

THE CYCLE OF CRIME: EXAMINING THE RELATIONSHIP BETWEEN OFFENDING
AND VIOLENT VICTIMIZATION

by

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(Under the Direction of Jody Clay-Warner)

ABSTRACT

The current study examines the relationship between offending and violent victimization among a sample of African American young adults using data from the Family and Community Health Study (FACHS). I test contrasting predictions derived from three major criminological perspectives. I examine the general strain theory prediction that violent victimization causes offending, and also the argument that this relationship is mediated by anger and depression. I test the lifestyle-exposure theory and routine activity theory claim that offending causes violent victimization through association with criminal peers. Finally, I examine the prediction of self-control theory that self-control is the ultimate cause of both offending and violent victimization. I also examine how self-control influences these relationships. To test these predictions, I employ structural equation modeling in cross-sectional and longitudinal data, focusing on the influence of self-control and the mediating roles of anger, depression, and criminal peers. I also examine how self-control moderates the relationship between offending and violent victimization using multi-group analyses that examine individuals with high self-control and those with low self-control. Results indicate moderate support for the predictions of general strain theory and limited support for the predictions of lifestyle theories and self-control theory. Violent

victimization causes future offending, but little evidence suggests that these effects are mediated by negative emotions. Offending has a very weak influence on future violent victimization, but these effects are entirely mediated through criminal peers. Self-control does not influence future offending and only indirectly influences future violent victimization through criminal peers. As predicted, self-control moderates the influence of depression on offending. However, the effects of victimization on offending, anger on offending, offending on victimization, and criminal peers on victimization are not influenced by self-control.

INDEX WORDS: Offending; Violent victimization; General strain theory; Lifestyle-exposure theory; Routine activity theory; Self-control theory

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A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2013

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DEDICATION

To Harry Hugh Bunch and Samuel Durward Malone: you are missed.

ACKNOWLEDGEMENTS

There are many individuals to whom I am indebted, the first and foremost being my major professor, Jody Clay-Warner. She has provided invaluable assistance, support, and guidance during my time in graduate school. Jody is a selfless mentor who has contributed in countless ways to my development as a sociologist. I have been most fortunate to have her by my side, and I could not have done any of this without her. I would also like to express my gratitude to the other members of my committee, Tom McNulty and Ron Simons, for their guidance, critiques, and encouragement throughout every step of this project. I want to thank Amy Chasteen Miller, who sparked my interest in sociology so many years ago and helped me embark on my academic journey. Finally, I would like to thank my parents, Jerry Bunch and Susan Malone. Their incredible support over the years has brought me to where I am today.

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CHAPTER 1

INTRODUCTION

Criminal offending and criminal victimization are inexorably linked. Offending is associated with victimization, and victimization is associated with offending. A study using cross-sectional data from the National Longitudinal Study of Adolescent Health (Add Health) found that offenders were six times more likely than non-offenders to have experienced victimization and victims were four times more likely than non-victims to have engaged in offending (Shaffer and Ruback 2002). Despite this strong link, only recently have researchers turned their attention to the relationship between offending and victimization. Several major criminological theories offer either explicit or implicit predictions regarding the nature of the victimization-offending relationship. These theories provide us with very different views of this relationship, however, proposing different causal ordering between victimization and offending and offering different mediating mechanisms. In this dissertation, I examine the nature of the relationship between offending and violent victimization among a sample of African American young adults.

It is imperative to understand how offending and victimization are linked. The answers to this question have great bearing on our theoretical understanding of crime. Because offending and victimization are so tightly interwoven, it is impossible to understand either without understanding the interplay between the two. This issue also has practical implications. We cannot hope to reduce offending or prevent victimization if we only comprehend each

phenomenon in isolation. This dissertation is important because it contributes to our growing knowledge of the relationship between offending and victimization.

I examine the victim-offender overlap using the Family and Community Health Study (FACHS). I employ structural equation modeling to examine the relationship between offending and violent victimization among African American young adults. I test arguments drawn from general strain theory, lifestyle theories, and self-control theory. I examine these relationships cross-sectionally and across time. Modeling the relationship between offending and victimization in this manner provides a more in-depth understanding of the nature of the offending-victimization link, which sheds light on the validity of our theories of crime and victimization. I also examine how self-control shapes the relationship between offending and victimization, expanding our knowledge of the role self-control has to play within general strain theory and lifestyle theories.

In the next chapter, I discuss empirical literature on the relationship between offending and victimization. In Chapter 3, I present the theoretical framework of my research and my predictions. I discuss the data and measures used in this dissertation in Chapter 4. In Chapter 5, I present a cross-sectional examination of the relationship between offending and violent victimization. Chapter 6 involves an examination of the offending-victimization relationship using longitudinal data. In Chapter 7, I examine how self-control conditions the relationship between victimization and offending. Finally, in Chapter 8, I discuss the broad conclusions and implications of this body of research.

CHAPTER 2

LITERATURE REVIEW

There is a strong connection between offending and victimization, but the exact nature of this relationship remains somewhat unclear. In this chapter, I discuss the research examining the broad relationship between offending and victimization. This literature not only shows that offending and victimization are associated with one another, but that offending leads to subsequent victimization and victimization leads to subsequent offending. Then, I move to the research examining the role theoretical factors play in the relationship between offending and victimization.

Offending and Victimization

Offending and victimization are strongly linked. Numerous studies show that offending—including violent crime, property crime, and substance use—is associated with victimization—including violent victimization and property victimization (e.g., Fisher, Sloan, Cullen, and Lu 1998; Lauritsen, Sampson, and Laub 1991; Shaffer and Ruback 2002). Shaffer and Ruback (2002) examined the victim-offender overlap in violent crime using data from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study of juveniles ages 11-17. They found that, over the course of one year, 23% of the sample reported engaging in violent crime but not experiencing victimization, 15% reported being violently victimized but not committing any violent offenses, and 10% reported both violent offending and violent victimization. During this 12-month time period, individuals who committed violent offenses were six times more likely than non-offenders to be victimized by

violent crime. During the same year, the researchers found that individuals who were violently victimized were four times more likely than non-victims to engage in violent crime. Lauritsen, Sampson, and Laub (1991) used five waves of the National Youth Survey (NYS) to examine the relationship between offending and victimization. The authors used an offending scale that included violent and property offenses, and they examined several types of victimization, including assault, robbery, larceny, and vandalism. Ultimately, Lauritsen and colleagues found that engaging in crime was associated with a heightened risk of victimization within the same wave. This pattern was found in all 4 waves for assault, robbery, and larceny victimization; for vandalism victimization, offending was associated with victimization in three of the four waves. Fisher, Sloan, Cullen, and Lu (1998) found that drug use is related to violent victimization. The researchers examined the risk factors associated with victimization among college students and found that students who regularly used illegal drugs were also more likely to experience violent victimization. Together, these findings point to an overlap between offenders and victims; however, they are unclear as to the direction of this relationship.

Many longitudinal studies have shown that criminal behavior increases the risk of future victimization (e.g., Dobrin and Brusk 2003; Martino, Collins, and Ellickson 2004; Lauritsen et al. 1991; Shaffer and Ruback 2002). In their previously discussed study using the NYS, Lauritsen and colleagues (1991) found that, when controlling for previous victimization and current offending, previous criminal behavior increased the risk of assault and robbery in one wave. However, this pattern was not consistent: previous offending did not increase the risk of robbery or assault in the three other waves, and offending was not related to property victimization in any of the waves. Martino, Collins, and Ellickson (2004) examined how substance use influenced the risk of subsequent violent victimization among 20 year olds.

Individuals who used marijuana in their early twenties faced a heightened risk of sexual victimization in their late twenties. Similarly, women who engaged in heavy alcohol use faced a heightened risk of subsequent assault, while men who used marijuana increased their risk of future assault. Shaffer and Ruback (2002) examined the influence of violent offending on subsequent violent victimization among juveniles in the Add Health data. The authors found that adolescents who committed violent crime were almost twice as likely to be violently victimized in the coming year, controlling for a number of risk factors. Dobrin and Brusik (2003) examined the influence of offending on homicide victimization by matching homicide victims in Maryland to a control group. The authors found that murder victims were 10 times more likely than the non-victimized controls to have been previously arrested.

Similarly, longitudinal research has demonstrated that experiencing victimization increases the risk of future offending (Fagan 2005; Resnick, Ireland, and Borowsky 2004; Shaffer and Ruback 2002). For example, Shaffer and Ruback (2002) examined the relationship between violent victimization and violent offending using the Add Health data. Controlling for the effects of gender, race, age, household characteristics, level of drug/alcohol use, level of physical development, and previous violent offending, the authors found that individuals who suffered violent victimization were more than twice as likely to engage in violent offending in the next year. In another study using Add Health to examine the influence of victimization on offending, Resnick and colleagues (2004) found that violent victimization increased subsequent violent offending among both males and females, controlling for a wide array of community- and personal-level risk and protective factors. Fagan (2005) examined the influence of adolescent physical abuse on subsequent offending using the NYS. She focused on several offending outcomes, including general offending (a wide range of serious and minor violent, property, and

public order offenses), index offending (serious violent and property crimes, such as aggravated assault, sexual assault, motor vehicle theft, and robbery), drug use, minor intimate partner violence, and serious intimate partner violence. Fagan found that physical abuse during teenage years increased each type of offending later in life. For some offenses, teenage abuse increased offending during the early twenties, while for others it increased offending during the late twenties to early thirties; in many cases, abuse increased offending at both these stages in life.

Some research suggests that a reciprocal relationship exists between offending and victimization (e.g., Lauritsen et al. 1991). Lauritsen, Sampson, and Laub (1991) utilized five waves of the National Youth Survey (NYS) to examine the relationship between delinquency and victimization. Using measures of delinquency and offending that included both violent and property offenses, the authors found that delinquency increased victimization, while at the same time, victimization increased delinquency.

Finally, though the link between offending and victimization is well-established in the literature, it should be noted that a recent study suggests that the relationship may be misunderstood (Ousey, Wilcox, and Fisher 2011). The authors used a latent variable fixed effects approach to examine the relationship between offending and victimization (measures that included both violent and property crimes). The researchers used the Rural Substance Abuse and Violence Project (RSVP), which is a study of students in Kentucky. Using structural equation modeling, the authors examined recursive and reciprocal effects and found evidence for both positive effects of victimization on offending and offending on victimization. They also documented positive reciprocal effects, though the reciprocal effects did little to improve the overall fit of the model. Next, the researchers controlled for time-stable individual differences using latent fixed effects. When controlling for this unmeasured population heterogeneity, the

authors found that these relationships changed directions, becoming negative. Though the strength of these negative relationships were somewhat reduced when the authors included several time-varying covariates hypothesized to explain the relationship between victimization and offending (impulsivity, maternal bonds, school bonds, illicit opportunities, delinquent friends, and gang membership), the significant negative recursive and reciprocal relationships between offending and victimization persisted.

The Offending-Victimization Relationship and Theoretical Predictors

Several studies have tried to examine the etiology underlying the relationship between offending and victimization by incorporating theoretical factors (e.g., Hay and Evans 2006; Maldonado-Molina, Jennings, Tobler, Piquero, and Canino 2010; Schreck, Stewart, and Fisher 2006). These studies have modeled the interplay between offending, victimization, and various factors drawn from criminological theory, such as negative emotions (e.g., Hay and Evans 2006), self-control (e.g., Hay and Evans 2006; Schreck et al. 2006), parenting (Maldonado-Molina et al. 2010) and delinquent peers (e.g., Maldonado-Molina et al. 2010; Schreck et al. 2006).

Maldonado-Molina and colleagues (2010) used structural equation modeling to examine factors influencing trajectories of offending and victimization among Hispanic youth. The researchers used the Boricua Youth Study (BYS), a longitudinal study of Puerto Rican children living in Bronx, New York. The youths, initially ages 5 to 13, were followed in three waves over four years. The authors focused on 1,138 of these youth in their study.

First, Maldonado-Molina and colleagues (2010) examined the extent of the overlap between offenders and victims across the three waves. Their measure of self-reported delinquency included a variety of violent, property, and drug offenses. Victimization focused on experiences with violent victimization and included both direct victimization (i.e., the respondent

was victimized) and indirect victimization (i.e., the respondent either witnessed or heard about the incident). In all three waves, the authors found that many individuals were non-offending non-victims. Most offenders were victims, as well; however, a large number of victims were not also offenders. The number of offender-victims within a particular wave decreased over time; yet, the researchers found that a small group of respondents were offender-victims across all three waves (around 4% of the sample).

Next, Maldonado-Molina et al. (2010) used structural equation modeling to examine how a number of factors—including individual characteristics (gender, age, sensation-seeking, and cultural stress), parenting (coercive discipline), peers (peer delinquency and the quality of peer relationships), and school environment—influenced the trajectories of offending and victimization. The authors first calculated latent growth models for offending and victimization, then examined how these various factors affected initial levels and growth of offending and victimization over three waves. Ultimately, the authors found that a number of factors influenced baseline offending and victimization and growth in victimization; however, none affected growth in offending. Males had higher initial levels of offending and victimization. Age increased baseline victimization. Sensation-seeking increased initial offending and victimization. Coercive discipline, peer delinquency, and negative school environment increased initial offending and victimization but decreased growth in victimization. Positive peer relationships decreased initial offending, while they increased initial victimization and decreased growth in victimization. Cultural stress increased baseline victimization but decreased growth in victimization. Taking all these relationships into account, the associations between initial offending and victimization and between growth in offending and victimization were both strong and positive, suggesting that these factors do not explain all of the offender-victim overlap.

Some research has examined the role of negative emotions in the influence of victimization on offending and how self-control moderates these effects (e.g., Hay and Evans 2006). Hay and Evans used data from the National Survey of Children (NSC), a nationally representative longitudinal study of children and their families, to examine general strain theory explanations of the relationship between victimization and offending. The researchers used two waves of the NSC data: the children were ages 7 to 11 in the first time period and 12 to 16 years old in the second time period. Hay and Evans used three measures of offending: substance use, violent and property delinquency, and general delinquency, which combined substance use and violent/property offending. First, the authors used OLS to examine the effects of victimization at wave 1 on general delinquency at wave 1, controlling for several factors (age, race, sex, and family income). They found that victimization had a strong influence on offending. However, they also examined the effects of victimization at wave 1 on offending at wave 2, while controlling for the demographic factors and wave 1 delinquency. In these models, victimization significantly increased each type of offending: substance use, violent/property, and general delinquency, though the effects were not as strong as in the previous model. The authors also examined how self-control conditioned the relationships they had observed. They included an interaction between victimization and self-control in their models. This interaction term was significant for substance use and general delinquency. They found that victimization caused a greater increase in both substance use and general delinquency for children with low self-control. These moderating effects were stronger for substance use than for general delinquency. The interaction between victimization and self-control was not significant in the model examining violent-property offending.

Schreck, Stewart, and Fisher (2006) examined the role of self-control and deviant peers in the relationship between offending and victimization. The researchers analyzed longitudinal data from the Gang Resistance Education and Training (GREAT) project. Their study focused on 1,510 youth from schools in six cities: Philadelphia, Portland, Phoenix, Omaha, Lincoln, and Las Cruces. They used three waves of data, starting when the respondents were 12 years old and following them every year until they were age 14. In the final analyses of the study, the authors used structural equation modeling to examine how self-control moderates the influence of victimization (violent/property) on offending (violent/property/substance use), the influence of offending on victimization, and the role of deviant peers in these relationships. The model had paths from victimization at wave 1 to delinquent peers at wave 2, delinquency at wave 2, and victimization at wave 3, and paths from delinquency at wave 2 and delinquent peers at wave 2 to victimization at wave 3. The researchers divided their sample into groups: a low self-control group (scoring below the 25th percentile) and a high self-control group (those scoring above the 75th percentile). For the low self-control group, the paths from initial victimization to delinquent peers, delinquency, and future victimization were all positive and significant. However, for the high self-control group, only the paths from initial victimization to delinquent peers and future victimization were significant. Additionally, the magnitude of the positive effect of victimization on association with delinquent peers was 38% lower for individuals with high self-control. These results suggest that: victimization caused delinquency only for individuals with low self-control, the relationship between victimization and associating with delinquent peers was stronger for individuals with low self-control, and association with delinquent peers led to victimization only for individuals possessing low self-control. However, this study suffered from some fundamental flaws. Prior delinquency and prior association with delinquent peers

were not included in any of the models. Because these two factors were not controlled, the observed relationships between victimization and both offending and delinquent peers could have been spurious. There was no reason to assume that victimization at time 1 and delinquency at time 2 were not merely the result of delinquency at time 1; the same issue applied to victimization at time 1 and delinquent peers at time 1, which could both have been the result of delinquent peers at time 1. Finally, the authors did not test for the significance of the differences across the low self-control model and the high self-control model. Therefore, the differences seen between these two groups may not have actually existed. Unfortunately, these shortcomings call into question the findings of this study.

In this dissertation, I examine the nature of the relationship between offending and violent victimization among African American young adults using the Family and Community Health Study (FACHS). I focus on how offending and violent victimization are connected. Many criminological theories offer explanations of this relationship, and I test these theoretical predictions using structural equation modeling. Though some previous studies have examined some of these possibilities, none have tested them all together, which is necessary to determine the relative merits of these explanations. This ultimately gives us a better understanding of these major criminological theories. Unlike previous research, I also examine the degree to which these explanations are generally applicable or contingent upon self-control. In the next chapter, I outline the theoretical framework for this dissertation. I discuss the explanations provided by different criminological theories regarding the offending-victimization link, and I detail the hypotheses I derive from these theories.

CHAPTER 3

THEORETICAL FRAMEWORK

Criminological theories offer competing depictions of the link between offending and victimization. These theories present three distinct possibilities: victimization causes offending, offending causes victimization, or both offending and victimization are caused by a third factor. In this chapter, I discuss each of these explanations in turn and offer hypotheses derived from theory. In the final section, I extend theory to examine how self-control may moderate the relationship between offending and victimization.

Victimization Causes Offending: General Strain Theory

According to general strain theory, victimization causes offending. General strain theory (Agnew 1992, 2006) explains why certain people engage in criminal behavior. Agnew claimed that individuals commit crime as a way to relieve psychological strain. People experience three broad categories of strains: (1) losing something valued, (2) being exposed to something unpleasant, and (3) failing to achieve valued goals. Strain causes an individual to experience negative emotions, such as anger, depression, or fear. According to the theory, if people experience strain and lack alternative coping mechanisms, then they may resort to crime in order to relieve their negative emotions. Agnew (2001) asserted that certain types of strain are more likely to lead to criminal behavior. In particular, he stated that most criminogenic strains are those that are perceived as unjust, strains that are high in magnitude, strains that are caused by or associated with low social control, and strains that create a pressure/incentive to engage in criminal coping behaviors.

General strain theory offers a clear explanation of the link between offending and victimization: victimization causes offending. Victimization causes strain, and then that strain causes offending. In fact, Agnew (2001, 2002) recently argued that victimization is one of the most consequential sources of strain. Criminal victimization possesses the characteristics of strains most likely to lead to crime (Agnew 2001). Victims are likely to perceive themselves as having been treated unfairly, viewing the perpetrator's actions as unjustified. Victimization, particularly violent victimization, is generally very high in magnitude: it is an incredibly noxious experience likely to produce severe strain. Victimization is also more likely to take place in situations characterized by low levels of social control. Finally, victimization can create pressure to engage in criminal coping, perhaps by providing a justification for delinquent behavior or because it is associated with the social learning of crime.

Several studies examining general strain theory demonstrate that victimization leads to various forms of offending (Agnew 2002; Brezina 1998; Hay and Evans 2006; Lin, Cochran, and Mieczkowski 2011). Brezina (1998) utilized two waves of the Youth in Transition survey (YIT), a national study of male public high school students, and found that adolescent maltreatment by parents (including physical and verbal abuse) causes delinquency, and these effects work through a variety of mechanisms, including anger. Using panel data from the National Survey of Children (NSC), Hay and Evans (2006) found that violent victimization leads to future substance use and violent/property offending. Agnew (2002) looked at the relationship between victimization and offending using a nationally representative sample of male high school students. He found that, controlling for prior delinquency, violent victimization increases delinquency. Lin and colleagues (2011) examined nationally representative cross-sectional data from the National Survey of Adolescents (NSA) and found that violent victimization increases

both violent/property crime and drug use. In addition to direct victimization, research suggests that vicarious victimization (e.g., the victimization of friends or family) can also lead to offending (Agnew 2002; Lin et al. 2011).

Hypothesis 1A: Violent victimization causes offending.

General strain theory posits that the effects of victimization on offending are mediated through negative emotions, such as anger, depression, or fear (Agnew 2006). Of these negative emotions, anger has received the most attention in the general strain literature. Research in this area suggests that anger mediates the effects of violent victimization on offending (Brezina 1998; Hay and Evans 2006). Using the NSC, Hay and Evans (2006) demonstrated that anger played a role in linking violent victimization with future delinquency. The authors found that anger partially mediated the effects of victimization on violent/property crime and fully mediated the effects of victimization on substance use and a combined measure of general delinquency. In his examination of the YIT data, Brezina (1998) found that adolescent maltreatment caused anger, which, in turn, caused delinquency. Therefore, the second general strain hypothesis:

Hypothesis 1B: Anger mediates the effects of violent victimization on offending.

Compared to anger, depression has not received as much attention among scholars examining general strain theory. Manasse and Ganem (2009) used two waves of National Youth Survey (NYS) data to examine the relationship between victimization, depression, and delinquency. The authors found that victimization caused individuals to experience depression and that depression and victimization were both related to delinquency (a scale that included serious and minor delinquent acts). This relationship between victimization was strongest for depressed males.

Examinations of the general strain predictions concerning the mediating effects of depression are somewhat equivocal (e.g., Lin et al. 2011). In their study using cross-sectional NSA data, Lin and colleagues (2011) examined the links between direct and vicarious victimization, depression, and offending. The researchers found that both direct and indirect victimization increased depression. However, depression was unrelated to violent/property offending in models examining direct victimization, and it was only marginally related to drug use when looking at direct victimization. When examining vicarious victimization, they did find that depression was related to drug use, and they found an indirect effect from victimization on drug use through depression. Though the possibility has not been examined much in the literature, general strain theory argues that depression is a mechanism connecting victimization and offending. This leads to the third general strain hypothesis:

Hypothesis 1C: Depression mediates the effects of violent victimization on offending.

Next, I discuss the lifestyle perspective on the relationship between offending and victimization.

Offending Causes Victimization: Lifestyle Theories

In contrast to general strain theory, the lifestyle theories argue that offending causes victimization. The lifestyle theories, lifestyle-exposure theory (Hindelang, Gottfredson, and Garofalo 1978) and routine activity theory (Cohen and Felson 1979), are the dominant theories of victimization. At their core, both theories assert that an individual's lifestyle influences his risk of victimization. Because the theories rest on such similar assumptions, many researchers treat them as a singular perspective.

Hindelang and colleagues (1978) developed lifestyle-exposure theory to explain why certain types of people are more likely to be victimized by crime. According to the theory, certain demographic characteristics are associated with specific role expectations and structural

constraints, which, in turn, lead people to adopt certain lifestyles. These lifestyles involve daily vocational and recreational activities. An individual's activities influence the degree to which the individual is exposed to crime; ultimately, exposure to crime causes victimization. Similarly, routine activity theory (Cohen and Felson 1979) claims that people's daily activities affect their risk of victimization. The theory focuses on the situational characteristics of the criminal event. According to the theory, in order for a crime to occur, three necessary elements must converge in space and time: (1) motivated offenders (2) suitable targets, and (3) absence of capable guardians against a violation. An individual's daily activities—such going to a bar or riding the subway—can affect the degree to which he or his property is a suitable target for victimization and whether either possesses capable guardians. Research is generally supportive of the lifestyle theories. Patterns of routine activities predict violent victimization (Bunch, Clay-Warner, and Lei forthcoming; Kennedy and Forde 1990; Pizarro, Corsaro, and Yu 2007) and property victimization (Bunch et al. forthcoming; Kennedy and Forde 1990; Mustaine and Tewksbury 1998; Pratt, Holtfreter, and Reisig 2010).

Lifestyle theories offer an alternative explanation for the link between offending and victimization: offending causes victimization. People who engage in crime spend time in very risky situations where they are exposed to victimization. Hindelang and colleagues (1978) observed that offenders and victims tend to possess similar demographic characteristics; therefore, they assumed that their lifestyles probably brought them into frequent contact with one another. Hindelang et al. believed that one of the strongest predictors of victimization would be offending, since criminals would tend to associate with each other, thus greatly increasing their exposure to victimization. Similarly, routine activity theory predicts that a lifestyle involving criminal offending would greatly increase one's risk for criminal victimization. Many criminal

acts are committed with other people, so engaging in these activities would place one in frequent contact with motivated offenders in the absence of capable guardians, thereby making oneself an attractive target.

Research has consistently supported the assertion of lifestyle theories that involvement in a criminal lifestyle increases the risk of victimization. Violent and property crime are associated with victimization (Lauritsen, Sampson, and Laub 1991; Loeber, Kalb, and Huizinga 2001; Shaffer and Ruback 2002). Shaffer and Ruback (2002) examined multiple waves of data from the National Longitudinal Study of Adolescent Health (Add Health) and found that teenagers who engaged in violent offending were almost twice as likely as non-offenders to experience violent victimization in the following 12 months. Lauritsen et al. (1991) examined the effects of offending on victimization using several waves of the NYS. The researchers found that a delinquent lifestyle—engaging in violent and property crime—was associated with an increased risk of assault, robbery, larceny, and vandalism victimization. However, Lauritsen and colleagues found that previous offending only sometimes led to an increased risk of future victimization. Similarly, in a study using data from the Denver Youth Survey (DYS) and the Pittsburg Youth Study (PYS), Loeber, Kalb, and Huizinga (2001) found that a variety of criminal behaviors—participating in gang fights, weapon-carrying, committing serious assault, and selling drugs—were associated with a heightened risk of violent victimization resulting in serious injury among both samples of youths.

Drug use also increases the risk of victimization (Fisher, Sloan, Cullen, and Lu 1998; Martino, Collins, and Ellickson 2004). Using panel data, Martino et al. (2004) found that marijuana use increased the risk of assault for men and the risk of sexual victimization for both men and women, while heavy alcohol use increased the risk of assault among women. In a

cross-sectional study of college students, Fisher and colleagues (1998) found that individuals who reported higher likelihoods of regularly taking recreational drugs also experienced a heightened risk of violent victimization.

Some research has linked offending to increased risk of homicide victimization, as well (Broidy, Daday, Crandall, Sklar, and Jost 2006; Dobrin and Brusk 2003; Wolfgang 1958). In his study of homicide in Philadelphia, Wolfgang (1958) found that both homicide victims and homicide offenders frequently had arrest records, and that victim-precipitation was a common pattern in the homicides examined. In a more recent example, Dobrin and Brusk (2003) used data drawn from Prince George's County, Maryland to compare homicide victims to a control group and found that victims were 10 times more likely to have a history of arrest compared to non-victims. Similarly, using data on homicide victims and offenders in New Mexico, Broidy and colleagues (2006) found that half of the victims in their study had histories of arrest.

Hypothesis 2A: Offending causes violent victimization.

Research also highlights the importance of delinquent peers as a risk factor for violent victimization (Loeber et al. 2001; Schreck, Fisher, and Miller 2004; Schreck, Stewart, and Fisher 2006; Schreck, Wright, and Miller 2002; Taylor, Peterson, Esbensen, and Freng 2007; Turanovic and Pratt forthcoming-b). In a cross-sectional study of Arkansas high school students, Schreck and colleagues (2002) found that association with delinquent peers—measured as a self-report of how many of the individual's friends had been arrested—increased the risk of violent victimization, both directly and through an increase in risky activities (spending time driving around with friends and going out at night looking for someone to hang out with). In their study examining the DYS and the PYS, Loeber and colleagues (2001) found evidence in both samples that having delinquent peers increased the risk of violent victimization resulting in serious injury.

Using panel data from the Gang Resistance Education and Training program (GREAT), Schreck, Stewart, and Fisher (2006) found that having delinquent peers (friends who engaged in violent crime and property crime) increased the risk of violent victimization.

In another study examining the GREAT data, Taylor and colleagues (2007) found that association with delinquent friends was one of the few protective or risk factors under examination that influenced the rate of serious violent victimization among youth. Also using several waves of GREAT, Turanovic and Pratt (forthcoming-b) found that changes (or lack thereof) in association with violent friends following violent victimization influenced the risk of repeat victimization. Finally, Schreck, Fisher, and Miller (2004) used Add Health data to examine how the structure of a student's peer network influenced the risk of violent victimization. Peer delinquency increased the risk of victimization, but the authors found more pronounced moderating effects between peer delinquency and peer network characteristics (centrality, density, and popularity). Ultimately, the authors found that youths who were central and popular members of dense conventional peers networks experienced low levels of violent victimization, while adolescents who were central and popular members of delinquent peer groups experienced higher levels of victimization.

Lifestyle theories argue that offending increases the risk of victimization because it involves exposure to criminals, and the evidence demonstrates that delinquent friends increase one's risk of victimization. Therefore, the second lifestyle theories hypothesis:

Hypothesis 2B: Criminal peers mediate the effects of offending on violent victimization.

Though a few studies examining predictions of lifestyle theories have used criminal peers as a mechanism linking violent victimization with repeat victimization (Schreck et al. 2006; Turanovic and Pratt forthcoming-b), to my knowledge, this is the first examination of criminal

peers as a theoretical mechanism linking offending with violent victimization. In the next section, I discuss the predictions of self-control theory.

The Offending-Victimization Link Is Spurious: Self-Control Theory

General strain theory claims that victimization causes offending, while lifestyle theories claim that offending causes victimization. However, these are not the only two possible predictions posited by criminological theories. Self-control theory argues that the relationship between offending and victimization is spurious because both are the result of low self-control.

Gottfredson and Hirschi's (1990) self-control theory claims that low self-control is the root cause of offending. Individuals with low self-control are impulsive, risk-taking, insensitive, and short-sighted, while individuals with high self-control are cautious, diligent, cognitive, and delay gratification. When presented with the opportunity, individuals lacking self-control engage in crime (or analogous risky behaviors, such as drinking, driving fast, engaging in unprotected sex, etc.) because they lack the internal restraints possessed by properly socialized individuals. Individuals who possess self-control are able to see the long term negative consequences of criminal behavior and therefore choose not to engage in crime; however, individuals with low self-control impulsively go for the immediate thrill, while ignoring any future costs associated with their decisions.

Research demonstrates that low self-control is related to offending (e.g., Meldrum, Young, and Weerman 2009; Piquero, MacDonald, Dobrin, Daigle, and Cullen 2005; Pratt and Cullen 2000). In their landmark meta-analysis, Pratt and Cullen (2000) found that self-control was one of the strongest predictors of crime. Similarly, Meldrum and colleagues (2009) found that self-control was the strongest predictor of criminal behavior among their sample of Dutch adolescents. Piquero and colleagues (2005) examined California parolees and found that low

self-control increases the likelihood that a released offender was rearrested within five years for committing violent crime. Thus, the first self-control theory hypothesis is as follows:

Hypothesis 3A: Low self-control causes offending.

Though self-control theory was developed as a theory of offending, it has more recently been expanded to victimization, as well. Schreck (1999) used the underlying logic and implicit arguments of self-control theory and explicated how this theory can explain victimization. He took the elements of self-control—future orientation, empathy, tolerance for frustration, diligence, preference for cognitive activities, and risk avoidance—and discussed how individuals lacking these characteristics possess a higher risk of victimization. According to Schreck’s logic: present-oriented individuals are unable to see the long term consequences of their actions; people lacking empathy might have difficulty judging the intent of others (thus being vulnerable to offenders); individuals with short tempers are likely to anger others with their behavior; people who lack diligence are unlikely to take precautions against victimization; physically-oriented individuals are more likely to take actions that escalate hostile situations; and people who engage in risky behaviors are much more likely to put themselves in dangerous situations (1999:635-37). Clearly, each of these attributes would greatly increase an individual’s risk of victimization. In his study, Schreck found that low-self-control increased victimization even when controlling for criminal involvement.

Other research further supports the claim that low-self-control is related to victimization (Piquero et al. 2005; Schreck 1999; Schreck et al. 2006; Schreck et al. 2002; Stewart, Elifson, and Sterk 2004; Turanovic and Pratt forthcoming-b). Using cross-sectional data gathered from Arkansas high school students, Schreck and colleagues (2002) found that low self-control increases violent victimization; in addition, self-control influences other risk factors for violent

victimization, such as association with delinquent peers, though the authors found no significant indirect effects. Stewart, Elifson, and Sterk (2004) examined the influence of self-control on violent victimization among drug-using female offenders in Atlanta. Examining cross-sectional data, the authors found that, when controlling for the effects of violent offending, property offending, and risk lifestyles (public drug use, drug-dealing, public alcohol abuse, prostitution, and associating with drug-using or drug-dealing friends), low self-control was associated with a heightened risk of violent victimization. In a study of California parolees, Piquero and colleagues (2005) found that low self-control increases the likelihood that a parolee would become a homicide victim within five years of his release. Using several waves of the GREAT data, Turanovic and Pratt (forthcoming-b) found that self-control indirectly influenced repeat violent victimization through risky lifestyles. The authors found that self-control was the strongest predictor of whether a victim made changes to his or her risky lifestyle following victimization (including risky socializing, substance use, engaging in violence, and associating with violent friends), and, in turn, these lifestyle changes influenced the risk of repeat victimization. Based on Schreck's (1999) expansion of self-control theory to victimization and the research supporting his claims, the second self-control theory hypothesis:

Hypothesis 3B: Low self-control causes violent victimization.

In the next section, I discuss a possible role self-control may play in the relationship between offending and victimization that goes beyond Gottfredson and Hirschi's (1990) statement of self-control theory. I examine the possibility that self-control moderates the relationships discussed in general strain theory and lifestyle theories.

The Conditioning Effects of Self-Control

Self-control is a characteristic that may condition the effects of many of the factors involved in the relationship between offending and victimization. Yet, this argument contradicts some of the claims put forth in self-control theory. In this section, I discuss the theory and research that suggests self-control is an important moderating factor in the relationship between offending and victimization.

Gottfredson and Hirschi's (1990) central claims should be somewhat reigned in. Evidence suggests that self-control is not the only cause of offending (e.g., Pratt and Cullen 2000) and victimization (e.g., Schreck et al. 2006; Schreck et al. 2002; Stewart et al. 2004). It is an important cause of offending and victimization, but other factors play a role, too. Therefore, it is possible that self-control moderates the effects of other influences of offending and victimization. This is moving beyond the arguments of self-control theory as depicted by Gottfredson and Hirschi (1990), but theory and research suggest the validity of this approach. In the following sections, I discuss how self-control may condition the relationships associated with the general strain and lifestyle explanations of the link between offending and victimization.

General Strain Theory and Self-Control. According to general strain theory, the effects of strain on delinquency are conditioned by a number of personal traits and social factors (Agnew 2006). Depending on these factors, some individuals possess more coping resources than others, enabling them to deal with strain in non-delinquent ways. Agnew (2002) discussed self-control as a factor that conditions the effects of strain. General strain theory argues that individuals with low self-control are more likely to cope with strain by engaging in delinquency, while individuals possessing high self-control are inclined to resort to non-criminal methods of coping with strain (Agnew 2006; Agnew, Brezina, Wright, and Cullen 2002).

Agnew and colleagues (2002) examined how certain factors condition the effects of strain on delinquency. The authors did not examine Gottfredson and Hirschi's conceptualization of self-control, per se; however, they did use a measure of negative emotionality and low constraint. Agnew and colleagues argued that this measure resembles low self-control in many important ways. When examining the effects of strain on delinquency, the researchers found that negative emotionality/low constraint significantly interacted with strain: individuals possessing these traits were more likely to react to strain with delinquency.

Some researchers have also examined how these conditioning effects of self-control affect the relationship between victimization and offending (Hay and Evans 2006; Turanovic and Pratt forthcoming-a). In their study examining general strain theory explanations of the victimization-offending relationship, Hay and Evans (2006) found that the effects of victimization on offending are moderated by self-control. Victimization caused a greater increase in substance use and general delinquency (violent, property, and substance offenses) among individuals with low self-control, but there were no effects for violent/property offending. This interaction was stronger for substance use than for general delinquency. Turanovic and Pratt (forthcoming-a) also found that self-control shapes how an individual responds to victimization. Using several waves of the GREAT data, the authors found that low self-control was associated with maladaptive coping in response to violent victimization, and this led to violent offending. Their study demonstrated that victims with low self-control were more likely to engage in substance use. They also found that victims with low self-control and victims who used substances were more likely to commit future violent crime. These studies, along with the predictions of general strain theory, suggest that the relationship between offending and victimization is conditioned by self-control.

Hypothesis 4A: Victimization has a stronger effect on offending for individuals with low self-control than for individuals with high self-control.

Research and theory suggest that the relationship between victimization and offending is stronger for individuals with low self-control because the relationship between negative emotions caused by victimization and offending is more pronounced for this group. Everyone experiences negative emotions as a result of victimization, but individuals possessing self-control are able to find non-criminal ways of dealing with these emotions. Individuals lacking self-control are less capable of coping with the strain of victimization, so these negative emotions are more likely to lead to offending. These hypotheses are listed below:

Hypothesis 4B: Anger has a stronger effect on offending for individuals with low self-control than for individuals with high self-control.

Hypothesis 4C: Depression has a stronger effect on offending for individuals with low self-control than for individuals with high self-control.

Lifestyle Theories and Self-Control. As discussed earlier, lifestyle theories (Cohen and Felson 1979; Hindelang et al. 1978) argue that offending causes victimization. This is because engaging in criminal behavior brings an individual into contact with offenders, which greatly increases the risk of victimization. By applying Schreck's (1999) arguments regarding self-control and victimization to this premise of lifestyle theories, it becomes clear that self-control can affect the relationship between offending and victimization.

Schreck claimed that individuals with low self-control are more likely to be victimized because: (1) they fail to anticipate the consequences of their decisions, (2) they cannot accurately judge the intent of others, (3) they are likely to evoke anger in others, (4) they are unlikely to take precautions against victimization, (5) they are more likely to escalate conflicts, and (6) they

are more likely to put themselves in dangerous situations (1999: 635-637). Regarding this last point, lifestyle theories already argue that offenders place themselves in risky situations by associating with other offenders (Hindelang et al. 1978). Each of the other characteristics discussed by Schreck (1999) should greatly increase the risk of victimization when in contact with criminals. Failure to anticipate consequences makes it more likely that an individual will do something that precipitates his victimization. Being incapable of reading the intent of others makes it more likely that an individual will not realize until it is too late that other offenders around him intend to victimize him. An abrasive, short-tempered person who angers other people with his behavior is more likely to do something that precipitates his victimization at the hands of fellow offenders. An individual who fails to take steps to guard against victimization is more likely to be victimized when associating with offenders. Finally, a physically-oriented person who tends to escalate hostile situations is more likely to precipitate his own victimization. Research suggests that self-control influences the relationship between offending and victimization. Schreck and colleagues (2006) examined several waves of the GREAT data and found that delinquency (violent offending, property offending, and drug offending) led to violent victimization among individual with low self-control; however, this relationship was not significant for individuals with high self-control. Unfortunately, the researchers did not test the statistical significance of this difference across models, so the empirical question remains open.

Hypothesis 5A: Offending has a stronger effect on victimization for individuals with low self-control than for individuals with high self-control.

Though no research has examined how self-control conditions the relationship between offending and victimization through association with criminal peers, some researchers have examined how self-control moderates the influence of criminal peers on victimization. Using

GREAT data, Schreck and colleagues (2006) found that delinquent peers led to violent victimization among individual with low self-control, but the relationship was not significant for individuals with high self-control. As mentioned before, the researchers did not test the statistical significance of the differences across models, so the empirical question remains open.

Ultimately, anyone who engages in crime is likely to associate with other criminals. This social dynamic shouldn't be greatly influenced by an individual's level of self-control. However, once in these dangerous situations, surrounded by criminals, an individual with low self-control should be much more likely to experience victimization than an individual with high self-control. This could happen either because he takes some imprudent or aggressive action that precipitates his victimization, or it could take place because he simply fails to anticipate the victimization event before it is too late. Either way, we would expect that the link between association with criminal peers and victimization should be stronger for individuals with low self-control. Based on the research by Schreck et al. (2006), the arguments of lifestyle theories, and Schreck's (1999) expansion of self-control theory, I derive the following hypothesis:

Hypothesis 5B: Criminal peers have a stronger effect on victimization for individuals with low self-control than for individuals with high self-control.

Current Study

In this study, I examine the relationship between offending and violent victimization among a sample of African American young adults drawn from the Family and Community Health Study (FACHS). I test the contrasting predictions derived from three major criminological perspectives: general strain theory, lifestyle theories, and self-control theory. In doing so, I expand our understanding of the relationship between offending and violent victimization. I also provide valuable insight into these three theories. This research shows the

extent to which these theoretical arguments are applicable to the relationship between offending and violent victimization. More broadly, this dissertation also points to the validity of these three important theories.

I improve upon previous research in several ways. Primarily, I examine the competing predictions of general strain theory, lifestyle theories, and self-control theory within a single study. These theories have been empirically tested in past research. In fact, on several occasions, self-control theory has been examined alongside either general strain theory or lifestyle theories; however, no research has examined the predictions of all three theories side by side. Some research has focused either exclusively on general strain theory or on the combined predictions of general strain theory and self-control theory (e.g., Hay and Evans 2006; Lin et al. 2011; Manasse and Ganem 2009; Turanovic and Pratt forthcoming-a). Other research has focused on either on the broad argument of lifestyle theories that offending causing victimization (e.g., Broidy et al. 2006; Dobrin and Brusk 2003; Fisher et al. 1998; Lauritsen et al. 1990; Loeber et al. 2001; Martino et al. 2004; Shaffer and Ruback 2002) or has combined these predictions with self-control theory (e.g., Schreck et al. 2006). This is the first study to examine the theoretical predictions drawn from general strain theory, lifestyle theories, and self-control theory. By examining all three theories, I can provide a better understanding of the validity of these contrasting theoretical claims.

I also expand upon previous research on lifestyle theories by examining criminal peers as a mechanism linking offending and violent victimization in addition to examining how self-control influences this relationship. As mentioned above, many studies have examined the broad relationship predicted by lifestyle theories and found that offending does lead to victimization (e.g., Dobrin and Brusk 2003; Lauritsen et al. 1990; Shaffer and Ruback 2002). Additionally,

some research has investigated the influence of criminal peers on victimization (e.g., Loeber et al. 2001; Schreck et al. 2004; Schreck et al. 2002), one study has examined criminal peers as a mechanism linking violent victimization with repeat violent victimization (Turanovic and Pratt forthcoming-b), and one study has focused on how self-control affects the relationship between deviant peers and victimization (e.g., Schreck et al. 2006). However, no previous research has explored the role of criminal peers as a mechanism linking offending and victimization, as predicted by lifestyle theories. Additionally, no study has examined how this hypothesized relationship between offending, criminal peers, and victimization is influenced by self-control.

My dissertation builds upon previous general strain research by examining the role of both anger and depression in the relationship between violent victimization and offending. Some previous research has focused on anger (e.g., Brezina 1998; Hay and Evans 2006), while other studies have examined depression (e.g., Lin et al. 2011; Manasse and Ganem 2009), but less research has examined general strain predictions involving anger and depression when focusing on the relationship between victimization and offending.

Unlike some research that combined violent and property victimization (e.g., Manasse and Ganem 2009), I focus exclusively on serious violent victimization. Also, unlike some previous studies that conflated direct and indirect victimization (e.g., Maldonado-Molina, Jennings, Tobler, Piquero, and Canino 2010), my measure of violent victimization focuses only on direct victimization. The fact that I only focus on serious violent victimization directly experienced by the respondent is important because direct violent victimization should be more consequential than relatively minor forms of property victimization or the victimization of friends, family, or acquaintances. Therefore, using serious violent victimization provides a more robust test of these theoretical relationships.

Additionally, unlike some previous research, I examine these questions using longitudinal data. The use of cross-sectional data in some studies examining the link between offending and victimization raises issues of ambiguous causal order, since it is impossible to disentangle cause from effect in cross-sectional data (e.g., Fisher et al. 1998; Lin et al. 2011; Schreck et al. 2002; Stewart et al. 2004). In my dissertation, I avoid these problems by using longitudinal data.

Finally, this dissertation examines the relationship between offending and violent victimization among a sample of African American young adults living primarily in suburban and rural areas. The characteristics of this group are distinct from the samples examined in much previous research. First, none of the studies discussed in this or the previous chapter focused exclusively on African Americans. However, it is important to understand how offending and violent victimization are related in this demographic group and to what extent these criminological theories are applicable to African Americans. It is especially important to understand the offending-victimization link among African Americans, since this group experiences heightened risks of offending and violent victimization. Additionally, most of the previous research focused on adolescents, whereas this study examines the relationship between offending and violent victimization among young adults. This expands our knowledge of how offending and violent victimization are related among an older age group, and it also examines the applicability of the theoretical predictions to adults. Finally, many of these previous studies used samples drawn from urban areas, such as the GREAT data. For the most part, the individuals in FACHS live in suburban and rural areas, and none of them live in the inner city. Therefore, my dissertation expands our understanding of the offending-victimization relationship beyond at-risk, highly urban individuals.

In this dissertation, I use structural equation modeling to examine the relationship between offending and violent victimization among African American young adults in FACHS. In doing so, I test the predictions of general strain theory, lifestyle theories, and self-control theory. As a first step, I examine these relationships cross-sectionally. Then, I test the theoretical predictions longitudinally in order to establish causal ordering. Finally, I consider how self-control moderates these relationships. In the next chapter, I discuss the sample and measures used in this study.

CHAPTER 4

METHODS

In this chapter, I discuss my research methods for this project. First, I discuss the sample from which my data are drawn. Then, I detail the measures I use in this dissertation. Finally, I briefly discuss the analytic framework for the results chapters.

Sample

I utilize data drawn from waves 5 and 6 of the Family and Community Health Study (FACHS), a multisite investigation of neighborhood and family effects on health and development (Simons, Lin, Gordon, Brody, Murry, and Conger 2002). The FACHS sample is comprised of several hundred African American families in non-inner-city areas in Georgia and Iowa. Each family had a child in the fifth grade at the time of recruitment. In Iowa, families were drawn from Des Moines and Waterloo. Public school officials in these communities created lists of families with African American fifth-graders. Families in Georgia came from several different areas in the northeast region of the state, including Athens and suburban Atlanta. In these areas, community coordinators helped to create lists of potential families with an eligible child. Researchers randomly selected families from these lists to form recruitment lists. Families on the recruitment lists were contacted and asked to participate in the study: 72% of the families on the recruitment lists participated in FACHS.

The first wave of FACHS data collection took place in 1997. A total of 867 African American fifth-graders were recruited for participation in the study. This included 400 males and 467 females, with 406 participants in Georgia and 462 in Iowa. During the first wave,

respondents were an average of 11 years old (specifically, 52% were age 10, 45% were age 11, and 3% were age 12). The mean family income of participants was just above \$30,000. These families lived in a wide range of settings. Most lived in suburban areas, though some lived in urban or rural areas; however, none of the participants lived in highly-urban inner-cities. Interviews were conducted with these children and their parents or caregivers. These interviews (and those in subsequent waves) were administered using a laptop computer. The computer contains the FACHS questionnaire; the interviewer reads the questions to the participant, who enters his or her responses into the laptop. The interviews with the target child and the caregiver were conducted separately, with only the participant and the interviewer present.

In my research, I use the fifth and sixth waves of FACHS data, which were conducted in 2008-2009 and 2010-2011, respectively. By these waves, the target children have become young adults: on average, the respondents are 22 years old in wave 5 and 24 years old in wave 6. My sample includes 559 respondents. Of the 867 respondents who participated in the first wave of FACHS, 634 individuals completed interviews in both wave 5 and wave 6. My sample eliminates an additional 75 individuals due to missing data in wave 5 or wave 6. I discuss in detail my methods for dealing with non-response to items within each section.

Measures

Offending. *Offending* is a 10-item standardized scale measuring the level of criminal offending the respondent reported engaging in during the past year. *Offending* is measured separately at wave 5 and wave 6. The items pertain to five property crimes and five violent crimes. These include: (1) breaking into a building or house; (2) stealing something inexpensive (like clothes or a small amount of cash); (3) stealing something expensive (like a stereo or TV); (4) purposely damaging or destroying property; (5) taking a car for a drive without the owner's

permission; (6) getting into a fight with the idea of seriously hurting someone; (7) carrying a hidden weapon such as a knife or a gun; (8) pulling a knife or gun on someone; (9) shooting or stabbing someone; and (10) using a weapon in a fight. For each item, individuals receive a score of 0 if they did not engage in the particular crime in the past year, and they receive a 1 if they engaged in the crime one or more times. Individuals who either refused to respond to an item or answered “don’t know” receive a score of 0 for the item. If individuals did not give valid responses to the majority of the items in this scale, then they are dropped from the sample. These items are summed and then the result is standardized to create a scale of *Offending* that has a mean of 0 and a standard deviation of 1. The alpha for the *Offending* scale is .78 in wave 5 and .81 in wave 6.

Violent Victimization. I measure violent victimization in wave 5 and in wave 6. *Violent Victimization* is a dichotomous variable measuring whether the respondent reported experiencing violent victimization during the past year (0 = Non-victim, 1 = Victim). The variable is based on responses to two items. The first item asks whether the respondent was a victim of violent crime in the past year. The second item asks the respondent: “Has anyone in the neighborhood surrounding where you lived for most of the past 12 months used violence, such as in a mugging, fight, or sexual assault, against you?” If respondents answered positively to either item, they are coded 1. Respondents answering “no” to both items are coded 0. Individuals who refused to answer both items or who responded “don’t know” to both items are also coded 0.

Negative Emotions. I examine two measures of negative emotions in this dissertation: *Anger* and *Depression*. *Anger* is a 7-item standardized scale measuring the extent to which an individual reports experiencing anger. *Anger* is measured in wave 5 and in wave 6. The items include: (1) I have a fiery temper; (2) I am quick-tempered; (3) I am a hotheaded person; (4) I fly

off the handle; (5) it makes me furious when I am criticized in front of others; (6) when I get frustrated, I feel like hitting someone; and (7) when I get mad, I say nasty things. For each item, respondents are asked to report the extent to which the statement describes themselves (0 = Almost never, 1 = Sometimes, 2 = Often, 3 = Almost always). Then, these items are averaged. If an individual answered “don’t know” or refused to answer an item, then that item is not included in the average. Individuals who did not give valid responses to a majority of the items are dropped from the sample. Finally, the resulting scale is standardized so that the mean for *Anger* is 0 and the standard deviation is 1. The alpha for *Anger* is .87 in wave 5 and .81 in wave 6.

Depression is a 16-item standardized scale measured in wave 5 and in wave 6. The depression scale consists of self-reported items measuring whether in the past year the respondent has experienced a variety of depression symptoms. These items were created using questions drawn from the University of Michigan Composite International Diagnostic Interview (Kessler 1994). Recently, researchers used this scale to study depression among FACHS participants (Granberg, Edmond, Simons, Gibbons, and Lei 2012). Each item asks the respondent “In the past year, was there ever a two-week period when you:” followed by a symptom of depression. These symptoms included: (1) feeling sad, empty, or depressed most of the day; (2) losing interest in things; (3) waking up at least two hours before you wanted to; (4) sleeping too much almost every day; (5) not being able to sit still and pacing up and down or not being able to keep your hands still when sitting; (6) feeling worthless nearly every day; (7) feeling guilty; (8) feeling like you are not as good as other people; (9) having so little self-confidence that you wouldn’t try to have your say about anything; (10) being a lot less interested in sex than usual; (11) losing the ability to enjoy having good things happen to you, like winning

something or being praised or complimented; (12) thinking a lot about death; (13) feeling so low that you thought about committing suicide; (14) attempting suicide; (15) taking medication for depression; and (16) being so depressed or sad that it interfered with your ability to do your job, take care of your house or family, or take care of yourself. If respondents answer positively to an item, they receive a 1; if they did not experience the symptom, then they receive a 0. Then, these 16 items are averaged. Individuals who refused to answer an item or answered “don’t know” do not have that item included in their average; however, individuals who did not give valid responses to a majority of the items in this scale are dropped from the sample. Finally, the resulting scale is standardized so that the *Depression* scale has a mean of 0 and a standard deviation of 1. The alpha for the *Depression* scale is .86 in wave 5 and .89 in wave 6.

Criminal Peers. *Criminal Peers* is a 6-item standardized scale measuring the extent to which a respondent’s close friends engage in crime. This measure was adapted from items used in the National Youth Survey (Elliot, Huizinga, and Menard 1989). *Criminal Peers* is measured at wave 5 and wave 6. The items include: (1) getting high using drugs of some kind; (2) stealing something inexpensive (like clothes or a small amount of cash); (3) stealing something expensive (like a stereo or TV); (4) getting into fights where someone got hurt; (5) attacking someone with a weapon or with the idea of hurting them; and (6) using a weapon, force, or strong-arm methods to get money or other things from people. Individuals report how many of their closest friends engaged in each criminal act over the past year (0 = None of them, 1 = Some of them, 2 = Many of them, 3 = All of them). Then, these items are averaged. If an individual answered “don’t know” or refused to answer an item, then that item is not included in the average. Individuals who did not give valid responses to a majority of the items are dropped from the sample.

Finally, the resulting *Criminal Peers* scale is standardized so that the mean is 0 and the standard deviation is 1. In wave 5, the alpha for *Criminal Peers* is .75; the alpha in wave 6 is .71.

Self-Control. *Self-Control* is a 16-item standardized scale measuring an individual's level of self-control. *Self-Control* is measured at wave 5 and wave 6. Gottfredson and Hirschi (1990) describe individuals with low self-control as impulsive, risk-taking, insensitive, and short-sighted, and this scale taps into many of these characteristics. *Self-Control* uses items drawn from several established scales measuring self-constraint, impulsivity, and risk-taking behaviors.¹ This measure of self-control is similar to scales used in other FACHS studies, including Simons and Burt (2011) and Burt, Simons, and Simons (2006).

First, I include 4 items from Kendall and Wilcox's (1979) good self-control scale: (1) when you promise to do something, people can count on you to do it; (2) you stick with what you're doing until you've finished it; (3) when you wait in line, you do it patiently; and (4) you usually think before you act. Next, I include 8 items from Kendall and Wilcox's (1979) poor self-control scale: (1) when you ask a question, you often jump to something else before getting an answer; (2) you have to have everything right away; (3) you have to be reminded several times to do things; (4) you have a lot of accidents; (5) you would rather have a small gift today than a large gift tomorrow; (6) you could be described as careless; (7) you like to switch from one thing to another; and (8) if you find something is really difficult, you get frustrated and quit. Finally, I draw 4 items from Eysenck and Eysenck's (1977) risk-taking scale: (1) you could do something that most people would consider dangerous like driving a car fast; (2) you enjoy taking risks; (3) you would do almost anything for a dare; and (4) life without danger would be

¹ I do not include all of the items from the original scales from Kendall and Wilcox (1979) and Eysenck and Eysenck (1977). I omit several items because they relate to behaviors in school. Given that I am examining respondents in their early twenties, these measures are not appropriate.

dull for you. For each item, respondents report the extent to which the statement is true (0 = Not at all true, 1 = Somewhat true, 2 = Very true). The items from Kendall and Wilcox's poor self-control scale and the items from Eysenck and Eysenck's risk-taking scale are reverse-coded so that they indicate high self-control. Then, these 16 items are averaged. Individuals who refused to answer an item or responded "don't know" do not have that item included in their average; individuals who did not give valid responses to a majority of the items in this scale are dropped from the sample. Finally, the resulting scale is standardized so that the mean for *Self-Control* is 0 and the standard deviation is 1. The alpha for *Self-Control* is .75 in wave 5 and .75 in wave 6.

Control Variables. I also control for the influence of several individual and contextual factors, including gender, region, and neighborhood crime.² Because some research suggests that males are twice as likely to engage in offending and are almost 2.5 times as likely to experience violent victimization than are females (Shaffer and Ruback 2002), in addition to the gender differences in the other endogenous constructs—anger, depression, and criminal peers—I include the variable *Male* (0 = female, 1 = male). Additionally, I take into account the region in which the respondent lives. *South* compares participants drawn from Iowa (*South* = 0) to those from Georgia (*South* = 1). No data regarding gender or region are missing in FACHS, so these variables do not cause any participants to be eliminated from the sample.

Finally, I control for the level of criminal activity in the participant's community.

Neighborhood Crime is a 6-item standardized scale measuring the extent of crime taking place in the neighborhood surrounding the respondent's home. These items were adapted from measures

² I also considered several additional control variables, including age (at wave 5 and wave 6), neighborhood crime at wave 5, and socioeconomic status at wave 4, a measure incorporating the primary caregiver's level of education and the household income. Ultimately, these variables did not significantly influence the outcomes under consideration, so they were not included in the final analysis (for additional discussion, see Chapters 5 and 6).

developed for the Project on Human Development in Chicago Neighborhoods (PHDCN; see Sampson, Raudenbush, and Earls 1997). This variable is measured at wave 6. The respondent indicates how often six different crimes occurred over the past year in their neighborhood (0 = Never, 1 = Sometimes, 2 = Often). These crimes included: (1) drug dealing; (2) car theft; (3) burglary; (4) sexual assault or rape; (5) robbery or mugging; and (6) a fight involving a weapon (gun or knife). Then, these responses are averaged. Individuals who refused to answer an item or answered “don’t know” do not have that item included in their average; however, individuals who did not give valid responses to at least half of the items in this scale are dropped from the sample. Finally, the resulting *Neighborhood Crime* scale is standardized such that the mean is 0 and the standard deviation is 1. The alpha for *Neighborhood Crime* is .81.

Analytic Framework

My research consists of three primary stages. In Chapter 5, I examine the relationship between offending and violent victimization using cross-sectional data, testing my hypotheses regarding the mechanisms influencing the offender-victim link using three structural equation models. In Chapter 6, I examine the offending-victimization relationship longitudinally, utilizing cross-lagged structural equation models of offending and violent victimization that examine my theoretical predictions. Finally, in Chapter 7, I examine how self-control influences the relationship between offending and violent victimization. This multi-group analysis examines the longitudinal structural equation models from the previous chapter separately for individuals with low self-control and high self-control.

CHAPTER 5

A CROSS-SECTIONAL EXAMINATION

Criminal offending and victimization are linked, and criminological theories offer different explanation of this relationship. In this chapter, I examine the cross-sectional relationship between offending and violent victimization among African American young adults. I focus on three competing theoretical arguments concerning the nature of this relationship. General strain theory (Agnew 1992, 2006) posits that victimization leads to offending: an individual is violently victimized, which causes him to feel negative emotions, such as anger and depression, which, in turn, lead to criminal behavior. Conversely, the lifestyle theories—lifestyle-exposure theory (Hindelang, Gottfredson, and Garofalo 1978) and routine activity theory (Cohen and Felson 1979)—argue that offending leads to victimization. According to lifestyle theories, an individual commits crime, which involves spending time around other criminals, which, ultimately, causes violent victimization. Finally, self-control theory (Gottfredson and Hirschi 1990) claims that the relationship between offending and victimization is spurious, since both offending and violent victimization are ultimately caused by low self-control.

In this chapter, I examine each of these theoretical claims separately using cross-sectional data from the Family and Community Health Study (FACHS), a panel study of African American youths. In these analyses, my variables of interest are drawn from wave 6 of FACHS.³

³ Though the analyses are generally cross-sectional, I use lagged measures of some potential mediators in order to control for previous levels of these variables. These include anger, depression, and criminal peers. The lagged variables are drawn from wave 5. However, the variables of interest in these analyses—including

In wave 6, participants are approximately 24 years old. I examine models testing the predictions of general strain theory, lifestyle theories, and self-control theory. Though each of these three theoretical models assumes causal ordering, it should be noted that the variables of interest in the models are measured cross-sectionally. This means that the models are actually measuring the association between variables; the causal ordering in each model is derived from theoretical assumptions. Though there are limitations to using cross-sectional data to test these competing explanations, it is important to first examine these relationships at a single point in time before progressing to longitudinal analyses. This is primarily due to the fact that some of these theoretical processes likely take place within a relatively brief timespan. For instance, it seems logical that the sequence linking victimization, negative emotions, and offending posited by general strain theory would transpire fairly quickly. Analyses examining panel data would stretch this theorized sequence of events out over a longer period of time—approximately two years in the case of the FACHS data. It is possible that the effects hypothesized by general strain theory would dissipate over such a prolonged period of time. In light of this, I think that it is appropriate to first examine these relationships at a single point in time. It is important, however, not to lose sight of the fact that these analyses are cross-sectional, and therefore they only measure associations between variables. Causal relationships can only be assumed based on theoretical interpretation of these associations. I address the limitations regarding cross-sectional data and the ambiguity of time-ordering in the discussion section.

Despite the issues with time-ordering, it is important to examine these hypothesized relationships using cross-sectional data before proceeding to longitudinal analyses. Determining that the predicted associations exist between variables is a necessary first step in examining the

offending, violent victimization, anger, depression, criminal peers, and self-control—are all measured at wave 6.

theoretical relationships. If I do not find that particular relationships predicted by general strain theory, lifestyle theories, or self-control theory exist within a particular wave, then it casts doubt on whether they would exist when examined across multiple waves. Ultimately, finding patterns consistent with theoretical predictions in this chapter's cross-sectional analyses should be viewed as necessary but not sufficient support for the theoretical claims.

Analysis Plan

Table 1 presents the descriptives for the variables used in this chapter and the correlations between these variables. In order to examine the hypotheses drawn from general strain theory, lifestyle theories, and self-control theory, I employ structural equation modeling (SEM) using Mplus 6.11 (Muthén and Muthén 1998-2011). SEM is particularly suited to these analyses because it allows both (1) simultaneous estimation of all relationships under observation and (2) estimation of the hypothesized indirect effects. I examine three models, each of which tests the claims of one theory. Figure 1 displays the model hypothesized by general strain theory. This model examines the influence of violent victimization on offending. It includes the potential mediators drawn from general strain theory—anger and depression—while also taking into account lagged measures of these mediators. Figure 2 shows the model predicted by lifestyle theories. This model examines the effects of offending on violent victimization, and it includes the mediator criminal peers (and a lagged measure of criminal peers). Figure 3 displays the model examining the predictions of self-control theory. This model examines the influence of self-control on offending and violent victimization, while modeling the correlation between offending and victimization.

Because the outcomes differ across the three models, I use different SEM estimation methods. In the model examining general strain theory, the endogenous variables are all

continuous; therefore, I use maximum likelihood estimation with robust standard errors (MLR) in this model. The model derived from lifestyle theories includes an endogenous outcome: violent victimization. Therefore, I use weighted least squares means and variance adjusted estimation (WLSMV).⁴ Finally, the model focusing on the predictions of self-control theory includes a dichotomous outcome—violent victimization—and a correlation between this outcome and another endogenous variable—offending. This requires the use of WLSMV estimation.⁵

The hypothesized models presented in Figure 1, Figure 2, and Figure 3 do not account for all the potential relationships between the variables. Additionally, they do not include the influence of the control variables: gender, region, and neighborhood crime. Therefore, for each model, I employ the following process. First, I estimate a full model which includes all possible paths between the exogenous and endogenous variables. Next, in order to improve model fit, I eliminate paths from the model that: (1) are non-significant ($t \leq 1.5$) and (2) are not part of the hypothesized model.⁶ The results of these reduced models are displayed in two formats: path diagrams that omit the control variables for clarity and tables that include the complete regression results. The results of the model examining general strain predictions are shown in

⁴ Several estimation methods are appropriate for dealing with categorical endogenous variables. I chose WLSMV from among these options in part because it is the estimator necessary for analyses presented in later chapters. Therefore, using it here provides some consistency. It would be equally appropriate to use MLR estimation in this model. Unlike WLSMV, which uses probit regression to estimate categorical outcomes, MLR uses logistic regression for dichotomous outcomes. In order to ensure that choice of estimator did not produce significantly different results, I performed SEM analyses of the hypothesized model using both WLSMV and MLR estimation methods. Ultimately, the choice of estimator did not substantively affect the results. Therefore, I chose only to present the WLSMV analyses in this chapter.

⁵ Unlike with the model examining the predictions of lifestyle theories, MLR is not a suitable alternative estimator for this model. WLSMV is capable of estimating correlations between categorical and continuous endogenous variables, where MLR cannot. Therefore, the choice of estimator is clearer for this model.

⁶ Eliminating these paths resulted in dropping several control variables from each of the models. These included age at wave 6 and socioeconomic status at wave 4. Because these variables did not significantly influence any of the endogenous variables, they are not included in the reduced models presented in this chapter.

Figure 4 as a path diagram and in table format in Table 2. The results of the model examining lifestyle predictions are displayed in Figure 5 and Table 4. Finally, the results of the model examining self-control predictions are found in Figure 6 and Table 6.

I use several measures of fit in order to assess each model. I examine the chi-square divided by its degrees of freedom (fit ratio), in which an insignificant chi-square test of model fit indicates that the model fits the data well. I also examine Steiger's root mean square error of approximation (RMSEA; Browne and Cudeck, 1992), in which lower values indicate better model fit. Hu and Bentler (1999) suggested that an RMSEA between .05 and .08 indicates a reasonable fit, while values lower than .05 suggest that the model fits the data very well. Finally, I examine the comparative fit index (CFI; Bentler, 1990). Higher CFI values indicate good model fit; Hu and Bentler (1999) recommended a cutoff of .95.

Finally, two of the theoretical models hypothesize mediating effects. The model examining general strain theory predicts that anger and depression mediate the effects of violent victimization on offending, while the model examining the predictions of lifestyle theories hypothesizes that criminal peers mediate the influence of offending on violent victimization. In order to test these arguments, I examine the indirect effects hypothesized in these two models.⁷ The indirect effects of the model examining general strain theory predictions are presented in Table 3, and the indirect effects of the model examining the predictions of lifestyle theories are presented in Table 5.

⁷ The indirect effects are calculated using a continuous structural equation model with bootstrapped standard errors. Given my focus on the theoretical variables, I do not examine the indirect effects of control variables on offending and violent victimization in these analyses.

Results

General strain predictions. In this section, I examine the influence of violent victimization on offending and the role of anger and depression in this process. General strain theory predicts that violent victimization causes offending (hypothesis 1A), and that the effects of victimization on offending are mediated by anger (hypothesis 2B) and depression (hypothesis 1C). Therefore, results consistent with general strain theory predictions would include several patterns. First, violent victimization would increase offending. Second, we would expect to find that violent victimization increases anger, anger increases offending, and violent victimization increases offending indirectly through anger. Finally, the results would indicate that violent victimization increases depression, depression increases offending, and violent victimization increases offending indirectly through depression.

Model fit. The results of the model examining the predictions of general strain theory are presented in Figure 4, which omits the control variables for clarity. The full results are presented in Table 2. The overall fit of the model is reasonable. The chi-square test of model fit is significant ($\chi^2 = 17.88$, $d.f. = 5$, $p \leq .01$), indicating that the model does not fit the data well. The RMSEA is .068 with a 90% confidence interval of .036 to .103, below the .08 cutoff indicative of reasonable fit according to Hu and Bentler (1999). Finally, the CFI is .966, surpassing the .95 cutoff suggested by Hu and Bentler (1999). Taken together, these indices suggest acceptable model fit.

Hypotheses. Consistent with theoretical predictions, violent victimization is associated with offending: victims of violent crime engage in offending at a level 1.48 standard deviations higher than those who did not experience violent victimization ($p \leq .001$). However,

contradicting the general strain predictions regarding anger, I find that violent victimization is unrelated to anger ($p = .46$) and anger is not related to offending ($p = .17$). In contrast, I find that victims of violent crime are more depressed: violent victimization is associated with a .58 standard deviation increase in depression ($p \leq .05$). Also consistent with general strain theory, individuals who are depressed engage in more criminal activity: a standard deviation increase in depression is associated with a .15 standard deviation increase in offending ($p \leq .01$).

The indirect effects found in this model are presented in Table 3. General strain theory predicts that violent victimization influences offending through anger and depression. It is unnecessary to examine any indirect effects mediated through anger, since I find that no relationships exist between violent victimization and anger or between anger and offending. However, based on the model results, depression remains a potential mediator. Further examination shows that the indirect effect of violent victimization on offending through depression is marginally significant ($p = .07$), consistent with the predictions of general strain theory. However, as seen in the model, the direct effect of victimization on offending is significant even when taking into account depression ($p \leq .001$). Comparing coefficients shows that the indirect effect of violent victimization on offending through depression accounts for only about 6% of the total effect of victimization on offending, while the direct effect constitutes about 94% of the total effect. Taken together, this suggests that depression does mediate some of the influence of violent victimization on offending, but most of the influence does not go through depression.

Additional relationships. In addition to the theoretically predicted relationships, I find several other associations in this model. Individuals who previously had high levels of anger are more likely to currently have high levels of anger ($p \leq .001$), whereas males ($p \leq .05$) and

individuals living in the South ($p \leq .05$) experience lower levels of anger. Individuals living in high crime areas are marginally more likely to experience anger ($p \leq .10$). Individuals who were previously depressed ($p \leq .001$) or angry ($p \leq .01$) experience more depression. Individuals living in the South are less depressed ($p \leq .01$), while individuals living in high crime neighborhoods are marginally more likely to be depressed ($p \leq .10$). Males ($p \leq .01$) and individual living in high crime neighborhoods ($p \leq .01$) engage in higher levels of offending, while individuals living in the South commit less crime ($p \leq .05$).

Summary. General strain theory predicts that violent victimization causes offending (hypothesis 1A). Additionally, the theory predicts that the effects of violent victimization on offending are mediated by anger (hypothesis 1B) and depression (hypothesis 1C). Using cross-sectional data, this model indicates that current violent victimization is associated with an increase in current offending. The model also shows that a small part of the influence of violent victimization on offending is mediated by depression, though the effect is only marginally significant. However, contrary to predictions, anger does not mediate any of the relationship between victimization and offending. Ultimately, these findings support hypothesis 1A, which claims that violent victimization causes offending, although the direction of effects cannot be substantiated with cross-sectional data. I find marginal support for hypothesis 1C, which claims that the effects of victimization on offending are mediated by depression. However, I find no support for hypothesis 1B, which argues that the effects of victimization on offending are mediated by anger.

Lifestyle predictions. In this section, I examine the influence of offending on violent victimization and the role criminal peers play in this process. Lifestyle theories predict that offending causes violent victimization (hypothesis 2A), and that the effects of offending on

victimization are mediated by association with criminal peers (hypothesis 2B). Therefore, results consistent with the predictions of lifestyle theories would indicate that offending increases the risk of violent victimization. Additionally, we would expect to find that offending increases criminal peers, criminal peers increase the risk of violent victimization, and offending increases the risk of violent victimization indirectly through criminal peers.

Model fit. Figure 5 presents the results of the model examining the predictions of lifestyle theories, leaving out the control variables. The full results are shown in Table 4. The overall fit of the model is very good. The chi-square test of model fit is not significant ($\chi^2 = 2.80, d.f. = 4, p = .59$), suggesting that the model fits the data well. The RMSEA is .000 with a 90% confidence interval of .000 to .054, and values lower than .05 are indicative of very good model fit (Hu and Bentler 1999). The CFI is 1.000, well over the .95 cutoff suggested by Hu and Bentler (1999). Taken together, these indices suggest excellent model fit.

Lifestyle hypotheses. As predicted, I find that criminals are more likely to experience violent victimization ($p \leq .001$). Also consistent with lifestyle predictions, I find that criminals have peers who engage in higher levels of criminal behavior, as well. A standard deviation increase in offending is associated with a .31 standard deviation increase in criminal peers ($p \leq .001$). Finally, criminal peers are also associated with an increased risk of violent victimization, though the significance of this effect is just beyond the traditional cutoff ($p = .056$). The indirect effects of this model are presented in Table 5. Given that association with criminal peers has only a marginally significant influence on violent victimization, it seems unlikely that it mediates any of the relationship between offending and victimization. Indeed, this is the case: the indirect effect of offending on violent victimization through criminal peers is not significant ($p = .47$).

Additional relationships. Moving beyond the theoretically predicted relationships, I find that individuals who previously associated with criminal peers are also more likely to do so currently ($p \leq .001$). Similarly, males ($p \leq .001$) and individuals living in high crime areas ($p \leq .001$) have more criminal peers, while individuals living in the South tend to have fewer criminal peers ($p \leq .01$).

Summary. Lifestyle theories predict that offending causes violent victimization (hypothesis 2A) and that the effects of offending on violent victimization are mediated by criminal peers (hypothesis 2B). Examining these relationships cross-sectionally, I find support for the first claim but no support for the second claim. This model shows that current offending is associated with an increased risk of current violent victimization, but that none of the effects are mediated through criminal peers.

Self-control predictions. In this section, I examine the influence of self-control on offending and violent victimization. Self-control theory predicts that low self-control causes both offending (hypothesis 3A) and violent victimization (hypothesis 3B). Therefore, in a model consistent with self-control theory, we would find two major patterns. First, self-control would decrease offending. Second, self-control would decrease the risk of violent victimization.

Model fit. The results of the model examining the predictions of self-control theory are presented in Figure 6, in which the control variables are omitted, and in Table 6, which displays the complete regression results. The overall fit of the model is very good. The chi-square test of model fit is not significant ($\chi^2 = 1.45, d.f. = 2, p = .49$), suggesting that the model fits the data well. The RMSEA is .000 with a 90% confidence interval of .000 to .076, well below the cutoff

suggested by Hu and Bentler (1999). Finally, the CFI is 1.000, indicating great model fit (Hu and Bentler 1999). Together, these indices suggest excellent model fit.

Hypotheses. Consistent with the predictions of self-control theory, I find that self-control is related to criminal behavior: a standard deviation increase in self-control is associated with a .22 standard deviation decrease in offending ($p \leq .001$). Also supportive of self-control predictions, self-control is associated with an increased risk of violent victimization ($p \leq .05$).

Additional relationships. In addition to these predicted relationships, I find that males ($p \leq .05$) and individuals living in high crime neighborhoods ($p \leq .001$) commit more crime, while individuals living in the South are marginally less likely to engage in crime ($p \leq .10$). Additionally, individuals living in high crime areas are more likely to experience victimization ($p \leq .05$).

Summary. Self-control theory predicts that low self-control causes offending (hypothesis 3A) and violent victimization (hypothesis 3B). I find support for both these claims in cross-sectional analyses. These results show that an individual's current level of self-control is negatively associated with both current level of offending and the current risk of violent victimization.

Discussion

Offending and victimization are linked, but the exact nature of this relationship is unclear. In this chapter, I examine the relationship between violent victimization and offending among a sample of African American young adults. In doing so, I test predictions drawn from general strain theory, lifestyle theories, and self-control theory. I find varying degrees of support for each of these theories.

General strain theory. General strain theory argues that victimization causes offending and that the mechanisms involved in this relationship are negative emotions. I find some support for these theoretical claims. Violent victimization is associated with higher levels of offending, and a small portion of these effects are mediated through depression. However, this indirect effect through depression is only marginally significant, and anger is entirely unrelated to victimization and offending. This suggests a mechanism other than anger or depression mediates most of the relationship between violent victimization and offending. This could be another negative emotion, or it could be something outside the realm of general strain theory.

It is particularly striking that anger is unrelated to victimization and offending, given the central importance of anger in general strain theory. Several studies examining general strain explanations of the link between victimization and offending found associations between victimization, anger, and offending (e.g., Brezina 1998; Hay and Evans 2006). Brezina (1998) found that adolescent maltreatment was associated with concurrently measured levels of anger, and that this anger mediated some of the effects of the maltreatment on future delinquency. Similarly, Hay and Evans (2006) found that violent victimization led to future anger, and anger was found to mediate some of the effects of violent victimization on several different forms of offending. Given that these studies found fairly strong links between victimization, anger, and offending in longitudinal analyses, it is surprising that cross-sectional analyses in this chapter do not find a relationship. As discussed earlier, a cross-sectional examination of general strain theory is a less stringent—and some would argue a more appropriate—test of the theoretical arguments.

Compared to anger, research examining general strain theory and the relationship between victimization and offending has generally placed less focus on depression, particularly

with regard to its effects on violent or property crime. When depression is examined, it is generally within the context of substance use. For example, Lin, Cochran, and Mieczkowski (2011) found that depression was unrelated to a combined measure of property and violent offending; however, they did find that depression was associated with drug use and, in fact, mediated some of the effects of vicarious victimization on drug use. Some research has found links between victimization, depression, and broader delinquency. Manasse and Ganem (2009) found that victimization was related to depression, and that both victimization and depression were related to a broad scale of delinquent/deviant behaviors, which included a wide variety of property crimes, violent crimes, drug crimes, and non-criminal deviant behaviors. In this chapter, I not only find that victimization is related to depression, but that depression is related to violent/property crime. Indeed, a portion of the influence of violent victimization on violent/property offending is mediated through depression, although this indirect effect is only marginally significant. These findings suggest that depression should receive more attention among general strain scholars, both as a precursor to a wider array of offenses beyond substance use—such as violent and property crime—and as a potential mechanism by which victimization influences these offenses.

Lifestyle theories. Routine activity theory and lifestyle-exposure theory predict that offending causes victimization, and that this relationship is mediated by exposure to criminals. In this chapter, I examine this exposure to crime by focusing on the criminality of an individual's closest friends. I find some support for the lifestyle argument. Engaging in crime increases the risk of violent victimization, but these effects are not mediated by criminal peers.

My analyses suggest that some mechanism other than criminal peers may be mediating the influence between offending and violent victimization. It could be that some other form of

risky activity associated with offending is leading to victimization. For example, research shows that engaging in substance use increases one's risk of violent victimization (Fisher, Sloan, Cullen, and Lu 1998; Martino, Collins, and Ellickson 2004; Turanovic and Pratt forthcoming-b). Turanovic and Pratt (forthcoming-b) found that changes in drug use in response to violent victimization influenced the risk of repeat violent victimization. Fisher and colleagues (1998) found that regular drug use was associated with violent victimization among college students. Martino et al. (2004) found that alcohol and marijuana use were related to assault and sexual victimization (though the effects differed by gender). Perhaps offending is associated with higher levels of drug use among the respondents in FACHS, and this drug use is the link between offending and victimization.

However, it would be premature to discount the role of criminal peers based on the analyses presented in this chapter. Though I do not observe a significant indirect effect from offending to victimization through criminal peers, this null finding could be due to the design of the study. I find that criminal peers have only a marginally significant effect on victimization, but this model is cross-sectional. It could be that the relationship hypothesized by lifestyle theories simply takes longer to manifest. Perhaps the longer an individual engages in crime, the more criminal friends he meets, and by spending more time around these friends, his risk of victimization ultimately increases. It is possible that a single snapshot in time does not adequately capture this process; rather, it must be viewed over the course of time in order to allow both the criminal friends and the subsequent risk of victimization to accrue. The longitudinal analyses in the following chapter help shed light on this issue.

Self-control theory. Self-control theory predicts that offending and violent victimization are both caused by low self-control. I find strong support for this argument. My analyses show

that low self-control is associated with higher levels of criminal behavior. This is in line with much of the research examining self-control theory (e.g., Pratt and Cullen 2000). Similarly, I find that low self-control is associated with a heightened risk of violent victimization. This reflects the considerable research examining self-control theory and victimization (e.g., Schreck 1999; Schreck, Stewart, and Fisher 2006; Turanovic and Pratt forthcoming-b).

Limitations. There are two primary limitations to this chapter. First, the measure of violent victimization is somewhat limited. As discussed in the Methods chapter, this variable is constructed using two dichotomous measures of violent victimization. Unfortunately, FACHS does not distinguish between different types of violent victimization. This information would enable researchers to construct a violent victimization scale similar to the offending scale used in this chapter. This would give a more nuanced measure of the degree of victimization experienced by respondents, rather than simply separating individuals into the categories of victims and non-victims. Additionally, there is no measure of property victimization included in FACHS. Therefore, this dissertation is unable to examine the influence of offending on property victimization or the influence of property victimization on offending.

As discussed earlier, cross-sectional data pose problems for time-ordering. For most of the variables examined in these analyses, it is impossible to determine whether one preceded another or vice versa. This is of particular importance given the competing theoretical predictions dealt with in this chapter. General strain theory argues that victimization causes offending, while lifestyle theories argue that offending causes victimization. Therefore, these models made different assumptions regarding causal order, and with cross-sectional data, it is impossible to adjudicate between these positions. Of course, the self-control model is not left untouched by these concerns, either. Though research suggests that self-control affects

victimization risk (e.g., Schreck 1999), some recent research also suggests that victimization can reduce self-control (Agnew, Scheuerman, Grosholz, Isom, Watson, and Thaxton 2011).

Though these cross-sectional analyses cannot firmly establish causal ordering among the variables, they still constitute a necessary step in the process of examining the predictions of general strain theory, lifestyle theories, and self-control theory. It is important to establish cross-sectional associations predicted by the theories before progressing to longitudinal analyses. Many of the findings presented in this chapter are consistent with these theories, though this evidence cannot be viewed as unequivocal support for the theoretical claims. It is, however, necessary to find cross-sectional associations in order for the predictions to be valid. If no relationship exists in cross-sectional data, then it casts doubt that one exists in longitudinal data. Ultimately, only longitudinal data can firmly establish time-order. With cross-sectional data, researchers are forced to make assumptions regarding the causal ordering. Therefore, now that I have established that many of the predictions of general strain theory, lifestyle theories, and self-control theory can be found in cross-sectional data, I examine these relationships longitudinally in the next chapter.

Table 1. Correlation Matrix and Descriptives (N=559)

	1	2	3	4	5	6	7	8	9	10	11	12
1. Offending _{w6}	—											
2. Violent Victimization _{w6}	.35 ***	—										
3. Anger _{w5}	.22 ***	.05	—									
4. Anger _{w6}	.18 ***	.08 †	.59 ***	—								
5. Depression _{w5}	.13 **	.05	.39 ***	.30 ***	—							
6. Depression _{w6}	.25 ***	.16 ***	.32 ***	.34 ***	.52 ***	—						
7. Criminal Peers _{w5}	.33 ***	.07	.38 ***	.26 ***	.25 ***	.18 ***	—					
8. Criminal Peers _{w6}	.48 ***	.20 ***	.33 ***	.34 ***	.15 ***	.25 ***	.46 ***	—				
9. Self-Control _{w6}	-.26 ***	-.13 **	-.39 ***	-.49 ***	-.32 ***	-.36 ***	-.27 ***	-.37 ***	—			
10. Male	.10 *	.01	.00	-.08 †	-.20 ***	-.10 *	.14 ***	.20 ***	-.01	—		
11. South	-.12 **	-.06	-.02	-.09 *	-.07 †	-.14 ***	-.10 *	-.15 ***	.16 ***	.02	—	
12. Community Crime _{w6}	.25 ***	.12 **	.22 ***	.20 ***	.14 ***	.18 ***	.21 ***	.33 ***	-.15 ***	.01	-.01	—
Mean	0	.04	0	0	0	0	0	0	0	.39	.52	0
Standard Deviation	1	.19	1	1	1	1	1	1	1	.49	.50	1
Alpha	.81	—	.87	.81	.86	.89	.75	.71	.75	—	—	.81

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 2. Regression Coefficients for the General Strain Model (N =559)

	Anger_{w6}	Depression_{w6}	Offending_{w6}
Violent Victimization _{w6}	.18	.58 *	1.48 ***
Anger _{w5}	.57 ***	.12 **	—
Anger _{w6}	—	—	.07
Depression _{w5}	—	.45 ***	—
Depression _{w6}	—	—	.15 **
Male	-.16 *		.25 **
South	-.14 *	-.20 **	-.15 *
Community Crime _{w6}	.07 †	.08 †	.17 **
R^2	.37	.32	.21
Model Fit Indices	Chi-square = 17.88, d.f. = 5, $p \leq .01$		
	RMSEA = .068 (.036, .103)		
	CFI = .966		

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 3. General Strain Model: Indirect Effects of Violent Victimization on Offending (*N* =559)

	Offending_{w6}		
	Total Effect	Direct Effect	Indirect through Depression _{w6}
Violent Victimization _{w6}	1.585 ***	1.484 ***	.089 †

Notes: These indirect effects were calculated from a continuous SEM using bootstrapped standard errors.

† $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 4. Regression Coefficients for the Lifestyle Model (N =559)

	Criminal Peers_{w6}	Violent Victimization_{w6}
Offending _{w6}	.31 ***	.31 ***
Criminal Peers _{w5}	.29 ***	—
Criminal Peers _{w6}	—	.18 †
Male	.27 ***	—
South	-.18 **	—
Community Crime _{w6}	.19 ***	—
R^2	.39	.16
Model Fit Indices	Chi-square = 2.80, d.f. = 4, $p = .59$ RMSEA = .000 (.000, .054) CFI = 1.000	

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 5. Lifestyle Model: Indirect Effects of Offending on Violent Victimization (N =559)

	Violent Victimization _{w6}		
	Total Effect	Direct Effect	Indirect through Criminal Peers _{w6}
Offending _{w6}	.066 ***	.064 ***	.002

Notes: These indirect effects were calculated from a continuous SEM using bootstrapped standard errors.

† p ≤ .10; * p ≤ .05; ** p ≤ .01; *** p ≤ .001 (two-tailed tests).

Table 6. Regression Coefficients for the Self-Control Model (N =559)

	Offendings_{w6}	Violent Victimization_{w6}
Self-Control _{w6}	-.22 ***	-.21 *
Male	.20 *	—
South	-.18 †	—
Community Crime _{w6}	.22 ***	.21 *
R^2	.13	.09
Model Fit Indices	Chi-square = 1.45, d.f. = 2, $p = .49$ RMSEA = .000 (.000, .076) CFI = 1.000	

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Figure 1. Hypothesized General Strain Model

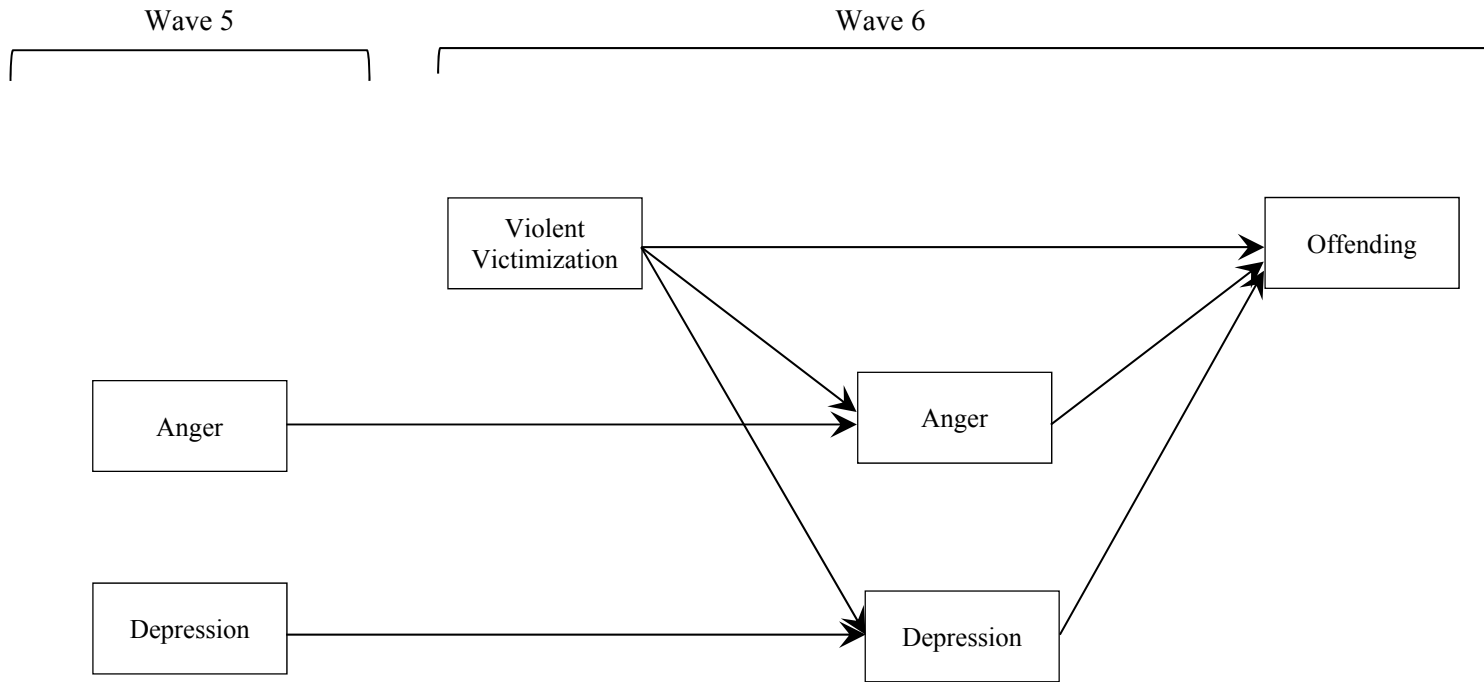


Figure 2. Hypothesized Lifestyle Model

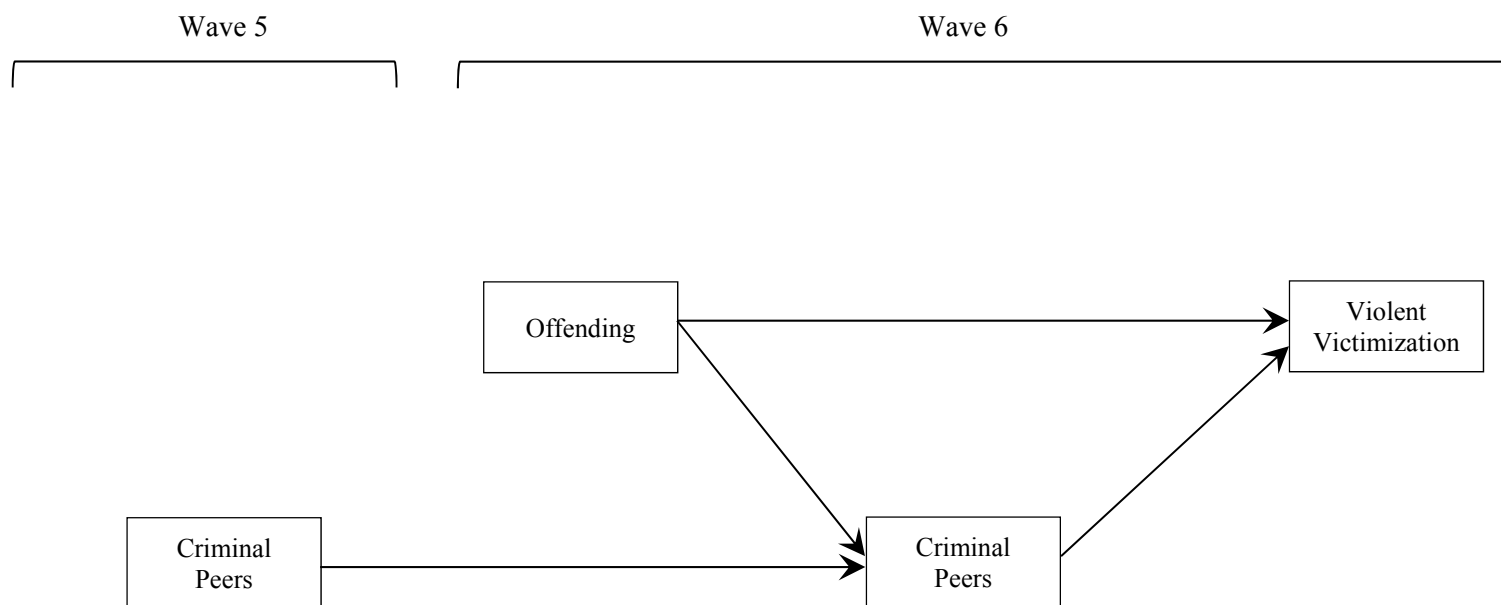


Figure 3. Hypothesized Self-Control Model

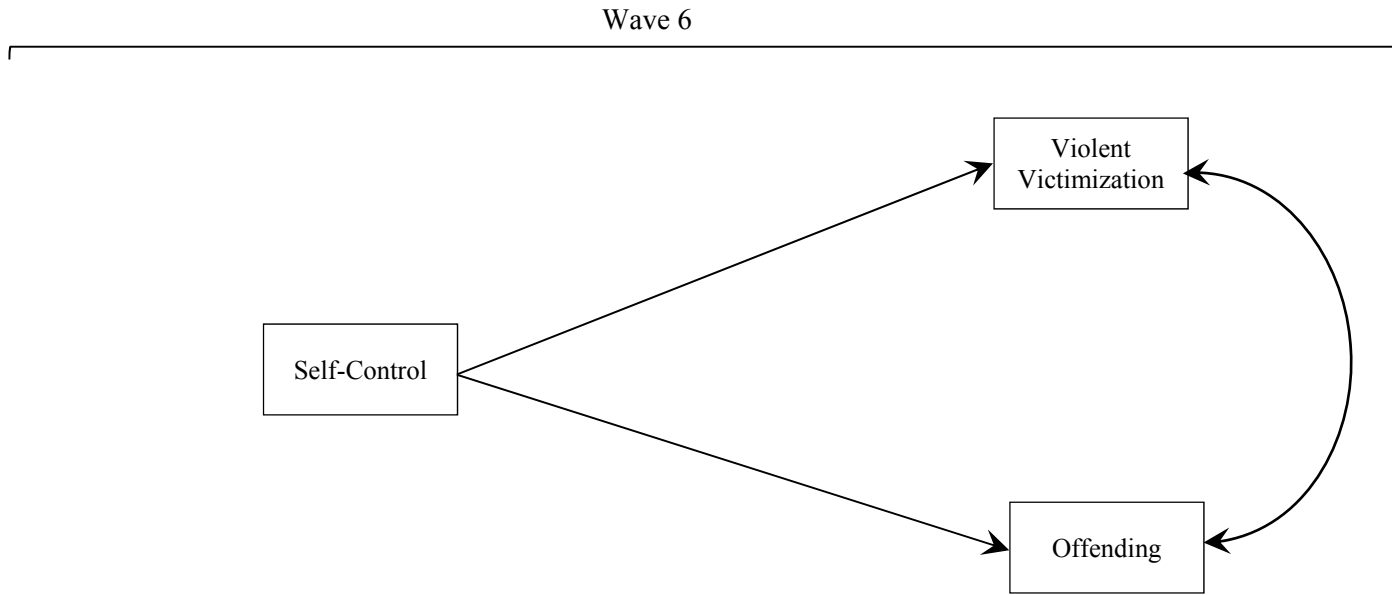
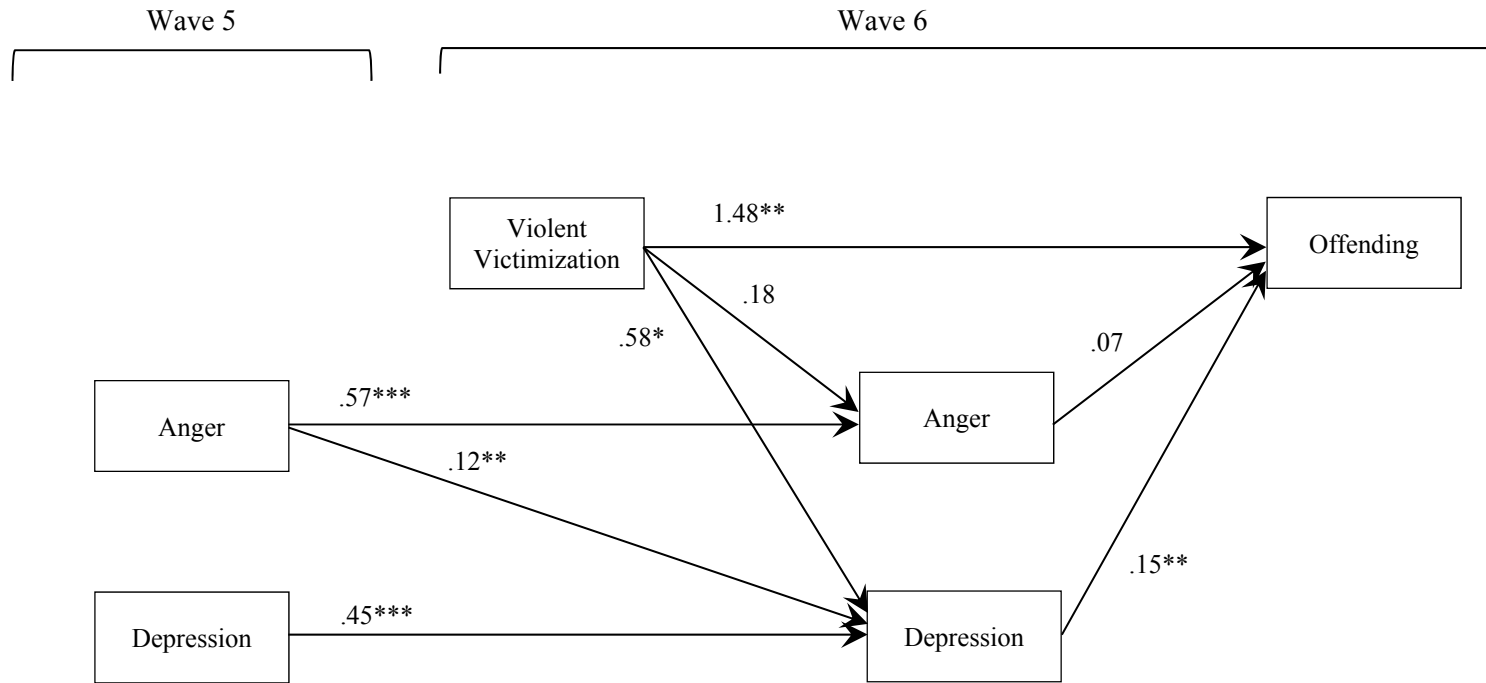


Figure 4. General Strain Model (N=559)



Chi-square = 17.88, *df* = 5, $p \leq .01$

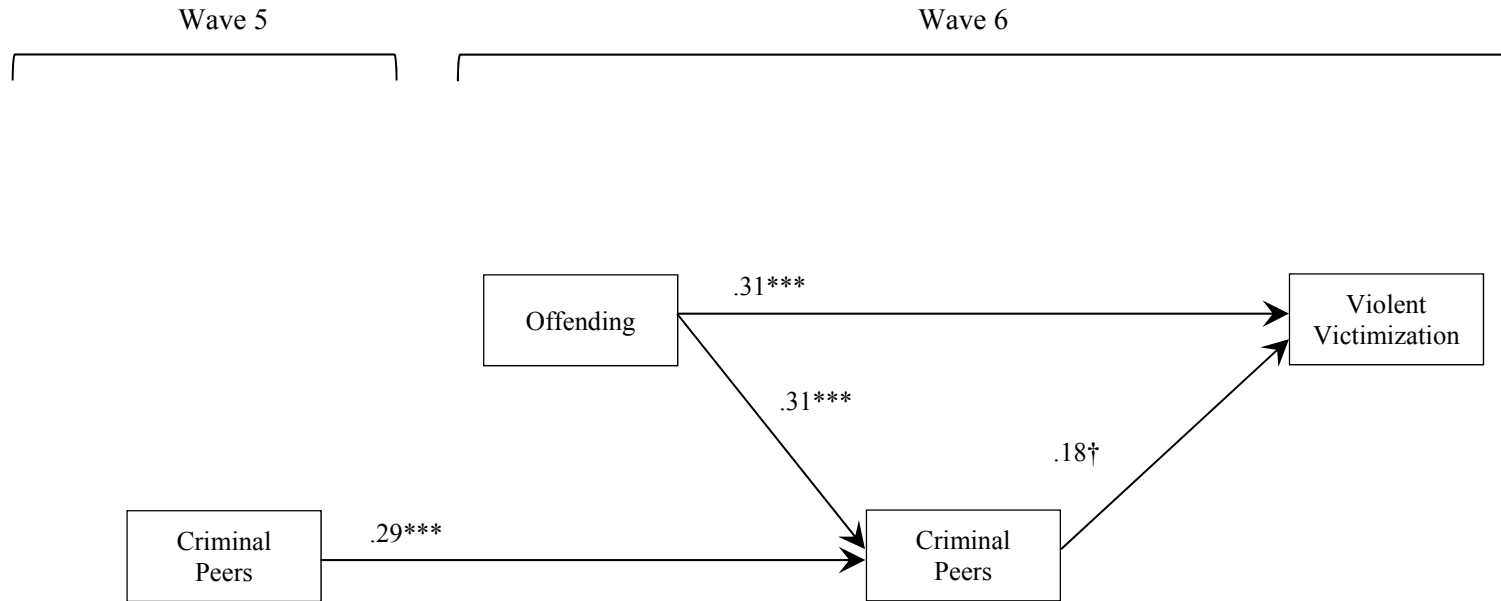
RMSEA = .068 (.036, .103)

CFI = .966

Notes: This model controls for the effects of gender, region, and community crime.

† $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests)

Figure 5. Lifestyle Model (N=559)



Chi-square = 2.80, $df = 4$, $p = .59$

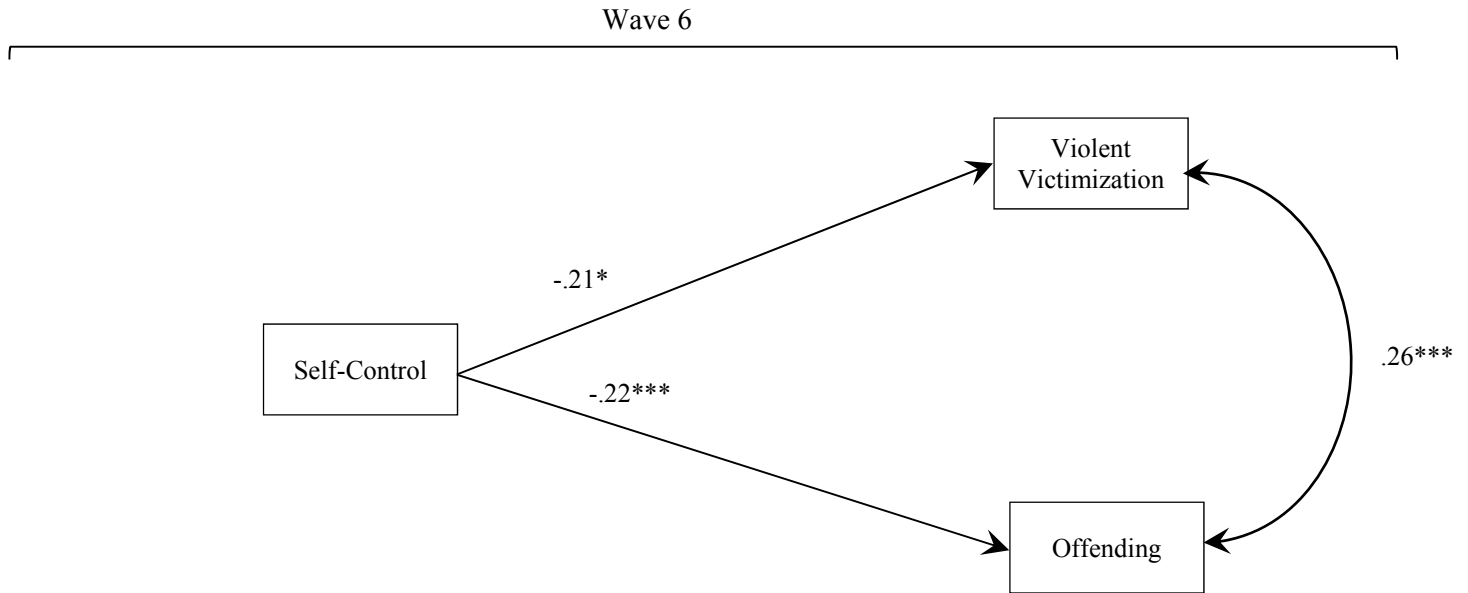
RMSEA = .000 (.000, .054)

CFI = 1.000

Notes: This model controls for the effects of gender, region, and community crime.

$^{\dagger} p \leq .10$; $* p \leq .05$; $** p \leq .01$; $*** p \leq .001$ (two-tailed tests)

Figure 6. Self-Control Model (N=559)



Chi-square = 1.45, *df.* = 2, *p* = .49
RMSEA = .000 (.000, .076)
CFI = 1.000

Notes: This model controls for the effects of gender, region, and community crime.

† *p* ≤ .10; * *p* ≤ .05; ** *p* ≤ .01; *** *p* ≤ .001 (two-tailed tests)

CHAPTER 6

A LONGITUDINAL EXAMINATION

Offending and victimization are linked, but the nature of this relationship remains unclear. In particular, the degree to which our theoretical explanations of this victim-offender overlap are applicable remains an open question. As with the previous chapter, I examine the relationship between offending and violent victimization among African American young adults, testing claims drawn from criminological theory. In the previous chapter, I found varying levels of support for the predictions of each theory using cross-sectional data. This justifies the longitudinal examination of these relationships. The longitudinal analyses presented in this chapter will enable me to establish causal ordering, something that is not possible using cross-sectional data.

As before, I test claims derived from three major criminological theories. General strain theory (Agnew 1992, 2006) argues that victimization causes offending. When an individual experiences victimization, she feels negative emotions like anger and depression. These emotions lead her to engage in crime as a way of relieving this psychological pressure. In contrast, the lifestyle theories, including lifestyle-exposure theory (Hindelang, Gottfredson, and Garofalo 1978) and routine activity theory (Cohen and Felson 1979), insist that offending leads to victimization. Engaging in criminal activity tends to lead an individual to spend time around other criminals. Ultimately, this exposure to crime greatly increases his risk of victimization. Finally, self-control theory (Gottfredson and Hirschi 1990) claims that the apparent relationship

between offending and victimization is spurious; rather, both offending and violent victimization are caused by low self-control.

In this chapter, I examine each of these theoretical claims using longitudinal data from the Family and Community Health Study (FACHS), a panel study of African American youths. My sample is drawn from waves 5 and 6 of the FACHS data, in which respondents are approximately 22 and 24 years old, respectively. On average, waves 5 and 6 are separated by 2 years. Using longitudinal data allows me to move beyond ambiguity associated with the cross-sectional analyses of the previous chapter. The cross-sectional models had to make untenable assumptions regarding the causal ordering of offending and victimization and self-control and victimization. Since I established the theoretically predicted associations between variables in those cross-sectional analyses, I now progress to longitudinal examinations of these relationships. Here, I measure these concepts at two different points in time, obviating the time-order concerns that are endemic to cross-sectional analyses. I now detail my analysis plan.

Analysis Plan

Table 7 presents the descriptives for the variables used in this chapter and the correlations between these variables. In this chapter, I examine the hypotheses drawn from general strain theory, lifestyle theories, and self-control theory using structural equation modeling (SEM). There are two reasons that SEM presents invaluable advantages for the current analyses. First, using SEM allows me to simultaneously estimate all the relationships under observation rather than performing a series of regressions which would only allow me to view the processes piecemeal. Additionally, several of my theoretical hypotheses involve mediation; therefore, SEM presents a great advantage because it enables me to examine any indirect effects found in the models.

Because competing theories argue that either victimization causes offending or offending causes victimization, it is important to study the relationship between offending and violent victimization longitudinally in order to establish time-order. Therefore, I employ cross-lagged models to examine the influence of offending and violent victimization at wave 5 on offending and violent victimization at wave 6. I test two models, each of which focuses on different theoretical mediators. Figure 7 presents the hypothesized model examining the mediators drawn from general strain theory, while Figure 8 presents the hypothesized model examining the mediator drawn from lifestyle theories.⁸ Both Figure 7 and Figure 8 examine the predictions of self-control theory.

Because both models include a dichotomous endogenous variable—violent victimization—I use weighted least squares means and variance adjusted estimation (WLSMV) in Mplus 6.11 (Muthén and Muthén 1998-2011).⁹ Because the hypothesized models in Figures 7

⁸ Because I am using two waves of data to measure offending and victimization, I am able to avoid ambiguity with time-order. However, with two waves of data, the mediators must both be measured either at wave 5 or wave 6, reintroducing potential time-ordering problems. I am forced to make assumptions regarding the causal ordering associated with the mediators. I chose to measure the three mediators—anger, depression, and criminal peers—at wave 6. For the general strain model mediators, the time-order issue seems of minimal concern, given that it is more likely that anger and depression would lead to offending rather than the inverse. The lifestyle model mediator, criminal peers, presented more difficulties. It is certainly problematic to measure offending and criminal peers in the same wave and claim definitively that offending causes association with criminal peers, given that theory and considerable research suggest that spending time with deviant peers leads to offending (e.g., Burgess and Akers 1966; Pratt and Cullen 2000; Pratt, Cullen, Sellers, Winfree, Madensen, Daigle, Fearn, and Gau 2010). Therefore, I measure criminal peers at wave 6. Though it is possible to envision violent victimization causing association with deviant peers (e.g., an individual is victimized, so he joins a gang for protection), it is far more likely that spending time with criminals causes an individual to experience violent victimization.

⁹ An alternate strategy used by some scholars when dealing with categorical endogenous variables is maximum likelihood estimation with robust standard errors (MLR). Unlike WLSMV, which uses probit regression to estimate categorical outcomes, MLR uses logistic regression. This could be advantageous for this model, given the skew of the dichotomous endogenous victimization variable, violent victimization. In practice, however, probit and logistic regressions tend to produce similar results. More importantly, WLSMV is capable of estimating correlations between categorical and continuous endogenous variables, where MLR cannot. This capability is beneficial in my analyses, since I want to account for the correlation between offending and violent victimization at wave 6. In order to ensure that choice of estimator did not produce significantly different results, I performed SEM analyses of the hypothesized model using both WLSMV and MLR estimation methods, the only difference being that the MLR model did not include a correlation between

and 8 do not account for all potential relationships between the variables—nor do they take into account the influence of the control variables—for each model, I first estimate a full model which includes all possible paths between the exogenous and endogenous variables. Then, in order to improve model fit, I eliminate paths from the model that: (1) are non-significant ($t \leq 1.5$) and (2) are not part of the hypothesized model.¹⁰ The results of these reduced models are displayed in two formats. Figure 9 and Figure 10 present the reduced model results as path diagrams; both figures omit the control variables for clarity. Table 8 and Table 10 show the complete results for these models.

I use several measures of fit in order to assess each model, including the chi-square divided by its degrees of freedom (fit ratio), Steiger's root mean square error of approximation (RMSEA; Browne and Cudeck, 1992), and the comparative fit index (CFI; Bentler, 1990). An insignificant chi-square test of model fit indicates that the model fits the data well. Lower RMSEA values indicate better fit. Hu and Bentler (1999) suggested that an RMSEA between .05 and .08 indicates a reasonable fit, while values lower than .05 suggest that the model fits the data very well. Finally, higher CFI values indicate good model fit; Hu and Bentler (1999) recommended a cutoff of .95.

I also examine the indirect effects of the predictors on offending and violent victimization at wave 6.¹¹ The model presented in Figure 7 examines the indirect effects predicted by general strain theory: (1) violent victimization increases offending indirectly through anger; and (2)

wave 6 offending and violent victimization. Ultimately, the choice of estimator did not substantively affect the results. Therefore, I chose only to present the WLSMV analyses in this chapter.

¹⁰ Eliminating these paths resulted in dropping several control variables from the model. These included neighborhood crime at wave 5, age at wave 5 and wave 6, and socioeconomic status at wave 4. Because these variables did not significantly influence any of the endogenous variables, they are not included in the reduced model.

¹¹ The indirect effects are calculated using a continuous structural equation model with bootstrapped standard errors. Given my focus on the theoretical variables, I do not examine the indirect effects of control variables on offending and violent victimization in these analyses.

violent victimization increases depression, which increases offending. The model presented in Figure 8 examines the indirect path predicted by lifestyle theories: offending increases the risk of violent victimization through the mechanism of criminal peers. Additionally, both models examine any potential indirect effects of self-control on offending and violent victimization. For the model presented in Figure 7, this includes the influence of self-control on offending through two potential mediators: anger and depression. For the model presented in Figure 8, this includes the influence of self-control on violent victimization through criminal peers.

Results

General strain predictions. In this section, I examine the influence of previous violent victimization on offending and the role of anger and depression in this process. General strain theory predicts that violent victimization causes offending (hypothesis 1A), and that the effects of victimization on offending are mediated by negative emotions, such as anger (hypothesis 1B) and depression (hypothesis 1C). Therefore, results consistent with general strain theory predictions would include several patterns. First, previous violent victimization increases an individual's level of offending. Second, the results would indicate previous violent victimization increases anger, anger increases offending, and previous violent victimization increases offending indirectly through anger. Finally, we would expect to find that previous violent victimization increases depression, depression increases offending, and previous violent victimization increases offending indirectly through depression.

Model fit. Figure 9 presents the results the model examining the predictions of general strain theory. The control variables are omitted for clarity. The full regression results are presented in Table 8. Based on several fit indices, the overall fit of the model is good. Though

the chi-square test of model fit is significant ($\chi^2 = 26.95$, $d.f. = 13$, $p \leq .05$), the other fit indices suggest that the model fits the data well. The RMSEA is .044 with a 90% confidence interval of .020 to .067, suggesting that the model fits the data very well. Finally, the CFI is .976, also indicating good model fit. Taken together, these indices suggest good model fit.

Hypotheses. Consistent with general strain predictions, I find that previous victims of violent crime experience a .40 standard deviation increase in offending ($p \leq .001$). Contrary to the predictions of general strain theory, previous violent victimization does not lead to higher levels of anger ($p = .51$) or depression ($p = .31$). However, I do find that current violent victimization is correlated with both anger ($p \leq .01$) and depression ($p \leq .001$). Anger has a weak and marginally significant effect on offending, in which a standard deviation increase in anger causes a .05 standard deviation increase in offending ($p = .076$). In contrast, depression shows a stronger influence on offending, with a standard deviation increase in depression resulting in a .18 standard deviation increase in offending ($p \leq .001$). Though it is hypothesized that violent victimization has indirect effects on offending through anger and depression, there is no need to examine indirect effects, given that violent victimization does not influence anger or depression.

Additional relationships. In addition to these theoretical relationships, I find a number of patterns in this model. Previous anger increases current anger ($p \leq .001$). Community crime increases anger ($p \leq .05$), and females are marginally more likely to experience higher levels of anger than males ($p \leq .10$). Previous depression ($p \leq .001$) and previous anger ($p \leq .01$) lead to depression. Individuals living in the South are less likely to be depressed ($p \leq .01$), and individuals living in high-crime neighborhoods experience higher levels of depression ($p \leq .01$). Previous criminal behavior increases offending ($p \leq .001$). Individuals living in higher-crime

neighborhoods engage in more offending ($p \leq .001$), and individuals living in the South are marginally less likely to engage in higher levels of crime ($p \leq .10$). I find that previous victims of violent crime experience a heightened risk of violent victimization ($p \leq .01$), and neighborhood crime increases the risk of violent victimization ($p \leq .05$). Surprisingly, I do not find that previous offending influences violent victimization ($p = .26$). Less surprisingly, current violent victimization and current offending are positively correlated ($p \leq .001$).

Summary. General strain theory predicts that violent victimization causes offending (hypothesis 1A) and that the effects of violent victimization on offending are mediated by anger (hypothesis 1B) and depression (hypothesis 1C). This model shows that violent victimization increases offending. However, violent victimization does not influence anger or depression, eliminating the possibility of indirect effects through these mediators. Despite the lack of mediating effects, I do find that anger and depression influence offending. Anger has a weak and marginally significant effect on offending, while depression causes a more pronounced increase in offending. Ultimately, these findings support hypothesis 1A, which claims that violent victimization causes offending, but lead to the rejection of hypotheses 1B and 1C, which argues that these effects are mediated through anger and depression.

Lifestyle predictions. In this section, I examine the influence of previous offending on violent victimization and the role that criminal peers play in this process. Lifestyle theories predict that offending causes violent victimization (hypothesis 2A), and that the effects of offending on victimization are mediated by association with criminal peers (hypothesis 2B). Therefore, results consistent with the predictions of lifestyle theories would indicate that previous offending increases the risk of violent victimization. Additionally, lifestyle theories predict that previous offending increases criminal peers, criminal peers increase the risk of

violent victimization, and previous offending increases the risk of violent victimization indirectly through criminal peers.

Model fit. The results of the model examining the predictions derived from lifestyle theories are presented in Figure 10, which omits the control variables for clarity. The full regression results are presented in Table 10. All the fit indices suggest that the overall fit of the model is excellent. The chi-square test of model fit is not significant, indicating good model fit ($\chi^2 = 7.13$, $d.f. = 6$, $p = .31$). Similarly, the RMSEA is .018 (90% confidence interval = .000 to .060). Finally, the CFI is .998. Taken together, these indices suggest excellent model fit.

Hypotheses. Contrary to the predictions of lifestyle theories, offending does not directly influence violent victimization ($p = .72$). Consistent with these theories, however, I find that individuals who previously engaged in crime ultimately have more friends who commit crime, with a standard deviation increase in previous offending resulting in a .21 standard deviation increase in criminal peers ($p \leq .001$). Also supportive of lifestyle predictions, individuals with friends who engage in higher levels of criminal behavior experience a higher risk of violent victimization ($p \leq .001$). The indirect effects from this model are presented in Table 11. Though offending does not have a direct effect on violent victimization, I find that it does have an indirect effect through criminal peers ($p \leq .05$). Supporting the predictions of lifestyle theories, offending increases an individual's association with criminal friends, which then leads to violent victimization.

Additional relationships. In addition to the predicted relationships, I find several other significant effects in this model. Individuals who associated with criminal peers in the past are also likely to do so in the future ($p \leq .001$). Males ($p \leq .001$) and individuals living in high-crime

areas ($p \leq .001$) are more likely to have more criminal friends, while individuals living in the South are less likely to associate with criminal peers ($p \leq .01$). Previous victimization ($p \leq .001$), previous criminal behavior ($p \leq .001$), and having criminal friends ($p \leq .001$) all increase offending. Additionally, individuals living in higher-crime neighborhoods engage in more offending ($p \leq .001$), and individuals living in the South are marginally less likely to engage in higher levels of crime ($p \leq .10$). Previous victims of violent crime experience a higher risk of victimization ($p \leq .01$). Finally, current offending is positively correlated with current violent victimization ($p \leq .001$) and current association with criminal peers ($p \leq .001$).

Summary. Routine activity theory and lifestyle-exposure theory predict that offending causes violent victimization (hypothesis 2A) and that the effects of offending on violent victimization are mediated by criminal peers (hypothesis 2B). This model shows that offending does not have direct effects on violent victimization; however, a positive indirect effect exists through criminal peers. Taken together, this shows that offending increases the risk of violent victimization, but these effects are entirely mediated through criminal peers. Offending causes violent victimization because it leads to association with criminal peers, which, in turn, leads to victimization. This fully supports both lifestyle theories hypotheses.

Self-control predictions. In this section, I examine how previous self-control influences offending and violent victimization. Self-control theory predicts that low self-control causes both offending (hypothesis 3A) and violent victimization (hypothesis 3B). Therefore, results supportive of self-control theory would find that previous self-control decreases an individual's level of offending, and previous self-control decreases an individual's risk of violent victimization. In one of the models I examine, it is possible for self-control to indirectly influence offending through anger or depression. In the other model, it is possible for self-

control to indirectly influence violent victimization through criminal peers. These indirect effects would not be inconsistent with self-control theory predictions. Self-control theory proposes that low self-control leads to offending and victimization; negative emotions or criminal peers could merely be mechanisms through which this influence is exerted.

Model fit. The predictions of self-control theory are examined in both of the previously discussed models. The results of the first model are presented in Figure 9 (omitting the control variables), with the full regression results displayed in Table 8. The overall fit of the first model was good based on the three fit indices discussed earlier ($\chi^2 = 26.95$, $d.f. = 13$, $p \leq .05$; RMSEA = .044; CFI = .976). The results of the second model are presented in Figure 10 and Table 10. All the fit indices suggest that the fit of the model is excellent ($\chi^2 = 7.13$, $d.f. = 6$, $p = .31$; RMSEA = .018; CFI = .998).

Hypotheses. Contrary to the predictions of self-control theory, self-control does not directly influence offending in either model ($p = .90$ and $p = .61$, respectively). Also inconsistent with self-control theory, neither model shows that self-control influences the risk of violent victimization ($p = .46$ and $p = .17$). However, it is possible that self-control indirectly influences offending through anger or depression. It is also possible that self-control influences the risk of violent victimization through criminal peers. The first model (Figure 9, Table 8) examines the effects of self-control on anger and depression, while the second model (Figure 10, Table 10) examines the influence of self-control on criminal peers.

The first model shows that self-control decreases anger: a standard deviation increase in self-control leads to a .12 standard deviation decrease in anger ($p \leq .01$). Given that anger has a marginally significant effect on offending ($p = .076$), it is possible that self-control indirectly influences offending through its effects on anger. As Table 9 shows, though, the indirect effect

of self-control on offending through anger is not significant. In contrast to anger, self-control does not affect depression, negating the possibility of indirect effects on offending through depression.

Turning to the second model, self-control negatively influences association with criminal peers: a standard deviation increase in self-control causes a .14 standard deviation decrease in criminal peers ($p \leq .001$). Since criminal peers increase the risk of violent victimization ($p \leq .001$), I examine the possibility that self-control indirectly affects violent victimization through its influence on criminal peers. These results are presented in Table 11. Though self-control does not have a direct influence on violent victimization, I find an indirect effect from self-control on violent victimization through the mechanism of criminal peers ($p \leq .05$). Consistent with self-control theory, low self-control results in an individual associating with criminal peers, which then leads to violent victimization.

Summary. Self-control theory predicted that low self-control causes offending (Hypothesis 3A) and violent victimization (Hypothesis 3B). Both of these models show that self-control does not have any direct effect on offending or violent victimization. I also consider any indirect effects that self-control may have on offending or violent victimization. First, I examine the possibility that self-control indirectly influences offending through anger or depression. I find no evidence to support these claims. Self-control decreases anger, but anger is unrelated to offending. While depression increases offending, self-control does not influence depression. I also examine the indirect influence of self-control on violent victimization through criminal peers, and I find that a negative indirect effect exists. Low self-control increases the risk of violent victimization, but this relationship is entirely mediated through criminal peers. Low self-control causes violent victimization because individuals with low self-control are more likely to

associate with criminal peers, which, in turn, leads to violent victimization. Taken together, these findings lead to a rejection of Hypotheses 3A; however, Hypothesis 3B receives partial support. Low self-control does cause violent victimization, but entirely through the mechanism of criminal peers.

Discussion

Research suggests a strong link between offending and victimization (e.g., Lauritsen, Sampson, and Laub 1991; Shaffer and Ruback 2002). In this chapter, I examine the relationship between violent victimization and offending among a sample of African American young adults. Criminological theories offer three competing explanations of the nature of this relationship. I test predictions drawn from general strain theory, lifestyle theories, and self-control theory using longitudinal data. When I examined these predictions using cross-sectional data in the previous chapter, I found some degree of support for each of these theoretical perspectives. However, when examining longitudinal models in this chapter, I ultimately find strong support for lifestyle theories and limited support for general strain theory and self-control theory.

General strain theory. General strain theory predicts that violent victimization causes offending and that this relationship is mediated by negative emotions. In this chapter, the negative emotions that I examine are anger and depression. I find limited support for the claims of general strain theory. Violent victimization increases future offending, but neither anger nor depression are involved in this process. I find that the relationship between anger and offending is very weak and only marginally significant. Depression has much more pronounced effects on offending. However, violent victimization does not influence anger or depression. Some mechanism other than anger or depression mediates the effects of violent victimization on offending. It could be a negative emotion not examined in this dissertation, such as fear.

Alternately, it could be an entirely different mechanism unaccounted for in general strain theory. Finally, it could be that the hypothesized relationship exists, but only among certain individuals. Personal characteristics—such as self-control—could shape how an individual reacts to victimization.

As discussed in the previous chapter, a longitudinal examination of general strain theory is a more conservative test of the theoretical predictions. This is because the processes hypothesized in the theory seem likely to take place within a relatively brief timeframe. That said, several studies examining the relationship between victimization, negative emotions, and offending over time find evidence supportive of general strain predictions (e.g., Brezina 1998; Hay and Evans 2006). Brezina examined the relationship between adolescent maltreatment, anger, and delinquency using two waves of data gathered about 1.5 years apart. He found that maltreatment in the first wave increased anger in the first wave. Both maltreatment and anger increased delinquency in the second wave, and some of the effects of maltreatment were mediated through anger. Similarly, Hay and Evans (2006) examined violent victimization, anger, and offending over two waves of data separated by 5 years. They found that victimization at the first wave increased anger in the second wave. Anger fully mediated the effects of victimization on wave 2 substance use and a measure of general offending (violent crime, property crime, and substance use) in wave 2, and anger partially mediated the effects of victimization on wave 2 violent/property crime.

These authors both found longitudinal evidence supportive of the general strain predictions regarding anger, while I find no evidence of these claims. It could be that the general strain effects dissipate across the two waves of FACHS, an issue that I address in the limitations section. However, in the cross-sectional analyses of the previous chapter, I found that anger was

unrelated to victimization and offending. Additionally, Hay and Evans (2006) measure victimization previous to anger and offending, and they found mediating effects. This is even more surprising given that their waves of data were separated by 5 years, while only two years transpire between wave 5 and wave 6 in FACHS. Taken together, the evidence in this chapter and the previous chapter leads to two conclusions regarding victimization, offending, and general strain: anger is unrelated to victimization and exerts, at best, a marginal effect on offending.

The results regarding depression further suggest that researchers should pay more attention to the influence of depression on predatory criminal behavior. Depression increases offending, exerting a much stronger influence on offending than anger does. However, when viewed longitudinally, depression is not influenced by previous victimization. This contradicts the predictions of general strain theory. Given that I found a relationship between victimization and depression in the cross-sectional analyses of the previous chapter, it could be that the influence of victimization on depression is fleeting, and therefore it is not observable two years later. However, conflicting evidence to this argument can be found in the research of Manasse and Ganem (2009). In their study of victimization, depression, and offending, the authors found that previous victimization increased future depression.

So, I find that violent victimization causes offending, supporting the overarching prediction of general strain theory. However, the predicted mechanisms—anger and depression—do not mediate any of these effects, contradicting theoretical arguments. This could be because a longitudinal test of general strain theory is not appropriate, given that the hypothesized effects disappear over time. As a counterpoint to this claim, however, other longitudinal research examining the general strain predictions regarding victimization, negative

emotions, and offending found evidence supportive of the theory (Brezina 1998; Hay and Evans 2006; Manasse and Ganem 2009).

Finally, the lack of findings supportive of the negative emotions component of general strain theory could be due to the fact that individuals react to strain differently. Agnew (2002, 2006) argued that some people are able to find non-criminal ways of dealing with strain because they possess greater coping resources. In particular, he discussed self-control as a coping resource that could shape whether individuals engage in crime as a response to strain. I examine this possibility in the next chapter. I should note that it seems unlikely that self-control would condition the relationship between victimization and negative emotions, so I do not expect to find that victimization increases negative emotions among individuals with low self-control, for example. Agnew (2002, 2006) discussed a wide array of personal or social characteristics that condition an individual's reaction to strain, and it is possible that one or more of these characteristics could condition the relationship between victimization and negative emotions. However, I do not examine the moderating effects of all the potentially conditioning factors in this dissertation. Rather, I focus on self-control, and I predict that self-control moderates the relationships between anger and offending and depression and offending, but has no effect on the relationships between victimization and these negative emotions.

Lifestyle theories. Routine activity theory and lifestyle-exposure theory predict that offending causes victimization, and that these effects are mediated by exposure to criminals. Here, I examine exposure to criminals by focusing on the criminality of an individual's closest friends. I find strong support for this argument. Offending increases the risk of violent victimization, and these effects are entirely mediated by criminal peers. The reason that offenders are more likely to become victims of violent crime is that they have highly criminal

friends. It should be noted that the magnitude of this relationship is not large. The effects of offending on victimization are modest; however, they are entirely mediated through criminal peers, providing strong support for lifestyle theories.

Self-control theory. Self-control theory predicts that both violent victimization and offending are the result of low self-control. I find limited support for this claim. Low self-control modestly increases the risk of violent victimization, but this relationship is entirely mediated through association with criminal peers. Individuals with low self-control are more likely to experience violent victimization because low self-control causes them to associate with highly criminal friends, which, in turn, increases the risk of victimization. Ultimately, this provides some support for the theory. Self-control causes violent victimization (via criminal peers); however, the magnitude of this effect is small, which is certainly not supportive of the claim that low self-control is the sole cause of victimization.

Contrary to predictions, low self-control has no influence on offending, either directly or indirectly through anger or depression. This lack of a relationship is surprising, particularly given the large amount of research that has shown a strong relationship between low self-control and criminal behavior (e.g., Hay and Forrest 2008; Meldrum, Young, and Weerman 2009; Pratt and Cullen 2000).

Limitations. No research is without limitations. In this chapter, the two primary data limitations involve the measure of violent victimization and the amount of time between wave 5 and wave 6 in the FACHS data. First, the measure of violent victimization is somewhat limited. As discussed in the Methods chapter, it is constructed using two dichotomous measures of violent victimization. FACHS does not distinguish between different types of violent victimization. Being able to separately measure different violent offenses (e.g., simple assault,

aggravated assault, sexual assault, robbery, etc.) would enable researchers to construct a violent victimization scale similar to the offending scale used in these analyses. This would give a more nuanced measure of the degree of victimization experienced by respondents, rather than simply separating individuals into the categories of victims and non-victims. Additionally, there is no measure of property victimization included in FACHS. Therefore, this dissertation is unable to examine the influence of offending on property victimization or the influence of property victimization on offending.

The second limitation of this chapter relates to the timing of the waves. Due to conflicting theoretical predictions of the causal ordering of offending and violent victimization, it is necessary to examine this relationship longitudinally. Cross-sectional analyses, such as those found in the previous chapter, are incapable of firmly establishing time-order. The use of longitudinal data in this chapter is a strength that sets it apart from some previous work (e.g., Lin, Cochran, and Mieczkowski 2011). However, there is a cost to the use of longitudinal data: time elapses between waves. With the FACHS data, there are approximately 2 years between wave 5 and wave 6. The fact that an average of 24 months separates the two waves could bias this chapter against finding results more supportive of general strain theory and self-control theory. As discussed in the previous chapter, some of the processes I attempt to examine in this dissertation may occur in close temporal proximity to one another. For instance, the effects of victimization on anger/depression and then offending could take place within a reasonably short time-frame and dissipate quickly. It is possible that the processes predicted by general strain theory do take place, but that they are not apparent two years later. As the previous chapter demonstrated, when examining a general strain model with cross-sectional data, I found that violent victimization caused offending, and that part of these effects worked through depression.

It is possible that I do not find similar results in this chapter because too much time has elapsed between waves. It is worth noting, however, that even when examined cross-sectionally and assuming causal-ordering, I did not find strong support for the general strain argument.

Similarly, when examining the influence of self-control on offending and victimization, I measure self-control in the previous wave. Although research suggests that self-control reduces victimization risk (e.g., Schreck 1999), recent research also points to the possibility that victimization can reduce self-control (Agnew, Scheuerman, Grosholz, Isom, Watson, and Thaxton 2011). Therefore, it is necessary to measure self-control and victimization at separate points in time. According to Gottfredson and Hirschi (1990), this should not be a problem, since I examine young adults and the theory argues that self-control is stable past age 10. However, some research suggests that self-control is not as stable as Gottfredson and Hirschi claim (Burt, Simons, and Simons 2006). Burt and colleagues (2006) found that self-control was susceptible to influence from various social relationships throughout adolescence. The researchers also found that, when compared to individuals with either very high or very low self-control, the youth with average levels of self-control were much more likely to experience changes in self-control due to these various social bonds. In contrast, Hay and Forrest (2006) found stronger evidence for the stability claim. Using a longitudinal study of children from age 7 to age 15, the researchers found that both between- and within-individual self-control were fairly stable after age 10. Over 80% of their sample showed stability in self-control from age 7 onward; however, about 16% of their sample did experience large changes in self-control after age 10.

Overall, the literature seems to suggest that there are at least some—and perhaps many—exceptions to the stability assumption of self-control theory, but that many individuals do maintain fairly stable levels of self-control after childhood. Therefore, it should not be

problematic that I measure self-control in wave 5. However, it should be noted that if it is the case that many respondents in my sample experienced shifts in self-control during the two years separating wave 5 and wave 6, then it could diminish the influence of self-control at wave 5 on offending and victimization at wave 6. In this instance, as with general strain theory, I found more support for the theoretical arguments when examining cross-sectional data in the previous chapter. These results showed that low self-control increased offending and the risk of violent victimization. So, measuring low self-control and victimization at the same point in time is problematic, but measuring them in different waves could also be problematic, given that self-control may change over time.

Despite the downsides related to the time lapse between waves, on balance, it is still far better to approach this research question with longitudinal data. A longitudinal approach allows me to determine the extent to which violent victimization causes offending and offending causes violent victimization, whereas the previous cross-sectional approach was not be able to determine causality due to time-order concerns.

Table 7. Correlation Matrix and Descriptives (N =559)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Offending _{w5}	—													
2. Offending _{w6}	.35 ***	—												
3. Violent Victimization _{w5}	.22 ***	.20 ***	—											
4. Violent Victimization _{w6}	.12 **	.35 ***	.19 ***	—										
5. Anger _{w5}	.31 ***	.22 ***	.16 ***	.05	—									
6. Anger _{w6}	.19 ***	.18 ***	.12 **	.08 †	.59 ***	—								
7. Depression _{w5}	.21 ***	.13 **	.13 **	.05	.39 ***	.30 ***	—							
8. Depression _{w6}	.14 ***	.25 ***	.12 **	.16 ***	.32 ***	.34 ***	.52 ***	—						
9. Criminal Peers _{w5}	.46 ***	.33 ***	.19 ***	.07	.38 ***	.26 ***	.25 ***	.18 ***	—					
10. Criminal Peers _{w6}	.43 ***	.48 ***	.16 ***	.20 ***	.33 ***	.34 ***	.15 ***	.25 ***	.46 ***	—				
11. Self-Control _{w5}	-.28 ***	-.18 ***	-.10 *	-.02	-.51 ***	-.40 ***	-.36 ***	-.28 ***	-.32 ***	-.32 ***	—			
12. Male	.09 *	.10 *	.03	.01	.00	-.08 †	-.20 ***	-.10 *	.14 ***	.20 ***	-.05	—		
13. South	-.07	-.12 **	-.05	-.06	-.02	-.09 *	-.07 †	-.14 ***	-.10 *	-.15 ***	.14 *	.02 **	—	
14. Community Crime _{w6}	.20 ***	.25 ***	.06	.12 **	.22 ***	.20 ***	.14 ***	.18 ***	.21 ***	.33 ***	-.13 **	.01	-.01	—
Mean	0	0	.07	.04	0	0	0	0	0	0	0	.39	.52	0
Standard Deviation	1	1	.26	.19	1	1	1	1	1	1	1	.49	.50	1
Alpha	.78	.81	—	—	.87	.81	.86	.89	.75	.71	.75	—	—	.81

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 8. Regression Coefficients for the General Strain Model ($N = 559$)

	Anger _{w6}	Depression _{w6}	Offending _{w6}	Violent Victimization _{w6}
Offending _{w5}	—	—	.25 ***	.10
Violent Victimization _{w5}	.09	.13	.40 ***	.87 **
Anger _{w5}	.50 ***	.12 **	—	—
Anger _{w6}	—	—	.05 †	—
Depression _{w5}	—	.43 ***	—	—
Depression _{w6}	—	—	.18 ***	—
Self-Control _{w5}	-.12 **	—	-.01	.11
Male	-.15 †	—	.17	—
South	—	-.20 **	-.15 †	—
Community Crime _{w6}	.08 *	.10 **	.15 ***	.22 *
R^2	.37	.29	.22	.11
Model Fit Indices	Chi-square = 26.95, d.f. = 13, $p \leq .05$ RMSEA = .044 (.020, .067) CFI = .976			

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 9. General Strain Model: Indirect Effects of Self-Control on Offending ($N = 559$)

	Offending _{w6}		
	Total Effect	Direct Effect	Indirect through Anger _{w6}
Self-Control _{w5}	-.013	-.003	-.004

Notes: These indirect effects were calculated from a continuous SEM using bootstrapped standard errors.

† $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 10. Regression Coefficients for the Lifestyle Model ($N = 559$)

	Criminal Peers_{w6}	Offending_{w6}	Violent Victimization_{w6}
Offending _{w5}	.21 ***	.21 ***	.05
Violent Victimization _{w5}	—	.40 ***	.89 **
Criminal Peers _{w5}	.24 ***	.16 ***	—
Criminal Peers _{w6}	—	—	.35 ***
Self-Control _{w5}	-.14 ***	-.02	.15
Male	.29 ***	—	—
South	-.20 **	-.17 †	—
Community Crime _{w6}	.22 ***	.17 ***	—
R^2	.36	.20	.18
Model Fit Indices	Chi-square = 7.13, d.f. = 6, $p = .31$ RMSEA = .018 (.000, .060) CFI = .998		

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 11. Lifestyle Model: Indirect Effects of Offending and Self-Control on Violent Victimization (N =559)

	Violent Victimization _{w6}		
	Total Effect	Direct Effect	Indirect through Criminal Peers _{w6}
Offending _{w5}	.013	.005	.007 *
Self-Control _{w5}	.008	.012	-.005 *

Notes: These indirect effects were calculated from a continuous SEM using bootstrapped standard errors.

† $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Figure 7. Hypothesized General Strain Model

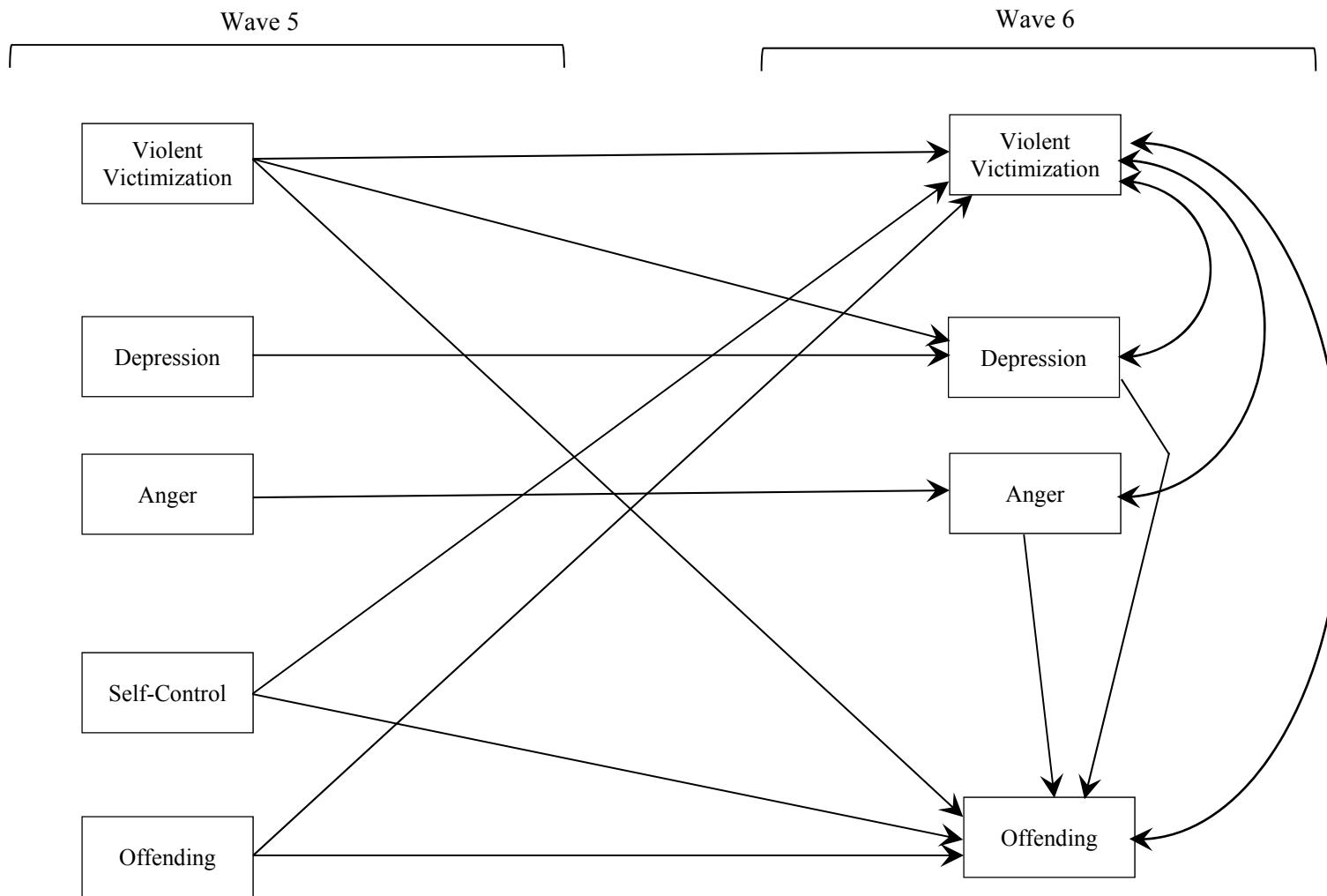


Figure 8. Hypothesized Lifestyle Model

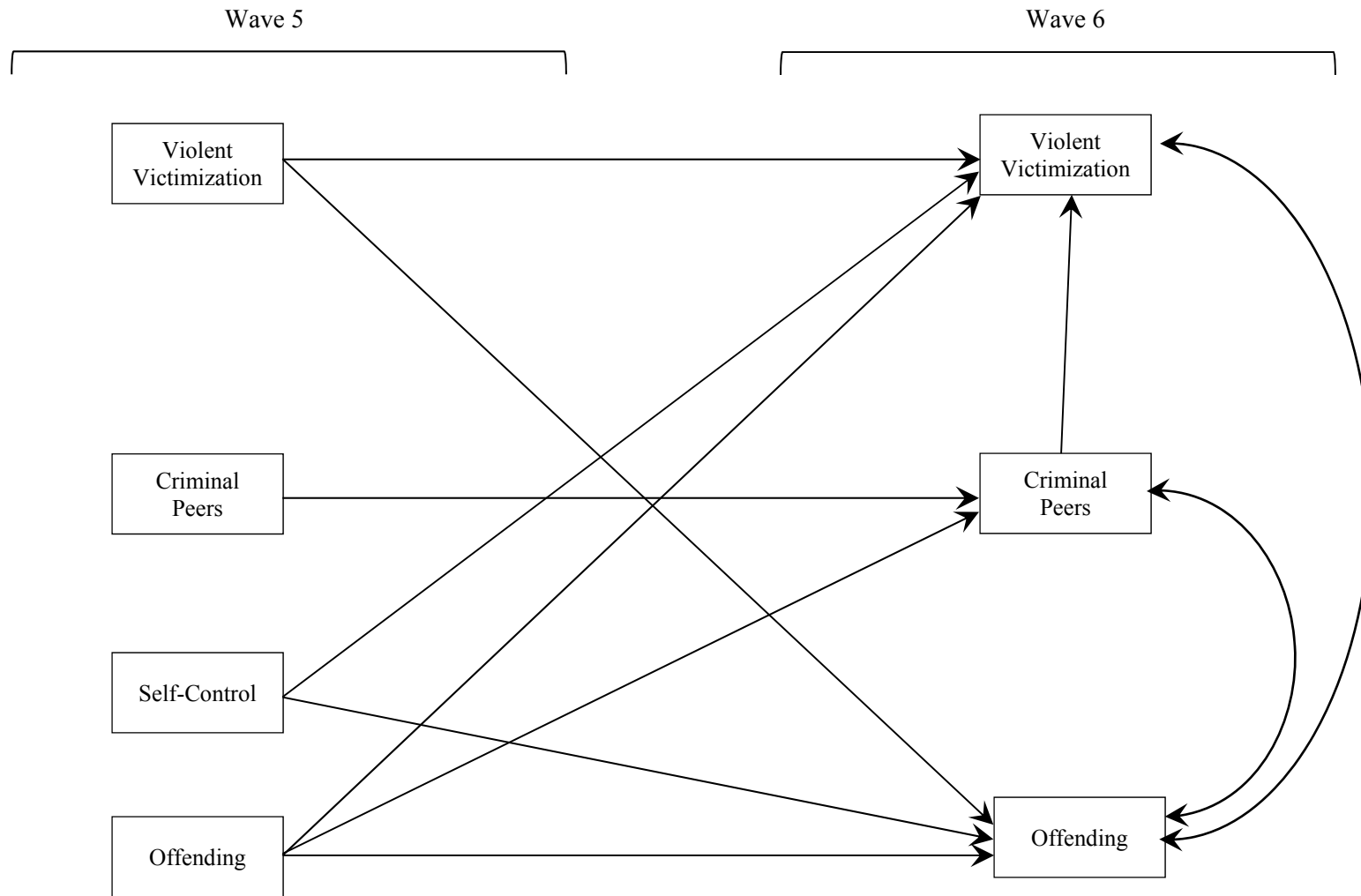
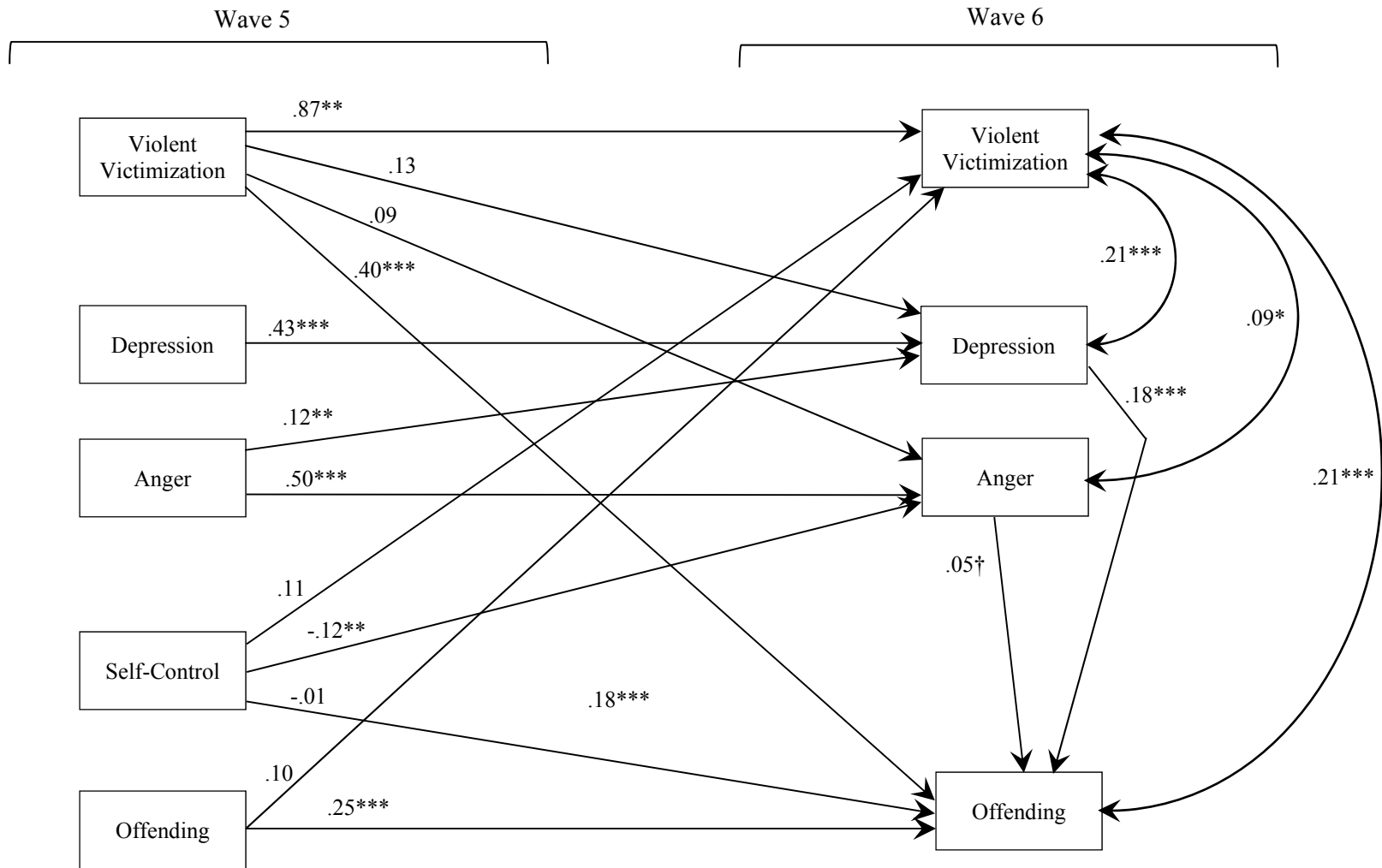


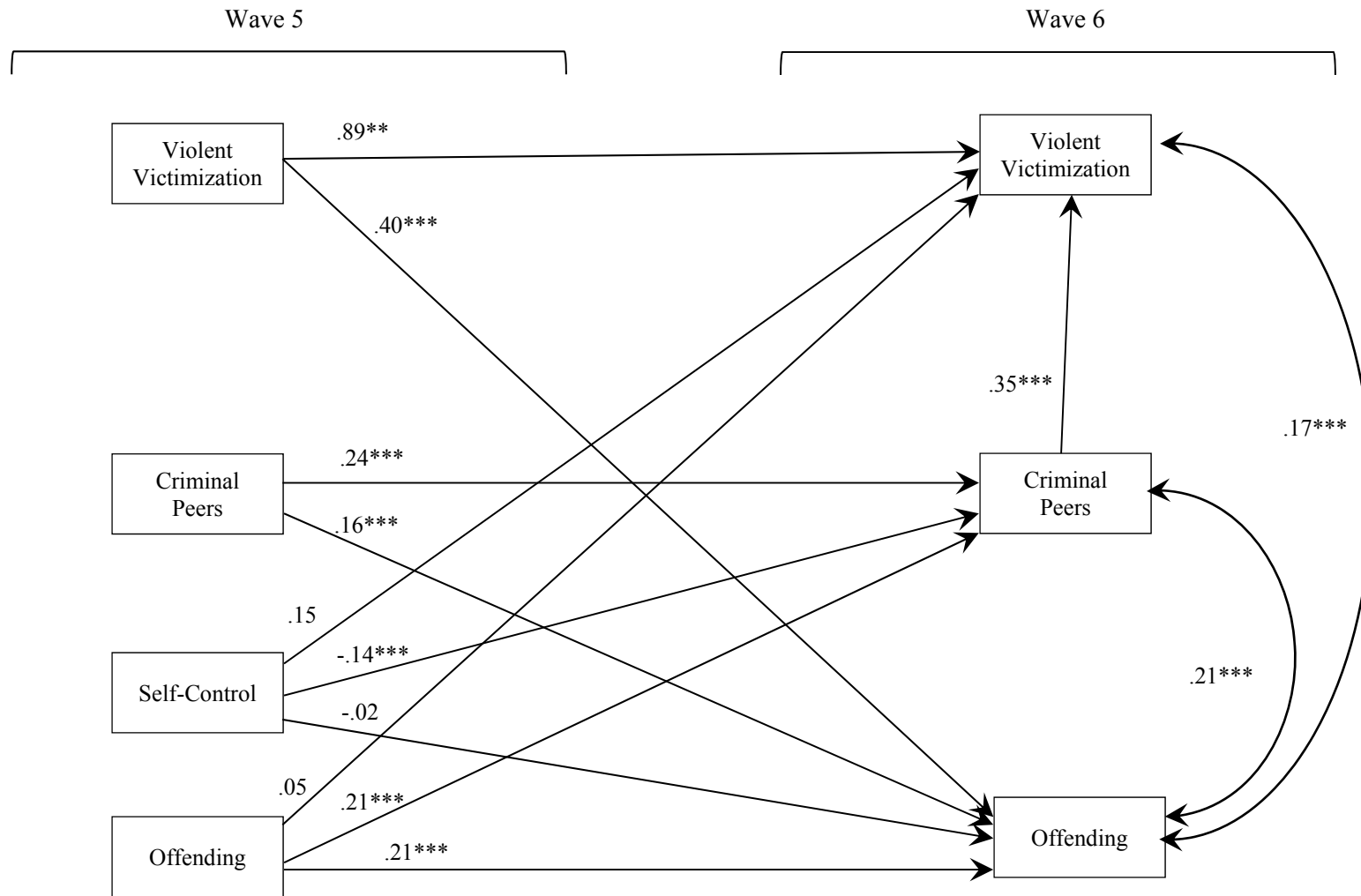
Figure 9. General Strain Model (N=559)



Chi-square = 26.95, *d.f.* = 13, *p* ≤ .05
 RMSEA = .044 (.020, .067)
 CFI = .976

Notes: This model controls for the effects of gender, region, and community crime.
 † *p* ≤ .10; * *p* ≤ .05; ** *p* ≤ .01; *** *p* ≤ .001 (two-tailed tests)

Figure 10. Lifestyle Model (N=559)



Chi-square = 7.13, *df* = 6, *p* = .31
 RMSEA = .018 (.000, .060)
 CFI = .998

Notes: This model controls for the effects of gender, region, and community crime.
 † *p* ≤ .10; * *p* ≤ .05; ** *p* ≤ .01; *** *p* ≤ .001 (two-tailed tests)

CHAPTER 7

THE CONDITIONING EFFECTS OF SELF-CONTROL

Research suggests that self-control is an important predictor of both offending (e.g., Pratt and Cullen 2000) and victimization (e.g., Schreck 1999). However, research also demonstrates that self-control can influence the nature of the relationship between offending and victimization (Schreck, Stewart, and Fisher 2006; Turanovic and Pratt forthcoming-a). In this chapter, I examine how self-control moderates the relationship between victimization and offending among African American young adults. Building upon the previous chapter, here I examine how the relationships predicted by general strain theory and lifestyle theories are influenced by self-control.

General strain theory predicts that self-control moderates the relationship between victimization and offending (Agnew 2002, 2006). Individuals with high self-control are more likely to engage in non-criminal methods of coping with the strain of victimization, whereas individuals with low self-control lack this vital coping resource. Therefore, violent victimization should have a stronger effect on offending among individuals lacking self-control compared to those with high self-control. Focusing on the mechanisms involved in general strain theory, negative emotions should also have a more pronounced effect on offending for individuals with low self-control. Again, individuals with high self-control are more capable of dealing with these emotions in non-criminal ways; in contrast, anger and depression have stronger effects on offending for individuals with low self-control.

Based on the arguments of lifestyle theories—Hindelang, Gottfredson, and Garofalo’s (1978) lifestyle exposure theory and Cohen and Felson’s (1979) routine activity theory—in conjunction with Schreck’s (1999) expansion of self-control theory, I predict that offending has a stronger effect on victimization among individuals with low self-control compared to those with high self-control. Engaging in crime increases the risk of violent victimization because it involves spending time around criminals (Hindelang et al. 1978). Schreck argued that individuals with low self-control experience a heightened risk of victimization because: (1) they fail to anticipate the consequences of their decisions, (2) they cannot accurately judge the intent of others, (3) they are likely to evoke anger in others, (4) they are unlikely to take precautions against victimization, (5) they are more likely to escalate conflicts, and (6) they are more likely to put themselves in dangerous situations (1999:635-37). Each of these characteristics should greatly increase an individual’s risk of violent victimization when spending time around offenders, either because the individual fails to anticipate the victimization or because he does something to precipitate his victimization. In this way, offending should have a greater impact on the risk of victimization for individuals with low self-control.

For similar reasons, I predict that association with criminal peers has a stronger effect on violent victimization among individuals with low self-control. Spending time around criminal peers increases the risk of victimization (e.g., Loeber, Kalb, and Huizinga 2001; Schreck, Wright, and Miller 2002; Taylor, Peterson, Esbensen, and Freng 2007). Additionally, research suggests that criminal peers have a stronger effect on victimization for individuals with low self-control (Schreck et al. 2006). Unfortunately, Schreck and colleagues did not examine whether the differences between individuals with low self-control and those with high self-control were significantly different. Nonetheless, these results, along with the predictions of lifestyle theories

in conjunction with the expansion of self-control theory (Schreck 1999), suggest that associating with criminal peers should have a more pronounced effect on the risk of violent victimization for individuals with low self-control.

In this chapter, I examine each of these theoretical claims separately using longitudinal data from the Family and Community Health Study (FACHS), a panel study of African American youths. I draw my sample from wave 5 and wave 6 of FACHS. Respondents are about 22 years old in wave 5 and about 24 years old in wave 6, with an average of two years elapsing between waves. I build upon our understanding of how self-control moderates the relationship between offending and violent victimization by examining the longitudinal models from the previous chapter separately on two groups of individuals: respondents with low self-control and those with high self-control. This allows me to examine how self-control conditions the effects hypothesized by general strain theory and lifestyle theories.

Analysis Plan

In this chapter, I examine how self-control influences the relationships hypothesized by general strain theory and lifestyle theories using structural equation modeling (SEM). SEM is well-suited for these analyses because it allows simultaneous estimation of all relationships under examination. In these analyses, I examine individuals with low and high self-control separately. To create these two groups, I split the sample of 559 individuals at the median value for self-control at wave 5, resulting in a low self-control group of 288 individuals and a high self-control group of 271 individuals. Table 12 presents the descriptives for the variables used in this chapter and the correlations between these variables. The correlations, means, and standard deviations for the low self-control group are above the diagonal, while the statistics for the high self-control group are below the diagonal.

I examine the two models from the previous chapter, focusing on differences between these low and high self-control groups. As discussed in the preceding chapter, these models examine the relationship between offending and victimization longitudinally in order to establish time-order. Figure 11 presents the hypothesized model examining the mediators drawn from general strain theory, while Figure 12 presents the hypothesized model examining the mediator drawn from lifestyle theories.¹² I examine each model separately for the low self-control group and the high self-control group. For the models examining general strain theory, I predict that the effects of victimization on offending are more pronounced for individuals with low self-control than for individuals with high self-control. I also predict that the effects of anger and depression on offending are stronger for individuals with low self-control. For the models examining lifestyle theories, I predict that the relationship between offending and victimization is stronger for individuals with low self-control than those with high self-control. I also predict that the effects of criminal peers on victimization are more pronounced for individuals with low self-control.

Both models include the dichotomous endogenous variable violent victimization at wave 6; therefore, I use weighted least squares means and variance adjusted estimation (WLSMV) in Mplus 6.11 (Muthén and Muthén 1998-2011).¹³ The hypothesized models in Figures 11 and 12 neither account for all potential relationships between the variables nor take into account the influence of the control variables. Therefore, for each model, I first estimate a full model which

¹² I do not make any hypotheses regarding how self-control moderates the effects of self-control. Therefore, unlike the models from Chapter 6, these theoretical models do not include self-control. However, self-control is included as a control variable in the analyses.

¹³ Maximum likelihood estimation with robust standard errors (MLR) is another estimation method suitable for categorical endogenous variables. However, as in the previous chapter, these models account for the correlation between offending and violent victimization at wave 6. WLSMV is capable of estimating correlations between categorical and continuous endogenous variables, while MLR cannot estimate these correlations. Therefore, WLSMV is the most appropriate estimation method for these analyses.

includes all possible paths between the exogenous and endogenous variables. In order to improve model fit, I then eliminate paths from the model that: (1) are non-significant ($t \leq 1.5$) for both the low self-control group and the high self-control group and (2) are not part of the hypothesized model.¹⁴ These results are displayed in two formats. Figure 13 displays a path diagram of the model examining the general strain theory predictions for the low self-control group, while Figure 14 shows the general strain results for the high self-control group. Figure 15 shows the results of the model examining the predictions of lifestyle theories for the low self-control group, and Figure 16 depicts the lifestyle model results for individuals with high self-control. Each of the figures omits the control variables for clarity. For the full regression results for the models examining general strain theory, see Table 13 (low self-control) and Table 14 (high self-control). The complete regression results for models examining lifestyle theories are found in Table 16 (low self-control) and Table 17 (high self-control).

I use several measures of fit in order to assess each model. I examine the chi-square divided by its degrees of freedom. An insignificant chi-square test of model fit indicates that the model fits the data well. I also examine Steiger's root mean square error of approximation (RMSEA; Browne and Cudeck, 1992). Lower RMSEA values indicate better fit. Hu and Bentler (1999) suggested that values between .05 and .08 indicate reasonable fit and values lower than .05 suggest that the model fit the data very well. Finally, I examine the comparative fit index (CFI; Bentler, 1990). Higher CFI values indicate good model fit; Hu and Bentler (1999) recommended a cutoff of .95.

¹⁴ Eliminating these paths resulted in dropping several control variables from the models. These included neighborhood crime at wave 5, age at wave 5 and wave 6, and socioeconomic status at wave 4. Because these variables did not significantly influence any of the endogenous variables, they are not included in the reduced models.

In order to examine differences between the low self-control and high self-control groups, I employ the model comparison procedure in SEM to test the statistical significance of the differences across these groups (Bollen 1989).¹⁵ This involves stacking the models for the two self-control groups and testing for differences in the chi-square between: (1) a model that constrains all paths to be the same across groups and (2) a series of models, each of which frees a single path to differ between groups. These results are presented in Table 15 for the models examining the predictions of general strain theory and Table 18 for the models examining the predictions of lifestyle theories. For each path included in the models, these tables present (1) the path coefficient for the constrained model in which all the paths are forced to be equal for the two groups, (2) the path coefficients for the low self-control group and the high self-control group when that path is allowed to differ across groups but all other paths are constrained to be equal across groups, (3) the difference in the chi-square between the constrained model and the model in which the path is freed, and (4) the significance of this chi-square difference. If I find a significant difference between the chi-square value for the model with the constrained paths and the chi-square for the model with a freed path, then I can conclude that a significant difference exists regarding that particular path between the coefficients for the low self-control group and the high self-control group.

Results

General strain predictions. In this section, I examine (1) how self-control influences the effect violent victimization on offending and (2) how self-control influences the effects of anger and depression on offending. General strain theory predicts that violent victimization

¹⁵ Because the models in this chapter use WLSMV estimation, the *difftest* command in Mplus (Muthén and Muthén 1998-2011) is used to test for differences across nested models.

causes offending (hypothesis 1A) and that anger (hypothesis 1B) and depression (1C) mediate the effects of violent victimization on offending. General strain theory also predicts that self-control influences the relationships between victimization, negative emotions, and offending. According to general strain theory, violent victimization has a stronger effect on offending for individuals with low self-control than for individuals with high self-control (hypothesis 4A). Additionally, the theory predicts that anger (hypothesis 4B) and depression (hypothesis 4C) have a stronger effect on offending for individuals with low self-control than for individuals with high self-control.

I first examine the model for individuals with low self-control, comparing these results to the results for the full sample found in the previous chapter. Next, I examine the model for individuals with high self-control and compare these results to the previous results. Then, I examine the differences across these groups. Finally, I discuss these findings in terms of the general strain hypotheses.

Model fit: Low self-control. The results of the model examining general strain predictions for individuals with low self-control are presented in Figure 13 and Table 13. Based on several fit indices, the overall fit of the model is excellent. The chi-square test of model fit is not significant ($\chi^2 = 13.49$, $d.f. = 13$, $p = .41$), the RMSEA is .011 with a 90% confidence interval of .000 to .060, and the CFI is .998.

Hypotheses: Low self-control. As predicted by general strain theory, individuals with low self-control who have previously experienced violent victimization engage in higher levels of offending ($p \leq .001$). Contrary to theoretical predictions, previous violent victimization does not lead to higher levels of anger ($p = .22$) or depression ($p = .50$). However, depression is positively correlated with current violent victimization ($p \leq .05$), though no correlation exists

between anger and current violent victimization ($p = .23$). Contrary to predictions, anger does not influence offending ($p = .36$). Supporting the predictions of general strain theory, depression is associated with more offending among individuals with low self-control ($p \leq .001$).

Additional relationships: Low self-control. In addition to the theorized relationships, I find a number of patterns among individuals with low self-control. Previous anger increases current anger ($p \leq .001$). Females experience higher levels of anger than males ($p \leq .05$), and higher levels of community crime cause a marginally significant increase in anger ($p \leq .10$). Among individuals with low self-control, self-control ($p \leq .05$) and living in the South decrease depression ($p \leq .05$), while previous depression ($p \leq .001$) and living in high-crime neighborhoods increase depression ($p \leq .05$). Individuals in the low self-control group who previously engaged in criminal behavior ($p \leq .001$) and live in higher crime neighborhoods ($p \leq .001$) commit more crime, while those living in the South are marginally less likely to engage in crime ($p \leq .10$). Previous violent victimization increases the risk of current victimization ($p \leq .05$), and higher levels of neighborhood crime marginally increase the risk of violent victimization ($p \leq .10$). Previous offending does not the risk of violent victimization among individuals with low self-control ($p = .50$); however, current violent victimization and current offending are positively correlated ($p \leq .001$).

Comparison to full sample: Low self-control. When examining the hypothesized relationships, I find a few relatively minor differences between the results of the low self-control model shown here and the results of the full sample model presented in the previous chapter. Among individuals with low self-control, violent victimization increases offending. In the previous chapter, I found that violent victimization increased offending in the full sample, as well. However, the effect size is larger among the low self-control group (.56) than it was

among the full sample (.40). In this model, anger is unrelated to offending; however, in the previous model, anger was marginally related to offending; however, the effect sizes are similar (.04 for low self-control; .05 for full sample). In this model, depression increases offending. Similarly, depression increased offending in the full sample. However, the effect size is slightly larger for the low self-control group (.23) than it was for the full sample (.18).

Model fit: High self-control. The results of the model examining the general strain theory predictions for individuals with high self-control are presented in Figure 14 and Table 14. Based on several fit indices, the overall fit of the model is good. The chi-square test of model fit is not significant ($\chi^2 = 18.95$, $d.f. = 13$, $p = .12$). The RMSEA is .041 with a 90% confidence interval of .000 to .078 and the CFI is .976, both meeting the cut-off criteria suggested by Hu and Bentler (1999).

Hypotheses: High self-control. Consistent with the predictions of general strain theory on the conditioning effects of self-control, previous violent victimization does not have any influence on offending among individuals with high self-control. Contrary to the predictions of general strain theory, previous violent victimization does not lead to higher levels of anger ($p = .57$) or depression ($p = .50$). However, anger ($p \leq .05$) and depression ($p \leq .001$) are significantly correlated with current violent victimization. In line with the broader predictions of general strain theory, anger ($p \leq .01$) and depression ($p \leq .001$) are associated with higher levels of offending.

Additional relationships: High self-control. In addition to the predicted effects, I find several other significant relationships among individuals with high self-control. Previous anger increases current anger ($p \leq .001$), while living in the South marginally decreases anger ($p \leq .10$).

Previous criminal behavior leads to a decrease in depression ($p \leq .05$), while previous anger ($p \leq .05$) and previous depression ($p \leq .001$) increase depression. Living in the South is associated with a marginally significant decrease in depression ($p \leq .10$). For individuals with high self-control, previous offending ($p \leq .01$) and higher levels of community crime ($p \leq .001$) increase offending. Surprisingly, neither previous victimization ($p = .99$) nor previous offending ($p = .52$) influence the current risk of violent victimization. However, current violent victimization and current offending are positively correlated ($p \leq .001$).

Comparison to full sample: High self-control. I find some differences in the hypothesized relationships when comparing the results of the low self-control model shown here and the results of the full sample model presented in the previous chapter. Violent victimization does not influence offending among individuals with high self-control. In the previous chapter, violent victimization increased offending in the full sample. In the high self-control group, anger increases offending. In the previous model, however, anger was only marginally related to offending. In this model, depression increases offending; depression increased offending in the full sample, as well. However, the effect size was twice as large in the full sample (.18) as it is for the high self-control group (.09).

Hypothesized differences across models. Table 15 presents the statistical examination of differences across the general strain models for the low self-control group and the high self-control group based on the model comparison procedure (Bollen 1989). I predict that three relationships will be stronger for individuals with low self-control than for individuals with high self-control: the effect of violent victimization on offending (hypothesis 4A), the effect of anger on offending (hypothesis 4B), and the effect of depression on offending (hypothesis 4C).

In the models above, I find that victimization increases offending for individuals with low self-control ($p \leq .01$), but it has no influence on offending for individuals with high self-control. Table 15 shows that, in a multi-group model in which all other paths are constrained to be equal, this same pattern is found. However, when comparing the chi-square difference between the model in which the path from victimization to offending is constrained and the model in which it is freed to differ across groups, I find that the difference is not statistically significant. This suggests that the difference seen in the previous models regarding the influence of violent victimization on offending is not significantly different across the two groups.

In the earlier models, I find that anger increases offending for individuals with high self-control ($p \leq .01$), but anger does not affect offending among the low self-control group. Table 15 shows that, constraining all other paths, this pattern is reflected. However, examining the chi-square difference across constrained and freed models shows that this difference is not statistically significant. This suggests that the influence of anger on offending is not significantly different across groups.

I also find differences in the influence of depression on offending in the earlier models: depression increases offending for both groups ($p \leq .001$), but the effect is much larger for individuals with low self-control (.23) than for those in the high self-control group (.09). Table 15 shows that this difference is statistically significant ($p \leq .01$). As predicted, depression has a stronger effect on offending for individuals with low self-control.

Additional differences across models. In addition to the hypothesized differences across groups, I find a few other significant differences between individuals with low and high self-control. For individuals with high self-control, engaging in offending decreases their level of depression, whereas offending has no effect on depression for individuals with low self-control.

This difference is significant at $p \leq .05$. I also find a marginally significant difference in the relationship between previous offending and current offending: previous criminal behavior has a more pronounced effect on current offending for individuals with low self-control than for individuals with high self-control ($p = .060$). I also find that living in the South has a marginally different influence on offending across groups. For those with low self-control, living in the South decreases offending, whereas for individuals with high self-control, no relationship exists. The difference in these effects is significant at $p = .075$.

Summary. General strain theory predicted that, compared to individuals with high self-control, individuals with low self-control would experience more pronounced effects in three relationships: violent victimization on offending (hypothesis 4A), anger on offending (hypothesis 4B), and depression on offending (4C). These models provide limited support for these claims. Though victimization leads to offending for the low self-control group and not for the high self-control group, the difference across groups is not statistically significant. Contrary to the predictions regarding anger and offending, I find that anger increases offending for individuals with high self-control, but it does not influence offending among individuals with low self-control. This is the inverse of the relationship predicted by general strain theory. However, I again find that this difference across groups is not statistically significant. Regarding depression and offending, I find a significant difference across groups: depression increases offending for everyone, but the effect is significantly stronger for individuals with low self-control. Ultimately, I find support for hypothesis 4C, which claims that depression has a stronger effect on offending for individuals with low self-control, but I am led to reject both hypothesis 4A and hypothesis 4B, which claim that victimization and anger have stronger effects on offending for individuals with low self-control.

Lifestyle predictions. In this section, I examine (1) how self-control influences the effect of offending on violent victimization and (2) how self-control influences the effect of criminal peers on violent victimization. Lifestyle theories predict that offending causes violent victimization (hypothesis 2A) and that this effect is mediated through association with criminal peers (hypothesis 2B). Based on the predictions of lifestyle theories, Schreck's (1999) expansion of self-control theory, and empirical research, I derive several predictions on how self-control influences the relationships predicted by lifestyle theories. I hypothesize that offending has a stronger effect on violent victimization for individuals with low self-control than for those with high self-control (hypothesis 5A). I also predict that criminal peers have a stronger effect on violent victimization for individuals with low self-control than for individuals with high self-control (hypothesis 5B).

First, I examine the model for individuals with low self-control and compare these results to the results for the full sample found in the previous chapter. Next, I examine the model for individuals with high self-control and compare these findings to the previous results. Then, I examine the differences across these two groups. Finally, I discuss the findings in terms of the lifestyle hypotheses regarding the moderating effects of self-control.

Model fit: Low self-control. Figure 15 and Table 16 show the results of the model examining the lifestyle predictions among the low self-control group. The overall fit of the model is excellent. The chi-square test of model fit is not significant ($\chi^2 = 4.09$, $d.f. = 6$, $p = .66$), the RMSEA is .000 with a 90% confidence interval of .000 to .061, and the CFI is 1.000. Taken together, these indices suggest that the model fits the data very well.

Hypotheses: Low self-control. Contrary to the predictions of lifestyle theories, previous offending does not increase the risk of violent victimization among individuals with low self-

control ($p = .58$). Consistent with lifestyle theories, however, previous criminal behavior increases association with criminal peers ($p \leq .001$). Also consistent with predictions, current association with criminal peers is associated with an increased risk of violent victimization for individuals with low self-control ($p \leq .01$).

Additional relationships: Low self-control. In addition to the relationships predicted by lifestyle theories, I find several other patterns among individuals with low self-control. Past association with criminal peers increases current association with criminals ($p \leq .001$), while self-control decreases association with criminal peers ($p \leq .01$). Males are more likely than females to associate with criminal peers ($p \leq .001$), and increases in the level of community crime increase an individual's association with criminal peers ($p \leq .001$). For the low self-control group, previous offending ($p \leq .001$), previous violent victimization ($p \leq .001$), and previous association with criminal peers ($p \leq .01$) all increase current offending. Males engage in marginally higher levels of crime ($p \leq .10$), while living in the South decreases offending ($p \leq .05$) and living in higher-crime neighborhoods increases offending ($p \leq .001$). Previous violent victimization increases the risk of current violent victimization for the low self-control group ($p \leq .01$). Finally, current offending is positively correlated with current violent victimization ($p \leq .001$) and current association with criminal peers ($p \leq .001$).

Comparison to full sample: Low self-control. I find some relatively minor differences in the hypothesized relationships when comparing the results of the low self-control model shown here and the results of the full sample model presented in the previous chapter. Offending does not influence the risk of violent victimization in the low self-control group. In the previous chapter, offending did not influence violent victimization, either. Among those with low self-control, offending increases an individual's association with criminal peers; offending increased

criminal peers in the full sample, as well, and the effect sizes are fairly similar (.24 for low self-control; .21 for full sample). Finally, association with criminal peers increases the risk of violent victimization in the low self-control group. A similar relationship was found in the full sample. Though relatively comparable, the effect among the low self-control group (.29) is slightly smaller than the effect size for the full sample (.35).

Model fit: High self-control. The results of the model examining the predictions of lifestyle theories for individuals with high self-control are presented in Figure 16 and Table 17. Based on several fit indices, the overall fit of the model is excellent. The chi-square test of model fit is not significant ($\chi^2 = 3.02$, $d.f. = 6$, $p = .81$). The RMSEA is .000 with a 90% confidence interval of .000 to .050. Finally, the CFI is 1.000.

Hypotheses: High self-control. Inconsistent with the broader predictions of lifestyle theories, previous offending does not influence the risk of violent victimization among individuals with high self-control ($p = .75$). However, as hypothesized by lifestyle theories, previous offending increases association with criminal peers ($p \leq .001$). Also consistent with the broader predictions of lifestyle theories, current association with criminal peers is associated with an increased risk of violent victimization ($p \leq .001$).

Additional relationships: High self-control. In addition to the relationships hypothesized by lifestyle theories, I find several patterns among the high self-control group. Previous association with criminals increases current association with criminal peers ($p \leq .001$). Males are marginally more likely than females to associate with criminal peers ($p \leq .10$). For individuals with high self-control, living in the South decreases association with criminal peers ($p \leq .01$), while higher levels of neighborhood crime increase an individual's association with criminal

peers ($p \leq .001$). Previous criminal behavior ($p \leq .05$) and association with criminal peers ($p \leq .001$) increase offending. Living in a neighborhood with higher levels of crime is associated with increased criminal behavior ($p \leq .001$). Previous violent victimization does not influence the risk of current violent victimization ($p = .90$). Finally, current offending is positively correlated with current violent victimization ($p \leq .001$) and current association with criminal peers ($p \leq .001$).

Comparison to full sample: High self-control. I find some differences in the hypothesized relationships when comparing the results of the high self-control model shown here to the results of the full sample model presented in the previous chapter. In the high self-control group, offending is not related to the risk of violent victimization. Similarly, offending did not influence the risk of violent victimization in the full sample. Offending increases an individual's association with criminal peers in the high self-control group, and offending increased criminal peers in the full sample, too. However, the effects sizes were slightly different: the effect is smaller in the high self-control group (.14) than it was among the full sample (.21). Association with criminal peers increases the risk of violent victimization in the high self-control group, and criminal peers increased violent victimization in the full sample, as well. This effect is more pronounced among the high self-control group (.49) than it was among the full sample (.35).

Hypothesized differences across models. Table 18 displays the examination of differences across the low self-control and the high self-control lifestyle models based on the model comparison procedure (Bollen 1989). Drawing from theory and research, I predict that two relationships will be stronger for individuals with low self-control than for individuals with high self-control: the effect of offending on violent victimization (hypothesis 5A) and the effect of criminal peers on violent victimization (hypothesis 5B).

In the two models discussed earlier, I find that previous offending does not directly influence violent victimization for either the low self-control group or the high self-control group. The results of the lifestyle model examined in the previous chapter showed that offending increased the risk of violent victimization indirectly through the mechanism of criminal peers. Both the low and high self-control models examined in this section show that (1) previous offending increases an individual's criminal peers and (2) criminal peers are associated with violent victimization. Table 18 shows that there is no significant difference in these effects between the two groups. This suggests that the same indirect effect of offending on victimization through criminal peers may be taking place among both groups. However, no direct effect exists for either group, so there is no difference between the groups in the direct effect of offending on victimization (see Table 18).

I also predict that criminal peers will have a stronger effect on violent victimization for individuals with low self-control. In the models examined above, I find that association with criminal peers increases the risk of violent victimization for both groups, though the effect size is larger for individuals with high self-control (.49) versus those with low self-control (.29). Table 18 shows that, in a multi-group model in which all other paths are constrained to be equal across groups, a similar pattern is found, though the difference in effect size is less pronounced. However, examining the chi-square difference across constrained and freed models shows that this difference is not statistically significant. This suggests that the association between criminal peers and violent victimization is not significantly different across groups.

Additional differences across models. Though I do not find any of the hypothesized differences across groups, I find some other distinctions between individuals with low and high self-control. For both individuals with low self-control and those with high self-control, having

criminal peers in the past increases one's current criminal peers. However, this effect is stronger among individuals with high self-control, and the difference between groups is highly significant ($p \leq .001$). Additionally, though I find that community crime increases criminal peers for both groups, the effects are more pronounced for individuals with low self-control. This difference is significant at $p \leq .05$. Current criminal peers and current offending are positively correlated for both groups; however, this association is stronger for the low self-control group, and the difference is highly significant ($p \leq .001$).

I also find several marginally significant differences across groups. In the low self-control group, males have more criminal peers ($p \leq .001$), while this gender difference is only marginally significant in the high self-control group ($p \leq .10$). This difference in the influence of gender on criminal peers is marginally significant ($p = .098$). In the low self-control group, individuals living in the South commit less crime, while there are no regional differences in offending among individuals with high self-control. This difference between the high self-control and low self-control groups is marginally significant ($p = .052$). Finally, current offending and current violent victimization are positively correlated for both groups, but the association is stronger among individuals with low self-control. This difference is significant at $p = .053$.

Summary. Based on lifestyle theories, expansions of self-control theory, and research, I predicted that, compared to individuals with high self-control, individuals with low self-control would experience more pronounced effects in two relationships: offending on violent victimization (hypothesis 5A) and criminal peers on violent victimization (hypothesis 5B). These models provide no support for either of these claims. Previous offending does not influence the risk of violent victimization for either group. It should be noted that the association

between current offending and current violent victimization is significantly stronger ($p \leq .001$) for individuals with low self-control. However, because offending and violent victimization are both measured at wave 6, it is impossible to disentangle the sequencing of these events. Therefore, cautious interpretation of these findings would avoid claiming that offending has a stronger influence on violent victimization for the low self-control group.

I must reject the second hypothesis, as well. The separate models for the high and low self-control groups suggest that the influence of criminal peers on violent victimization is in fact stronger for individuals with high self-control. This is the inverse of the hypothesized moderating effect of self-control. However, the difference between groups is not significant, suggesting that self-control does not condition the influence of criminal peers on violent victimization. Ultimately, I reject both hypothesis 5A and hypothesis 5B.

Discussion

We know that a strong association exists between offending and victimization (e.g., Loeber, Kalb, and Huizinga 2001; Shaffer and Ruback 2002). General strain theory suggests that victimization leads to offending (Agnew 2001), while lifestyle theories suggest that offending causes victimization (Cohen and Felson 1979; Hindelang et al. 1978). Research supports both of these claims (e.g., Dobrin and Brusk 2003; Hay and Evans 2006; Lauritsen, Sampson, and Laub 1991). However, theory and research also point to factors that may moderate these effects.

Perhaps the most prominent of these conditioning factors is self-control. Self-control has been shown to exert a direct influence on offending (e.g., Pratt and Cullen 2000) and victimization (e.g., Schreck 1999). In addition to these direct effects, theory and research suggest that self-control may also moderate the influence of victimization on offending and vice

versa. In this chapter, I examine how self-control conditions the relationship between offending and victimization

General strain theory. General strain theory predicts that victimization causes offending (Agnew 2001). Being victimized causes an individual to experience negative emotions, and in order to relieve the strain of these emotions, some people engage in criminal behavior. Individuals who possess coping resources may find non-criminal ways of dealing with this strain, but those who lack such resources are likely to commit crime as a reaction to strain (Agnew 2006). General strain theory posits that self-control is an important coping resource (Agnew 2002). Research suggests that self-control does condition an individual's response to strain in that individuals with low self-control are more likely to engage in crime as a reaction to experiencing strain (e.g., Agnew, Brezina, Wright, and Cullen 2002). Some studies have examined victimization as the source of strain, and their findings suggest that the effects of victimization on offending are stronger for individuals with low self-control (Hay and Evans 2006; Turanovic and Pratt forthcoming-a).

In this dissertation, one process I examine using several approaches is the effect of violent victimization on violent/property offending among African American young adults. This chapter focuses on how self-control moderates this relationship. Drawing from general strain theory, I predicted that: (1) the relationship between victimization and offending is stronger for individuals with low self-control, (2) the relationship between anger and offending is stronger for individuals with low self-control, and (3) the relationship between depression and offending is stronger for individuals with low self-control.

Of these three hypothesized differences, I find support for only one: depression leads to a greater increase in offending among individuals with low self-control. Depression increases

offending for everyone, but the effects are stronger for the low self-control group. This suggests that individuals with low self-control are more likely to be at the whim of their emotions, acting without thought to the negative consequences. When depressed, they are more likely to engage in crime, even though it is undeniably a maladaptive form of coping. I also find differences based on self-control for the effects of victimization on offending and for the effects of anger on offending; however, none of these differences are statistically significant.

I did find another interesting difference between individuals with high self-control and low self-control that fits in with general strain theory. For individuals with high self-control, engaging in offending decreases future depression; for individuals with low self-control, there is no relationship between previous offending and depression. This is interesting in a couple of ways. In a sense, the basic process here is what general strain theory would predict. Agnew (2006) argued that individuals engage in offending as a way to relieve the strain of negative emotions. Research supports this claim of general strain theory: Brezina (1996) found that engaging in delinquency reduced the negative emotions caused by strain. However, it is unexpected that I would find this effect only among individuals with high self-control. General strain theory suggests that self-control would help to prevent an individual from engaging in crime as a method of dealing with negative emotions. Perhaps this finding suggests that individuals with high self-control are more judicious about their decision to offend. Maybe self-control does allow them to generally find ways of dealing with negative emotions other than crime; however, when they do engage in crime, they choose to do so in a way that is particularly effective at diminishing their strain. This is an interesting possibility that should be examined further in future research.

Lifestyle theories. Lifestyle theories (Cohen and Felson 1979; Hindelang et al. 1978) argue that offending causes victimization. In particular, offending leads to victimization because it involves spending time around criminals. Based on the predictions of lifestyle theories, Schreck's (1999) expansion of self-control theory, and empirical research on self-control, delinquent peers, and victimization (Schreck et al. 2006), I derived several predictions on how self-control would influence the relationships predicted by lifestyle theories.

In each chapter of this dissertation, one process I examine was how violent/property offending influences the risk of violent victimization among African American young adults. In particular, I focus on how association with criminal peers mediated this relationship. In this chapter, I expand my focus to examine how self-control influences this relationship. I predicted that, among individuals with low self-control: (1) offending would have a stronger effect on violent victimization and (2) association with criminal peers would have a stronger effect on violent victimization. However, I find no support for either of these claims. It seems that self-control does not affect the relationships hypothesized by lifestyle theories. We can interpret the findings from this chapter in the context of the results of the previous chapter to draw some conclusions. In the previous chapter, I found that offending caused a small increase in the risk of violent victimization, and this effect worked entirely through an increased association with criminal peers. Though I do not directly examine mediating effects in this chapter, among both the low self-control group and the high self-control group, I find that offending increases association with criminal peers and that association with criminal peers increase the risk of violent victimization. This would suggest that the indirect effect observed in the previous chapter is at play among both individuals with high self-control and those with low self-control.

This contradicts my hypotheses regarding the conditioning effects of self-control; however, it is supportive of the lifestyle predictions more generally.

Limitations. Perhaps the primary limitation in this chapter is one that surfaces in both preceding chapters: the narrow measure of violent victimization. As discussed previously, this variable is a dichotomous measure of serious violent victimization. It does not measure the rate of victimization an individual experiences, so it cannot distinguish between one-time victims and repeatedly victimized individuals. Additionally, it only measures violent victimization, and it does not distinguish between different forms of violent victimization. Lacking these data, I cannot create a scale more similar to the offending scale, which could provide a more nuanced measure of the range of victimizations experienced by respondents, rather than simply separating individuals into the categories of victims and non-victims. Similarly, FACHS does not include any measures of property victimization, so I am unable to examine the relationship between property victimization and offending.

Finally, the victimization measure presents particular problems for the analyses in this chapter. Given the limited nature of the items used to compose this measure, the level of serious violent victimization reported in the sample is fairly low. In these analyses, I split the sample into two groups. The levels of victimization in wave 6 were similar across the two groups, suggesting that any differences found across groups are not an artifact of diminished statistical power. However, the small numbers of victims in these groups could have contributed to errors in which I falsely failed to reject the null hypothesis. In particular, it is possible that some of the differences observed across the groups actually exist, despite the fact that the group comparison procedure failed to detect statistically significant moderating effects.

Table 12. Correlation Matrix and Descriptives (N =288 Low Self-Control and 271 High Self-Control)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Mean	S.D.
1. Offending _{w5}	—	.39 ***	.24 ***	.13 *	.29 ***	.17 **	.18 **	.18 **	.49 ***	.45 ***	-.22 ***	.13 *	-.07	.22 ***	.22	1.19
2. Offending _{w6}	.17 **	—	.24 ***	.36 ***	.21 ***	.15 *	.08	.29 ***	.34 ***	.51 ***	-.15 **	.16 **	-.20 ***	.24 ***	.14	1.15
3. Violent Victimization _{w5}	.14 *	.08	—	.27 ***	.17 **	.15 *	.10 †	.10 †	.22 ***	.19 ***	-.10	.05	-.02	.03	.09	.29
4. Violent Victimization _{w6}	.09	.32 ***	.05	—	.10	.10 †	.02	.14 *	.05	.19 **	-.03	.02	-.08	.13 *	.05	.21
5. Anger _{w5}	.16 **	.12 *	.08	-.05	—	.57 ***	.36 ***	.32 ***	.42 ***	.29 ***	-.42 ***	-.03	-.07	.19 **	.37	1.06
6. Anger _{w6}	.00	.11 †	-.01	.03	.46 ***	—	.28 ***	.32 ***	.25 ***	.31 ***	-.26 ***	-.14 *	-.07	.19 **	.32	1.11
7. Depression _{w5}	.09	.11 †	.12 †	.08	.21 ***	.14 *	—	.52 ***	.22 ***	.06	-.25 ***	-.28 ***	-.07	.10 †	.29	1.05
8. Depression _{w6}	-.05	.13 *	.09	.18 **	.20 **	.24 ***	.45 ***	—	.19 **	.21 ***	-.27 ***	-.13 *	-.16 **	.19 **	.19	1.04
9. Criminal Peers _{w5}	.26 ***	.23 ***	.09	.07	.10	.07	.16 **	.06	—	.42 ***	-.31 ***	.11 †	-.10 †	.21 ***	.23	1.15
10. Criminal Peers _{w6}	.24 ***	.34 ***	.05	.21 ***	.21 ***	.25 ***	.13 *	.23 ***	.46 ***	—	-.29 ***	.23 ***	-.12 *	.35 ***	.23	1.14
11. Self-Control _{w5}	-.05	.04	.04	.10	-.21 ***	-.19 **	-.12 *	-.08	-.02	-.10	—	-.04	.13 *	-.08	-.77	.74
12. Male	.01	.00	.00	-.01	.00	-.03	-.14 *	-.09	.17 **	.16 **	-.01	—	-.02	-.01	.41	.49
13. South	-.01	.02	-.06	-.04	.12 *	-.06	-.02	-.09	-.06	-.17 **	.12 *	.07	—	-.03	.48	.50
14. Community Crime _{w6}	.07	.22 ***	.08	.11 †	.16 **	.13 *	.11 †	.12 *	.15 *	.23 ***	.05	.01	.05	—	.13	1.08
Mean	-.23	-.15	.05	.03	-.40	-.34	-.31	-.20	-.24	-.24	.81	.37	.56	-.14		
S.D.	.68	.78	.22	.18	.75	.74	.84	.91	.75	.75	.44	.48	.50	.88		

Notes: Coefficients for the low self-control group are above the diagonal, and coefficients for the high self-control group are below the diagonal.

† p ≤ .10; * p ≤ .05; ** p ≤ .01; *** p ≤ .001 (two-tailed tests).

Table 13. Regression Coefficients for the General Strain Model for Low Self-Control ($N = 288$)

	Anger _{w6}	Depression _{w6}	Offending _{w6}	Violent Victimization _{w6}
Offending _{w5}	—	.02	.26 ***	.07
Violent Victimization _{w5}	.23	.11	.56 **	1.21 *
Anger _{w5}	.54 ***	.08	—	—
Anger _{w6}	—	—	.04	—
Depression _{w5}	—	.42 ***	—	—
Depression _{w6}	—	—	.23 ***	—
Self-Control _{w5}	—	-.14 *	—	—
Male	-.25 *	—	.27	—
South	-.06	-.22 *	-.32 †	—
Community Crime _{w6}	.09 †	.11 *	.15 ***	.21 †
R^2	.34	.31	.29	.18
Model Fit Indices	Chi-square = 13.49, d.f. = 13, $p = .41$			
	RMSEA = .000 (.000, .060)			
	CFI = .998			

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 14. Regression Coefficients for the General Strain Model for High Self-Control (N =271)

	Anger _{w6}	Depression _{w6}	Offending _{w6}	Violent Victimization _{w6}
Offending _{w5}	—	-.16 *	.18 **	.28
Violent Victimization _{w5}	-.17	.16	.12	-.03
Anger _{w5}	.44 ***	.15 *	—	—
Anger _{w6}	—	—	.08 **	—
Depression _{w5}	—	.46 ***	—	—
Depression _{w6}	—	—	.09 ***	—
Self-Control _{w5}	—	-.01	—	—
Male	-.04	—	—	—
South	-.17 †	-.18 †	—	—
Community Crime _{w6}	.06	.07	.15 ***	.28
R^2	.22	.24	.09	.09
Model Fit Indices	Chi-square = 18.95 , d.f. = 13, $p = .12$ RMSEA = .041 (.000 , .078) CFI = .976			

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 15. Fit Indices of the Multiple-Group General Strain Models for High Self-Control and Low Self-Control (N=288 Low Self-Control and 271 High Self-Control)

Paths		Low Self-Control	High Self-Control	$\Delta\chi^2_{(1)}$	p-value
β_1 : Violent Victimization _{w5} → Anger _{w6}	Constrained Model	.12	.12	1.49	.222
	Free β_1	.24	-.19		
β_2 : Anger _{w5} → Anger _{w6}	Constrained Model	.47 ***	.47 ***	2.20	.138
	Free β_2	.54 ***	.44 ***		
β_3 : Male → Anger _{w6}	Constrained Model	-.13 †	-.13 †	1.59	.207
	Free β_3	-.25 *	-.04		
β_4 : South → Angers _{w6}	Constrained Model	-.13 †	-.13 †	1.49	.222
	Free β_4	-.06	-.16 †		
β_5 : Community Crime _{w6} → Anger _{w6}	Constrained Model	.07 *	.07 *	1.15	.283
	Free β_5	.09 †	.06		
β_6 : Offending _{w5} → Depression _{w6}	Constrained Model	-.03	-.03	5.80 *	.016
	Free β_6	.02	-.17 *		
β_7 : Violent Victimization _{w5} → Depression _{w6}	Constrained Model	.13	.13	.00	.969
	Free β_7	.12	.14		
β_8 : Anger _{w5} → Depression _{w6}	Constrained Model	.11 *	.11 *	1.65	.199
	Free β_8	.08	.16 *		
β_9 : Depression _{w5} → Depression _{w6}	Constrained Model	.44 ***	.44 ***	.12	.734
	Free β_9	.43 ***	.46 ***		
β_{10} : Self-Control _{w5} → Depression _{w6}	Constrained Model	-.10 †	-.10 †	2.12	.146
	Free β_{10}	-.14 *	.01		
β_{11} : South → Depression _{w6}	Constrained Model	-.20 **	-.20 **	1.18	.278
	Free β_{11}	-.23 *	-.17		
β_{12} : Community Crime _{w6} → Depression _{w6}	Constrained Model	.09 **	.09 **	.38	.539
	Free β_{12}	.11 *	.07		
β_{13} : Offending _{w5} → Offending _{w6}	Constrained Model	.24 ***	.24 ***	3.53 †	.060
	Free β_{13}	.27 ***	.17 **		
β_{14} : Violent Victimization _{w5} → Offending _{w6}	Constrained Model	.44 **	.44 **	2.14	.144
	Free β_{14}	.57 ***	.10		
β_{15} : Anger _{w6} → Offending _{w6}	Constrained Model	.06 **	.06 **	1.55	.213
	Free β_{15}	.04	.07 **		
β_{16} : Depression _{w6} → Offending _{w6}	Constrained Model	.11 ***	.11 ***	9.15 **	.003
	Free β_{16}	.24 ***	.09 ***		
β_{17} : Male → Offending _{w6}	Constrained Model	.13	.13	1.13	.288
	Free β_{17}	.27	.03		
β_{18} : South → Offending _{w6}	Constrained Model	-.10	-.10	3.17 †	.075
	Free β_{18}	-.35 *	.04		
β_{19} : Community Crime _{w6} → Offending _{w6}	Constrained Model	.15 ***	.15 ***	1.02	.312
	Free β_{19}	.16 ***	.15 ***		
β_{20} : Offending _{w5} → Violent Victimization _{w6}	Constrained Model	.09	.09	.21	.645
	Free β_{20}	.07	.28		
β_{21} : Violent Victimization _{w5} → Violent Victimization _{w6}	Constrained Model	1.10 *	1.10 *	.56	.456
	Free β_{21}	1.21 *	-.03		
β_{22} : Community Crime _{w6} → Violent Victimization _{w6}	Constrained Model	.23 *	.23 *	.07	.791
	Free β_{22}	.21 †	.28		
β_{23} : Violent Victimization _{w6} ↔ Offending _{w6}	Constrained Model	.18 ***	.18 ***	2.35	.125
	Free β_{23}	.25 ***	.17 ***		
β_{24} : Violent Victimization _{w6} ↔ Anger _{w6}	Constrained Model	.10 **	.10 **	1.10	.294
	Free β_{24}	.08	.10 *		
β_{25} : Violent Victimization _{w6} ↔ Depression _{w6}	Constrained Model	.21 ***	.21 ***	.73	.393
	Free β_{25}	.17 **	.24 ***		

Notes: Because the model uses WLSMV estimator, the *diffest* command in Mplus is used to test for differences across nested models.

Fit indices for the Constrained Model: Chi-square = 62.76, *df* = 51, *p* = .13; RMSEA = .029 (.000, .050); CFI = .976

† *p* ≤ .10; * *p* ≤ .05; ** *p* ≤ .01; *** *p* ≤ .001 (two-tailed tests).

Table 16. Regression Coefficients for the Lifestyle Model for Low Self-Control ($N = 288$)

	Criminal Peers_{w6}	Offending_{w6}	Violent Victimization_{w6}
Offending _{w5}	.24 ***	.22 ***	.09
Violent Victimization _{w5}	.27	.56 ***	1.21 **
Criminal Peers _{w5}	.16 ***	.14 **	—
Criminal Peers _{w6}	—	—	.29 **
Self-Control _{w5}	-.21 **	—	—
Male	.40 ***	.24 †	—
South	-.14	-.36 *	—
Community Crime _{w6}	.27 ***	.17 ***	—
R^2	.37	.26	.27
Model Fit Indices	Chi-square = 4.09, d.f. = 6, $p = .66$ RMSEA = .000 (.000, .061) CFI = 1.000		

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 17. Regression Coefficients for the Lifestyle Model for High Self-Control ($N = 271$)

	Criminal Peers_{w6}	Offending_{w6}	Violent Victimization_{w6}
Offending _{w5}	.14 ***	.13 *	.11
Violent Victimization _{w5}	-.08	.13	.16
Criminal Peers _{w5}	.38 ***	.19 ***	—
Criminal Peers _{w6}	—	—	.49 ***
Self-Control _{w5}	-.11	—	—
Male	.16 †	-.05	—
South	-.25 **	.04	—
Community Crime _{w6}	.16 ***	.16 ***	—
R^2	.30	.10	.15
Model Fit Indices	Chi-square = 3.02, d.f. = 6, $p = .81$ RMSEA = .000 (.000, .050) CFI = 1.000		

Note: † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Table 18. Fit Indices of the Multiple-Group Lifestyle Models for High Self-Control and Low Self-Control (N=288 Low Self-Control and 271 High Self-Control)

Paths		Low Self-Control	High Self-Control	$\Delta\chi^2_{(1)}$	p-value
β_1 : Offending _{w5} → Criminal Peers _{w6}	Constrained Model	.18 ***	.18 ***	2.61	.106
	Free β_1	.24 ***	.14 ***		
β_2 : Violent Victimization _{w5} → Criminal Peers _{w6}	Constrained Model	.08	.08	2.27	.132
	Free β_2	.27	-.09		
β_3 : Criminal Peers _{w5} → Criminal Peers _{w6}	Constrained Model	.30 ***	.30 ***	20.37 ***	.000
	Free β_3	.16 ***	.38 ***		
β_4 : Self-Control _{w5} → Criminal Peers _{w6}	Constrained Model	-.17 **	-.17 **	.582	.446
	Free β_4	-.21 **	-.12		
β_5 : Male → Criminal Peers _{w6}	Constrained Model	.24 ***	.24 ***	2.73 †	.098
	Free β_5	.39 ***	.16 †		
β_6 : South → Criminal Peers _{w6}	Constrained Model	-.21 **	-.21 **	.583	.445
	Free β_6	-.14	-.25 **		
β_7 : Community Crime _{w6} → Criminal Peers _{w6}	Constrained Model	.20 ***	.20 ***	4.08 *	.043
	Free β_7	.27 ***	.16 ***		
β_8 : Offending _{w5} → Offending _{w6}	Constrained Model	.20 ***	.20 ***	1.72	.189
	Free β_8	.22 ***	.13 *		
β_9 : Violent Victimization _{w5} → Offending _{w6}	Constrained Model	.43 **	.43 **	1.92	.166
	Free β_9	.56 ***	.13		
β_{10} : Criminal Peers _{w5} → Offending _{w6}	Constrained Model	.16 ***	.16 ***	1.57	.210
	Free β_{10}	.14 **	.19 ***		
β_{11} : Male → Offending _{w6}	Constrained Model	.10	.10	2.34	.126
	Free β_{11}	.24 †	-.05		
β_{12} : South → Offending _{w6}	Constrained Model	-.12	-.12	3.77 †	.052
	Free β_{12}	-.36 *	.04		
β_{13} : Community Crime _{w6} → Offending _{w6}	Constrained Model	.16 ***	.16 ***	.02	.882
	Free β_{13}	.17 ***	.16 ***		
β_{14} : Offending _{w5} → Violent Victimization _{w6}	Constrained Model	.09	.09	.01	.945
	Free β_{14}	.09	.11		
β_{15} : Violent Victimization _{w5} → Violent Victimization _{w6}	Constrained Model	1.13 **	1.13 **	1.74	.188
	Free β_{15}	1.26 **	.07		
β_{16} : Criminal Peers _{w6} → Violent Victimization _{w6}	Constrained Model	.37 ***	.37 ***	.47	.494
	Free β_{16}	.32 **	.43 ***		
β_{17} : Violent Victimization _{w6} ↔ Offending _{w6}	Constrained Model	.14 ***	.14 ***	3.73 †	.053
	Free β_{17}	.24 ***	.12 ***		
β_{18} : Criminal Peers _{w6} ↔ Offending _{w6}	Constrained Model	.13 ***	.13 ***	17.95 ***	.000
	Free β_{18}	.29 ***	.12 ***		

Notes: Because the model uses WLSMV estimator, the *diffest* command in Mplus is used to test for differences across nested models. Fit indices for the Constrained Model: Chi-square = 63.02, *df* = 30, $p \leq .001$; RMSEA = .063 (.041, .084); CFI = .931
 † $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$ (two-tailed tests).

Figure 11. Hypothesized General Strain Model

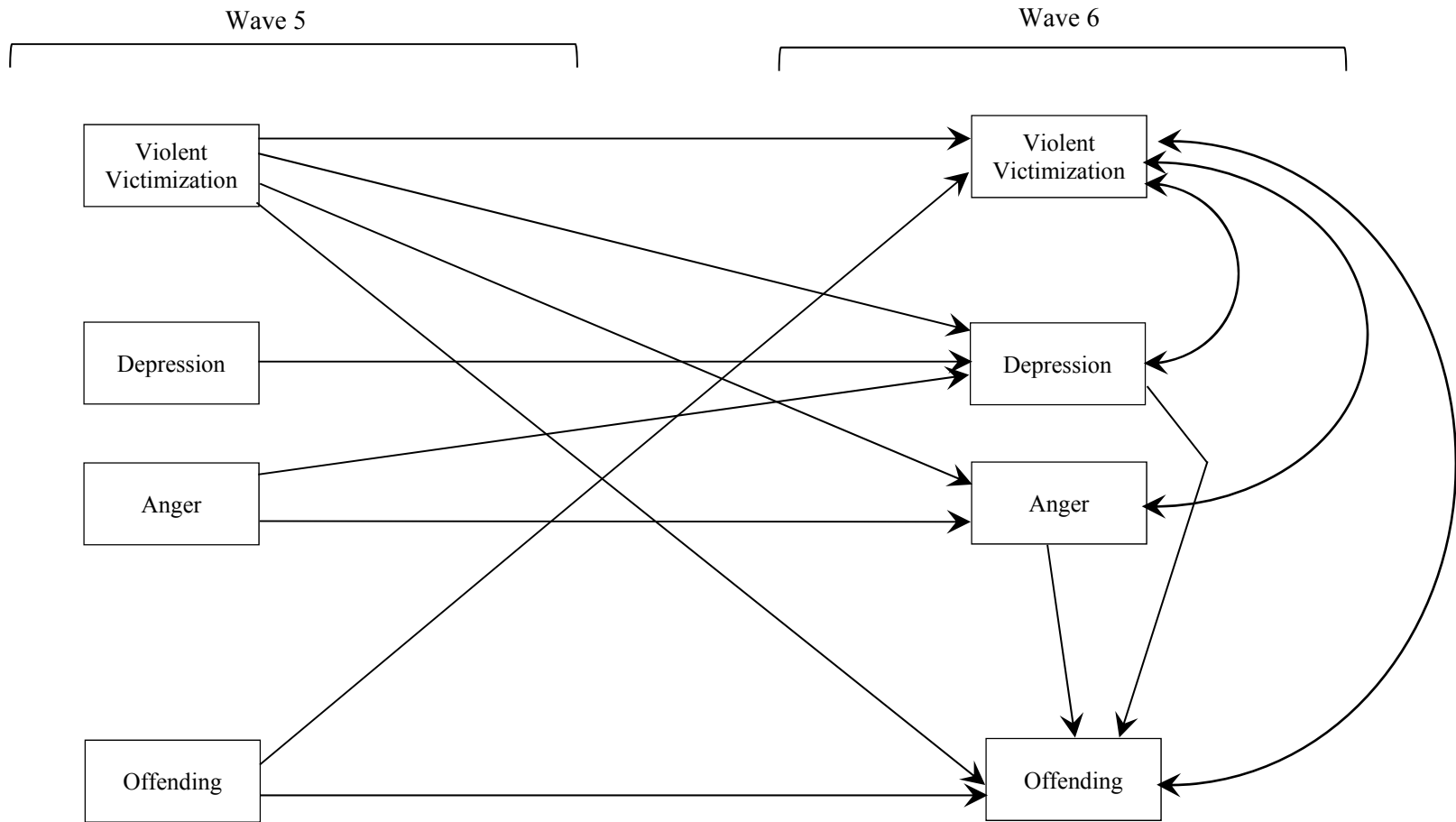


Figure 12. Hypothesized Lifestyle Model

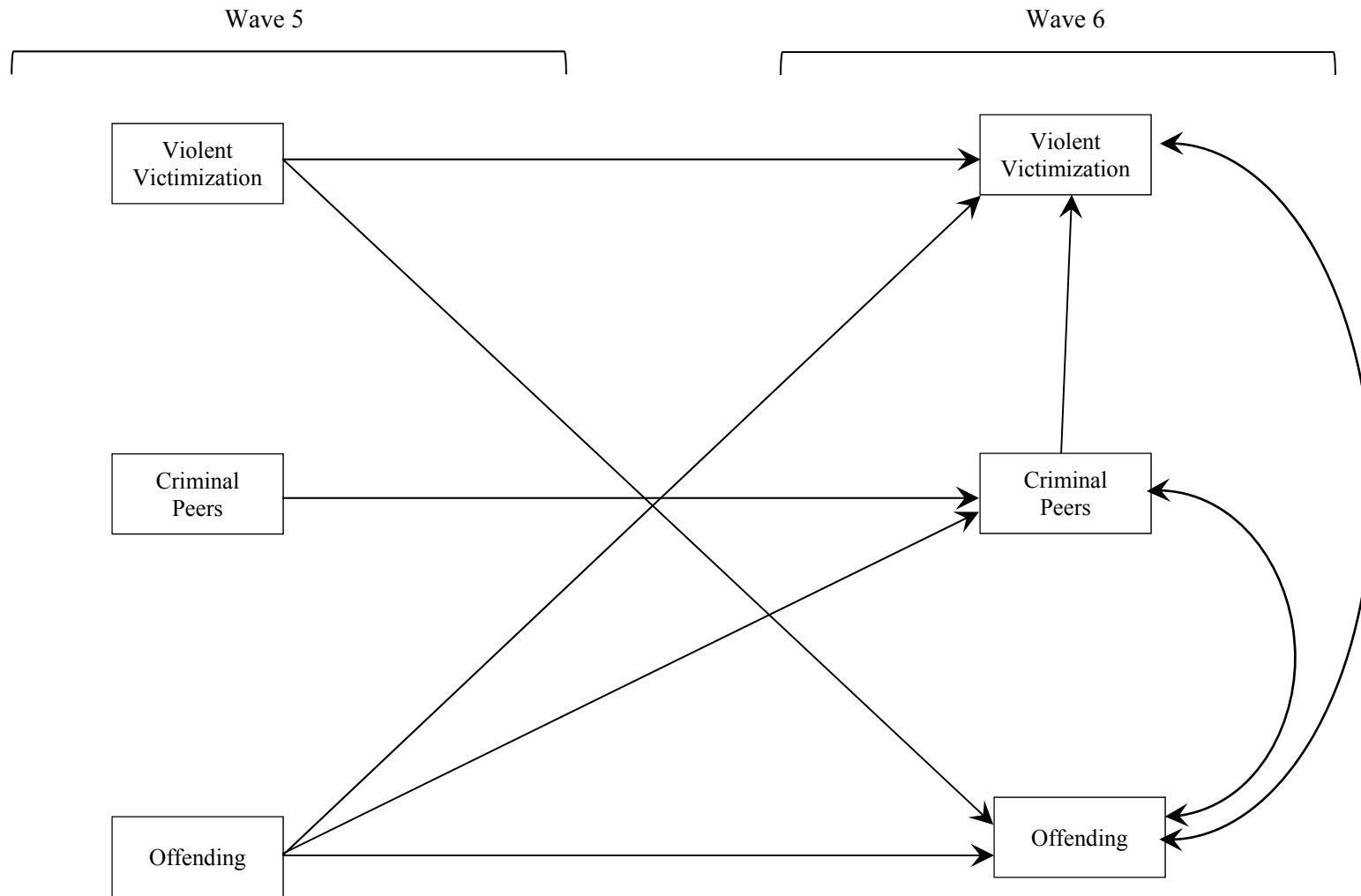
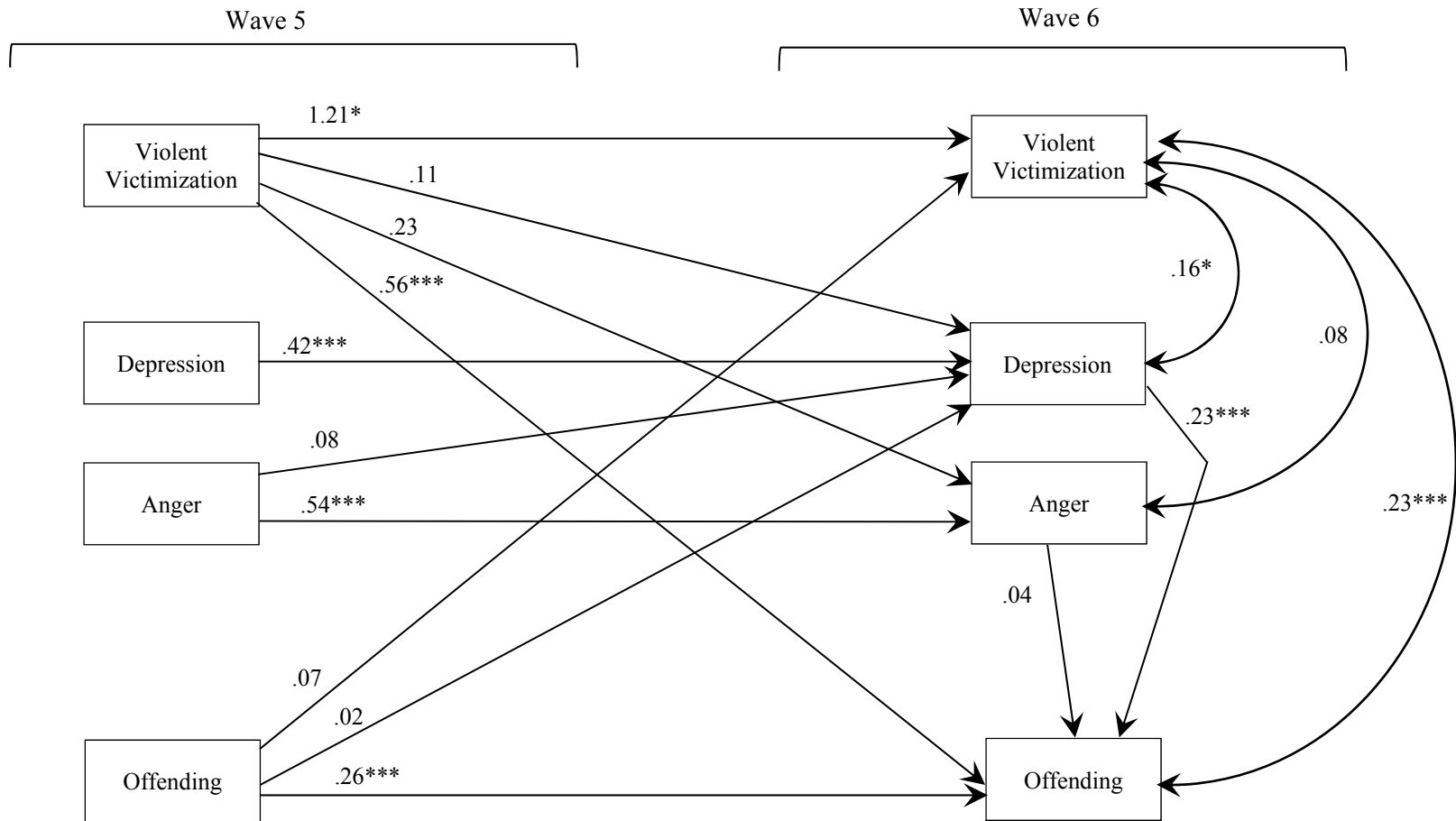


Figure 13. General Strain Model for Low Self-Control (N=288)



Chi-square = 13.49, *d.f.* = 13, *p* = .41

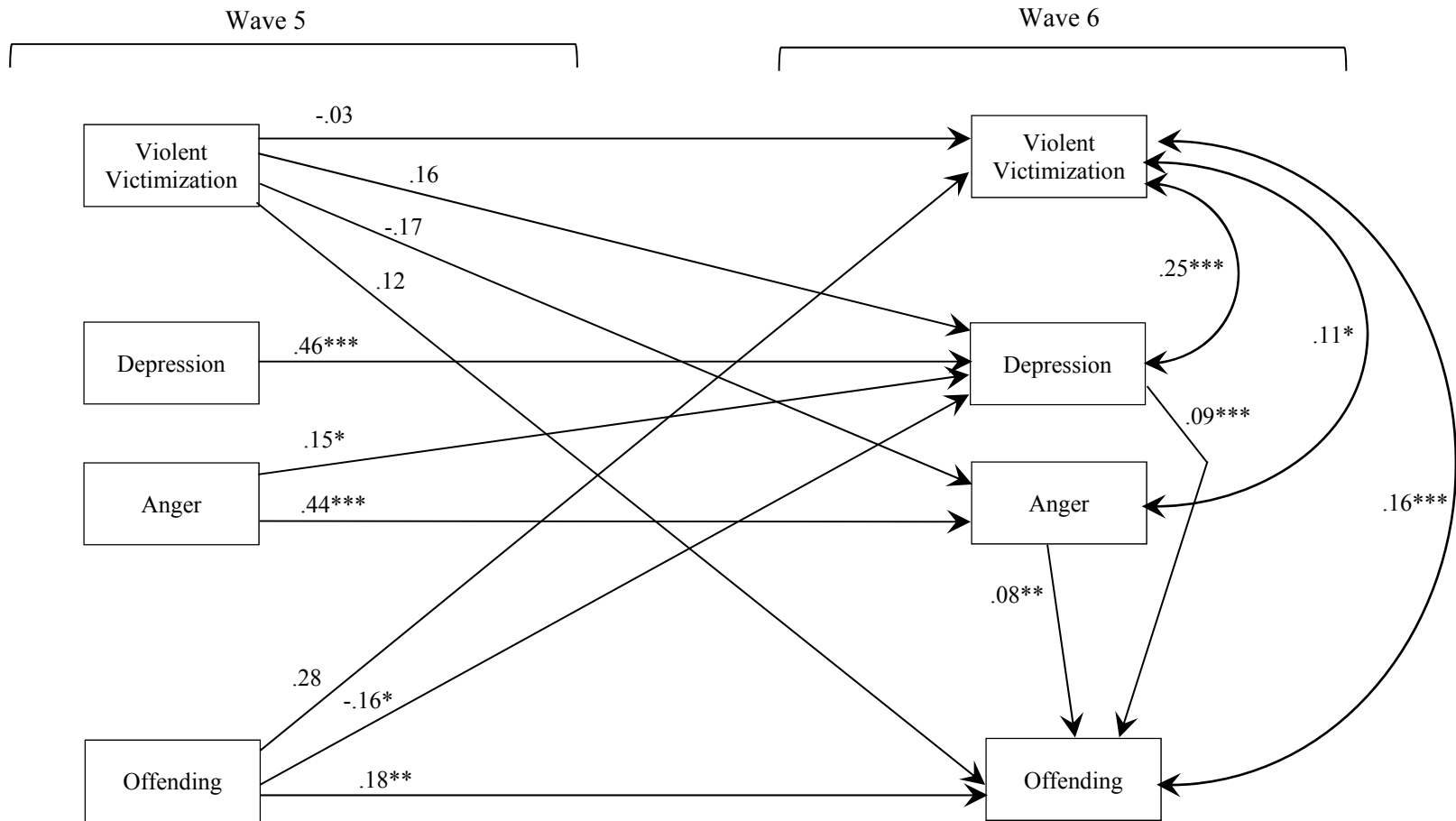
RMSEA = .011 (.000, .060)

CFI = .998

Notes: This model controls for the effects of gender, region, and community crime.

† *p* ≤ .10; * *p* ≤ .05; ** *p* ≤ .01; *** *p* ≤ .001 (two-tailed tests)

Figure 14. General Strain Model for High Self-Control (N=271)



Chi-square = 18.95, *d.f.* = 13, *p* = .12

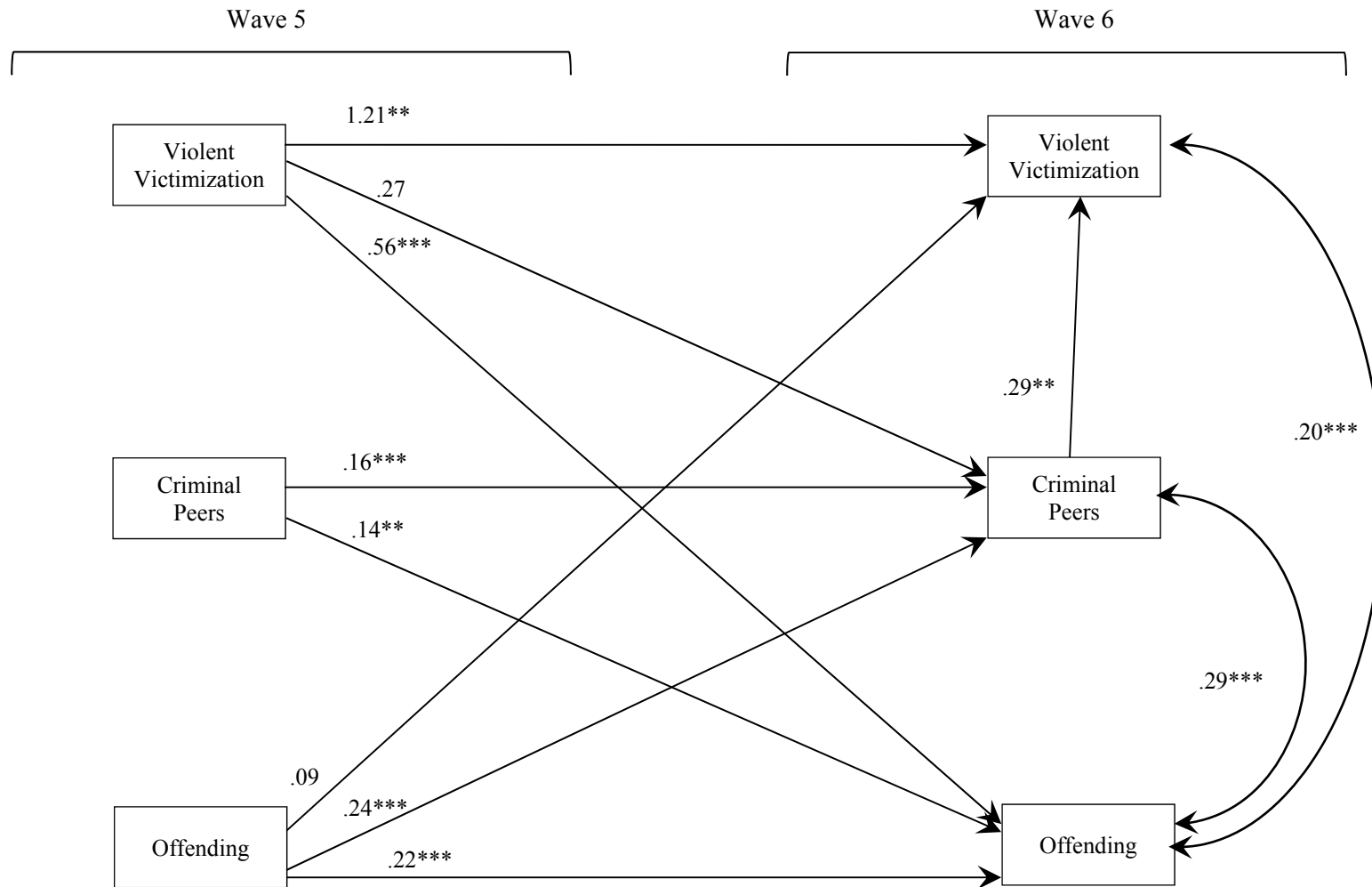
RMSEA = .041 (.000, .078)

CFI = .976

Notes: This model controls for the effects of gender, region, and community crime.

† *p* ≤ .10; * *p* ≤ .05; ** *p* ≤ .01; *** *p* ≤ .001 (two-tailed tests)

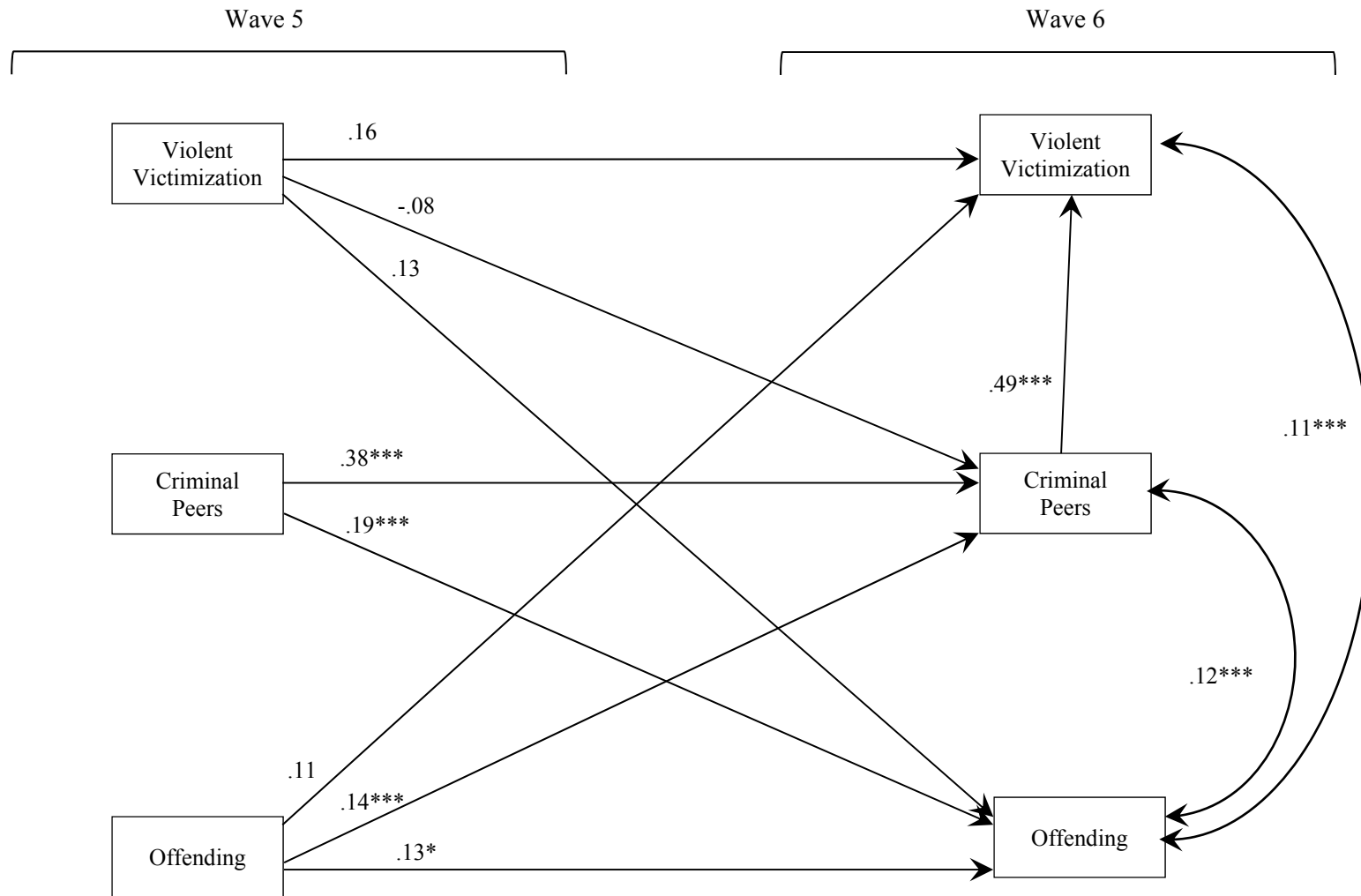
Figure 15. Lifestyle Model for Low Self-Control (N=288)



Chi-square = 4.09, *df.* = 6, *p* = .66
 RMSEA = .000 (.000, .061)
 CFI = 1.000

Notes: This model controls for the effects of gender, region, and community crime.
 † *p* ≤ .10; * *p* ≤ .05; ** *p* ≤ .01; *** *p* ≤ .001 (two-tailed tests)

Figure 16. Lifestyle Model for High Self-Control (N=271)



Chi-square = 3.02, *d.f.* = 6, *p* = .81
 RMSEA = .000 (.000, .050)
 CFI = 1.000

Notes: This model controls for the effects of gender, region, and community crime.
 † *p* ≤ .10; * *p* ≤ .05; ** *p* ≤ .01; *** *p* ≤ .001 (two-tailed tests)

CHAPTER 8

CONCLUSION

A strong relationship exists between offending and victimization, but we do not yet fully understand the nature of this relationship. Many of our major theories of crime and victimization offer explanations of this link, but the validity of these propositions remains unclear. In this dissertation, I shed light on these issues, providing insight into the applicability and overall validity of these criminological theories.

I examined the nature of the relationship between offending and violent victimization among African American young adults using structural equation modeling in cross-sectional and longitudinal data from the Family and Community Health Study (FACHS). I focused on the influence of violent victimization on offending and the role of negative emotions in this relationship, thereby testing the predictions of general strain theory (Agnew 2006). I also tested the arguments of lifestyle theories (Cohen and Felson 1979; Hindelang, Gottfredson, and Garofalo 1978), examining how offending affected victimization and how criminal peers mediated this relationship. I tested the arguments of self-control theory (Gottfredson and Hirschi 1990; Schreck 1999) by considering how self-control influences offending and the risk of violent victimization. I also investigated the extent to which self-control conditioned the relationships predicted by general strain theory and lifestyle theories. This provided a more in-depth understanding of the nature of the offending-victimization link by examining whether certain theoretical explanations are generally applicable or contingent upon self-control. Previous studies have explored some of these theoretical arguments, but none have considered them

within the same study. This is necessary to evaluate the relative merits of these contrasting theoretical predictions. Ultimately, this provides insight into the applicability of these theories to the issue of the offending-victimization relationship. This, in turn, points to the broader validity of each of these theories.

General Strain Theory

General strain theory (Agnew 2006) argues that violent victimization leads to criminal behavior and that negative emotions play a role in this process. Specifically, the theory predicts that: (1) violent victimization causes offending, (2) anger mediates the influence of violent victimization on offending, and (3) depression mediates the influence of violent victimization on offending. Overall, I found strong support for the first claim, no support for the second claim, and limited support for the third claim. Additionally, general strain theory argues that self-control influences how people react to strain (Agnew 2002). Individuals who possess self-control are more likely to find non-criminal ways of coping with the strain caused by victimization, whereas individuals lacking self-control are more likely to engage in criminal behaviors as a way of dealing with the strain. Therefore, regarding the moderating effects of self-control, general strain theory also predicts that: (1) victimization has a stronger influence on offending for individuals with low self-control compared to those with high self-control, (2) anger has a stronger effect on offending for individuals with low self-control, and (3) depression has a stronger effect on offending for individuals with low self-control. I found no support for the first two claims and strong support for the last claim.

Experiencing violent victimization increased an individual's level of offending. This association was more pronounced in the cross-sectional analyses; however, violent victimization did increase subsequent offending years later. This provides fairly strong support for the

overarching claim of general strain theory that the strain-inducing experience of violent victimization causes an individual to engage in crime. This is consistent with much research on the influence of victimization on offending (e.g., Agnew 2002; Brezina 1998; Hay and Evans 2006; Lin, Cochran and Mieczkowski 2011; Manasse and Ganem 2009). However, general strain theory also predicts that self-control moderates the effects of victimization on offending. In separate models, I found results consistent with general strain theory: victimization increased offending for the low self-control group and victimization had no effect for the high self-control group. However, these differences between individuals with low self-control and individuals with high self-control were not significant, suggesting that no difference existed between groups. This is inconsistent with some previous research suggesting that self-control influences how individuals react to violent victimization (e.g., Hay and Evans 2006; Turanovic and Pratt forthcoming-b) and inconsistent with the predictions of general strain theory (Agnew 2002, 2006). Failure to find statistically significant differences between the high and low self-control groups could be due to diminished statistical power in the models presented in this study. The fact that the predicted relationships were found in the separate models—but that the difference between groups was not significant—suggests that perhaps a significant difference exists but that I was unable to detect it due to relatively small sample size.

Contrary to the prediction of general strain theory, anger was essentially unrelated to both violent victimization and offending. In both cross-sectional and longitudinal analyses, victimization did not influence an individual's level of anger. Being victimized did not make an individual angry, contradicting general strain theory. Similarly, anger did not influence offending in cross-sectional analyses, and the influence of anger on criminal behavior in the longitudinal analyses was only marginally significant and substantively negligible. Again, this

contradicts the predictions of general strain theory. Anger should lead to crime; however, I found no such relationship. Since victimization did not increase anger and anger did not increase offending, it is clear that anger did not mediate any of the influence of victimization on offending. Ultimately, this contradicts the findings of previous studies examining the role of anger in the relationship between violent victimization and offending (e.g., Brezina 1998; Hay and Evans 2006). Brezina (1998) found that maltreatment led to anger among adolescents, and this anger was associated with higher levels of offending. Brezina also found that some of the influence of maltreatment on offending was mediated through anger. Similarly, Hay and Evans (2006) also found that anger mediated the influence of violent victimization on future offending among adolescents. Since both of these studies also used longitudinal data, one possibility for these divergent findings is that previous research examined adolescents, whereas the current study focuses on young adults. General strain theory (Agnew 1992) was developed to explain adolescent delinquency, and Agnew (2006) has stated that the theory may have limited applicability to adults.

Finally, regardless of whether an individual had low self-control or high self-control, victimization did not influence anger and anger did not affect offending. This contradicts the general strain prediction that anger would have a stronger effect on offending among those with low self-control. It is surprising that anger was essentially unrelated to both offending and violent victimization, given the prominence of anger in the research on general strain theory. This could be due to problems with the anger measures used in this study. These measures were measures of dispositional anger, or trait anger. However, general strain theory deals with situational emotions (i.e., state anger). Due to data limitations, many studies examining general strain theory have used trait anger in place of state anger; however, recent research examining

dispositional anger and situational anger suggest that the two play distinct roles (Mazerolle, Piquero, and Capowich 2003). The researchers found that trait anger and state anger independently influenced the intention to offend through different pathways, leading them to conclude that future research should avoid using dispositional measures of anger in place of situational measures of anger. It is possible that the unanticipated lack of findings related to anger is due in part to the fact that the current study used a trait-based measure of anger. Though my measure of anger may be problematic, it should be noted that previous research has examined the relationship between violent victimization and offending using trait-based measures of anger and found results supportive of general strain theory (e.g., Brezina 1998; Hay and Evans 2006).

Compared to anger, depression played a much more prominent role in the relationship between violent victimization and offending. In cross-sectional analyses, depression mediated some of the influence of victimization on offending. This is more supportive of general strain theory than some previous cross-sectional research (Lin et al. 2011). Lin and colleagues found that depression mediated the effects of indirect victimization on drug use, but they found no evidence that depression mediated any of the effects of direct victimization on violent/property offending. Here, though the indirect effect through depression was significant, it only accounted for a small portion of the overall effect of victimization on offending. This suggests that some other factor connects victimization and offending. It could be that this is a negative emotion not examined in this study, such as fear, or that the mechanism involved was something outside the scope of general strain theory.

When viewed longitudinally, depression was not related to previous violent victimization. This negates the possibility of depression mediating the influence of victimization on subsequent offending. However, consistent with the prediction of general strain theory and with previous

research (e.g., Manasse and Ganem 2009), depression was strongly related to offending. Individuals who were depressed engaged in higher levels of violent and property crime. Additionally, self-control influenced this relationship. Supporting the predictions of general strain theory, depression had a more pronounced influence on offending for individuals with low self-control. Depression increased offending both for individuals with low self-control and for those with high self-control; however, the effect was significantly stronger among individual with low self-control.

Another interesting and unexpected pattern emerged regarding depression, offending, and self-control. For individuals with high self-control, engaging in crime decreased subsequent levels of depression. Among individuals with low self-control, previous offending did not influence depression. The idea that engaging in crime would decrease negative emotions is consistent with general strain theory, given that the theory argues that individuals commit crime in order to relieve the psychological strain of negative emotions (Agnew 2006). Research suggests that committing crime does reduce negative emotions caused by strain (Brezina 1996). However, given that self-control is supposed to act as a coping resource that enables individuals to deal with strain in non-criminal ways, it seems contrary to the logic of general strain theory that offending would relieve depression for individuals with high self-control rather than those with low self-control. It could be that individuals with high self-control are better about deciding when to commit crime due to depression. The results suggest that the link between depression and offending was weaker for individuals with high self-control compared to those with low self-control. Maybe self-control allowed them to find non-criminal ways of dealing with depression more frequently than individuals with low self-control. However, when they did engage in crime, perhaps their self-control enabled them to be more judicious and only select the optimal

opportunities for offending, opportunities that would be particularly effective at reducing their depression. Future research should examine this issue further.

Overall, I found relatively strong support for general strain theory. Violent victimization caused offending. However, in a major blow to the predictions of general strain theory, anger was unrelated to both offending and victimization. Additionally, victimization did not cause subsequent depression. However, depression was strongly related to offending, and when measured contemporaneously, depression mediated some of the effects of victimization on offending. Also consistent with predictions, the effect of depression on offending was contingent on self-control: depression had a more pronounced effect on offending for individuals with low self-control. Of the three theories, the predictions of general strain theory received the strongest substantive support, despite several notable contradictions.

Lifestyle Theories

Lifestyle-exposure theory (Hindelang et al. 1978) and routine activity theory (Cohen and Felson 1979) argue that offending leads to victimization. This is because offending involves spending time around criminals, which increases an individual's risk of victimization. In this dissertation, I examined exposure to criminals by focusing on the level of criminality of an individual's closest friends. So, lifestyle theories predict that: (1) offending causes violent victimization and (2) association with criminal peers mediates the effects of offending on violent victimization. I find support for these claims, though the substantive significance of these relationships is questionable. Additionally, drawing from lifestyle theories (Cohen and Felson 1979; Hindelang et al. 1978) and extensions of self-control theory (Schreck 1999) I derived several additional hypotheses involving how self-control would moderate these predicted relationships. I argued that: (1) offending has a stronger influence on violent victimization for

individuals with low self-control compared to those with high self-control and (2) associating with criminal peers has a stronger effect on violent victimization for individuals with low self-control. I found no evidence supporting these claims.

In cross sectional analyses, offending increased the risk of violent victimization. However, when examined longitudinally, criminal behavior did not influence subsequent violent victimization, though subsequent offending and subsequent victimization were positively correlated. This result contradicts considerable previous research, which strongly suggests that offending increases the risk of future victimization (e.g., Dobrin and Brusk 2003; Loeber, Kalb, and Huizinga 2001; Schreck, Stewart, and Fisher 2006; Shaffer and Ruback 2002; Turanovic and Pratt forthcoming-b). This is possibly due to the limited measure of victimization used in this study. Perhaps a fuller measure of violent victimization would have been influenced by offending. To the extent offending did not indirectly influence violent victimization through criminal peers, this result contradicts the predictions of lifestyle theories.

Additionally, I predicted that offending would have more pronounced effect on violent victimization among individuals with low self-control. I found little to no evidence supporting this claim. For both individuals with low self-control and those with high self-control, offending did not influence the risk of subsequent violent victimization. However, a stronger positive correlation existed between subsequent victimization and subsequent offending for the low self-control group compared to the high self-control group. This also contradicts previous research, which suggests that the influence of offending on violent victimization is stronger for individuals with low self-control (Schreck et al. 2006). The divergent findings could be related to methodological issues with the previous study, which did not examine whether this difference between groups was statistically significant. In my study, I examined the significance of the

differences between individuals with high self-control and those with low self-control. This lends stronger support to my findings. Another reason that my results were different from Schreck and colleagues (2006) could be related to the limited victimization measure discussed earlier.

Consistent with lifestyle predictions, offending increased criminal peers, and criminal peers increased the risk of victimization. This was the case in both cross-sectional and longitudinal analyses. However, in the cross-sectional analyses, the influence of criminal peers on victimization was just beyond the conventional cutoff for statistical significance. When examined in longitudinal analyses, the relationship was far more robust. In the cross-sectional analyses, there were no indirect effects from offending on victimization through criminal peers. However, the longitudinal analyses found evidence supportive of the mediation hypothesis. Offending increased future criminal peers, and having criminal peers was associated with a heightened risk of violent victimization. Though offending did not have any direct effect on victimization, a significant indirect effect involving criminal peers existed. Therefore, the effects of offending on violent victimization were entirely mediated by criminal peers. This fully supported the claims of lifestyle theories. However, it is important to note that the indirect effect of offending on victimization through criminal peers was very weak. This suggests that, though lifestyle theories were fully supported, they really did not do much to substantively explain the relationship between offending and victimization. Ultimately, this relationship was unaffected by self-control. Contrary to my predictions, the influence of criminal peers was not significantly stronger for individuals with low self-control compared to individuals with high self-control. This contradicts the previous research by Schreck and colleagues (2006). They found that delinquent peers increased the risk of victimization for individuals with low self-control, while

delinquent peers did not influence victimization for individuals with high self-control. However, as discussed above, Schreck et al. (2006) did not test for the significance of these differences across groups. Because I took this additional step, my findings are more trustworthy.

Ultimately, I found support for the arguments of lifestyle theories. Technically, the evidence fully supported lifestyle theories, but substantively, the explanations offered by these theories did little to explain why offending and victimization are related to one another. The effects of offending on violent victimization were entirely mediated through criminal peers in longitudinal analyses. However, this indirect effect was very weak and not particularly noteworthy.

Self-Control Theory

Self-control theory argues that low self-control is the ultimate cause of offending (Gottfredson and Hirschi 1990) and victimization (Schreck 1999). Therefore, this theory predicts that: (1) low self-control causes offending and (2) low self-control causes violent victimization. These claims received limited support. In cross-sectional analyses, self-control was related to both offending and violent victimization. However, this relationship disappeared in the longitudinal analyses. Self-control did not influence subsequent offending, either directly or indirectly through anger or depression. Self-control did not directly influence subsequent violent victimization, either. However, self-control did indirectly affect subsequent violent victimization through criminal peers. Individuals with low self-control were more likely to associate with criminal peers, and this, in turn, increased their risk of violent victimization. However, the magnitude of this effect was very small.

Though not predicted by self-control theory, some of the most important effects of self-control found in this dissertation are the moderating effects. Most notably, these involved the

ways in which self-control conditioned the relationships between offending and depression. Depression had a stronger influence on offending for individuals with low self-control. Additionally, offending reduced depression among individuals with high self-control. These effects were ultimately more pronounced and more interesting than the indirect effects of self-control in the longitudinal analyses.

Ultimately, I find limited support for self-control theory. Self-control did influence current offending and current violent victimization. However, self-control did not influence subsequent offending and had a very weak indirect influence on subsequent violent victimization via criminal peers. Overall, this lack of findings contradicts the considerable previous research which suggests that self-control influences offending (e.g., Meldrum, Young, and Weerman 2009; Piquero, MacDonald, Dobrin, Daigle, and Cullen 2005; Pratt and Cullen 2000) and violent victimization (Piquero et al. 2005; Schreck 1999; Schreck et al. 2006; Schreck, Wright, and Miller 2002; Stewart, Elifson, and Sterk 2004; Turanovic and Pratt forthcoming-b). One possibility for these differences could be rooted in shifts in self-control. I found that self-control was related to both offending and victimization when measured at the same point in time. The fact that self-control is not related to future offending and violent victimization suggests that self-control is changing over the two years separating the two waves. Given that the individuals are in their early twenties in the first wave and their mid-twenties during the second, this seems to contradict the claim by Gottfredson and Hirschi (1990) that self-control is stable past 10 years of age. Some research has suggested that self-control can change over the course of adolescence (Burt, Simons, and Simons 2006); however, it is still surprising that self-control would fluctuate to this degree during adulthood.

Summary

The research presented here expands our understanding of the link between offending and violent victimization and provides insight into the applicability of criminological theories to this issue and the overall validity of these theories. I improved upon previous research in a number of ways. I tested predictions from all three theories within a single study, examining the validity of these contrasting theoretical claims. I also expanded on previous research on lifestyle theories by examining criminal peers as a mechanism linking offending and violent victimization in addition to examining how self-control influences this relationship. I also built upon previous general strain research by examining the role of both anger and depression in the relationship between violent victimization and offending. I focused on serious violent victimization, providing a more robust test of these theoretical relationships than studies using combined measures of violent and property victimization or direct and indirect victimization. I examined the relationship between offending and violent victimization using longitudinal data, allowing me to firmly establish causal order. Finally, I used a sample of African Americans in early adulthood living in primarily non-urban areas. Groups with any of these three characteristics are general understudied in the literature examining offending and victimization.

Ultimately, I found moderate to strong support for general strain theory, limited to moderate support for lifestyle theories, and limited support for self-control theory. Violent victimization increased future offending, though the effects were not mediated through anger or depression. Depression increased offending, and these effects were more pronounced among individuals with low self-control. In contrast, offending had very little influence on future violent victimization. However, these weak effects were entirely mediated through criminal peers, supporting lifestyle predictions. Finally, self-control did not influence future offending.

However, self-control did exert a very weak influence on future violent victimization, and these effects were entirely mediated through criminal peers.

Future Research

Future studies should expand upon this research in several ways. First, the relationships examined in this study, particularly the relationships predicted by lifestyle theories, should be examined using broader and more refined measures of victimization. It is possible that I did not find much of an influence of offending on violent victimization because the measure of violent victimization was limited. As discussed earlier, violent victimization should be more consequential than property victimization, so the focus of this study on violent victimization is not necessarily problematic. However, the measure of violent victimization available in the FACHS data does not measure the rate of victimization, and it does not distinguish between different forms of violent victimization, such as robbery, assault, aggravated assault, and sexual assault. Future studies should examine these relationships using more nuanced measures of violent victimization. Additionally, it could be informative to examine the relationship between offending and property victimization. Though property victimization is less consequential to an individual, and therefore it would likely be a less robust examination of the general strain predictions, it would nonetheless expand upon our knowledge of how different forms of offending are related to different forms of victimization.

Additionally, future research should examine the relationships found in this dissertation using latent variables. Measurement models allow researchers to account for measurement error. I used scales in this study, so my variables are subject to random error. It is possible that this measurement error influenced the results of my dissertation. Future research should employ full

structural equation models—both measurement models and path models—in order to ensure that measurement error is not distorting the results.

Finally, as discussed earlier, the influence of self-control on the relationship between offending and depression deserves more scrutiny. I found that engaging in crime decreases depression for individuals with high self-control, whereas no relationship exists for individuals with low self-control. Since, to my knowledge, this pattern has not been found in any other studies, future research should examine the robustness of these findings. Are they present in other groups, or is this pattern unique to African American young adults? Additionally, future research should examine why this relationship exists. A better understanding of how self-control affects the relationship between offending and negative emotions could provide important extensions to general strain theory.

Conclusion

The relationship between offending and victimization is of theoretical and practical importance. It is vital that we understand how these two phenomena are linked. Major criminological theories propose very different explanations of the offending-victimization relationship. We need to know which of these explanations are valid and whether certain explanations are more applicable to certain types of individuals. Victimization and offending are so closely linked that we cannot hope to understand either without fully comprehending the relationship that exists between them. If we cannot understand victimization and offending, then we cannot aspire to prevent either. Any attempt to reduce offending or victimization based on an incomplete, isolated understanding of one or the other is doomed to be ineffective. My dissertation is important because it contributes to our growing knowledge of the relationship between offending and victimization.

My research suggests that general strain theory offers the best explanation of the relationship between offending and violent victimization. Violent victimization increases offending; additionally, depression increases offending, and these effects are exacerbated by low self-control. Overall, the predictions of lifestyle theories and self-control theory contributed little insight into the offending-victimization link. This indicates that general strain theory should receive more attention among scholars focused on the victim-offender overlap. Self-control and criminal peers should not be ignored, since both play important roles in the process. Though offending has negligible effects on violent victimization, offending does increase association with criminal peers, and criminal peers are an important risk factor for violent victimization. In the case of self-control, it seems that it may be more important as a moderating factor that influences the nature of other relationships rather than as a direct cause of offending or violent victimization.

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