152 [75%] participants in Study 4 reported no time spent in this location). For these reasons, the analysis of the relation between past violent victimization experience, EVI, IVI, and routine activities was conducted separately (i.e., not pooled with Study 2 and 3 participants from the previous paragraph). However, the same steps outlined before were taken for this routine activities analysis.

As per Routine Activities Theory (see Chapter 2), those at greatest risk of violent victimization are those who are more frequently in situations where a motivated offender,
suitable target, and absence of a capable guardian intersect in space and time. However, the temporal relation between cognitions and routine activities is unclear. It could be that individuals have experienced violent victimization because of their routine activities, and thus formed associations between the self, victims, and routine activities associated with the victimization experience. Or, it could be that individuals change their routine activities as a result of violent victimization and their newly formed association with victims. This is all speculative; however, given the relation between risky activities and violent victimization, it is important to uncover if EVI and IVI are related to such activities, so that researchers can better test how EVI and IVI influence routine activities in the future (if a relation does indeed exist).

**Results for Behavioral Patterns Measures**

**Measures.**

*IVI.* See Study 2.

*EVI.* See Study 2.

*Demographics.* See Study 2.

*Follow-up.* Following completion of Studies 2 and 3, participants were asked by the research assistant if they would be willing to provide an e-mail address and/or phone number for a short follow-up survey. Participants were informed that they would be contacted approximately six months later and would be asked several questions that would take approximately five minutes of their time. Those who agreed to the follow-up provided the research assistant with their contact information (e-mail, phone number, or both).
Approximately one year after participants completed Studies 2 and 3, a research assistant contacted them via e-mail with a link to a Rutgers Qualtrics follow-up survey. Participants were asked about any new violent victimizations since their time in the lab. Those who reported a subsequent violent victimization were asked where the violent victimization took place (in class, at home/dorm but not online or social media, online or social media, on campus but not in class or dorm, in a sport, club, or religious group, at work, in Greek life, off campus, at a bar or club, traveling from place-to-place, or another location) and their relationship to the perpetrator (family member, romantic partner, friend, acquaintance, stranger, or other). Participants were also asked a number of questions related to criminal activity and to their routine activities (see below).

**Routine Activities, Studies 2 and 3.** Participants were asked several lifestyle questions that could affect their risk of violent victimization. First, participants were asked where they lived (on- or off-campus) and with whom they lived (no one, parent, sibling, friend, roommate, significant other, or other). They were then asked to provide the zip code(s) of their home and university residences (if different), and were asked to select their primary mode of transportation (car, train, bus, bicycle, walking). Finally, participants were presented with a matrix table and were asked to select, based on the locations of violent victimization named above in the Follow-up section, how many hours they spend at each location in an average week (0 hours, 4 hours or less, 5 to 8 hours, 9 to 12 hours, 13 to 16 hours, 17 to 20 hours, 21 to 24 hours, 25 to 28 hours, 29 to 32 hours, 33 to 36 hours, 37 to 40 hours, 41 or more hours).

**Routine Activities, Study 4.** Participants were asked the same questions about where they lived, zip code of home, with whom they lived, and primary mode of
transportation as in Studies 2 and 3. However, Study 4 differed in the locations of violent victimization. Because the MTurk sample consisted of U.S. adults (who may or may not have been enrolled in a college or university), additional locations were based upon past research examining routine activities (Kennedy & Forde, 1990; Meithe, Stafford, & Long, 1987; Miller, 2013; Osgood, Wilson, O’Malley, Bachman, & Johnston, 1996; Schreck & Fisher, 2004). Participants were asked how many hours (0 hours, 4 hours or less, 5 to 8 hours, 9 to 12 hours, 13 to 16 hours, 17 to 20 hours, 21 to 24 hours, 25 to 28 hours, 29 to 32 hours, 33 to 36 hours, 37 to 40 hours, 41 or more hours) they spend at the following locations in an average week: in classes and in the library on a college or university campus; in a fraternity or sorority; at home or in a dorm room alone or engaging in personal activities (e.g., watching TV), but not any online activities; on social media; online gaming, browsing the internet, or shopping; online to complete school or other work; at work; in clubs, religious groups, or volunteering; in organized or team sports, or at a gym or place of exercise; in recreational sports, but not in an organized or official team or at a gym; attending a sporting event as a spectator; hanging out with friends at someone’s (but not your) house; hanging out with friends outside, like in a park or on the street; at a bar or club; shopping at a store; traveling from place-to-place; or driving around for fun.

**Results, Studies 2 and 3.** Thirty-five participants from Study 2 (22.9%) and 25 participants from Study 3 (13.2%) completed the follow-up survey. As such, participants were pooled across both studies for this analysis. One participant was dropped from analyses for IAT errors and another was dropped for not completing the routine activities
measure (final $N = 58$; 46 male, 12 female; $M_{age} = 20.8$ years $SD = 4.51$, age range: 18-42).

The routine activities measure was scored so that 0 hours was coded 0, 4 hours or less was coded 1, 5 to 8 hours was coded 2, 9 to 12 hours was coded 3, 13 to 16 hours was coded 4, 17 to 20 hours was coded 5, 21 to 24 hours was coded 6, 25 to 28 hours was coded 7, 29 to 32 hours was coded 8, 33 to 36 hours was coded 9, 37 to 40 hours was coded 10, and 41 or more hours was coded 11. In other words, greater scores indicate more time spent in a particular location or activity. Though diverse, some appear to overlap in meaning (e.g., in class, on campus) and others describe similar activities (e.g., Greek life, at a bar or club).

To identify routine activities dimensions, a principal components analysis was conducted using varimax rotation with undetermined number of factors to be derived. Table 7 reports the factor loadings of the analysis (component score coefficient matrix), and Table 8 displays the correlation matrix. As per Kaiser (1960), the factor loading table indicates a four factor solution. These four factors explained 23%, 21%, 14%, and 12% of the variance, respectively. Three routine activities (in class, at home or dorm, traveling from place-to-place) did not have a factor loading of or greater than .4. The Kaiser-Meyer-Olkin measure of sampling adequacy was .55, and Bartlett’s test of sphericity $p < .001$, suggesting the data were indeed suitable for principal components analysis. The meanings of the factors are delineated below.
Table 7

Routine Activities Factor Loadings, Studies 2 and 3 (N = 58).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
<th>Component 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>In class</td>
<td>.025</td>
<td>-.029</td>
<td>.346</td>
<td>-.147</td>
</tr>
<tr>
<td>At home or dorm</td>
<td>.394</td>
<td>-.088</td>
<td>.087</td>
<td>.109</td>
</tr>
<tr>
<td>Online</td>
<td>.216</td>
<td>.009</td>
<td>.124</td>
<td>.408</td>
</tr>
<tr>
<td>On campus</td>
<td>.090</td>
<td>.107</td>
<td>.469</td>
<td>-.017</td>
</tr>
<tr>
<td>Sports</td>
<td>-.065</td>
<td>-.001</td>
<td>-.083</td>
<td>.739</td>
</tr>
<tr>
<td>At work</td>
<td>.148</td>
<td>-.088</td>
<td>-.433</td>
<td>-.132</td>
</tr>
<tr>
<td>Greek life</td>
<td>-.025</td>
<td>.486</td>
<td>.063</td>
<td>-.019</td>
</tr>
<tr>
<td>Off campus</td>
<td>.400</td>
<td>-.019</td>
<td>-.047</td>
<td>-.291</td>
</tr>
<tr>
<td>At a bar or club</td>
<td>-.018</td>
<td>.506</td>
<td>.088</td>
<td>.027</td>
</tr>
<tr>
<td>Traveling from place-to-place</td>
<td>.300</td>
<td>.148</td>
<td>-.163</td>
<td>.078</td>
</tr>
</tbody>
</table>

Table 8

Correlation Matrix of Routine Activities, Studies 2 and 3 (N = 58).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In class</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. At home/dorm</td>
<td>.253*</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Online</td>
<td>-.029</td>
<td>.384**</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. On campus</td>
<td>.321**</td>
<td>.241*</td>
<td>.220*</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Sports</td>
<td>-.054</td>
<td>.109</td>
<td>.095</td>
<td>-.114</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. At work</td>
<td>-.199†</td>
<td>.036</td>
<td>-.076</td>
<td>-.355**</td>
<td>.006</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Greek life</td>
<td>-.137</td>
<td>-.141</td>
<td>-.108</td>
<td>-.090</td>
<td>-.013</td>
<td>.141</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Off campus</td>
<td>-.022</td>
<td>.537***</td>
<td>.159</td>
<td>.076</td>
<td>-.203†</td>
<td>.170</td>
<td>.034</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>9. At a bar/club</td>
<td>-.172†</td>
<td>-.169</td>
<td>-.036</td>
<td>-.059</td>
<td>-.006</td>
<td>.064</td>
<td>.794***</td>
<td>.054</td>
<td>--</td>
</tr>
<tr>
<td>10. Traveling</td>
<td>-.215†</td>
<td>.316**</td>
<td>.161</td>
<td>-.050</td>
<td>.048</td>
<td>.319**</td>
<td>.253*</td>
<td>.359**</td>
<td>.308**</td>
</tr>
</tbody>
</table>

Note. *** p < .001; ** p < .01; * p < .05; † p < .10

Homebody (Factor 1). The item “off-campus” loaded onto the first factor. It also has a modest loading (between .3 and .4) for “home or dorm” and “traveling from place-to-place.”

Party (Factor 2). The second factor describes students in “Greek life” and going to “bars or clubs.”

Academic (Factor 3). The items “on campus” and “work” (n.b., negative loading indicating not work) loaded onto the third factor, with a modest loading of “in class” as well.
**Hobbies (Factor 4).** The final factor has loadings for time spent “in sports” or “online,” which are two items that involve different activities and different settings (with the exception of playing fantasy sports, in which these two items would overlap). As such, these variables were analyzed together (as a factor) and separately.

**Relation between routine activities, past violent victimization experience, EVI, and IVI.** Zero-order correlations were explored between past violent victimization experience, EVI, IVI, and routine activities. Routine activities were measured using the four factor scores produced by the above analyses. Additionally, sports and online were analyzed individually for the reason mentioned previously. Table 9 reports the correlation results. Past violent victimization experience was not significantly correlated with any of the factors. Activities relating to *Homebody* and *Party* were unrelated to EVI and IVI. Activities related to *Academic* were positively and significantly related to EVI, $r(58) = .43$, $p = .001$, and negatively and significantly related to IVI, $r(58) = -.27$, $p = .042$.

Sports-related activities were also positively and significantly related to IVI, $r(58) = .38$, $p = .003$.

Table 9

<table>
<thead>
<tr>
<th></th>
<th>Past Violent Victimization Experience</th>
<th>EVI</th>
<th>IVI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homebody (Factor 1)</td>
<td>-.124</td>
<td>-.127</td>
<td>-.148</td>
</tr>
<tr>
<td>Party (Factor 2)</td>
<td>.014</td>
<td>-.180</td>
<td>.119</td>
</tr>
<tr>
<td>Academic (Factor 3)</td>
<td>-.030</td>
<td>.433**</td>
<td>-.269*</td>
</tr>
<tr>
<td>Hobbies (Factor 4)</td>
<td>-.111</td>
<td>.053</td>
<td>.264*</td>
</tr>
<tr>
<td>Sports</td>
<td>-.061</td>
<td>-.029</td>
<td>.380**</td>
</tr>
<tr>
<td>Online</td>
<td>-.098</td>
<td>.056</td>
<td>-.157</td>
</tr>
</tbody>
</table>

*Note.* *** $p < .001$; ** $p < .01$; * $p < .05$; † $p < .10$
It is difficult to draw any concrete conclusions from this analysis. First, the results are correlational only. Second, EVI and IVI were measured in the laboratory and routine activities were measured 6-18 months later through the online follow-up survey. At follow-up, it is possible that participants’ routine activities changed since the time in which they completed the studies. However, these results do provide initial evidence that IVI and EVI are related to behavioral patterns or activities.

**Results, Study 4.** As in the previous analysis, a principal components analysis was conducted using varimax rotation with undetermined number of factors to be derived. Table 10 reports the factor loadings of the analysis (component score coefficient matrix). As per Kaiser (1960), the factor loading table indicates a four factor solution. These four factors explained 33%, 9%, 8%, and 7% of the variance, respectively. Twelve routine activities did not have a factor loading of or greater than .4. The Kaiser-Meyer-Olkin measure of sampling adequacy was .89, and Bartlett’s test of sphericity $p < .001$, suggesting the data were indeed suitable for principal components analysis. The meanings of the factors are delineated below.
Table 10

*Routine Activities Factor Loadings, Study 4 (N = 152).*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
<th>Component 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>In class or in library on a college campus</td>
<td>.211</td>
<td>-.298</td>
<td>.011</td>
<td>-.007</td>
</tr>
<tr>
<td>In a fraternity or sorority</td>
<td>.082</td>
<td>.180</td>
<td>.031</td>
<td>-.059</td>
</tr>
<tr>
<td>At home or in dorm room</td>
<td>.006</td>
<td>.008</td>
<td>.140</td>
<td>-.564</td>
</tr>
<tr>
<td>On social media</td>
<td>-.118</td>
<td>.402</td>
<td>.148</td>
<td>-.077</td>
</tr>
<tr>
<td>Online gaming, shopping, or browsing the internet</td>
<td>-.063</td>
<td>.152</td>
<td>.476</td>
<td>.040</td>
</tr>
<tr>
<td>Online doing school or other work</td>
<td>.052</td>
<td>-.128</td>
<td>.486</td>
<td>-.136</td>
</tr>
<tr>
<td>At work</td>
<td>.003</td>
<td>-.042</td>
<td>.102</td>
<td>.559</td>
</tr>
<tr>
<td>In clubs, religious groups, or volunteering</td>
<td>.149</td>
<td>-.058</td>
<td>.020</td>
<td>.082</td>
</tr>
<tr>
<td>In organized sports or at the gym</td>
<td>.075</td>
<td>.069</td>
<td>-.058</td>
<td>-.147</td>
</tr>
<tr>
<td>In recreational sports</td>
<td>.235</td>
<td>-.157</td>
<td>.046</td>
<td>-.019</td>
</tr>
<tr>
<td>Attending a sporting event</td>
<td>.179</td>
<td>-.032</td>
<td>-.009</td>
<td>-.032</td>
</tr>
<tr>
<td>Hanging with friends at someone’s house</td>
<td>.165</td>
<td>-.024</td>
<td>-.059</td>
<td>.029</td>
</tr>
<tr>
<td>Hanging with friends outside</td>
<td>.129</td>
<td>.055</td>
<td>-.120</td>
<td>.001</td>
</tr>
<tr>
<td>At a bar or club</td>
<td>-.059</td>
<td>.377</td>
<td>-.078</td>
<td>.122</td>
</tr>
<tr>
<td>Shopping at a store</td>
<td>-.083</td>
<td>.403</td>
<td>-.064</td>
<td>-.054</td>
</tr>
<tr>
<td>Traveling from place-to-place</td>
<td>.122</td>
<td>-.055</td>
<td>.357</td>
<td>.260</td>
</tr>
<tr>
<td>Driving around for fun</td>
<td>.155</td>
<td>-.043</td>
<td>.134</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Academic, Young Adult (Factor 1).* The items loading onto the first factor are “in class,” “in a fraternity or sorority,” “in clubs, religious groups, or volunteering,” “in organized sports or at the gym,” “in recreational sports,” “attending a sporting event,” “hanging out with friends at someone’s house,” “hanging out with friends outside,” and “driving around for fun.”

*Other Leisure (Factor 2).* The items “on social media” and “shopping at a store” loaded onto the second factor. Further, it also has a modest loading (between .3 and .4) for “at a bar or club.”
**Online Users (Factor 3).** The items “online gaming, shopping, or browsing the internet” and “online doing school or work” loaded onto the third factor. Further, it also has a modest loading (between .3 and .4) for “traveling from place-to-place.”

**Workaholics (Factor 4).** The items “at work” and “not at home” loaded onto the fourth factor.

**Relation between routine activities, past violent victimization experience, EVI, and IVI.** Zero-order correlations were explored between past violent victimization experience, EVI, IVI, and routine activities. Routine activities were measured using the four factor scores produced by the above analyses. Additionally, because 12 items did not have a factor loading greater than .4, all activities were also analyzed individually. Table 11 reports the correlation results with the factor scores; Table 12 reports the correlations with the individual activity items. Neither past violent victimization experience nor IVI was significantly correlated with any of the factors.

Activities related to Other Leisure were positively and significantly related to EVI, $r(152) = .220, p = .007$. Spending time “at a bar or club,” a routine activity previously found to be linked to risk of (re)victimization (e.g., Graham, Wells, & Jelley, 2002; Miller, 2013), modestly loaded onto this factor, so it is not all surprising that there was a relation to EVI. Activities related to Workaholics were negatively and significantly related to EVI, $r(152) = -.19, p = .019$. Finally, and consistent with the routine activities analysis from Studies 2 and 3, the Academic, Young Adult activities were positively and significantly related to EVI, $r(152) = .264, p = .001$. 
Table 11


<table>
<thead>
<tr>
<th></th>
<th>Past Violent Victimization Experience</th>
<th>EVI</th>
<th>IVI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic, Young Adult (Factor 1)</td>
<td>.056</td>
<td>.264**</td>
<td>.010</td>
</tr>
<tr>
<td>Other Leisure (Factor 2)</td>
<td>.114</td>
<td>.220**</td>
<td>.058</td>
</tr>
<tr>
<td>Online Users (Factor 3)</td>
<td>-.020</td>
<td>.118</td>
<td>-.101</td>
</tr>
<tr>
<td>Workaholics (Factor 4)</td>
<td>-.106</td>
<td>-.189*</td>
<td>.027</td>
</tr>
</tbody>
</table>

Note. *** p < .001; ** p < .01; * p < .05; † p < .10
Table 12

Zero-Order Correlations of Separate Routine Activities Items, Past Violent Victimization Experience, EVI, IVI, and Age, Study 4 (N = 152).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Past Violent</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victimization</td>
<td></td>
<td>0.257</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td>--</td>
<td>0.085</td>
<td>-0.151</td>
<td>-0.131</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. EVI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.122</td>
<td>0.388</td>
<td>0.035</td>
<td>0.115</td>
<td>0.000</td>
<td>-0.277</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. IVI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Violent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victimization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. In class or library</td>
<td>-0.061</td>
<td>0.115</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. In fraternity or sorority</td>
<td>0.122</td>
<td>0.388 **</td>
<td>0.035</td>
<td>-0.131</td>
<td></td>
<td>0.227**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. At home</td>
<td>0.264 **</td>
<td>0.141†</td>
<td>-0.088</td>
<td>0.199*</td>
<td>0.039</td>
<td></td>
<td>0.016</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Online media</td>
<td>-0.027</td>
<td>0.124</td>
<td>0.022</td>
<td>-0.181†</td>
<td>0.039</td>
<td>0.263**</td>
<td>0.076</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Online gaming, shopping, or browsing</td>
<td>0.027</td>
<td>0.107</td>
<td>-0.075</td>
<td>-0.081</td>
<td>-0.089</td>
<td>-0.008</td>
<td>0.017</td>
<td>0.157†</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Online doing work</td>
<td>-0.128</td>
<td>0.089</td>
<td>-0.064</td>
<td>0.040</td>
<td>-0.081</td>
<td>-0.050</td>
<td>0.140†</td>
<td>-0.021</td>
<td>0.246**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. At work</td>
<td>0.071</td>
<td>-0.123</td>
<td>-0.052</td>
<td>-0.029</td>
<td>-0.050</td>
<td>-0.071</td>
<td>-0.182*</td>
<td>0.003</td>
<td>0.038</td>
<td>-0.006</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. In clubs, religious groups, volunteering</td>
<td>0.035</td>
<td>0.184*</td>
<td>-0.024</td>
<td>-0.037</td>
<td>0.214**</td>
<td>0.489***</td>
<td>-0.077</td>
<td>0.163*</td>
<td>-0.046</td>
<td>-0.078</td>
<td>-0.037</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. In organized sports or at the gym</td>
<td>0.134†</td>
<td>0.213**</td>
<td>-0.056</td>
<td>-0.147†</td>
<td>0.129</td>
<td>0.468***</td>
<td>0.112</td>
<td>0.088</td>
<td>-0.036</td>
<td>-0.110</td>
<td>-0.022</td>
<td>0.294***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. In recreational sports</td>
<td>0.071</td>
<td>0.225**</td>
<td>-0.006</td>
<td>-0.104</td>
<td>0.379***</td>
<td>0.646***</td>
<td>-0.011</td>
<td>0.118</td>
<td>-0.109</td>
<td>-0.014</td>
<td>-0.086</td>
<td>0.474***</td>
<td>0.460***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Attending a sporting event</td>
<td>-0.015</td>
<td>0.311***</td>
<td>0.008</td>
<td>-0.050</td>
<td>0.289***</td>
<td>0.731***</td>
<td>-0.039</td>
<td>0.141†</td>
<td>-0.109</td>
<td>-0.061</td>
<td>-0.138†</td>
<td>0.543***</td>
<td>0.379***</td>
<td>0.784***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. At a friend's house</td>
<td>0.142†</td>
<td>0.166*</td>
<td>0.039</td>
<td>-0.144†</td>
<td>0.311***</td>
<td>0.545***</td>
<td>0.013</td>
<td>0.184</td>
<td>-0.122</td>
<td>-0.169*</td>
<td>-0.015</td>
<td>0.494***</td>
<td>0.371***</td>
<td>0.719***</td>
<td>0.687***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Hanging outside with friends</td>
<td>0.042</td>
<td>0.226**</td>
<td>0.070</td>
<td>-0.148†</td>
<td>0.327***</td>
<td>0.614***</td>
<td>-0.018</td>
<td>0.197*</td>
<td>-0.098</td>
<td>-0.237**</td>
<td>-0.047</td>
<td>0.505***</td>
<td>0.437***</td>
<td>0.648***</td>
<td>0.653***</td>
<td>0.744***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. At a bar or club</td>
<td>0.074</td>
<td>0.204*</td>
<td>0.083</td>
<td>-0.194†</td>
<td>0.063</td>
<td>0.550***</td>
<td>-0.156†</td>
<td>0.253**</td>
<td>0.004</td>
<td>-0.146†</td>
<td>0.041</td>
<td>0.259***</td>
<td>0.305***</td>
<td>0.341***</td>
<td>0.432***</td>
<td>0.409***</td>
<td>0.448***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Shopping at a store</td>
<td>0.117</td>
<td>0.232**</td>
<td>0.033</td>
<td>-0.090</td>
<td>0.091</td>
<td>0.493***</td>
<td>-0.008</td>
<td>0.231**</td>
<td>-0.021</td>
<td>-0.101</td>
<td>-0.058</td>
<td>0.206*</td>
<td>0.201*</td>
<td>0.234*</td>
<td>0.353***</td>
<td>0.356***</td>
<td>0.402***</td>
<td>0.447***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Traveling from place-to-place</td>
<td>0.000</td>
<td>0.051</td>
<td>-0.045</td>
<td>-0.099</td>
<td>0.145†</td>
<td>0.271**</td>
<td>-0.004</td>
<td>0.153†</td>
<td>0.166*</td>
<td>0.049</td>
<td>0.157†</td>
<td>0.254**</td>
<td>0.083</td>
<td>0.309***</td>
<td>0.265**</td>
<td>0.284***</td>
<td>0.201*</td>
<td>0.186*</td>
<td>0.180*</td>
<td></td>
</tr>
<tr>
<td>21. Driving for fun</td>
<td>0.116</td>
<td>0.267**</td>
<td>0.091</td>
<td>-0.179*</td>
<td>0.286***</td>
<td>0.503***</td>
<td>-0.010</td>
<td>0.129</td>
<td>0.007</td>
<td>0.020</td>
<td>-0.048</td>
<td>0.321***</td>
<td>0.352***</td>
<td>0.579***</td>
<td>0.533***</td>
<td>0.448***</td>
<td>0.460***</td>
<td>0.337***</td>
<td>0.316***</td>
<td>0.294***</td>
</tr>
</tbody>
</table>

Note. *** p < .001; ** p < .01; * p < .05; † p < .10
Correlation results show that spending time in class or in the library on a college campus is positively and significantly related to spending time in a fraternity or sorority, in clubs, religious groups, or volunteering, participating in a recreational sport, attending a sporting event, hanging out with friends either at someone’s house or outside, and driving around for fun. Spending time in a fraternity or sorority is also positively and significantly related to spending time on social media, at the gym or participating in organized sports, at a bar or club, at a store shopping, and traveling from place-to-place. Many, if not all, of these related activities are experienced by young adults in college, and it was confirmed in the correlation table that age was negatively and significantly related to spending time in class, in a fraternity or sorority, on social media, at a bar or club, and driving around for fun. In other words, younger people spend more time in activities that tend to be associated with greater risk of (re)victimization (Graham et al., 2002; Jensen & Brownfield, 1986; Kalof, 1993; Miller, 2013; Schreck & Fisher, 2004). Coupled with this, EVI is positively and significantly associated with spending more time in a fraternity or sorority, in clubs, religious activities, or volunteering, in sports (both recreational and organized), attending a sporting event, hanging out with friends, at a bar or club, shopping, and driving around for fun.

As for other activities, spending time at work and at home are not significantly related to EVI; time spent at work is negatively and significantly correlated with spending time at home. EVI is also not related to spending time online, nor is it related to traveling from place-to-place.

In sum, and in regard to the mental health and psychological well-being variables, results suggested that EVI either partially or fully mediated the relation between past
violent victimization experience and the mental health and psychological well-being variables. Implicit victim identity was not significantly related to past violent victimization experience, so IVI was not explored as a potential mediator. In regard to behavioral patterns, it also appeared that EVI (more so than IVI) was correlated with a number of behaviors or activities that are related to young adults and are more likely to increase one’s risk of violent victimization.
Chapter 6: Discussion

The studies in this dissertation research sought to examine the relation between past violent victimization experience and implicit and explicit victim identity processes and how these processes are related to known victim outcomes. This research provides a new lens through which to examine and understand violent victimization; specifically, an implicit social cognitive approach was taken to understand the processes underlying the self and victim identity. This dissertation research is the first to develop measures of IVI and IVSS for adults, and provides initial evidence for the unique relation between IVI and IVSS among adults who have experienced one or multiple violent victimizations. It is also the first to examine the relation between implicit victim identity and self-stereotyping and their explicit counterparts, and to provide initial evidence that these processes are distinct among those who have experienced violent victimization. Further, this work examines how explicit and implicit cognitions might fit into our current understanding of the effects and outcomes of violent victimization, specifically mental health and behavioral patterns. Taken together, this work adds to current knowledge of the cognitive effects of violent victimization and explores a previously understudied area in the general victimization literature, namely explicit and implicit victim identity and self-stereotyping. It also extends implicit social cognition theory to a new domain (violent victimization) and adds to social psychology’s knowledge of how context makes salient implicit and explicit identities, specifically self-group associations.

The present research utilized social identity (Hogg, 2006; Hogg et al., 1995; Tajfel & Turner, 1979) and self-categorization (Turner et al., 1987) theories to understand and operationalize explicit victim identity. Per these theories, new
experiences can lead individuals to consciously identify with new social groups (i.e., explicit victim identity). Following this new group identification, individuals also tend to consciously associate themselves with the stereotypes of that group, known as self-stereotyping (i.e., explicit self-stereotyping; Hogg & Turner, 1987). In regard to conscious cognitions, three hypotheses were tested: those with past violent victimization experience are predicted to exhibit stronger explicit victim identity (Hypothesis 1) and explicit victim self-stereotyping (Hypothesis 2) compared to those who have not experienced violent victimization, and those who strongly identified with victims are predicted to also strongly identify with victim stereotypes (Hypothesis 3).

The aforementioned theories and hypotheses are specific to explicit cognitive processes. Explicit and implicit cognition tap into different processes and can predict different outcomes; this is particularly true when the identity under investigation is a stigmatized one. By examining both explicit and implicit victim identity and their relation to violent victimization-related outcomes, the present work substantially adds to the existing literature. Implicit social cognition theory (Greenwald & Banaji, 1995; Greenwald et al., 2002) posits that in addition to conscious identification with a group and its stereotypes, a similar implicit process linking the self to social groups (i.e., implicit victim identity) and group attributes (i.e., implicit victim self-stereotyping) also occurs following new experiences. This implicit process is neither consciously known nor controllable by individuals. In regard to implicit cognitions, three hypotheses were tested: those with past violent victimization experience are predicted to exhibit stronger implicit victim identity (Hypothesis 4) and implicit victim self-stereotyping (Hypothesis 5) compared to those who have not experienced violent victimization, and those who
exhibited strong implicit victim identity are predicted to also exhibit strong implicit victim self-stereotyping (Hypothesis 6).

Further, explicit and implicit measures of cognition tend to be unrelated when the topic is socially sensitive. Indeed, Hoffmann and colleagues (2005), and more recently Greenwald and colleagues (2009), have found a weak or null relation between explicit and implicit measures for topics such as race and sexuality. Consistent with this literature, null relations between explicit and implicit measures of victim identity and self-stereotyping were predicted (Hypothesis 7).

Because individuals have multiple social identities, the effect of context on strength of implicit and explicit victim identity was explored. Context can influence which identity is salient in a particular situation. Identities that are temporarily activated in a particular context are referred to as contextually salient identities (cf. Crocker, 1999; Deaux & Major, 1987; Oakes, 1987). In regard to contextually salient identities, two hypotheses were tested: those experimentally randomized into a condition in which they are asked to think and write about a past time in which they were seriously injured or badly hurt are predicted to exhibit stronger explicit (Hypothesis 8) and implicit (Hypothesis 9) victim identities compared to participants who are not asked to recall a past victimization.

**Summary of Results**

The results of the hypothesis testing for each of the studies are presented in Table 13. A meta-analysis of any inconsistent results between studies is then presented. Results of the exploratory analyses are also discussed at the end of this subsection.
Hypothesis 1. Hypothesis 1 was tested in all studies using ANOVA. Consistent with social identity and self-categorization theories, participants who reported past violent victimization experience exhibited significantly stronger EVIs than participants who did not report past violent victimization experience. This finding held across all studies. Hypothesis 1 was supported.

Hypothesis 2. Hypothesis 2 was tested in Studies 1 and 2 using ANOVA. Hypothesis 2 was not tested in Studies 3 and 4 because measures of self-stereotyping were not collected. Again, consistent with social identity and self-categorization theories, participants who reported past violent victimization experience exhibited significantly stronger EVSS than participants who did not report past violent victimization experience. This finding held across both Studies 1 and 2. Hypothesis 2 was supported.

Hypothesis 3. Hypothesis 3 was tested in Studies 1 and 2 utilizing nested regression analyses in which EVSS scores were regressed on demographic variables in the first step, mean-centered EVI scores and dichotomized violent victimization experience in the second step, and their interaction in the third step. In both studies, the final step of the model (i.e., the interaction of past violent victimization experience and EVI) was not significant. Hypothesis 3 was not supported.

Hypothesis 4. Hypothesis 4 was tested in all studies using ANOVA. Across all studies, those with and without past violent victimization experience did not exhibit significantly different mean IVI scores. Hypothesis 4 was not supported.

Hypothesis 5. Hypothesis 5 was tested in Studies 1 and 2 using ANOVA; it was not tested in the remaining studies for the reason listed above (under Hypothesis 2). In both studies, IVSS did not differ as a function of past violent victimization experience.
These findings are consistent with the findings of Hypothesis 4. Hypothesis 5 was not supported.

**Hypothesis 6.** Hypothesis 6 was tested in Studies 1 and 2 using the same nested regression model as described earlier to test Hypothesis 3, but replacing EVI and EVSS with IVI and IVSS, respectively. In Study 1, Hypothesis 6 was supported – those with past violent victimization experience and who had strong IVIs exhibited strong IVSS. However, this finding did not hold in Study 2. In Study 2, the Past Violent Victimization Experience X IVI interaction was not significant. There was mixed support for Hypothesis 6.

**Hypothesis 7.** Hypothesis 7 was tested in all studies using correlation analyses. In all studies, explicit and implicit measures of victim identity (and self-stereotyping) were not related. This finding is consistent with Hofmann and colleagues’ (2005) and Greenwald and colleagues’ (2009) findings that explicit and implicit measure are weakly or non-related for socially sensitive topics. Additionally, this finding provides evidence that explicit victim identity and implicit victim identity are two distinct cognitive processes (for more on this see the associative-propositional evaluation (APE) model, Gawronski & Bodenhausen, 2006). Hypothesis 7 was supported.

**Hypothesis 8.** Hypothesis 8 was tested in Studies 3 and 4 using ANOVA. In Study 3, there were two conditions: 1) the experimental (i.e., victimization salience) condition in which participants were asked to recall a time in which they were severely injured or badly hurt, and 2) the control condition, in which participants did not complete a writing task but instead proceeded to the implicit measure. Participants in the
experimental condition exhibited significantly stronger EVIs compared to those in the control condition.

In Study 4, there were three conditions: 1) the experimental victimization experience salience condition in which participants were asked to recall a time in which THEY were severely injured physically or badly hurt physically, 2) the experimental indirect victimization experience salience condition, in which participants were asked to recall a time in which a STRANGER on the news was severely injured physically or badly hurt physically, and 3) the control condition, in which participants did not complete a writing task but instead proceeded to the implicit measure. Four ANOVAs were run comparing all three groups, comparing the victimization experience salience group to a pooled group of participants in the indirect victimization experience salience and control condition, comparing the victimization experience salience group to the control group only, and comparing the victimization experience salience group to the indirect victimization experience salience group only. In the second and third ANOVAs described in the previous sentence, participants in the victimization experience salience condition exhibited significantly stronger EVIs compared to those in the pooled group and the control group. However, in the first (omnibus) and fourth models, EVI did not differ significantly from the other groups. There was mixed support for Hypothesis 8.

**Hypothesis 9.** Hypothesis 9 was tested in Studies 3 and 4 using ANOVA. In Study 3, participants in the experimental condition exhibited marginally significantly stronger IVIs compared to those in the control condition. This finding, coupled with the Hypothesis 8 findings from Study 3 above, support the notion that victim is a
contextually salient identity. However, in Study 4, across all ANOVA models, IVI did not differ significantly between groups. There was mixed support for Hypothesis 9.

Table 13

Summary of hypotheses by study, indicating support.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Study 1</th>
<th>Study 2</th>
<th>Study 3</th>
<th>Study 4</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Those self-reporting past violent victimization experience will exhibit stronger explicit victim identity than those not reporting such experience.</td>
<td>+ (partial)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>H2: Those self-reporting past violent victimization experience will exhibit stronger explicit victim self-stereotyping than those not reporting such experience.</td>
<td>+</td>
<td>+</td>
<td>N/A</td>
<td>N/A</td>
<td>+</td>
</tr>
<tr>
<td>H3: Those who strongly explicitly identify as victims will also strongly associate with victim stereotypes.</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>-</td>
</tr>
<tr>
<td>H4: Those self-reporting past violent victimization experience will exhibit stronger implicit victim identity than those not reporting such experience.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>H5: Those self-reporting past violent victimization experience will exhibit stronger implicit victim self-stereotyping than those not reporting such experience.</td>
<td>-</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>-</td>
</tr>
<tr>
<td>H6: Those who strongly implicitly associate the self with victim will also strongly implicitly associate the self with victim stereotypes.</td>
<td>+</td>
<td>-</td>
<td>N/A</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>H7: Explicit and implicit measures of victim identity will be unrelated.</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>H8: Being reminded of a past victimization (versus not) will result in stronger explicit victim identities.</td>
<td>N/A</td>
<td>N/A</td>
<td>+</td>
<td>+/-</td>
<td>0</td>
</tr>
<tr>
<td>H9: Being reminded of a past victimization (versus not) will result in stronger implicit victim identities.</td>
<td>N/A</td>
<td>N/A</td>
<td>+</td>
<td>-</td>
<td>0</td>
</tr>
</tbody>
</table>

Note. (+) = support for hypothesis; (0) = inconsistent support for hypothesis; (-) = no support for hypothesis; N/A = not applicable.
**Meta-analysis of findings.** Meta-analyses were conducted for hypotheses with inconsistent support (Hypothesis 6, Hypothesis 8, and Hypothesis 9) (Goh, Hall, & Rosenthal, 2016). Support for the predicted effect of past violent victimization experience on the relation between IVI and IVSS across Studies 1 and 2 was inconsistent, so Hypothesis 6 was re-tested by pooling the data across Studies 1 and 2 and re-conducting analyses. The same demographic covariates related to risk for violent victimization (gender, age, race/ethnicity, income, employment status) that were included in Study 1’s regression analysis were examined by conducting zero-order correlations between these variables and outcome variable IVSS. Table 14 lists the zero-order correlations. This analysis revealed that none of the demographic variables were statistically significantly related to IVSS.

Table 14

<table>
<thead>
<tr>
<th></th>
<th>IVSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.010</td>
</tr>
<tr>
<td>Age</td>
<td>.025</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>.026</td>
</tr>
<tr>
<td>Income</td>
<td>-.007</td>
</tr>
<tr>
<td>Employment</td>
<td>.024</td>
</tr>
</tbody>
</table>

To re-test Hypothesis 6, a nested regression analysis was performed to examine violent victimization experience as a moderator of the relation between IVI and IVSS. The dichotomous victimization experience variable was coded 1 for those with victimization experience and 0 for those without victimization experience. IVSS scores were regressed on the mean-centered IVI scores and dichotomized violent victimization
experience in the first step, and their interaction in the second step. Overall, this model was marginally significant, $ΔF(1, 239) = 3.00, p = .084$. Hypothesis 6 was not supported.

Support for the predicted effect of victimization experience salience on EVI across Studies 3 and 4 was inconsistent, so Hypothesis 8 was re-tested by calculating effect sizes across both experiments following the strategies recommended by Borenstein and colleagues (2009). An effect size was computed as the difference between either: 1) the victimization experience salience and control conditions (from Studies 3 and 4) or 2) the victimization experience salience and indirect victimization experience salience conditions (from Study 4 only). Cohen’s effect size value ($r = .15$) suggested a small effect (Cohen, 1988).

To test the predicted effect of victimization experience salience on EVI differently, Hypothesis 8 was re-tested by pooling the victimization experience salience and control conditions from Studies 3 and 4 ($N = 290$) and re-conducting analyses. Zero-order correlations were first analyzed between demographic variables (age, gender, race/ethnicity, employment status, income) and EVI, however there was no significant relation between EVI and any of the demographic variables. Overall, participants in the victimization experience salience condition ($N = 141, M = 1.31, SD = 1.40$) exhibited significantly stronger EVI compared to the control condition ($N = 149, M = .99, SD = 1.15$), $F(1,288) = 4.45, p = .036$. Hypothesis 8 was supported.

Support for the predicted effect of victimization experience salience on IVI across Studies 3 and 4 was inconsistent, so Hypothesis 9 was re-tested by calculating effect sizes across both experiments following the strategies recommended by Borenstein and colleagues (2009). An effect size was computed as the difference between either: 1) the
victimization experience salience and control conditions (from Studies 3 and 4) or 2) the victimization experience salience and indirect victimization experience salience conditions (from Study 4 only). Cohen’s effect size value \( r = .04 \) suggested a small effect (Cohen, 1988).

To test the predicted effect of victimization experience salience on IVI differently, Hypothesis 9 was re-tested by pooling the victimization experience salience and control conditions from Studies 3 and 4 \( (N = 290) \) and re-conducting analyses. Zero-order correlations were first analyzed between demographic variables (age, gender, race/ethnicity, employment status, income) and IVI, however there was no significant relation between IVI and any of the demographic variables. Overall, participants in the victimization experience salience condition \( (N = 141, M = -.21, SD = .35) \) did not differ significantly in IVI compared to the control condition \( (N = 149, M = -.25, SD = .32) \), \( F(1,288) = 1.17, p = .280 \). Hypothesis 9 was not supported.

**Exploratory analyses findings.** Some research currently suggests that violent victimization experience has a direct effect on negative outcomes, such as mental health and behavioral patterns (e.g., Boney-McCoy & Finkelhor, 1996). Other studies have found that certain variables or factors (e.g., interpersonal control, social support) moderate or mediate the violent victimization-negative mental health relation (e.g., Katz & Arias, 1999). In the exploratory analyses, explicit and implicit cognitions were tested as mediators because the association between self and victim was thought to follow a violent victimization experience. Indeed, it was found that the relation between past violent victimization experience and mental health or psychological well-being was mediated by EVI (but not IVI).
These findings suggest support for the state dependence hypothesis (Sparks, 1981) insofar as explicit measures are concerned. Those without violent victimization experience exhibited weak or no EVI or EVSS. However, it appears that those who did have such experience exhibited stronger EVI and EVSS. It follows that a violent victimization experience may change one’s cognitive associations, such that he or she develops an explicit association between the self and victim. These associations may be one mechanism by which violent victimization leads to poor mental health and psychological well-being.

Interestingly, only EVI mediated the relation between violent victimization experience and mental health and psychological well-being. One potential explanation for this finding is that the measure of EVI, like the measures of past violent victimization experience and mental health and psychological well-being, was a self-report. As such, participants had conscious control over their responses. Further, and as will be elucidated in the following section, explicit and implicit measures of social cognitions predict different outcomes. It may be, then, that explicit measures of social cognition are better predictors of mental health outcomes than implicit measures.

Like the above findings, EVI (more so than IVI) was strongly correlated with behaviors or activities linked to risk of (re)victimization. For example, in the results for the behavioral patterns in Study 4, EVI was positively and significantly correlated with spending time at a bar or club, hanging out with friends outside, and driving around for fun. These activities are unstructured (there is no agenda to time spent in the location; Osgood et al., 1996), may lack guardianship, and increase the visibility and accessibility of potential targets (Meier & Meithe, 1993). Further, many of the activities linked to EVI
were also associated with young adults, who are generally at the greatest risk of (re)victimization (Sampson & Lauritsen, 1994). Thus, it could be that individuals have experienced violent victimization before as a result of their routine activities (which they may or may not have altered post-victimization), and therefore display stronger EVI. Or, it could be that much exposure to risky activities could contextually strengthen EVI. Also consistent with lifestyle-exposure and routine activities theories, EVI was not related to spending time at home, nor was it related to spending time at work. These are more private locations and tend to include some level of guardianship (Hindelang et al., 1987; Meier & Meithe, 1993).

Interestingly, past violent victimization experience was not correlated with any of the activities, suggesting that it may not be the violent victimization experience itself that affects behavior patterns, but rather the change in one’s cognitions, specifically explicitly association with victim, following the victimization experience. This is all speculative, however, as conclusions regarding behavior patterns are near impossible to draw from correlational analyses only.

Social Identity Theory and Explicit Victim Identity and Self-Stereotyping

Across all studies, findings were consistent with social identity theory (SIT; Hogg, Terry, & White, 1995; Tajfel & Turner, 1979). That is, those who reported having experienced violent victimization were more likely to explicitly, or consciously, associate the self with the group victim and victim stereotypes compared to those without violent victimization experience. While these findings were expected to be consistent with SIT, it was also suggested that, because victim is a stigmatized identity, participants may be motivated to explicitly distance themselves from the victim group (Crocker et al., 1998).
Indeed, it has been found that individuals will distance themselves from stigmatized identities on self-report measures (e.g., Devos & Banaji, 2003; Veysey & Rivera, 2017). However, in the present study this was not the case, and therefore explicit victim identity (and self-stereotyping) does not behave the same as other stigmatized identities. Potential explanations for this finding are that 1) participants were not concerned about their self-presentations because they completed the study in a private room and were ensured their responses would be kept confidential (Nosek, 2002), 2) reporting past violent victimization and associating with the victim group and its attributes were perceived as beneficial (in some way) to the participants, or 3) participants did not perceive that they were responsible for the label (Crocker & Major, 1989).

One of the most common criticisms of self-report measures from an implicit social cognition standpoint is that they do not accurately capture self-group associations when the group is a stigmatized one. Interestingly, the present dissertation research challenges this criticism of self-report measures. It appears that individuals are willing to not only report past violent victimization experiences (which is consistent with the NCVS, that individuals will report violent victimization experience on a survey), but also their associations with the group victim and with victim stereotypes.

**Implicit Social Cognition Theory and Implicit Victim Identity and Self-Stereotyping**

Surprisingly, results across studies only partially supported implicit social cognition (ISC) theory (Greenwald & Banaji, 1995; Greenwald et al., 2002). In Study 1, and consistent with ISC theory, those with past violent victimization experience who strongly implicitly identified with the group victim also strongly implicitly identified with victim stereotypes. This finding was not replicated in Study 2. Perhaps one potential
explanation for this finding was the change in one stimulus on the IVI measure (i.e., the word survivor in Study 1 was replaced with the word abused in Study 2). On one hand, it might be expected that the inclusion of the survivor term would lead to stronger IVI because survivor is a positively valenced word. This could help to explain the findings from Study 1. However, it could also be expected that inclusion of the word survivor would lead to null results in Study 1, and the replacement of the word survivor with abused would lead to a significant strong IVI-IVSS relation in Study 2 because all stimuli in the SC-IAT measures were negative. However, this was not the case. Because victims and non-victims did not differ significantly on IVI and IVSS measures, both IVI and IVSS scores in general were low; indeed, participants more often associated other with victim than self with victim. This trend could have led to the lack of support for Hypothesis 6 in Study 2, such that those with past violent victimization experience either did not display strong IVI and/or IVSS. And, while survivor was included as a stimulus in Study 1’s IAT, there is no known way to disaggregate IAT results to compare reaction times between the victim and prey responses and survivor responses. Future research, then, might consider utilizing another measure of implicit social cognition (e.g., Go/No-Go Task) that compares associations with positive versus negative stimuli.

Perhaps the most surprising finding of this work was that victims and non-victims did not differ on measures of IVI or IVSS. As such, this work was not consistent with ISC theory, nor does implicit victim identity (and self-stereotyping) behave the same as other stigmatized identities. It is more common that associations between the self and a stigmatized social group show up on implicit measures of cognition, not explicit. Indeed, Veysey and Rivera (2017) found that those with criminal experience (i.e., arrested,
convicted, and/or incarcerated) exhibited significantly stronger implicit criminal identity compared to those without criminal experience; those with and without criminal experience did not differ significantly on explicit criminal identity. The present work’s findings demonstrate the opposite, and ask, why might victims and non-victims not look different on implicit measures? Further, what is different about victim identity?

A related set of explanations surrounding resiliency may potentially explain these unexpected findings. The first of these is that individuals may identify with victims following a violent victimization experience, but the victim identity is low on one’s identity hierarchy. Thus, other chronic and more positive identities may be activated day-to-day and in most contexts (Stryker, 1968; 1980), at both explicit and implicit levels. In a similar vein, Greenwald and colleagues (2002) find that individuals will associate with positive and negative groups and group attributes. However, in general individuals associate the self with a positive valence. This has the potential to create imbalance when the positive self is associated with a negatively valenced group, like victim. When two concepts (i.e., self and victim) with different valences are pressured into an association, they are known as pressured concepts. To resolve the imbalance, Greenwald and colleagues’ (2002) differentiation principle holds that the pressured concepts will split into subconcepts that are associated with the opposite valence. As this applies to victims, perhaps victim can split into the subconcept survivor (though whether survivor is a subconcept or a separate identity is questionable), victim advocate, or past victim associated with more positive valence. Thus, rather than form an implicit association between self and victim, individuals may be forming implicit associations between the self and a positive subconcept of victim.
Another possible explanation is that individuals who have experienced violent victimization actively work to overcome their victimization experience, and this conscious process also affects implicit processes. Oyserman and Swim (2001) suggest that individuals with stigmatized identities may actively work to create positive outcomes. Schwager and Rothermund (2014) also note individuals may try to change an adverse situation by increasing the importance of a (positive) goal and shielding it against alternative goals. As this applies to victimization, perhaps an individual’s goal might be to overcome his or her victim identity. The authors note, “Recent research has shown that automatic processing mechanisms provide the basis for an increase in the importance of a threatened goal and thereby support the self regulatory stabilization of motivational commitment in the face of adversity” (Schwager & Rothermund, 2014, p. 58). Applying this to victimization, if someone feels that his or her efforts in overcoming a victim identity are being threatened, he or she will then focus more on the goal of mitigating the victim identity and inhibit any information that counters the goal. This may be why the self-victim association is weak implicitly, and why victims and non-victims do not differ on IVI or IVSS.

Affective-motivational counter-regulation holds that when faced with negative stimuli or cues, individuals will allocate more attention to positive stimuli; this effect has been found explicitly and implicitly (e.g., Quirin, Bode, & Kuhl, 2011; Rothermund, 2003; Rothermund, Gast, & Wentura, 2011). As this may apply to IVI and/or IVSS, perhaps being asked to recall a victimization experience strengthens the other-victim association on an IAT as a way to implicitly distance oneself from the negatively
valenced victim group (recall that Hypothesis 9 was not supported when all data was pooled).

A final potential explanation for this finding, discussed above, is that victim is a contextually salient identity. Indeed, results from Study 3 (and partially Study 4) demonstrate some support for this hypothesis, but more so for EVI. Because individuals have multiple social identities, individuals need to be reminded of a past violent victimization experience in order for victim identity to be strengthened (temporarily). In this case, the association between self and victim exists in one’s explicit (and implicit) cognitive networks but remains somewhat dormant until a contextual cue is given. Alternatively, if the association between self and victim is resisted following a violent victimization experience, the contextual cue may temporarily create an association between the self and victim group.

While the studies included in this dissertation utilized a writing task to make salient past violent victimization experience, there are additional contexts outside of the laboratory in which the victim identity might be primed. Examples include places similar to the one in which a person was victimized, encountering a person who looks similar to one’s perpetrator, participating in Take Back the Night and other victim-centered events, watching a television show or news report highlighting a similar violent victimization experience, attending counseling related to the violent victimization, or attending court proceedings regarding one’s violent victimization. Though this is not an exhaustive list, it does suggest that there are a number of contexts that can prime the victim identity and, in turn, consequences and behaviors related to EVI or IVI. Thus, one future area of research should then be to examine outcomes related to these identities. While this dissertation
finds some evidence of relations between EVI and mental health, psychological well-being, and behavioral patterns, it also suggests additional behaviors to be examined in future research, namely walking gait, that may be related to IVI.

**Implications for Victim Identity-Related Behavior and Revictimization**

This dissertation research has potential implications for behavior. Identities can influence and maintain future identity-based behaviors and mental health outcomes (Swann & Bosson, 2010); they have psychological functionality (Oakes, 1987). That is, identities can aid individuals in understanding their surroundings, can determine how people feel, can help individuals form expectations of others and anticipate others' and their own behaviors (this may be especially true for those with past violent victimization experience), and can influence behavior. Indeed, Greenwald and colleagues (2009) show that both measures of implicit and explicit cognition about socially sensitive topics have good predictive validity, but for different behavioral outcomes. Explicit cognition tends to predict more thoughtful, controlled behaviors (e.g., Friese, Hofmann, & Wänke, 2008), while implicit cognition tends to predict more subtle, automatic/nonconscious behavior (for a review, see Payne & Gawronski, 2010).

Limited research has shown that those who are victimized exhibit automatic responses and/or behavior related to violent victimization and vulnerability to assault, for example startle response (Herman, 1992), chronic hyperarousal (Burgess & Holmstrom, 1974; van der Kolk, 1986; van der Kolk & Saporta, 1991), and walking gait (Book, Costello, & Camilleri, 2013; Grayson & Stein, 1981; Gunns, Johnston, & Hudson, 2002; Sakaguchi & Hasegawa, 2006; Wheeler, Book, & Costello, 2009). Startle response and hyperarousal are autonomic, nonconscious responses, and could be related to implicit
victim identity. Walking gait is a subtle behavior that would also likely be related to implicit victim identity. If such behavioral indicators exist, individuals may signal to others this past violent victimization experience, and by consequence may be more vulnerable to revictimization.

Walking gait. There is some research to support the idea that subtle behaviors indicate either past violent victimization experience and/or vulnerability to violent victimization. Grayson and Stein (1981) had prisoners incarcerated for assaultive crimes rate the behaviors of men and women of varying ages walking New York City streets on a scale of 1 to 10 of assault potential. Those who the prisoners identified as easy victims of assault were those who exhibited the following movements: long stride length, walking gesturally (i.e., movement that begins at the body’s edge, rather than from the center), moving unilaterally (i.e., moving one side of the body at a time), lifting feet when walking (as opposed to moving more fluidly), and moving so that body weight would shift diagonally, up or down, or laterally. In other words, those rated as the greatest potential victims were those who moved their body in unsynchronized ways. Citing Goffman, Grayson and Stein (1981) mention that this nonconscious “gestural hinting” on the part of potential victims is read by criminals, also nonconsciously, as a sign of their vulnerability (p. 74). Indeed, Grayson and Stein (1981) mention the unconscious nature of these movements, which would support a relation to implicit victim identity.

Gunns and colleagues (2002) also examined assault potential by examining the way in which men and women walk. The authors found similar results to Grayson and Stein (1981), that easy to attack walkers were those who moved gesturally and shifted their weight either lateral or forward/back. Conversely, those rated as hard to attack
moved posturally, shifted weight three-dimensionally, took longer strides, walked faster, had a larger range of arm swing, had higher energy, and had heavier body weight. Moreover, the authors found that ease of attack ratings did not vary by walkers’ or raters’ age, height, or weight (Gunns et al., 2002).

In Japan, Sakaguchi and Hasegawa (2006) looked at sexual advance potential of female walkers only, as rated by male students. Like Gunns and colleagues (2002), Sakaguchi and Hasegawa (2006) utilized point-light technology, which “isolates movement cues” (Gunns et al., 2002, p. 131). Those who moved more awkwardly, walked more slowly, and had a short stride were those rated highest in vulnerability for inappropriate touching. Further, the authors also asked walkers to complete measures of personality, and found that those who described themselves as shy, neurotic, and introverted were those rated most likely to be approached for inappropriate touching.

Even more recently, several scholars in Canada have demonstrated that individuals who score high on measures of psychopathy are able to distinguish those with versus those without victimization experience by their walking gait. Wheeler and colleagues (2009) found that male students scoring higher in psychopathy were better able to distinguish victims from nonvictims after watching a video clip of individuals walking (the walkers were asked to self-report whether they had ever been victimized). However, the male students could not explain why they rated a walker as a victim. Similarly, Book and colleagues (2013) found that inmates with a long history of violence, who scored higher in psychopathy, were able to accurately distinguish victims from nonvictims through their walking gait. Further, these inmates also mentioned walking gait specifically in their judgment of vulnerability.
While not directly related to violent victimization, Bargh and colleagues (1996) provide evidence that priming negative stereotypes associated with a particular identity can affect walking gait. In their study (Experiment 2), young students were randomized into conditions in which they were either primed with negative age stereotypes (e.g., worried, old, Florida, retired, wrinkle), or not. Results demonstrated that those in the negative prime condition exhibited slower walking speed immediately following study completion compared to those in the control condition (i.e., not primed with negative age stereotypes). In other words, receiving a reminder of a negative stereotype can influence subtle behaviors.

Taken together, the above studies demonstrate that not only is walking gait related to vulnerability of assault, but it is a subtle behavior that is picked up on by others (e.g., potential offenders). It is possible, then, that walking gait may be related to implicit victim identity. And, further, it is possible that being reminded of one’s violent victimization experience can affect walking gait (through the strengthening of IVI), which, as has been shown above, can increase one’s risk of revictimization. In the final chapter of this dissertation, one potential intervention to reduce the negative effects of violent victimization and victim identity is introduced. Also presented are limitations and future research directions, and policy implications.
Chapter 7: Implications and Conclusion

The present work established new (and the first) measures of IVI and IVSS for adults, and its findings set the foundation for future research on explicit and implicit victim identity. As with any research, the studies included in this dissertation are not without limitations, and they introduce new questions to be answered. This final chapter is organized to first address some of this work’s limitations, and based on these limitations, suggest future directions of research. Then, based on the current findings, this dissertation concludes by discussing implications for criminal justice policy and practice.

Limitations and Future Directions

The present research included the use of implicit measures because it is possible that self-presentation concerns could affect individuals’ reporting of past violent victimization experience and level at which they characterize themselves with victims and victim stereotypes. That said, the studies in this dissertation still relied on participants’ reporting of past violent victimization experience for a number of analyses. It is possible, then, that some participants with past violent victimization experience did not report this. Further, while participants with violent victimization experience displayed stronger EVIs, the average EVI score among these participants was still rather low on the scale. For example, among those with violent victimization experience in Study 1 ($N = 37$), 73% had EVI scores less than the midpoint (3), designated as “Somewhat characteristic of me”, and 51% had EVI scores less than two. Among the entire Study 1 sample, 85% had EVI scores less than the midpoint. In Study 2, 89% of those with violent victimization experience ($N = 66$) had EVI scores below the midpoint, and 79% had scores below two. Among the entire Study 2 sample, 94% had EVI scores below the
midpoint. In Study 3, 83% of those with violent victimization experience \((N = 109)\) had EVI scores below the midpoint, and 67% had scores below two. Among the entire Study 3 sample, 88% had EVI scores below the midpoint. Nevertheless, to reduce potential self-presentation concerns, participants completed the study on a computer in a private room and were told that their answers would be confidential (cf. Nosek, 2002).

This dissertation research is the first known work to develop measures of IVI and IVSS for adults, and provide initial evidence for the unique relation between IVI and IVSS among adults who have experienced violent victimization(s). However, some questions remain regarding implicit self and identity processes among those who have experienced violent victimization. First, all studies included modified questions from the National Crime Victimization Survey, a well-known self-report questionnaire that assesses violent victimization experiences, but these questions did not distinguish between an initial violent victimization and revictimization. Similarly, Studies 1 and 4 were cross-sectional. Identifying the temporal order between violent victimization experience and EVI and IVI is important to understanding a violent victimization experience’s effect on strength of EVI and IVI (and on measurable consequences of EVI and IVI), as well the possible additive or multiplicative effect of multiple victimizations on EVI and IVI strength. To address this limitation, rigorous longitudinal research is necessary to measure IVI and IVSS, ideally before and immediately following an initial violent victimization experience, and then to follow participants over time to examine strength of EVI and IVI over time, as well as any victim identity-consistent behaviors.

Studies 2 and 3 included follow-up surveys, and participants were asked if they experienced violent victimization since their time in the lab. However, there were only
three participants who reported a violent victimization experience during the follow-up, so no further analyses could be conducted. Rather than examine (re)victimization at follow-up, exploratory analyses instead looked at routine activities and their relation to past violent victimization experience, EVI, and IVI. These analyses only examined correlations between routine activities and past violent victimization experience, EVI, and IVI. One potential issue with this analysis, and with drawing conclusions from these results, is that EVI and IVI were measured during participants’ time in the lab, but routine activities were measured at follow-up. Therefore, it is possible that participants’ routine activities changed from the time of study to time of follow-up.

To address the aforementioned issue, the routine activities measure was included in Study 4, so that participants would complete all measures of interest at the same time. Still, it may be difficult to examine the link between past violent victimization experience, EVI, IVI, and routine activities because routine activities might have changed among those who experienced violent victimization years ago. To address this issue, more specific questions asking participants about any changes in behavior following a violent victimization experience should be included in future research. Further, measuring behavior patterns before and after a violent victimization experience, and measuring EVI and IVI during these same time points, would be an even better approach to understand relations and causal links between past violent victimization experience, EVI, IVI, and routine activities.

While the routine activities analyses utilized principal components analysis, an alternative analysis to consider might be confirmatory factor analysis (CFA). In CFA, the researcher assigns items to factors; this has the benefit of testing specific hypotheses.
(versus exploring data reduction as in principal components; Kim & Mueller, 1978).
However, confirmatory factor analysis typically requires a larger sample size (over 200) and each factor must be comprised of a minimum of three items (Comrey & Lee, 1992; DeCoster, 1998; MacCallum, Widaman, Zhang, & Hong, 1999). In the earlier analyses in this dissertation, CFA would not have been appropriate given these criteria. Nevertheless, those who wish to test specific hypotheses regarding routine activities, past violent victimization experience, and EVI and/or IVI may consider CFA in future research.

Much research currently investigates single identities (e.g., ethnic-racial or gender), but the social world is increasingly diverse, and individuals have to navigate multiple identities at any given time. Correlation results demonstrated a relation between EVI and/or IVI and several demographic variables (depending on the study), including gender, age, race, and income. Further, while not included in this dissertation, the author has explored the interaction between implicit victim identity and gender identity on mental health, finding that men with violent victimization experience, and who displayed strong IVSS, reported greater state depression and anxiety (Sachs, Rivera, Saad, & Veysey, 2018). These data suggest that a promising line of research is to understand the conditions under which an implicit (or explicit) victim identity interacts with one or more other identities (e.g., other demographics, perpetrator/criminal) to shape important consequences.

Finally, violent victimization experience was only treated as a dichotomous measure. Future research would consider measuring victimization severity. It would be expected that those who have experienced more severe violent victimization would exhibit stronger IVI and EVI compared to those who have experienced less severe violent
victimization. One measure of victim severity is the General Victimization Index (GVI), but the GVI only sums responses to victimization-related questions (Titus, Dennis, White, Scott, & Funk, 2003). One alternative way to measure severity might be to assign weights to violent victimization type, violent victimization frequency, recency of violent victimization experience, amount of post-violent victimization trauma experience, and how worried one is about being revictimized (Titus, Dennis, White, Scott, & Funk, 2003). By examining what factors of violent victimization collectively strengthen EVI or IVI, researchers can better identify those at greatest risk of experiencing negative outcomes related to these identities.

**Policy and Practice Implications**

In an earlier chapter, some potential consequences of associating with a stigmatized group (i.e., victim) and its stereotypes were described, such as poor mental health (as tested and confirmed in the exploratory chapter). One possible way to mitigate these negative consequences is to make salient (either explicitly, implicitly, or both) the **positive** stereotypes of a group, in this case victims. Indeed, previous intervention research on age stereotypes has shown that detrimental behaviors and their consequences associated with older adults can be reversed following a positive age stereotype prime (for a review, see Levy & Banaji, 2002). Specifically, older persons (typically 50 years or older) primed with positive age stereotypes (e.g., confident, wise) increased their walking speed, will to live, control of handwriting, improved their memory (immediate, learned, delayed, and photo recall), and lowered their cardiovascular response to stress, when compared to older persons primed with negative stereotypes. It appears that priming positive stereotypes (e.g., astute) activates associated subtle behaviors (e.g., increased
walking speed) that have downstream consequences for relatively healthy and productive lives.

Introducing positive stereotypes associated with victims may therefore promote positive outcomes for victims. Pretest Studies A and B indicated that brave and calm are two positive victim stereotypes. If victimized individuals unknowingly present themselves in a way that makes them more vulnerable to revictimization (e.g., slower walking speed), then perhaps priming them with positive stereotypes such as brave will promote subtle but empowering behaviors (e.g., faster walking speed) that make them less of a potential target of violent victimization. This hypothesis is consistent with research showing that when individuals display open and expansive nonverbal behaviors (e.g., widespread limbs), they experience subjective feelings of power (Carney, Cuddy, & Yap, 2010). Furthermore, such behavioral displays and the power it potentially transmits may influence how others perceive and treat these individuals (e.g., this person commands respect and cannot be intimidated; Holland, Wolf, Looser, & Cuddy, 2017).

Another possible intervention, one that has been used with offenders, is the association with a more positive identity. Several studies demonstrate that the association between the self and a negatively valenced, or stigmatized, identity (e.g., criminal) can be assuaged by associating with another, more positive identity. As a result, behaviors related to the stigmatized identity are also mitigated. For example, Paternoster and Bushway (2009) and Sampson and Laub (2005) found that individuals with criminal experience, or a criminal identity, moved towards desistance by adopting new identities (e.g., employee, father). Further, Reissman (1989) and Park and colleagues (2009) found that women who have experienced sexual abuse and cancer patients, respectively,
consciously moved from associating with victim, to associating with survivor. Together, this research suggests that associating with a positive identity might provide those with violent victimization experience with a greater sense of self-worth, and might reduce risk of perceived vulnerability or revictimization.

Given the above, criminal justice (and other) policymakers should consider bolstering law enforcement training. Law enforcement officers have been criticized for inflicting a “second wound” (Karmen, 2016, p. 189) on victims through their actions (e.g., they may appear disinterested, unconcerned, or indifferent about the plight of victims, thereby reinforcing some of the negative stereotypes of victims). Training programs should be implemented that 1) inform law enforcement officers of the potential negative consequences of victim identity and 2) encourage these officers to use positive language when speaking with victims (e.g., consider referring to victims as survivors instead). In-line with this, jurisdictions that include victim advocates should also consider revising their training programs in accordance with the previous suggestions of using more positive language, and also should focus on positive relations between the victims and family, friends, and community members (to provide alternative sources of self-worth; see self-affirmation theory, Aronson, Cohen, & Nail, 1999; Sherman & Cohen, 2002; Sherman & Cohen, 2006; Steele, 1988). Further, it would be beneficial for those who experience violent victimization to be provided with free (or reduced rate) counseling services that can employ the suggested interventions (see above) to reduce the likelihood of depression and other negative outcomes related to EVI and/or IVI.

For decades, victims were often overlooked in the criminal justice system, but in recent years they have been rediscovered (Karmen, 2016). As such, there is arguably no
better time than the present to examine the effects of violent victimization. It is well understood that the consequences of violent victimization are rife, and this dissertation introduces a novel cognitive consequence – that individuals consciously and nonconsciously associate with victims following such an experience. As this research is in its infancy, it offers a prime opportunity for future researchers to examine the interaction between victim identity, and context and other social identities. Future research in this domain, coupled with changes to policy and practice, can potentially mitigate the individual and social costs of violent victimization, have positive effects on victims’ recovery, and reduce risk of revictimization.
References


726-736.


65522220&disposition=inline.


Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the


The second main theory of revictimization is the heterogeneity hypothesis, or flag account. The heterogeneity hypothesis posits that some third factor (e.g., sex, race, risk-taking, impulsiveness, size/physical vulnerability) explains the relation between an initial victimization and repeat victimization, and this factor(s) may differ between individuals (Lauritsen & Quinet, 1995). Lauritsen and Quinet (1995) find that both state dependence and heterogeneity explain the relation between initial and repeat victimization; however, they also recognize that there are unmeasured factors not included in their analyses that can contribute to this relation. Similarly, Wittebrood and Nieuwbeerta (2000) find some evidence for state dependence, but conclude that the relation between previous and repeat victimization is largely explained by heterogeneity in routine activities. Tseloni and Pease (2000) find some support for the heterogeneity hypothesis among people who have experienced personal victimization (as measured by the 1994 NCVS); however, they also conclude that there is unexplained heterogeneity in their model, suggesting that there are missing variables or factors in the relation between previous and repeat victimization (also see Finkelhor, Ormrod, Turner, & Holt, 2009 for additional support of the heterogeneity hypothesis).

In-line with the heterogeneity hypothesis, Shreck and colleagues (2006) suggested that individuals with low self-control are most vulnerable to repeat victimization. Specifically, individuals with low self-control engage in riskier activities that constantly increase their likelihood of being revictimized. Turanovic and Pratt (2014) examined the relation between self-control, routine activities, and repeat victimization, finding that individuals with low self-control do not change their (risky) routine activities following a victimization experience, thereby increasing their chances of repeat victimization. Further, risky activities fully mediated the relation between low self-control and repeat victimization.

Overall, there is some evidence supporting the heterogeneity hypothesis. However, factors of heterogeneity do not fully explain or predict revictimization, suggesting again that there are other unmeasured factors contributing to this relation. It may be possible that the state dependence factors proposed in this dissertation, explicit and implicit victim identity, are better at predicting revictimization (above and beyond that of heterogeneity factors), however this remains speculative as revictimization is not the focus of this dissertation.

Footnotes

1The second main theory of revictimization is the heterogeneity hypothesis, or flag account. The heterogeneity hypothesis posits that some third factor (e.g., sex, race, risk-taking, impulsiveness, size/physical vulnerability) explains the relation between an initial victimization and repeat victimization, and this factor(s) may differ between individuals (Lauritsen & Quinet, 1995). Lauritsen and Quinet (1995) find that both state dependence and heterogeneity explain the relation between initial and repeat victimization; however, they also recognize that there are unmeasured factors not included in their analyses that can contribute to this relation. Similarly, Wittebrood and Nieuwbeerta (2000) find some evidence for state dependence, but conclude that the relation between previous and repeat victimization is largely explained by heterogeneity in routine activities. Tseloni and Pease (2000) find some support for the heterogeneity hypothesis among people who have experienced personal victimization (as measured by the 1994 NCVS); however, they also conclude that there is unexplained heterogeneity in their model, suggesting that there are missing variables or factors in the relation between previous and repeat victimization (also see Finkelhor, Ormrod, Turner, & Holt, 2009 for additional support of the heterogeneity hypothesis).

In-line with the heterogeneity hypothesis, Shreck and colleagues (2006) suggested that individuals with low self-control are most vulnerable to repeat victimization. Specifically, individuals with low self-control engage in riskier activities that constantly increase their likelihood of being revictimized. Turanovic and Pratt (2014) examined the relation between self-control, routine activities, and repeat victimization, finding that individuals with low self-control do not change their (risky) routine activities following a victimization experience, thereby increasing their chances of repeat victimization. Further, risky activities fully mediated the relation between low self-control and repeat victimization.

Overall, there is some evidence supporting the heterogeneity hypothesis. However, factors of heterogeneity do not fully explain or predict revictimization, suggesting again that there are other unmeasured factors contributing to this relation. It may be possible that the state dependence factors proposed in this dissertation, explicit and implicit victim identity, are better at predicting revictimization (above and beyond that of heterogeneity factors), however this remains speculative as revictimization is not the focus of this dissertation.

2After identifying with a particular ingroup, we can then, by extension, identify outgroups. Outgroups do not share the same attribute(s) as our ingroups. Violent victimization was chosen for this research because the reference group (outgroup) to victim is most apparent in these acts: offender, or non-victim. This should make it easier for one to categorize him- or herself into the group, “victim.”

3The exact text of the NCVS Basic Screen Questionnaire (Bureau of Justice Statistics, 2008) reads: “(Other than the incidents already mentioned,) has anyone attacked or threatened you in any of these ways – (Exclude telephone threats) – (a) With any weapon, for instance a gun or knife – (b) With anything like a baseball bat, frying pan, scissors, or stick – (c) By something thrown, such as a rock or bottle – (d) Include any grabbing, punching, or choking, (e) Any rape, attempted rape, or other type of sexual attack – (f)
Any face to face threats – OR (g) Any attack or threat or use of force at all? Please mention even if you are not certain it was a crime.” This question was modified to remove the text in the parentheses, and also removed letters (f) and (g), as they did not represent violent victimization. The author instead replaced letter (f) with “None of the above.”

Although the theoretical interest of this dissertation (see Chapter 2) was based on the distinction between having any past violent victimization experience versus none, the violent victimization measure was also examined as a continuous variable, which was calculated as the sum of multiple violent victimizations. This variable was entered into similar analyses reported in the results section for Study 1 and the trends were similar.

Additional analyses were conducted using gender as a factor. For the ANOVA analyses, there were no significant gender differences among any of the main measures as a function of victimization for male participants, .00 < $F_s(1,30) < 1.45$, .239 < $p_s < .994$, and female participants, .65 < $F_s(1,67) < .76$, .390 < $p_s < .419$, with two exceptions. There was a marginally significant difference on EVI ($F(1, 67) = 3.57$, $p = .063$) and a statistically significant difference on EVSS ($F(1, 67) = 8.09$, $p = .006$) between females with ($M_{EVI} = 3.14$, $SD_{EVI} = 1.33$; $M_{EVSS} = 2.86$, $SD_{EVSS} = 1.44$) and without ($M_{EVI} = 2.54$, $SD_{EVI} = 1.12$; $M_{EVSS} = 1.94$, $SD_{EVSS} = 1.10$) past violent victimization experience. Neither of the nested regression models were significant among any of the main measures for male participants, .614 < $p_s < .747$ and female participants, .579 < $p_s < .819$. Finally, the author examined the moderating effect of gender on the relation between EVI and EVSS, and IVI and IVSS. The EVI and EVSS model was not statistically significant, $p = .105$; the IVI and IVSS model was marginally significant, $p = .060$.

Two additional platforms, Prolific Academic and CrowdFlower, were considered. Prolific Academic was rejected due to the high costs associated with the platform ($6.50 per participant plus a 30% service charge on each participant payment, for a one-hour long study). CrowdFlower was rejected as Peer and colleagues (2017) found that CrowdFlower participants, compared to MTurk and Prolific participants, were more likely to produce data of lower quality, fail attention-check measures, and could not reproduce effects that have been replicated on the other two platforms.

The low response rate to the follow-up surveys may be due to several factors: 1) the author followed up with students between 6 and 18 months after their time in the laboratory; 2) participants were provided no additional incentive for completing the follow-up; and 3) many participants provided their Rutgers e-mail address, which may have been deactivated if the student graduated prior to follow-up.
Appendix A

Pretest Vignettes and Questionnaires

Pretest Study A Vignettes

Vignette A

**Person A** was walking home from the local convenience store and stopped to tie his/her shoes. During this time person B approached **person A** and put a gun up to **person A**’s head. Person B demanded that **person A** hand over money. **Person A** gave person B his/her wallet and person B fled.

Vignette B

**Person A** was walking home from the local convenience store and stopped to tie his/her shoes. During this time person B approached **person A** and kicked **person A** in the stomach. Person B continued to kick and punch **person A** for approximately two minutes before fleeing.

Vignette C

**Gang A** was hanging out near the local convenience store. While they were talking, Gang B drove past **Gang A** and fired shots at **Gang A** members.

Vignette D

**Person A** was walking home from the local convenience store and stopped to tie his/her shoes. During this time person B approached **person A** and put a gun up to **person A**’s head. Person B demanded that **person A** step into the alley. **Person A** complied and, once in the alley, person B raped **person A**. Person B fled immediately after the rape.

Vignette E

**Spouse A** was laying in bed when Spouse B walked out of the shower and began yelling at **spouse A** about a trivial matter. Both spouses began yelling, and during this time spouse B slapped **spouse A** in the face.
Pretest Study A Questionnaires

Instructions: Read the paragraph below and then list words as described below. Please complete this first before continuing to the next page.

[vignette here]
*Please list five words that describe [victim] from what you read above. There are no right or wrong answers. Please try to answer as quickly as possible.*

[Victim] A is...

[Victim] A is...

[Victim] A is...

[Victim] A is...

[Victim] A is...
Background:

1) Please indicate the racial-ethnic group that best describes you (circle one letter):
   a. American Indian/Alaskan Native
   b. Asian or Pacific Islander
   c. Black, not of Hispanic origin
   d. Hispanic or Latino(a)
   e. White, not of Hispanic origin
   f. Multi-racial
   g. Another ethnicity not listed above: _________________

2) What is your gender or sex? (circle one letter)
   a. Male
   b. Female
   c. Other: _________________

3) What is your age? ______________

4) What is your major? __________________________________

5) What is your family annual income? (circle one letter)
   a. $0 - 10,000
   b. $10,001 - 20,000
   c. $20,001 - 30,000
   d. $30,001 - 40,000
   e. $40,001 - 50,000
   f. $50,001 - 60,000
   g. $60,001 - 70,000
   h. $70,001- $80,000
   i. $80,001- $90000
   j. $90,001- $100,000
   k. $100,001 or more

6) Has anyone ever attacked or threatened you in any of these ways (circle all that apply)
   (a) With any weapon, for instance, a gun or knife?
   (b) By something thrown, such as a rock or bottle?
   (c) With anything like a baseball bat, frying pan, scissors, or stick?
   (d) Include any grabbing, punching, or choking?
   (e) Any rape, attempted rape or other type of sexual attack?
   (f) Any face to face threats?
(g) Any attack or threat or use of force by anyone at all? Please circle even if you are not certain it was a crime.
(h) Does not apply

7) If you circled any of the responses above, please note how many times this has happened to you:
   (a) once
   (b) two to five times
   (c) five or more times
   (d) do not recall

8) If you circled any of the responses above, please note when this act occurred (circle all that apply):
   (a) Within the last 6 months
   (b) Within the last year
   (c) Over one year ago but less than five years ago
   (d) More than five years ago

9) On a scale of 0 to 4, 4 being extremely likely, to what extent do you consider yourself to be a victim of crime? Please select one number.

0                        1           2                            3                       4
Never a
Definitely a
Victim
Victim
Pretest Study B Questionnaires

The purpose of this survey is to pretest words for a future study. Please use the entire range of the scale below to rate how closely you think the words below BEST describe a victim of crime. There are no right or wrong answers. We are just interested in your personal beliefs and opinions. When you rate each word, please use your GUT REACTION and go as quickly as possible while trying to use the entire range of the scale in your ratings. Please skip any words that you are not familiar with.

<table>
<thead>
<tr>
<th>Definitely does NOT describe a victim of crime</th>
<th>Somewhat describes a victim of crime</th>
<th>Definitely describes a victim of crime</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. innocent</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2. compliant</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>3. abused</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>4. prey</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5. scared</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>6. unaware</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>7. helpless</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8. victim</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>9. average</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10. mad</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>11. week</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>12. survivor</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>13. calm</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>14. shocked</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>15. hurt</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>16. dead</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>17. tired</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>18. pushover</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>19. angry</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20. defenseless</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>21. young</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>22. quiet</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>23. scared</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>24. unlucky</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>25. loiterer</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>26. unfortunate</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>27. confused</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>28. scapegoat</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>29. passive</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>30. upset</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>31. nervous</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>32. stupid</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>33. submissive</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>34. injured</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>35. smart</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>36. casualty</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>37. traumatized</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>38. brave</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>39. assaulted</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>40. female</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>41. alone</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>42. sad</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>43. vulnerable</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>44. rival</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>45. afraid</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>46. naïve</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>47. cooperative</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>48. vengeful</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>49. victimized</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>50. violated</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
Please use the entire range of the scale below to rate the extent to which each word below is positive versus negative. There are no right or wrong answers. We are just interested in your personal beliefs and opinions. When you rate each word, please use your GUT REACTION and go as quickly as possible while trying to use the entire range of the scale in your ratings. Please skip any words that you are not familiar with.

<table>
<thead>
<tr>
<th>Very Negative</th>
<th>Neutral</th>
<th>Very Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. innocent</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>2. compliant</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>3. abused</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>4. prey</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>5. scared</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>6. unaware</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>7. helpless</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>8. victim</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>9. average</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>10. mad</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>11. weak</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>12. survivor</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>13. calm</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>14. shocked</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>15. hurt</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>16. dead</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>17. tired</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>18. pushover</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>19. angry</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>20. defenseless</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>21. young</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>22. quiet</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>23. scared</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>24. unlucky</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>25. loiterer</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>26. unfortunate</td>
<td>-3......-2......-1......0 ......1......2......3</td>
<td></td>
</tr>
<tr>
<td>27. confused</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>28. Scapegoat</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>29. passive</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>30. upset</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>31. nervous</td>
<td>-3......-2......-1......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>32. stupid</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>33. submissive</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>34. injured</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>35. smart</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>36. casualty</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>37. traumatized</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>38. brave</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>39. assaulted</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>40. female</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>41. alone</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>42. sad</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>43. vulnerable</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>44. rival</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>45. afraid</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>46. naive</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>47. cooperative</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>48. vengeful</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>49. victimized</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
<tr>
<td>50. violated</td>
<td>-3......-2......-1 ......0......1......2......3</td>
<td></td>
</tr>
</tbody>
</table>

*Same Background Questions as Pretest Study A*
Appendix B
Manipulation Check Materials

Victimization Experience Salience Condition

Instructions: Please read the following prompt. Take one minute to think, and then turn to the next page to complete the question.

Sometimes in life there are people who harm others. Think about the worst time in your life when YOU were seriously threatened physically or badly hurt physically by someone.

Please close your eyes and think about the worst time in your life when YOU were seriously threatened physically or badly hurt physically by someone.

Think for at least one minute, and then turn the page to proceed with the next question.
Please describe that worst time in your life when YOU were seriously threatened physically or badly hurt physically by someone.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Please describe your thoughts and feelings about that worst time in your life when YOU were seriously threatened physically or badly hurt physically by someone.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Instructions: Please read the following questions and select one of the scale responses. There are no right or wrong answers.

1. On a scale of 0 to 6, how much did you think about victims or victimization after reading and responding to the questions on the previous pages?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At All</td>
<td>Not</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Somewhat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Much</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. On a scale of 0 to 6, how much did you think about yourself after reading and responding to the questions on the previous pages?

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At All</td>
<td>Not</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Somewhat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Much</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you for completing this questionnaire.

If these questions have in any way upset you, please contact the Rutgers Counseling Center, (973) 353-5805.
Indirect Victimization Experience Salience Condition

Instructions: Please read the following prompt. Take one minute to think, and then turn to the next page to complete the question.

Sometimes in life there are people who harm others. Think about the worst time when a STRANGER on the news (or social media) was seriously threatened physically or badly hurt physically by someone.

Please close your eyes and think about the worst time when a STRANGER on the news (or social media) was seriously threatened physically or badly hurt physically by someone.

Think for at least one minute, and then turn the page to proceed with the next question.
Please describe when a STRANGER on the news (or social media) was seriously threatened physically or badly hurt physically by someone.
Please describe your thoughts and feelings about a STRANGER on the news (or social media) was seriously threatened physically or badly hurt physically by someone.
Instructions: Please read the following questions and select one of the scale responses. There are no right or wrong answers.

3. On a scale of 0 to 6, how much did you think about victims or victimization after reading and responding to the questions on the previous pages?

0   1   2   3   4   5   6
Not   Somewhat   Very
At All   Much

4. On a scale of 0 to 6, how much did you think about yourself after reading and responding to the questions on the previous pages?

0   1   2   3   4   5   6
Not   Somewhat   Very
At All   Much

Thank you for completing this questionnaire.

If these questions have in any way upset you, please contact the Rutgers Counseling Center, (973) 353-5805.