

# A TEST OF COMPETING PATHWAYS TO YOUNG ADULTHOOD VIOLENCE

by

MEGAN E. STEELE

(Under the Direction of Leslie Gordon Simons)

## ABSTRACT

Historically, major criminological works overlooked violence occurring between romantic partners. As a result, studies of intimate partner violence (IPV) developed relatively separately from the research on violent crime. Nonetheless, there is considerable overlap in the violent crime and IPV literatures. Namely, both bodies of work have found adolescent experiences with harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination to heighten the likelihood of later perpetrating violence. Yet, it is not well known whether these experiences lead to violent crime and IPV in similar or divergent ways. To that end, this dissertation examines how four different adolescent experiences (e.g., exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination) shape violent crime and IPV in young adulthood. Drawing from a range of criminological perspectives, I further investigate how one's endorsement of violence, deviant values, low self-control, and anger explain pathways from adolescent exposure to violence to violent crime and IPV in young adulthood. Using a longitudinal study design and a sample of 512 Black young adults, I conduct ten different path analyses to better understand the processes leading to interpersonal violence. In simultaneously examining the four adolescent predictors, four potential mediators, and two kinds of interpersonal violence, results revealed a diversity of pathways to young adulthood violent

crime and IPV. Exposure to neighborhood crime predicted violent crime, but not IPV, for both genders. Harsh parenting also influenced women's violent crime, while friends' delinquency shaped men's violent crime. IPV perpetration, in comparison, was predicted by harsh parenting and friends' delinquency for women and racial discrimination among men. Examining the mechanisms connecting these experiences to violent crime and IPV, anger was the strongest mechanism leading to both kinds of interpersonal violence. Deviant values also contributed to women's violent crime and men's IPV. For women only, endorsing violence additionally impacted their IPV. Ultimately, findings suggest that interventions developed to reduce anger may be an effective strategy to interrupt the processes leading to interpersonal violence while also emphasizing the need for race- and gender-conscious policy solutions.

INDEX WORDS: Violent Crime, Intimate Partner Violence, Adolescence, Young Adulthood, Black Women, Black Men

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MEGAN E. STEELE

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by

MEGAN E. STEELE

Major Professor:	Leslie Gordon Simons
Committee:	Jody Clay-Warner
	Man Kit (Karlo) Lei
	Ronald L. Simons

Electronic Version Approved:

Ron Walcott  
Vice Provost for Graduate Education and Dean of the Graduate School  
The University of Georgia  
May 2022

## DEDICATION

This dissertation is dedicated to Sean. Thank you for the countless hours you spent reading and editing this work. I am forever grateful for your love, understanding, and encouragement.

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## CHAPTER 1

### INTRODUCTION

#### **Introduction**

Researchers, activists, and policymakers have long been concerned with understanding the etiology of interpersonal violence to inform research, policy, practice, and prevention efforts (Curtis, 1963; Widom, 1989). Interpersonal violence refers to the “intentional use of physical force or power against other persons by an individual or group of individuals,” including physical, sexual, and psychological harms (Mercy et al., 2017, p. 71). Acts of interpersonal violence include family or partner violence and community violence. The unfortunate reality is that interpersonal violence is common in the United States and across the world, with millions affected by intimate partner violence (IPV) and other violent crimes every year (Mercy et al., 2017). Researchers and major organizations—the Centers for Disease Control and Prevention (CDC), the United Nations, and the World Health Organization, among others—have led efforts to collect data and conduct research to better understand the causes of interpersonal violence, how this varies across different populations (e.g., gender, race, ethnicity), the consequences of interpersonal violence, and strategies to prevent IPV and other violent crimes.

The CDC estimates that more than 19,000 people were victims of homicide and more than 1.5 million were treated in hospital emergency departments for assault-related injuries in 2019 (CDC, 2022). Further, the National Intimate Partner and Sexual Violence Survey (NISVIS) suggests that 1 in 4 women and 1 in 10 men have experienced physical or sexual violence, or stalking by a romantic partner and reported an IPV-related impact during their lifetime (Smith et

al., 2018). Socio-economic and legal structures engrained with inequity and racism exacerbate the frequency and consequences of interpersonal violence among various populations. Rates of interpersonal violence are higher among minoritized populations such as Black, Native American, and multiracial people. For example, 41.2% of Black women and 36.3% of Black men have experienced physical violence by an intimate partner during their lifetime (Breiding et al., 2014). These unique experiences require further research to better understand the conditions leading to interpersonal violence among these groups. To that end, this dissertation aims to investigate how exposure to violence and discrimination in adolescence shapes the perpetration of interpersonal violence in young adulthood using a longitudinal study of Black men and women.

### **Statement of the Problem**

Historically, major criminological works overlooked violence occurring between romantic partners and spouses. As a result, the theoretical and empirical research on IPV developed relatively separately from research on violent crime. Despite the historical divide in the family violence and violent crime literatures, researchers have more recently highlighted the significant overlap in these bodies of research (Felson & Lane, 2010; Walby et al., 2014). Specifically, both bodies of research consistently find past exposure to violence to be a strong predictor of later violent behavior. For example, ample research has shown that childhood and adolescent experiences with harsh parenting increase the likelihood of later engaging in violent crime and IPV (Ehrensaft et al., 2003; L. G. Simons et al., 2014; Topitzes et al., 2012). Exposure to neighborhood crime has also been consistently tied to the perpetration of both forms of interpersonal violence (Reed et al., 2009; Simons & Burt, 2011; Zimmerman & Messner, 2010). Further, friends' delinquent behavior has been identified as a risk factor for participation in violent crime and IPV (Nofziger & Kurtz, 2005; Ramirez et al., 2012; Simons, Stewart, et al.,

2002). More recently, studies have highlighted racial discrimination as a predictor of later engagement in both types of interpersonal violence (Burt et al., 2017; Caldwell et al., 2004; Sutton et al., 2019).

Adolescence is a critical developmental period and a time of heightened exposure to violence and discrimination. Data from the 2019 National Youth Risk Behavior Survey (YRBS) revealed that 2 in 5 (44.3%) high school students were victimized by at least one form of violence in the previous year (David-Ferdon et al., 2021). Other nationally representative data suggests that 2 in 5 (38.1%) adolescents have experienced abuse or neglect, 7 in 10 (68.1%) have witnessed violence in their community or family, and 3 in 5 (63.5%) have been physically assaulted (Finkelhor et al., 2015). Homicide is the third leading cause of death among adolescents and young adults and the leading cause of death for non-Hispanic Black Americans ages 15 to 24 years old (Heron, 2021).

Moreover, there is substantial evidence of racial disparity in the prevalence of adolescent exposure to violence. For example, Black youth are more likely to live in neighborhoods characterized by concentrated disadvantage, residential instability, and violence (Zimmerman & Messner, 2013). Further, research has shown that Black adolescents' friendship networks tend to have higher levels of violence than White adolescents (Haynie & Payne, 2006). Black adolescents face greater risk for experiencing the most severe forms of violence, including fights with injuries, aggravated assault, and homicide (Sheats et al., 2018). Racial discrimination is also a pervasive stressor in the lives of Black adolescents and young adults (Swim et al., 2003). Research by English et al. (2020) revealed that Black American adolescents averaged more than five experiences with racial discrimination per day.

While considerable research has demonstrated that adolescent experiences with harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination increase one's risk of later interpersonal violence, there are several questions left unanswered by this work. First, the vast majority of this research has focused on two or less of the included adolescent experiences or combined them into a single measure of exposure to violence. Thus, it is not well known which of the included adolescent experiences (e.g., harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination) has the strongest effect on interpersonal violence once the effects of the others are accounted for.

Second, several theoretical perspectives have offered explanations for how exactly exposure to violence and discrimination shapes later violence perpetration (Agnew, 2015; Akers & Jennings, 2015; Britt & Rocque, 2015). For example, social learning theory (Akers, 1998) and Anderson's (1999) *Code of the Street* stress the importance of one's attitudes towards violence. Similarly, social control (Hirschi, 1969) and social learning frameworks (Akers, 1973) emphasize an individual's beliefs in conventional norms. Gottfredson and Hirschi's (1990) general theory of crime, on the other hand, underscores the role of self-control. While general strain theory highlights the expression of negative emotions, such as anger (Agnew, 1992). Substantial empirical research has supported each of these mechanisms when examined individually (Akers & Jennings, 2019; Brezina et al., 2004; Pratt & Cullen, 2000; Pratt et al., 2010; Slocum & Agnew, 2017). However, it is unclear which of these mechanisms best predict interpersonal violence once the others are accounted for. Lastly, few studies assess the outcomes of IPV and violent crime simultaneously. Therefore, it is unknown whether adolescent experiences with violence impact violent crime and IPV in similar or divergent ways.

## **Purpose of the Study**

In this dissertation, I investigate how exposure to violence and discrimination in adolescence shapes the perpetration of interpersonal violence in young adulthood among a sample of 512 Black women and men. I draw from the existing literature on violent crime and IPV with special attention given to the overlap in their developmental predictors in adolescence and shared theoretical mediators. Specifically, I focus on four distinct adolescent experiences (e.g., exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination) shown to influence later interpersonal violence. In this study, harsh parenting involves acts of verbal aggression (e.g., yelling, threatening) and physical aggression (e.g., hitting, pushing) by caregivers directed toward children. Neighborhood crime refers to witnessing or having knowledge of criminal acts in the community surrounding one's home, including but not limited to assaults, the sale of illegal drugs, and robbery. Friends' delinquency describes one's close friends' engagement in violent and deviant behaviors such as attacking others, theft, and purposely damaging property. Lastly, racial discrimination is defined as experiencing unequal treatment based on one's perceived or actual racial or ethnic background.

Further, I examine four mediators previously theorized to link the included adolescent experiences to young adulthood violence. Drawing from a range of popular criminological theories (e.g., social learning, social control, self-control/general theory of crime, and general strain), I consider one's endorsement of violence, deviant values, low self-control, and anger. The endorsement of violence refers to attitudes that support and justify the use of violence (Akers, 1998; Anderson, 1999). Deviant values refer to beliefs that are counter to society's norms, particularly those about criminal and antisocial behavior (Akers, 1973; Hirschi, 1969). Low self-control describes a preference for immediate gratification and risk-seeking activities



(Gottfredson & Hirschi, 1990). Anger includes feelings of hostility and high reactivity to others (Agnew, 1992; Agnew, 2006).

Finally, I assess two forms of interpersonal violence in young adulthood – violent crime and IPV. In this study, violent crime includes getting into fights with the intent of seriously harming someone, pulling a weapon on someone, shooting or stabbing someone, using a weapon in a fight, and carrying a hidden weapon. In comparison, IPV is comprised of acts of physical and verbal aggression towards a romantic partner, including hitting or slapping, hitting with an object, throwing something, shouting, and insulting or swearing. Rarely are such outcomes assessed simultaneously, despite research that suggests they share many of the same risk factors and correlates. The research questions posited by this dissertation are provided below.

### **Research Questions**

1. How does adolescent exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination affect the perpetration of violent crime and IPV in young adulthood?
2. How can one's *endorsement of violence* explain the effects of adolescent exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination on violent crime and IPV in young adulthood?
3. How can one's *deviant values* explain the effects of adolescent exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination on violent crime and IPV in young adulthood?
4. How can one's *low self-control* explain the effects of adolescent exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination on violent crime and IPV in young adulthood?

5. How can one's *anger* explain the effects of adolescent exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination on violent crime and IPV in young adulthood?
6. When all four mediators (e.g., the endorsement of violence, deviant values, low self-control, and anger) are assessed simultaneously, which of the mediators emerges as the strongest explanation for young adulthood violent crime and IPV?

### **Overview of the Dissertation**

In the next chapter, I review the existing literature on interpersonal violence with attention to the included adolescent experiences, mediators, and potential gender differences. Chapter 3 provides an overview of the current study and outlines my hypotheses. In Chapter 4, I describe the methods, including the study sample and procedures, measures, and analytic strategy. Chapter 5 presents the results. In Chapter 6, I provide a discussion of my findings, including substantive, theoretical, and policy implications of this research, as well as limitations and future directions.

## CHAPTER 2

### LITERATURE REVIEW

This dissertation explores the impact of adolescent exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination on the perpetration of violent crime and intimate partner violence (IPV) in young adulthood. The purpose of this chapter is to provide an overview of the literature on interpersonal violence. This chapter is divided into four parts. First, I review the shared risk factors for the perpetration of violent crime and IPV. Second, I highlight four key mechanisms emphasized by popular criminological theories through which adolescent experiences have been shown to affect interpersonal violence, including the endorsement of violence, holding deviant values, low self-control, and anger (Agnew, 2015; Akers & Jennings, 2015; Britt & Rocque, 2015). Third, I underscore the value of testing multiple mechanisms simultaneously to better understand the etiology of interpersonal violence. Lastly, I discuss gender differences in the prevalence and predictors of violent crime and IPV.

#### **Shared Risk Factors for Violent Crime & Intimate Partner Violence**

Violent crime and IPV share many of the same risk factors. These include developmental experiences within one's family, neighborhood, peer network, and psychological, behavioral, and cognitive characteristics.

#### ***Developmental Risk Factors***

In studies of the family and interpersonal violence, researchers frequently focus on early experiences of physical abuse or neglect, harsh parenting, and witnessing interparental violence.

For instance, Topitzes et al. (2012) found that individuals who were physically abused as children were more than twice as likely to have a violent offense on their record by the age of 26 as their non-maltreated counterparts. Other research has shown similar results when self-reports of violent offending are assessed. In one study, individuals with histories of child abuse were 55% more likely to report violent crime than those without accounts of abuse (Milaniak & Widom, 2015). Similar patterns emerge when violence towards romantic partners is investigated. Ehrensaft et al. (2003) found individuals who were physically abused as children were twice as likely as their non-maltreated counterparts to perpetrate IPV. Levels of parental hostility, including both physical and verbal aggression, have also been shown to predict young adults' aggression toward romantic partners (Simons et al., 2012).

Other work has considered how one's neighborhood impacts violence, focusing on factors such as neighborhood disadvantage, crime, and violence. Neighborhood disadvantage has been demonstrated to increase adolescents' violent offending, controlling for the effect of exposure to peer violence (Zimmerman & Messner, 2010). Additional research has indicated that youth who had witnessed neighborhood violence were more likely to have assaulted someone in the past year, regardless of parental supervision, attachment to school, and friends' delinquency (Patchin et al., 2006). Exposure to neighborhood violence has also been shown to heighten the likelihood of IPV perpetration. For example, Reed et al. (2009) found that men's perceptions of neighborhood violence were related to their greater use of IPV. Likewise, earlier research has demonstrated that witnessing or having knowledge of community violence predicted adolescents' greater dating violence perpetration, net the effects of adolescents' exposure to family violence and substance use (Malik et al., 1997).

In comparison, the literature focused on an individual's peer network and interpersonal violence often examines one's association with deviant and aggressive peers. For example, Nofziger and Kurtz (2005) found that having violent close friends increased one's likelihood of violent offending, regardless of race, sex, and income. Other research has indicated that the effect of violent friends on offending was amplified when adolescents lived in areas of concentrated disadvantage where witnessing a violent crime was more likely (Zimmerman & Messner, 2011). Closer affiliation with violent peers in adolescence has also been shown to increase the probability of men's IPV perpetration in young adulthood (Ramirez et al., 2012). Likewise, time spent with delinquent peers has been demonstrated to predict greater dating violence in emerging adulthood, regardless of gender (Paat & Markham, 2016).

Scholars have further stressed that experiences with racial discrimination are influential for engagement in interpersonal violence. Most of this research has assessed one's perceived racial discrimination from various people and in a range of settings. For example, Simons and Burt (2011) found that self-reports of racial discrimination predicted greater engagement in crime in young adulthood, net the effects of community crime and victimization, supportive parenting, and past delinquency. Perceived racial discrimination has also been demonstrated to strongly predict young adults' involvement in violent crime (Caldwell et al., 2004). Some research has also shown that experiences with racial discrimination increase one's risk of IPV perpetration. Sutton et al. (2019) found that perceived racial discrimination heightened Black men's use of IPV. Likewise, racial discrimination has been demonstrated to increase engagement in IPV among Black women (Stueve & O'Donnell, 2008).

### ***Psychological, Behavioral, & Cognitive Characteristics***

Beyond experiences with harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination, violent crime and IPV share many of the same cognitive, psychological, and behavioral characteristics. For instance, holding positive attitudes towards violence has been shown to increase engagement in violent crime and IPV (Franklin & Kercher, 2012; Stewart & Simons, 2010). Similarly, holding deviant or less conventional values has been demonstrated to predict both forms of interpersonal violence (Foshee et al., 2011; Payne & Salotti, 2007). More recent research has shown low self-control to be a risk factor for violent crime and IPV (Bates et al., 2017). Lastly, researchers have found negative emotionality, particularly anger, to increase both forms of violence (Jang & Rhodes, 2012; L. G. Simons et al., 2014). In the next section, I review the theoretical perspectives tied to each of these factors, as well as the literature connecting them to the included adolescent experiences, violent crime, and IPV.

### **Key Mechanisms**

#### ***The Endorsement of Violence***

In this dissertation, the endorsement of violence is defined as attitudes that support or justify the use of violence under certain circumstances. These circumstances include the use of violence to defend one's rights, get others to treat you fairly, gain or maintain respect, or get even. Attitudes supporting violence have long been offered as an explanation for how experiencing and witnessing violence increases later interpersonal violence perpetration. Sutherland (1947) proposed differential association theory which suggested that crime was learned through social interaction. This learning process includes not only the techniques of crime but also the motives and attitudes behind criminal behavior. Burgess and Akers (1966)

later revised differential association theory, and it was further developed by Akers (1998) as social learning theory.

Akers' (1998) social learning theory focused on four key ideas: differential association, definitions, differential reinforcement, and imitation. Specifically, one's criminal behavior was hypothesized to increase to the extent to which the individual (1) differentially associates with peers or others that hold pro-criminal attitudes and values, (2) comes to define crime as desirable or justified, (3) views the expected rewards of crime to outweigh the potential cost, and (4) the behavior is modeled by others and later imitated. The concepts of imitation and reinforcement mirror the work of Bandura (1969), suggesting that one learns a behavior by witnessing it modeled by others and perceiving the related consequences.

Another seminal work stressing the importance of attitudes toward violence in understanding crime was Anderson's (1999) *Code of the Street*. Anderson (1999) argued that adolescents exposed to high levels of violence adopt aggressive stances to prevent subsequent threats of victimization. For instance, research has shown that adolescents who lived in "street families" characterized by inconsistent discipline, physically and verbally abusive parenting, and interparental violence were more likely to endorse that violence was advantageous or justified under certain circumstances (e.g., to gain respect, get even, or get others to treat you fairly) (Stewart & Simons, 2006).

Empirical research supports the contention that youth and adolescent experiences shape attitudes toward violence. Numerous studies have linked harsh parenting to adolescents' pro-violent attitudes (Copp et al., 2016; Morris et al., 2015). Affiliation with aggressive peers has also been demonstrated to increase adolescents' support for physical retaliation as a justified and necessary response to provocation (Brezina et al., 2004). Other research has shown that

adolescents' exposure to neighborhood violence and perceived racial discrimination increased the likelihood of endorsing violence as advantageous (Stewart & Simons, 2006).

Further, studies have evidenced that attitudes in support of violence increases one's likelihood of perpetrating interpersonal violence. For instance, commitment to the street code has been demonstrated to predict greater engagement in violent delinquency (Stewart & Simons, 2010). Attitudes and beliefs accepting of violence in romantic relationships have also been shown to be one of the strongest predictors of IPV perpetration (Franklin & Kercher, 2012). Moreover, general beliefs in support of violence (i.e., not specific to IPV) have been linked to greater participation in dating violence (Morris et al., 2015).

While ample evidence exists that holding positive attitudes toward violence increases one's risk of violent behavior, remarkably few studies have sought to examine the questions addressed in the current study. First, this study considers whether exposure to violence and aggression in different contexts (e.g., family, peer, neighborhood, racial discrimination) contribute equally to the development of beliefs about when violent behavior is appropriate and justified. Second, this study assesses whether attitudes towards violence predict the perpetration violent criminal behavior and IPV in similar ways. It is hypothesized that adolescent experiences with harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination will increase an individual's endorsement of violence as a legitimate strategy. Further, it is hypothesized that one's endorsement of violence will subsequently increase the perpetration of violent crime and IPV.

### ***Deviant Values***

While some individuals view social norms discouraging fighting, theft, and substance use to be legitimate, others hold a cynical perspective on these social rules. In this dissertation,



deviant values refer to one's belief that certain criminal behaviors are socially permissible. Specifically, it is evaluated how acceptable individuals feel it is to do things such as steal, use illegal drugs, sell illegal drugs, or assault someone. Both social learning and social control theories stress that possessing less conventional views of social norms increases the likelihood of crime (Akers, 1973; Hirschi, 1969). As discussed above, social learning theory suggests that these deviant values emerge from differential association, imitation, and differential reinforcement. On the other hand, social control theory offers that deviant values arise when an individual's bond to society is weak or broken (Hirschi, 1969).

Hirschi (1969) argued that one's bond to society was comprised of four elements: attachment, commitment, involvement, and belief. Attachment is defined as emotional ties to others. Commitment refers to investment in conventional activities and goals (e.g., education, employment). Involvement is the amount of time spent participating in conventional activities. Lastly, belief is the extent to which one endorses society's rules and expectations. Ultimately, the stronger one's bond to society, the more one has to lose by engaging in crime. Therefore, as adverse experiences weaken an individual's bond to society, one perceives fewer social costs of engaging in crime. This dissertation focuses on the element of belief, specifically, a lack of belief in societal rules and expectations (i.e., deviant values).

Indeed, prior research has shown that certain experiences in adolescence can undermine one's belief in conventional norms. For example, Qi (2019) found that harsh parenting increased adolescents' moral disengagement (i.e., deviant values) which subsequently increased their aggressive behavior, controlling for the influence of gender, age, and SES. Further, exposure to neighborhood crime, peers' delinquency, and racial discrimination has been shown to weaken adolescents' commitment to conventional values, regardless of gender, age, and supportive

parenting (Simons & Burt, 2011). Lastly, adolescent experiences with racial discrimination have been linked to greater disengagement from conventional norms, net the effects of prior delinquency (Burt et al., 2012).

Moreover, past work has demonstrated that maintaining deviant values is associated with greater participation in crime and IPV. For instance, Payne and Salotti (2007) found that young adults who endorsed conventional values were less likely to engage in violent crime, property crime, and drug use, controlling for gender, age, race, and peer effects. Similarly, research by Foshee et al. (2011) revealed that one's endorsement of conventional beliefs, commitment to pro-social values, and religiosity were associated with decreased odds of dating violence perpetration, regardless of family, peer, and school context.

This dissertation uniquely contributes to the broader research on deviant values and violence in several ways. Specifically, I investigate how adolescent experiences with harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination differentially impact one's formation of deviant values. Further, I assess whether maintaining deviant values is more influential for violent crime or IPV. Given that the values assessed are not specific to the use of violence in romantic partnerships but rather are directed at crime more broadly, it is not well known how they will differentially impact each form of interpersonal violence. Nonetheless, I hypothesize that adolescents' exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination will lead to maintaining more deviant values. Moreover, it is hypothesized that holding deviant values will subsequently predict greater engagement in violent crime and IPV.

### ***Low Self-Control***

In this dissertation, low self-control describes a preference for immediate gratification and risk-seeking activities. Criminologists have long emphasized the role of self-control in explaining an individual's engagement in crime and delinquency. A "general theory of crime" put forth by Gottfredson and Hirschi (1990) asserted the lower a person's self-control, the higher their involvement in crime and analogous behaviors. More specifically, Gottfredson and Hirschi (1990) argued that individuals with low self-control were more likely to respond to stimuli in their immediate environment, while individuals with high self-control are better able to delay gratification. They cited the primary cause of low self-control to be ineffective parenting, characterized by a lack of supervision, inconsistent discipline, and a weak parent-child bond. Further, they theorized that individuals with low self-control would be more likely to be attracted to risky activities, prefer physical rather than mental tasks, have a low tolerance for frustration, and are less likely to consider the consequences of their actions (Gottfredson, 2005; Gottfredson & Hirschi, 1990).

Empirical research has demonstrated that adolescent experiences influence levels of self-control. For example, Li et al. (2019) found that harsh parenting negatively impacted levels of self-control into late adolescence. Other research has suggested that the effects of adverse neighborhood conditions on youth's self-control were as influential as parental socialization (Pratt et al., 2004). Similarly, adolescents' association with deviant peers has been shown to predict decreases in their self-control, controlling for changes in parenting and attachment to teachers (Burt et al., 2006). Lastly, research by Gibbons et al. (2012) demonstrated that perceived discrimination from ages 10 to 18 reduced levels of self-control over time.

Moreover, there has been fairly consistent support for Gottfredson and Hirschi's (1990) general theory of crime in predicting an individual's engagement in interpersonal violence. While research has shown that low self-control predicts participation in a range of antisocial behaviors, one study revealed that self-control was a stronger predictor of violent offending than property crime, drug use, and overall crime (Baron, 2003). Further, research has revealed that individuals with low self-control are more likely to engage in violent crime after being violently victimized than those with higher self-control (Turanovic & Pratt, 2013). Similarly, low self-control has been linked to greater IPV perpetration. For example, Zavala (2017) found that young adults with lower self-control had greater odds of engaging in IPV, regardless of sex, race, past exposure to interparental violence, and current levels of anger and depression. Other studies have yielded similar findings. A study by Gover et al. (2008) revealed that college students' levels of self-control significantly predicted their psychological and physical aggression toward romantic partners, net the effects of child abuse, attachment to parents, and witnessing interparental violence.

Nonetheless, research has yet to formally examine whether levels of self-control can explain the relationships among different adolescent experiences and later interpersonal violence. Moreover, while much of the research on self-control has focused on harsh parenting, less research has considered its' effect after other salient adolescent experiences are accounted for such as neighborhood crime, friends' delinquency, and racial discrimination. Thus, this dissertation uniquely contributes to the broader literature by examining how multiple adolescent experiences shape levels of self-control, and in turn, whether levels of self-control can explain the perpetration of violent crime and IPV. I hypothesize that adolescents' experiences with harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination will predict lower

self-control. Further, I hypothesize that low self-control will subsequently increase one's perpetration of violent crime and IPV.

### ***Anger***

The last mechanism of interest in this dissertation is anger. General strain theory proposes that stressful life experiences or strains increase the likelihood of crime by generating negative emotions (i.e., anger, frustration) that create pressure for corrective action (Agnew, 1992; Agnew, 2006). Crime is seen as a way to reduce strain or alleviate the negative emotions that accompany it. Specifically, anger is posited to increase the likelihood of other-directed forms of coping, such as crime and IPV, by empowering one to act and reducing inhibitions (Agnew, 2006). Strains are especially likely to lead to crime when they are high in magnitude, are viewed as unjust, are related to low social control, and when they incentivize criminal coping (Agnew, 2001). Harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination meet each of these criteria.

Indeed, each of the adolescent experiences of interest in this dissertation have been shown to foster anger and aggression. For instance, adolescents' exposure to harsh parenting has been demonstrated to increase anger and subsequent delinquency (Brezina, 1998). Similar research has indicated that witnessing neighborhood violence heightens adolescents' anger, anxiety, and disassociation (Rosenthal, 2000). Likewise, Mrug et al. (2008) found that friends' deviant behavior increased adolescents' overt aggression (i.e., anger) and aggressive fantasies. Finally, young adults' experiences with racial discrimination have been shown to elicit anger and adverse coping attempts (Sutton et al., 2019; Swim et al., 2003).

Moreover, empirical research has linked anger to the perpetration of interpersonal violence. In a test of general strain theory, Jang and Rhodes (2012) found that adolescents'

experience of strain heightened anger, which in turn, increased their engagement in violent crime in emerging adulthood. Likewise, research has shown anger to increase hostility and aggression toward romantic partners (L. G. Simons et al., 2014). Angry individuals are more likely to interpret their romantic partners' behavior as hostile, experience higher anger arousal during conflict, and see aggression toward romantic partners as justified (Birkley & Eckhardt, 2015). For example, Giordano et al. (2016) found anger to predict IPV perpetration in young adulthood regardless of race, gender, and relationship status.

This dissertation builds on previous general strain theory research in several ways. Namely, I examine four unique sources of strain in adolescence. This contrasts past work that has used either cumulative assessments of strain or assessed strain only within one context. I consider two different forms of other-directed coping (e.g., violent crime and IPV) that are likely to occur in response to anger. To the best of my knowledge, little work has applied GST to understand violent crime and IPV simultaneously. Accordingly, I hypothesize that adolescents' experiences with harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination will foster greater anger. Further, it is hypothesized that anger will consequently increase engagement in violent crime and IPV.

### **The Value of Testing Multiple Mechanisms**

At this point, the review of the literature has focused on the independent contributions of the endorsement of violence, deviant values, low self-control, and anger in explaining how different adolescent experiences shape young adulthood interpersonal violence. While each of these factors is often conceptualized as distinct or opposing explanations, in this dissertation, it is argued that they are also likely to operate collectively in explaining interpersonal violence. For instance, individuals with low self-control are especially likely to be quick to react with anger

(Clay-Warner, 2014). Other research has stressed the overlap between a preference for immediate gratification (low self-control), low commitment to conventional norms (deviant values), and hostile views of relationships (Simons & Burt, 2011).

Testing multiple mediators simultaneously is advantageous for several reasons. First, it allows the researcher to identify which mechanism is the strongest predictor of the outcome of interest. Second, it permits for a possible examination of overlap between different mediators. Third, it advances the broader literature in a unique way by providing a more complete explanation of engagement in crime and violence.

## **Gender & Interpersonal Violence**

### ***Prevalence of Interpersonal Violence***

While men are more likely to engage in violent crime than women, a growing proportion of violent offenses involve female offenders. For example, National Crime Victimization Survey (NCVS) data from 2019 suggested that 21.4% of violent incidents included female offenders (Morgan & Truman, 2020). Similarly, findings from the Uniform Crime Reports (UCR) have indicated that female offenders accounted for 17.5% of violent offenses reported to the police in 2020 (Morgan & Thompson, 2021). Yet, it is relevant to note that the narrowing gender gap in violent offending is largely due to a decrease in men's offending rather than recent increases in women's offending (Lauritsen et al., 2009).

In consideration of gender differences in IPV, research has shown that while women face a higher risk of experiencing the most severe forms of physical IPV (e.g., being hit with a fist, kicked, choked, beaten, or burned on purpose), men and women have similar odds of being victimized by less severe forms of violence including slapping, pushing, and shoving (Smith et al., 2018). In a systematic review of the literature on IPV, Capaldi et al. (2012) found that most

studies indicated men and women were generally equally likely to perpetrate IPV, or women perpetrated IPV at slightly greater rates than men. Nonetheless, in clinically abusive relationships, women more often need medical treatment for IPV-related injuries (Ehrensaft et al., 2004).

### ***Predictors of Interpersonal Violence***

A longstanding debate within the criminological literature is whether distinct explanations are needed for women's use of violence. Feminist scholars have cautioned against "add women and stir" research approaches, stressing the importance of gender theorizing rather than simply adding gender as a variable (Chesney-Lind, 1989, 2006). For example, while there is substantial overlap in the developmental predictors of interpersonal violence among women and men, gender shapes exposure to and the impact of such experiences on later violent crime and IPV. In the paragraphs below, I review a selection of studies that have examined gender differences in interpersonal violence with attention to the influence of harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination.

A limited number of studies have examined gender differences in the effect of harsh parenting on later interpersonal violence. One study by Topitzes et al. (2012) found that childhood maltreatment had a similar effect on adulthood violent offending for men and women. However, the mechanisms through which experiencing maltreatment influenced later violence varied by gender. Specifically, environmental instability, childhood externalizing behaviors, and adolescent peer social skills fully mediated the relationship between maltreatment and violence for men, while adolescent externalizing behavior partially mediated the relationship for women. Another study by Fang and Corso (2007) revealed that experiencing physical abuse predicted young adulthood IPV perpetration for both women and men, but this effect was stronger among



women. Research focused on harsh parenting more broadly (i.e., including physical and verbal aggression) has suggested that mothers' hostility was impactful for women's IPV perpetration but not men's (Simons et al., 2012). All in all, further research is needed to establish whether experiencing harsh parenting is a stronger predictor of women's violence than men's violence.

Turning to the research on neighborhood factors and interpersonal violence, previous work has indicated that boys tend to have greater exposure to neighborhood crime and violence than girls (Lobo Antunes & Ahlin, 2017). Nonetheless, some research suggests that exposure to neighborhood violence may be more influential for girls' outcomes. For instance, Browning et al. (2014) found that exposure to severe community violence predicted girls' delinquency and aggression but did not significantly influence these behaviors among boys. In comparison, research focused on the outcome of IPV has shown that community violence exposure was a strong predictor of adolescent dating violence perpetration for girls and boys, even though boys were exposed to greater levels of community violence (Malik et al., 1997). Overall, the existing literature suggests that boys are exposed to greater neighborhood crime and violence, but the effects of this exposure for later violence perpetration may vary by gender.

Similarly, the literature on peer delinquency and violence has indicated that boys are more likely to affiliate with violent peers than girls (Zimmerman & Messner, 2010). However, some research has found that affiliation with violent peers had a stronger influence on girls' violence offending than boys (Zimmerman & Messner, 2010). Other work has shown contradictory findings. In one study, results indicated that deviant peer affiliation had a greater impact on young men's IPV than women's (Morris et al., 2015). In a different study, time spent with delinquent peers predicted women's psychological IPV perpetration, but did not significantly impact men's use of psychological aggression toward romantic partners (Paat &

Markham, 2016). All in all, previous work focused on gender differences in peer effects and interpersonal violence has yielded inconsistent findings, highlighting the need for further research in this area.

Lastly, few studies have examined gender differences in the impact of racial discrimination on the perpetration of IPV and violent crime. An exception, Caldwell et al. (2004), found that young adulthood racial discrimination increased violent behavior for both Black women and men. Similarly, previous work has shown experiences with racial discrimination to increase IPV perpetration among male (Sutton et al., 2019) and female samples (Stueve & O'Donnell, 2008). However, it is not well known how the strengths of such effects vary by gender.

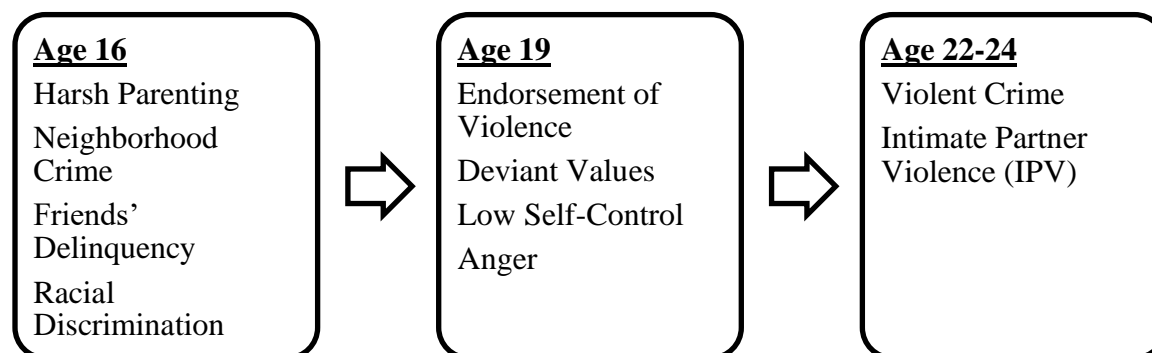
In conclusion, gender differences in the effects of harsh parenting, neighborhood crime, friends' delinquency on violent crime and IPV are not well established. It is clear that gender shapes exposure to these experiences and their influence on later behavior. In this dissertation, I speak to this research gap by conducting my analyses separately by gender rather than using gender as a control variable. In doing so, I identify the shared and unique adolescent predictors and mediators leading to young adulthood violence for women and men.

### CHAPTER 3

#### THE CURRENT STUDY

In this dissertation, I investigate how exposure to violence and discrimination in adolescence impacts the perpetration of interpersonal violence in young adulthood. Using four waves of data from the Family and Community Health Study (FACHS), this study overcomes several limitations of previous research on this topic. First, I examine four distinct adolescent experiences shown to influence later interpersonal violence. Specifically, exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination are evaluated at age 16 (Wave 3). It remains unclear which of these four sources of violence is most influential for interpersonal violence relative to the others. This issue is addressed by separately assessing the effect of each while controlling for the impact of the others.

Second, this study examines two forms of violent behavior in young adulthood: violent criminal offending and intimate partner violence (IPV) perpetration. Both are assessed at the ages of 22 and 24 (Waves 5 and 6). Rarely are such outcomes assessed simultaneously despite research suggesting they share many of the same risk factors and correlates. Third, I test four possible mediators of the relationships among the included adolescent experiences and young adulthood violent crime and IPV. Namely, I consider one's endorsement of violence, deviant values, low self-control, and anger at age 19 (Wave 4). While each of these mediators has received support when tested individually, few empirical studies have evaluated such mediators while controlling for the effects of the others. The conceptual model for this study is provided below.

**Figure 1***Conceptual Model*

## CHAPTER 4

### METHOD

#### **Sample & Procedures**

The Family and Community Health Study (FACHS) is a multisite, longitudinal investigation of Black families from Georgia and Iowa. The FACHS was designed to identify family and neighborhood factors that affect the development and well-being of Black American youth and their families over time. Block group areas were identified in each state using 1990 census data and included if the proportion of families with children living below the poverty line was between 10 and 100% and the ratio of Black households was at least 10% (Simons, Stewart, et al., 2002). Following these requirements, 259 block group areas were selected (115 in Georgia and 144 in Iowa). Next, the researchers obtained a roster of all fifth-grade students from schools zoned in the identified block groups. From these rosters, families that identified as Black American were randomly selected and contacted to determine their interest in participating in the study. In the end, 84% of contacted families agreed to participate.

The FACHS measures were selected and developed based on strong psychometric properties and predictive validity in previous research with Black American youth and adults (Simons, Lin, et al., 2002). Eight focus groups, including four in Georgia and four in Iowa, examined and critiqued the survey instruments before data collection. Each focus group included 10 Black women who had similar educational and economic backgrounds to the study participants and lived in neighborhoods similar to those from which the participants were recruited. The focus group members identified and proposed modifications for any items that

appeared to be culturally insensitive, intrusive, or unclear. The focus groups' revisions were then incorporated into the instruments. The protocol was next pilot tested with eight families from each state. Black American facilitators kept detailed reports of the participants' reactions to the questionnaires and offered suggestions for further revisions.

The first wave of data was collected in 1997, when youth were on average 10.5 years old. To increase rapport between interviewers and participants, all interviewers were Black American community members or university students who had completed one month of training on administering computer-based, self-report questionnaires (Murry et al., 2001; Simons, Lin, et al., 2002). Interviews took place in the participant's home or, if the participant preferred, in a location nearby such as a library or school. Interviews were conducted privately between one participant and one interviewer using a laptop computer that only the participant could see. The researcher read each question aloud, and participants entered their responses using the computer keypad. Interviews lasted approximately two hours. Data were collected from a target child, primary caregiver, sibling, and secondary caregiver if one was living in the home and available. Participants were surveyed every two and half to three years. This dissertation utilizes data from Waves 3, 4, 5, and 6 when the target youth were on average 16, 19, 22, and 24 years of age, respectively. As I was interested in participants' engagement in IPV, the present study sample is limited to participants who had romantic partners at the time of the Wave 5 or Wave 6 survey. The final sample includes 296 women and 216 men.

## **Measures**

### ***Adolescent Predictors***

**Harsh Parenting.** Adolescent experiences with harsh parenting were assessed at Wave 3 using a 12-item scale demonstrating predictive validity in previous research (L. G. Simons et al.,

2014). Participants reported how often in the past year, their primary caregiver had engaged in acts of physical and verbal aggression towards them such as pushing, grabbing, hitting, shouting, or threatening to hurt them. Possible responses ranged from 0 (*never*) to 3 (*always*). Responses were averaged to form the measure ( $\alpha = .81$ ).

**Neighborhood Crime.** At Wave 3, participants reported on neighborhood crime using an eight-item scale adapted from the Project on Human Development in Chicago Neighborhoods (Sampson et al., 1997), showing predictive validity in past work (R. L. Simons et al., 2014). Participants indicated how often in the past six months events such as a murder, rape, robbery, and the selling of drugs had occurred in their neighborhood on a scale of 0 (*never*) to 2 (*often*). Responses were averaged to form the measure ( $\alpha = .81$ ).

**Friends' Delinquency.** Friends' delinquency was measured at Wave 3 with nine items adapted from the National Youth Survey (Elliot et al., 1989), used in previous FACHS research (Simons et al., 2018). Participants indicated how many of their close friends had engaged in a range of delinquent behaviors in the previous year, including having skipped school, stolen things, attacked someone with a weapon, and damaged or destroyed property. Possible responses ranged from 0 (*none of them*) to 3 (*all of them*) and were averaged to form the measure ( $\alpha = .77$ ).

**Racial Discrimination.** Racial discrimination was evaluated at Wave 3 using an 11-item scale adapted from the Schedule of Racist Events (Landrine & Klonoff, 1996), that has demonstrated predictive validity in previous research (Steele et al., 2021). Participants reported how often several events had occurred in the last year because of their race, such as being called racial slurs, harassed by police, or threatened with physical harm, on a scale of 0 (*never*) to 3 (*frequently*). Responses were averaged to form the measure ( $\alpha = .89$ ).

### ***Proposed Mediators***

**Endorsement of Violence.** At Wave 4, participant's endorsement of the use of violence was assessed using 12 items. Six items were from the Street Code scale developed by Stewart and Simons (2010), which has shown predictive validity in past research (Berg et al., 2020). The remaining six items were drawn from the Violence as Legitimate Strategy scale that was developed for FACHS. Participants indicated how strongly they agreed with statements such as, "sometimes you have to use physical force or violence to defend your rights," and "if someone uses violence against you, it is important that you use violence against him or her to get even," on a scale of 1 (*strongly disagree*) to 4 (*strongly agree*). Responses were averaged to form the measure ( $\alpha = .84$ ).

**Deviant Values.** The extent to which participants held deviant values was measured at Wave 4 including seven items used in past FACHS work (e.g., R. L. Simons et al., 2014). Participants reported how wrong they thought it was for someone their age to engage in a range of deviant behaviors including stealing, drug use, and selling drugs, on a scale of 1 (*very wrong*) to 4 (*not at all wrong*). Responses were averaged to form the measure ( $\alpha = .82$ ).

**Low Self-Control.** Low self-control was evaluated at Wave 4 with a 13-item scale adapted from Kendall and Wilcox (1979) and Eysenck and Eysenck (1978), that has shown predictive validity in previous research (Simons & Burt, 2011). Seven items assessed poor self-control using statements such as "you have to have everything right away." Six items measured risk taking with statements such as "you would do almost anything for a dare." Responses ranged from 1 (*not at all true*) to 3 (*very true*) and were averaged to form the measure ( $\alpha = .77$ ).

**Anger.** As there was no available measure of anger at Wave 4, anger was measured at Wave 5 including seven items from the Spielberger Trait Anger Scale (Spielberger, 1988), that



have been used in past FACHS work (e.g., Simons et al., 2014). Items included statements such as “it makes me furious when I am criticized in front of others,” “when I get frustrated, I feel like hitting someone,” and “when I get mad, I say nasty things.” Responses ranged from 1 (*almost never*) to 4 (*almost always*). Responses were averaged to form the measure ( $\alpha = .87$ ).

### ***Young Adulthood Outcomes***

**Violent Crime.** At Waves 5 and 6, participants reported on their engagement in violent crime using five items. Specifically, they indicated how many times in the past year they had used a weapon in a fight, pulled a knife or gun on someone, carried a hidden weapon, shot or stabbed someone, and gotten into a fight with the idea of seriously hurting someone. Responses were coded as 0 (*0 times*), 1 (*1-2 times*), 2 (*3-5 times*), and 3 (*6 or more times*), summed at each wave, and then averaged to form the measure ( $\alpha = .81$ ). Previous FACHS research has used this coding strategy to assess engagement in general crime (Simons & Sutton, 2021).

**Intimate Partner Violence Perpetration (IPV).** IPV perpetration was assessed at Waves 5 and 6 using five items from the Conflict Tactics Scale (Straus & Gelles, 1990). This scale has demonstrated predictive validity in past work (Steele et al., 2021). Participants indicated how often they had hit or slapped, hit with an object, thrown something, shouted, and had insulted or sworn at their romantic partner in the last month on a scale of 0 (*never*) to 3 (*always*). Responses were summed at each wave and then averaged to form the measure ( $\alpha = .74$ ).

### ***Controls***

Previous research has shown that adolescent exposure to harsh parenting (Ireland & Smith, 2009), neighborhood crime (Patchin et al., 2006), and friends’ delinquency (Haynie & Payne, 2006), may be related to adolescent’s own delinquent behavior. Further, adolescent

delinquency has been demonstrated to increase violent crime and IPV in young adulthood (Fang et al., 2010; Piquero et al., 2012). Thus, I control for adolescent delinquency at Wave 3 in all analyses. Adolescent delinquency was evaluated assessed using the conduct disorder scale from the DISC-IV (Shaffer et al., 1993). Respondents indicated whether in the past year they had engaged in a range of delinquent behaviors such as assault, intimidation, use of a weapon, robbery, destruction of property, and breaking and entering.

### **Analytic Strategy**

All analyses were performed with path analysis using Mplus Version 8. Missing data were handled using full information maximum likelihood (FIML) estimation, which allows for unbiased estimates of parameters and standard errors, assuming data are missing at random (Schafer & Graham, 2002). Model fit is evaluated using the Comparative fit index (CFI) > .95, Tucker-Lewis index (TLI) > .95, root mean square error of approximation (RMSEA) < .06, and standard root mean square residual (SRMR) < .08 (Hu & Bentler, 1999). Given the literature that suggests the etiology of violent crime and IPV varies by gender, all analyses are conducted separately by participant gender.

First, initial path analyses were performed to determine which adolescent predictors (i.e., harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination) had direct effects on violent crime and IPV perpetration in young adulthood. Second, path analyses were conducted for each of the proposed mediators individually to establish whether, independently, they linked any of the included adolescent experiences to violent crime or IPV. Third, all four mediators were included in a single path analysis to determine which provided the strongest explanation for how adolescent experiences shape later interpersonal violence once the other mediators were accounted for. As a formal test of mediation, indirect effects were evaluated

using bias-corrected bootstrapping with 1,000 iterations. This method adjusts for non-normality of data and has greater power to detect indirect effects than traditional methods such as the Sobel test (Preacher & Hayes, 2008).

## CHAPTER 5

### RESULTS

#### **Descriptive Statistics**

Correlations and descriptive statistics are shown in Table 1. All variables were correlated in the expected directions. For women, harsh parenting and friends' delinquency were significantly associated with all other variables. Neighborhood crime was positively related to racial discrimination, endorsing violence, deviant values, anger, violent crime, and intimate partner violence (IPV) perpetration. The endorsement of violence was associated with greater deviant values, low self-control, anger, and IPV. Holding deviant values was positively correlated with low self-control, anger, violent crime, and IPV. Low self-control was related to greater anger, violent crime, and IPV. Anger was positively linked to violent crime and IPV. Lastly, violent crime was associated with greater IPV.

Among men, harsh parenting was significantly associated with friends' delinquency, neighborhood crime, racial discrimination, low self-control, and IPV perpetration. Friends' delinquency was positively correlated with all other variables. Neighborhood crime was associated with greater racial discrimination, endorsing violence, anger, and violent crime. Racial discrimination was positively related to endorsing violence, deviant values, low self-control, anger, violent crime, and IPV. Endorsing violence was correlated with greater low self-control, deviant values, anger, violent crime, and IPV. Holding deviant values was positively associated with low self-control, anger, violent crime, and IPV. Low self-control was correlated

with greater anger, violent crime, and IPV. Anger was positively related to violent crime and IPV. Finally, violent crime was correlated with greater IPV.

**Table 1***Correlations & Descriptive Statistics*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	Mean (SD)
1. Harsh Parenting	---	.14*	.18**	.15*	.15*	.28**	.17**	.23**	.17**	.22**	.52 (.36)
2. Friends' Delinquency	.34**	---	.30**	.27**	.16**	.22**	.28**	.24**	.17**	.26**	.29 (.28)
3. Neighborhood Crime	.19**	.28**	---	.16*	.14*	.10	.23**	.17**	.21**	.18**	.46 (.41)
4. Racial Discrimination	.32**	.39**	.28**	---	.01	.07	.08	.10	.07	.03	.67 (.56)
5. Endorsement of Violence	.05	.25**	.22**	.22**	---	.25**	.30**	.26**	.10	.30**	2.27 (.45)
6. Low Self-Control	.26**	.29**	.11	.29**	.40**	---	.30**	.37**	.20**	.24**	1.47 (.31)
7. Deviant Values	.13	.30**	.06	.19*	.39**	.33**	---	.22**	.22**	.18**	1.32 (.44)
8. Anger	.12	.22**	.20**	.22**	.26**	.23**	.24**	---	.23**	.53**	1.73 (.59)
9. Violent Crime	.10	.29**	.24**	.20**	.25**	.20**	.24**	.40**	---	.22**	.43 (1.03)
10. IPV Perpetration	.19**	.18**	.10	.31**	.23**	.23**	.30**	.27**	.29**	---	1.79 (1.70)
Mean (SD)	.47 (.39)	.32 (.29)	.47 (.43)	.65 (.57)	2.44 (.45)	1.51 (.33)	1.44 (.55)	1.78 (.66)	.82 (1.87)	1.25 (1.39)	-

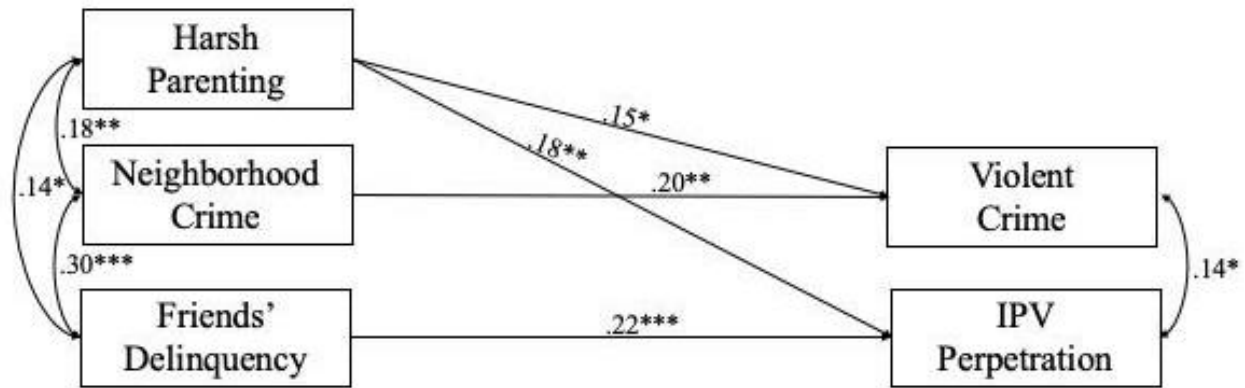
*Note.* Correlations and descriptive statistics for women (n = 296) are presented above the diagonal, correlations and descriptives for men (n = 216) are presented below the diagonal. \*\* $p < .01$ , \* $p < .05$ .

## Path Model Results

### *Results Among Women*

First, an initial path model was run to determine any direct relationships between the adolescent predictors and the young adulthood outcomes for women. The model was run fully recursive, with pathways from each of the adolescent predictors (e.g., harsh parenting, neighborhood crime, friends' delinquency, racial discrimination) to each outcome (e.g., violent crime and IPV), and covariances controlled for between the adolescent predictors and between violent crime and IPV. Racial discrimination did not predict violent crime or IPV and thus was dropped from the analysis. Next, the remaining nonsignificant pathways were trimmed one by one, resulting in the model depicted in Figure 2. Fit indices indicated the model was a good fit for the data (CFI = 0.946; TLI = 0.837; RMSEA = 0.067; SRMR = 0.038).

There were significant covariances between all the included adolescent predictors. Harsh parenting was related to greater neighborhood crime ( $\beta = .18, p < .01$ ) and friends' delinquency ( $\beta = .14, p < .05$ ). Neighborhood crime was associated with friends' delinquency ( $\beta = .30, p < .001$ ). There was also a positive relationship between violent crime and IPV perpetration ( $\beta = .14, p < .05$ ). Turning to the direct relationships, harsh parenting ( $\beta = .15, p < .05$ ) and neighborhood crime ( $\beta = .18, p < .01$ ) predicted greater violent crime. Harsh parenting ( $\beta = .20, p < .01$ ) and peer deviance ( $\beta = .22, p < .001$ ) increased women's IPV perpetration. All in all, the base model explained 6.4% of variance in women's violent crime and 9.8% of the variance in their IPV.

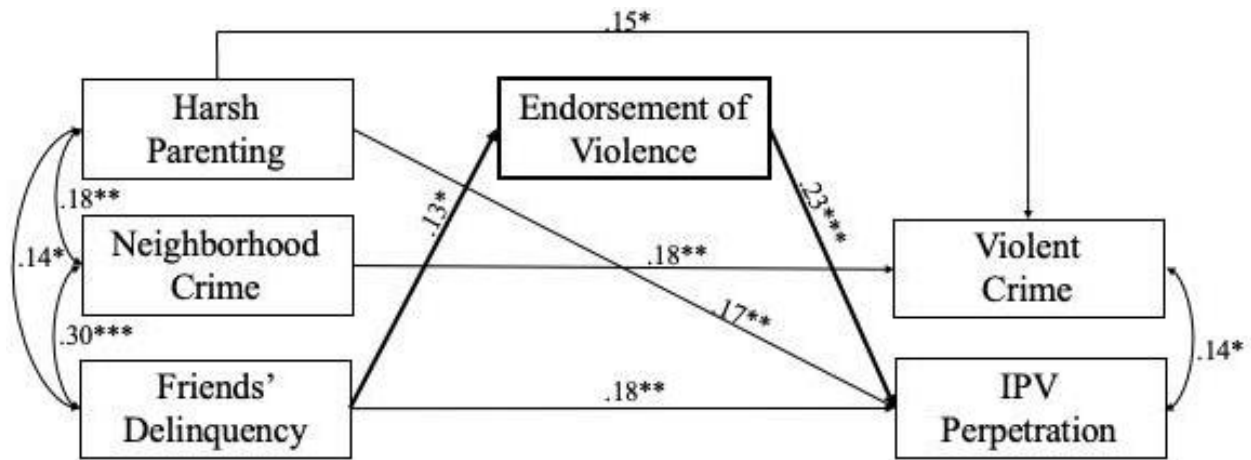
**Figure 2***Base Model Among Women*

*Note.* Standardized coefficients presented. Delinquency at Wave 3 controlled for. \*\*\* $p < .001$ ;

\*\* $p < .01$ ; \* $p < .05$ . CFI = 0.946; TLI = 0.837; RMSEA = 0.067; SRMR = 0.038.

**Endorsement of Violence.** Second, I examined whether women's endorsement of violence mediated some of the relationships between the included adolescent experiences and young adulthood interpersonal violence. Figure 3 presents the significant pathways after nonsignificant paths were trimmed from the model. Fit indices indicated that the model was a good fit for the data (CFI = 0.942; TLI = 0.876; RMSEA = 0.048; SRMR = 0.040). Friends' delinquency predicted one's greater endorsement of violence ( $\beta = .13, p < .05$ ). One's stronger endorsement of violence ( $\beta = .23, p < .001$ ) increased IPV perpetration. Nonetheless, harsh parenting ( $\beta = .17, p < .01$ ) and friends' delinquency ( $\beta = .18, p < .01$ ) continued to predict IPV. Harsh parenting ( $\beta = .15, p < .05$ ) and neighborhood crime ( $\beta = .18, p < .01$ ) persisted in increasing violent crime. The endorsement of violence model explained 6.4% of variance in women's violent crime and 14.5% of variance in their IPV perpetration.

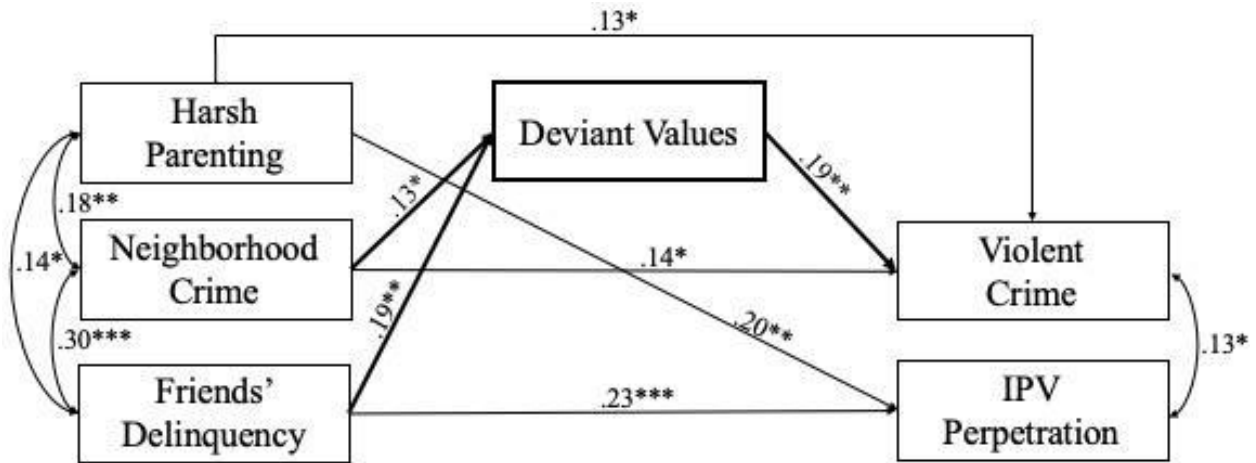


**Figure 3***Endorsement of Violence Model Among Women*

*Note.* Standardized coefficients presented. Delinquency at Wave 3 controlled for.  $***p < .001$ ;

$**p < .01$ ;  $*p < .05$ . CFI = 0.942; TLI = 0.876; RMSEA = 0.048; SRMR = 0.040.

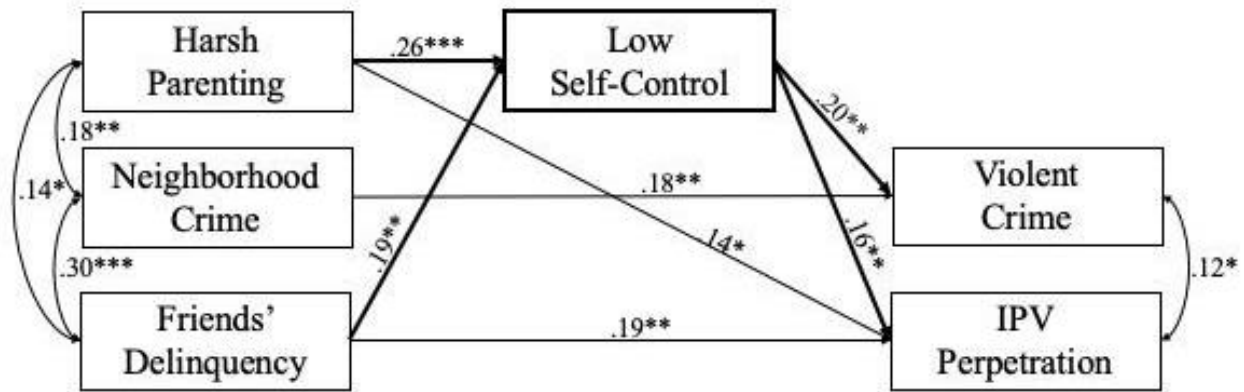
**Deviant Values.** Third, I investigated the potential mediating effect of deviant values. The model was an excellent fit for the data (CFI = 0.974; TLI = 0.934; RMSEA = 0.039; SRMR = 0.032). As shown in Figure 4, neighborhood crime ( $\beta = .13, p < .05$ ) and friends' delinquency ( $\beta = .19, p < .01$ ) predicted holding more deviant values. Holding deviant values ( $\beta = .18, p < .01$ ) increased engagement in violent crime. Harsh parenting ( $\beta = .13, p < .05$ ) and neighborhood crime ( $\beta = .14, p < .05$ ) continued to predict violent crime. Harsh parenting ( $\beta = .20, p < .01$ ) and friends' delinquency ( $\beta = .23, p < .001$ ) also persisted in heightening women's IPV perpetration. The deviant values model explained 9.1% of variance in women's violent crime and 10.4% of variance in their IPV perpetration.

**Figure 4***Deviant Values Model Among Women*

*Note.* Standardized coefficients presented. Delinquency at Wave 3 controlled for. \*\*\* $p < .001$ ;

\*\* $p < .01$ ; \* $p < .05$ . CFI = 0.974; TLI = 0.934; RMSEA = 0.039; SRMR = 0.032.

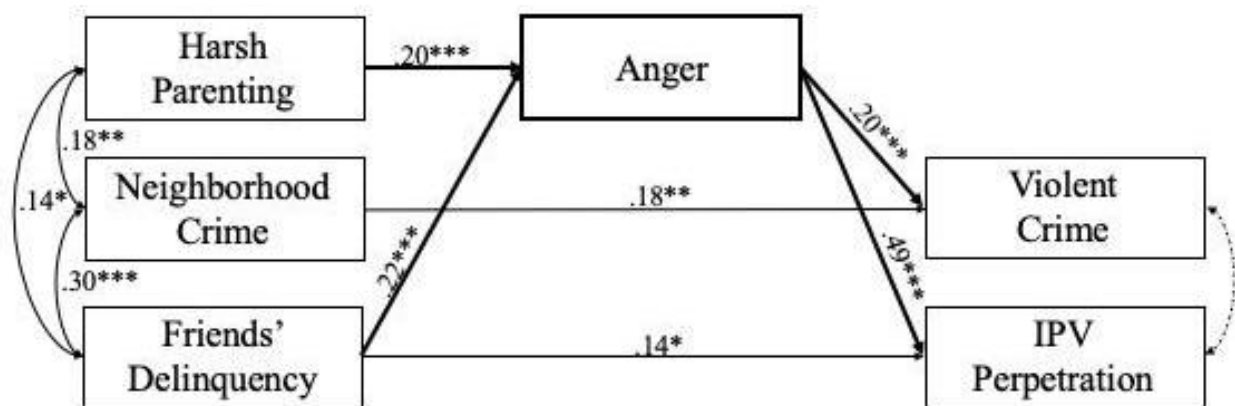
**Low Self-Control.** Fourth, low self-control was assessed as a possible mediator. Fit indices indicated that the model was a good fit for the data (CFI = 0.955; TLI = 0.883; RMSEA = 0.054; SRMR = 0.041). As depicted in Figure 5, harsh parenting ( $\beta = .26, p < .001$ ) and friends' delinquency predicted lower self-control ( $\beta = .19, p < .01$ ). Low self-control led to greater violent crime ( $\beta = .20, p < .01$ ) and IPV perpetration ( $\beta = .16, p < .01$ ). Neighborhood crime ( $\beta = .18, p < .01$ ), but not harsh parenting, continued to predict violent crime. Harsh parenting ( $\beta = .14, p < .05$ ), and friends' delinquency ( $\beta = .19, p < .01$ ) persisted in increasing IPV perpetration. The low self-control model explained 8.0% of variance in women's violent crime and 11.6% of variance in their IPV perpetration.

**Figure 5***Low Self-Control Model Among Women*

Note. Standardized coefficients presented. Delinquency at Wave 3 controlled for. \*\*\* $p < .001$ ;

\*\* $p < .01$ ; \* $p < .05$ . CFI = 0.955; TLI = 0.883; RMSEA = 0.054; SRMR = 0.041.

**Anger.** Fifth, I tested the potential mediating effect of anger. The model was an excellent fit for the data (CFI = 0.957; TLI = 0.914; RMSEA = 0.057; SRMR = 0.048). As displayed in Figure 6, harsh parenting ( $\beta = .20, p < .001$ ) and friends' delinquency ( $\beta = .22, p < .001$ ) heightened anger. Anger increased violent crime ( $\beta = .20, p < .001$ ) and IPV perpetration ( $\beta = .49, p < .001$ ). Only neighborhood crime continued to predict violent crime ( $\beta = .18, p < .01$ ). Likewise, only friends' delinquency ( $\beta = .14, p < .05$ ) persisted in predicting IPV. The anger model explained 8.2% of variance in women's violent crime and 29.2% of variance in their IPV perpetration.

**Figure 6***Anger Model Among Women*

*Note.* Standardized coefficients presented. Delinquency at Wave 3 controlled for. \*\*\* $p < .001$ ;

\*\* $p < .01$ ; \* $p < .05$ . CFI = 0.957; TLI = 0.914; RMSEA = 0.057; SRMR = 0.048.

**Summary of Individual Models.** The individual models among women revealed several significant pathways from adolescent experiences to young adulthood interpersonal violence through the proposed mediators. First, friends' delinquency led to greater endorsement of violence, which subsequently increased IPV perpetration. Second, neighborhood crime and friends' delinquency contributed to more deviant values, predicting higher engagement in violent crime. Third, harsh parenting and friends' delinquency predicted lower self-control, which led to greater violent crime and IPV. Fourth, harsh parenting and friends' delinquency resulted in heightened anger, increasing violent crime and IPV. In other words, women's low self-control and anger influenced both violent crime and IPV, while the endorsement of violence shaped only IPV, and holding deviant values impacted only violent crime. Notably, adolescent experiences with racial discrimination did not predict either young adulthood outcome. A summary of the individual models for women is presented in Table 2.

**Table 2***Summary of Individual Models Among Women*

<b>Proposed Mediator</b>	<b>Predicted Violent Crime</b>		<b>Predicted IPV Perpetration</b>	
	<i>Yes/No</i>	<i>Variance Explained</i>	<i>Yes/No</i>	<i>Variance Explained</i>
Endorsement of Violence	No	6.4%	Yes	14.5%
Deviant Values	Yes	9.1%	No	10.4%
Low Self-Control	Yes	8.0%	Yes	11.6%
Anger	Yes	8.2%	Yes	29.2%

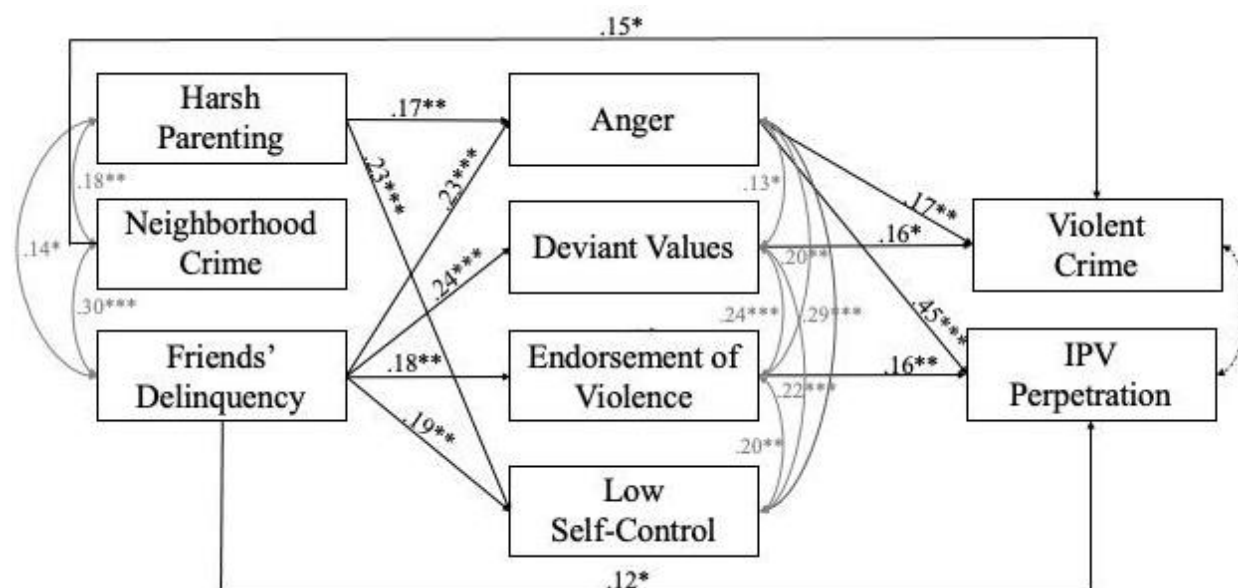
**Combined Model.** Lastly, a fully recursive model was run including all four of the proposed mediators. Non-significant pathways were then trimmed one-by-one, resulting in the model depicted in Figure 7. For clarity, covariances between variables are depicted in gray. Fit indices indicated that the model was an excellent fit for the data (CFI = 0.970; TLI = 0.941; RMSEA = 0.039; SRMR = 0.052). There were significant associations among all the proposed mediators. Women's anger was associated with holding more deviant values ( $\beta = .13, p < .05$ ), endorsing violence ( $\beta = .20, p < .01$ ), and lower self-control ( $\beta = .29, p < .001$ ). Holding deviant values was also related to endorsing violence ( $\beta = .24, p < .001$ ) and lower self-control ( $\beta = .22, p < .001$ ). Likewise, endorsing violence was tied to lower self-control ( $\beta = .20, p < .01$ ).

Turning to the effects of adolescent experiences on the proposed mediators, harsh parenting increased anger ( $\beta = .17, p < .01$ ) and low self-control ( $\beta = .23, p < .001$ ). Friends' delinquency led to heightened anger ( $\beta = .23, p < .001$ ), holding more deviant values ( $\beta = .23, p < .001$ ), greater endorsement of violence ( $\beta = .17, p < .01$ ), and low self-control ( $\beta = .19, p < .01$ ). Examining young adulthood interpersonal violence, anger ( $\beta = .17, p < .01$ ), deviant values

( $\beta = .16, p < .05$ ), and neighborhood crime ( $\beta = .15, p < .05$ ) increased women's violent crime. Anger ( $\beta = .45, p < .001$ ), endorsing violence ( $\beta = .16, p < .01$ ), and friends' delinquency ( $\beta = .12, p < .05$ ) heightened IPV perpetration. The combined model explained 9.9% of variance in women's violent crime and 31.2% of variance in their IPV.

**Figure 7**

*Combined Model Among Women*



*Note.* Standardized coefficients presented. Covariances between variables depicted in gray for clarity. Delinquency at Wave 3 controlled for. \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ . CFI = 0.970; TLI = 0.941; RMSEA = 0.039; SRMR = 0.052.

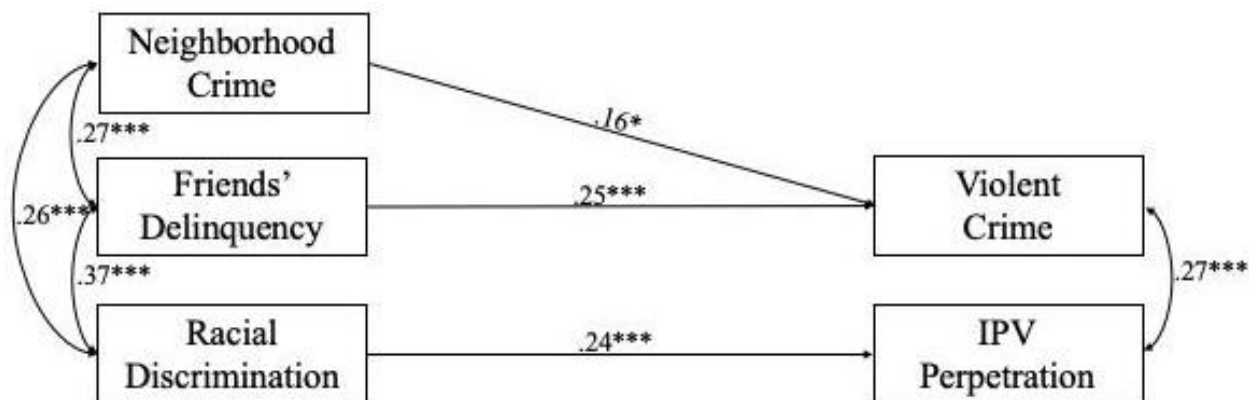
Bias-corrected bootstrapping was used to test for indirect effects from the included adolescent experiences to violent crime and IPV through the proposed mediators. Anger mediated some of the effects of harsh parenting,  $\beta = .029$ , 95% CI = [.008, .065], and friends' delinquency,  $\beta = .039$ , 95% CI = [.012, .084], on violent crime. Anger also mediated a portion of the effects of harsh parenting,  $\beta = .078$ , 95% CI = [.035, .135], and friends' delinquency,  $\beta = .104$ , 95% CI = [.044, .178], on IPV perpetration. Further, deviant values mediated some of the

effect of friends' delinquency on violent crime,  $\beta = .038$ , 95% CI = [.003, .104]. Lastly, endorsing violence mediated a portion of the effect of friends' delinquency on IPV perpetration,  $\beta = .028$ , 95% CI = [.010, .064].

### ***Results Among Men***

Next, a base model was run for men to determine any direct relationships between the adolescent predictors and the young adulthood outcomes. The model was again run fully recursive with pathways from each of the adolescent predictors to violent crime and IPV, and covariances controlled for between the adolescent predictors and between violent crime and IPV. Harsh parenting did not predict men's violent crime or IPV and thus was dropped from the analysis. Next, nonsignificant pathways were trimmed one by one, resulting in the model depicted in Figure 8. Fit indices indicated the model was an excellent fit for the data (CFI = 1.000; TLI = 1.077; RMSEA = 0.000; SRMR = 0.016).

There were significant covariances between all of the adolescent predictors. Neighborhood crime was associated with friends' delinquency ( $\beta = .27, p < .001$ ) and racial discrimination ( $\beta = .26, p < .001$ ). Friends' delinquency was tied to racial discrimination ( $\beta = .38, p < .001$ ). There was also a significant and positive covariance between men's violent crime and their IPV perpetration ( $\beta = .26, p < .001$ ). Turning to the direct relationships, neighborhood crime ( $\beta = .17, p < .01$ ) and friends' delinquency ( $\beta = .33, p < .001$ ) led to greater violent crime. Racial discrimination ( $\beta = .25, p < .001$ ) increased IPV perpetration. The base model explained 10.5% of the variance in men's violent crime and 12.8% of the variance in their IPV perpetration.

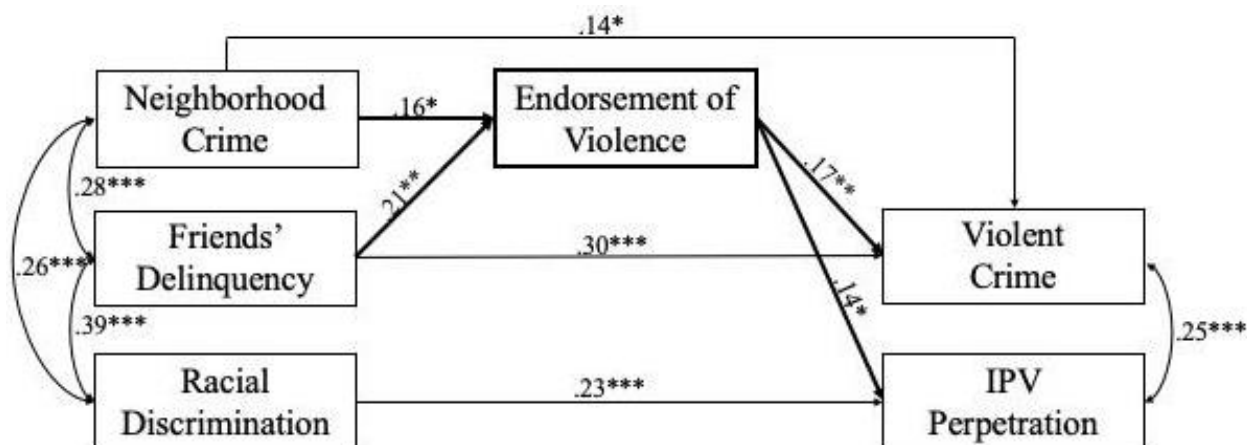
**Figure 8***Base Model Among Men*

*Note.* Standardized coefficients presented. Delinquency at Wave 3 controlled for. \*\*\* $p < .001$ ;

\*\* $p < .01$ ; \* $p < .05$ . CFI = 1.000; TLI = 1.077; RMSEA = 0.000; SRMR = 0.016.

**Endorsement of Violence.** Next, I examined whether men's endorsement of violence mediated some of the relationships from the adolescent experiences to interpersonal violence. Fit indices indicated that the model was an excellent fit for the data (CFI = 1.000; TLI = 1.026; RMSEA = 0.000; SRMR = 0.027). As shown in Figure 9, neighborhood crime ( $\beta = .16, p < .05$ ) and friends' delinquency ( $\beta = .21, p < .01$ ) predicted greater endorsement of violence. One's stronger endorsement of violence led to more violent crime ( $\beta = .17, p < .01$ ) and IPV perpetration ( $\beta = .15, p < .05$ ). Neighborhood crime ( $\beta = .14, p < .05$ ) and friends' delinquency ( $\beta = .30, p < .001$ ) continued to predict violent crime. Racial discrimination ( $\beta = .23, p < .001$ ) persisted in heightening IPV perpetration. The endorsement of violence model explained 16.3% of variance in men's violent crime and 12.2% of variance in their IPV perpetration.

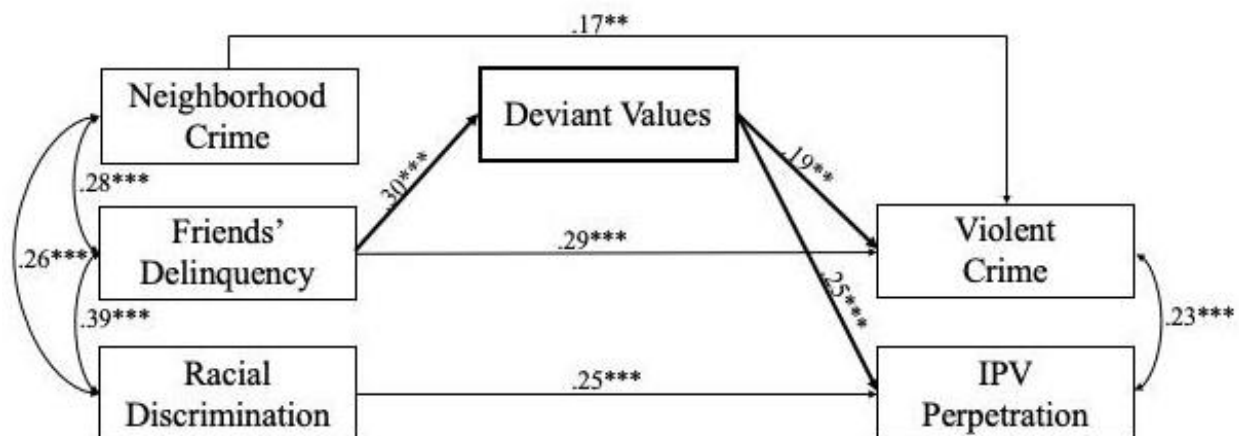


**Figure 9***Endorsement of Violence Model Among Men*

*Note.* Standardized coefficients presented. Delinquency at Wave 3 controlled for.  $***p < .001$ ;

$**p < .01$ ;  $*p < .05$ . CFI = 1.000; TLI = 1.026; RMSEA = 0.000; SRMR = 0.027.

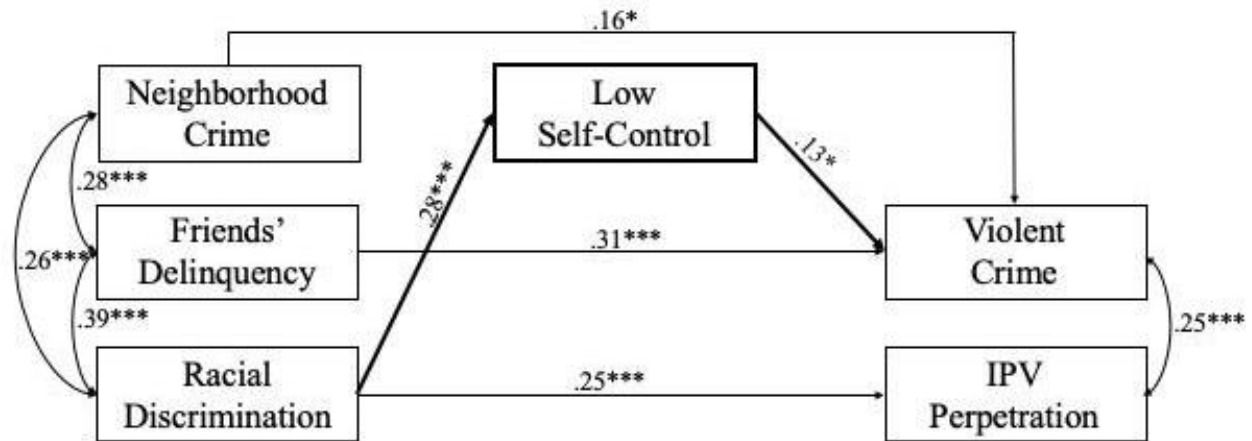
**Deviant Values.** The next model tested deviant values as a possible mediator. The model was an excellent fit for the data (CFI = 0.999; TLI = 0.997; RMSEA = 0.009; SRMR = 0.032). As depicted in Figure 10, friends' delinquency led to more deviant values ( $\beta = .30, p < .001$ ). Holding deviant values resulted in greater violent crime ( $\beta = .19, p < .01$ ) and IPV ( $\beta = .25, p < .001$ ). Neighborhood crime ( $\beta = .17, p < .01$ ) and friends' delinquency ( $\beta = .29, p < .001$ ) continued to increase violent crime. Racial discrimination also persisted in predicting IPV perpetration ( $\beta = .25, p < .001$ ). The deviant values model explained 17.1% of variance in men's violent crime and 8.7% of variance in their IPV perpetration.

**Figure 10***Deviant Values Model Among Men*

*Note.* Standardized coefficients presented. Delinquency at Wave 3 controlled for. \*\*\* $p < .001$ ;

\*\* $p < .01$ ; \* $p < .05$ . CFI = 0.999; TLI = 0.997; RMSEA = 0.009; SRMR = 0.032.

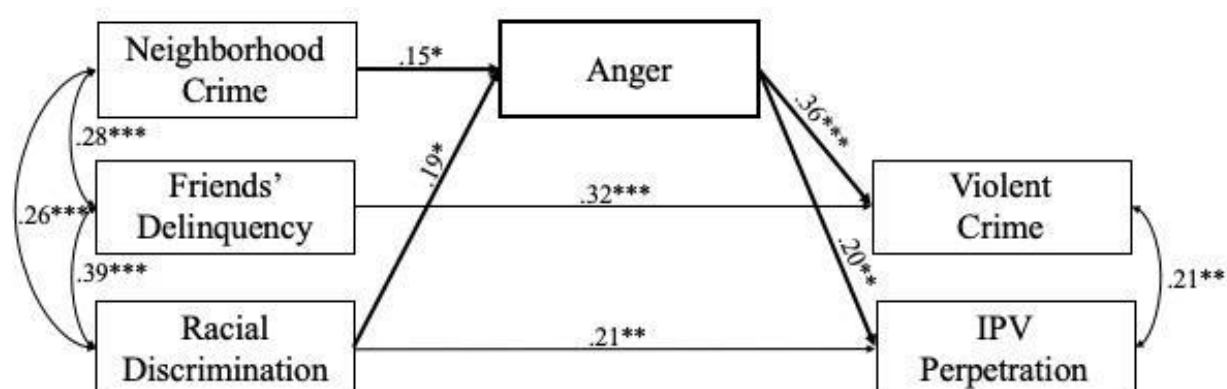
**Low Self-Control.** Subsequently, I assessed the potential mediating effect of low self-control. Fit indices indicated that the model was an excellent fit for the data (CFI = 1.000; TLI = 1.046; RMSEA = 0.000; SRMR = 0.022). As displayed in Figure 11, racial discrimination led to lower self-control ( $\beta = .28, p < .001$ ). Lower self-control resulted in more violent crime ( $\beta = .13, p < .05$ ). Neighborhood crime ( $\beta = .16, p < .05$ ) and friends' delinquency ( $\beta = .31, p < .001$ ) also continued to predict greater violent crime. Racial discrimination again led to more IPV perpetration ( $\beta = .25, p < .001$ ). The low self-control model explained 14.1% of variance in men's violent crime and 10.5% of variance in their IPV perpetration.

**Figure 11***Low Self-Control Model Among Men*

*Note.* Standardized coefficients presented. Delinquency at Wave 3 controlled for. \*\*\* $p < .001$ ;

\*\* $p < .01$ ; \* $p < .05$ . CFI = 1.000; TLI = 1.046; RMSEA = 0.000; SRMR = 0.022.

**Anger.** Further, it was examined whether anger mediated some of the relationships among adolescent experiences and later violence. The model was an excellent fit for the data (CFI = 0.987; TLI = 0.967; RMSEA = 0.033; SRMR = 0.031). As shown in Figure 12, neighborhood crime ( $\beta = .15, p < .05$ ) and racial discrimination ( $\beta = .19, p < .05$ ) heightened anger. In turn, anger increased violent crime ( $\beta = .36, p < .001$ ) and IPV perpetration ( $\beta = .20, p < .01$ ). Friends' delinquency continued to predict more violent crime ( $\beta = .32, p < .001$ ), while racial discrimination ( $\beta = .21, p < .01$ ) led to greater IPV perpetration. The anger model explained 22.1% of variance in men's violent crime and 13.9% of variance in their IPV perpetration.

**Figure 12***Anger Model Among Men*

*Note.* Standardized coefficients presented. Delinquency at Wave 3 controlled for. \*\*\* $p < .001$ ;

\*\* $p < .01$ ; \* $p < .05$ . CFI = 0.987; TLI = 0.967; RMSEA = 0.033; SRMR = 0.031.

**Summary of Individual Models.** The individual models among men exposed several significant pathways from adolescent experiences to young adulthood violence through the proposed mediators. First, neighborhood crime and friends' delinquency contributed to a stronger endorsement of violence, which led to greater engagement in violent crime and IPV. Second, friends' delinquency increased deviant values, predicting more violent crime and IPV. Third, racial discrimination heightened low self-control, subsequently increasing violent crime. Fourth, neighborhood crime and racial discrimination intensified anger, resulting in greater violent crime and IPV. In sum, endorsing violence, deviant values, and anger shaped both violent crime and IPV, while low self-control only impacted violent crime. Notably, harsh parenting did not influence IPV or violent crime. A summary of the individual models for men is presented in Table 3.

**Table 3***Summary of Individual Models Among Men*

<b>Proposed Mediator</b>	<b>Predicted Violent Crime</b>		<b>Predicted IPV Perpetration</b>	
	<i>Yes/No</i>	<i>Variance Explained</i>	<i>Yes/No</i>	<i>Variance Explained</i>
Endorsement of Violence	Yes	16.3%	Yes	12.2%
Deviant Values	Yes	17.1%	Yes	8.7%
Low Self-Control	Yes	14.1%	No	10.5%
Anger	Yes	22.2%	Yes	13.9%

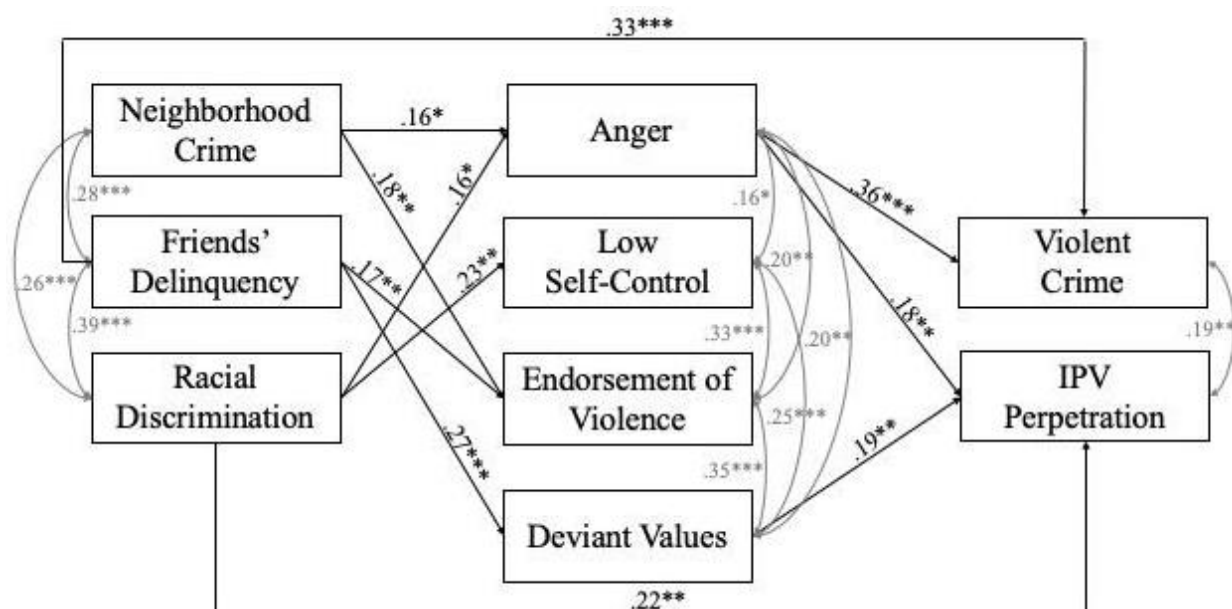
**Combined Model.** Finally, a fully recursive model was run for men including all four mediators. Non-significant pathways were then trimmed one-by-one, resulting in the model depicted in Figure 13. Fit indices indicated that the model was an excellent fit for the data (CFI = 0.986; TLI = 0.971; RMSEA = 0.028; SRMR = 0.051). There were significant associations among all the proposed mediators. Anger was associated with lower self-control ( $\beta = .16, p < .05$ ), endorsing violence ( $\beta = .20, p < .01$ ), and deviant values ( $\beta = .20, p < .01$ ). Low self-control was related to endorsing violence ( $\beta = .33, p < .001$ ) and deviant values ( $\beta = .25, p < .001$ ). Endorsing violence was also tied to holding more deviant values ( $\beta = .35, p < .001$ ).

Turning to the effects of the adolescent predictors on the proposed mediators, neighborhood crime increased anger ( $\beta = .16, p < .05$ ) and the endorsement of violence ( $\beta = .18, p < .01$ ). Friends' delinquency led to the stronger endorsement of violence ( $\beta = .17, p < .01$ ) and deviant values ( $\beta = .27, p < .001$ ). Racial discrimination led to greater anger ( $\beta = .16, p < .05$ ) and lower self-control ( $\beta = .23, p < .01$ ).

Lastly, evaluating effects of the adolescent predictors and proposed mediators on the young adulthood outcomes, anger ( $\beta = .36, p < .001$ ) and friends' delinquency ( $\beta = .33, p < .001$ ) predicted higher engagement in violent crime. Anger ( $\beta = .18, p < .01$ ), deviant values ( $\beta = .19, p < .01$ ), and racial discrimination ( $\beta = .22, p < .01$ ) led to greater IPV perpetration. The combined model explained 22.6% of variance in men's violent crime and 15.3% of variance in their IPV perpetration.

**Figure 13**

*Combined Model Among Men*



*Note.* Standardized coefficients presented. Covariances between variables depicted in gray for clarity. Delinquency at Wave 3 controlled for. \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ . CFI = 0.986; TLI = 0.971; RMSEA = 0.028; SRMR = 0.051.

Bias-corrected bootstrapping was used to test for indirect effects from adolescent experiences to IPV and violent crime through the proposed mediators. Anger mediated some of the effects of neighborhood crime,  $\beta = .056$ , 95% CI = [.004, .141], and racial discrimination,  $\beta = .057$ , 95% CI = [.001, .131], on violent crime. Anger additionally mediated a portion of the

effects of neighborhood crime,  $\beta = .027$ , 95% CI = [.002, .103], and racial discrimination,  $\beta = .028$ , 95% CI = [.001, .097], on IPV perpetration. Finally, deviant values mediated some of the effect of friends' delinquency on IPV perpetration,  $\beta = .051$ , 95% CI = [.001, .135].

## **Supplemental Analyses**

### ***Examining Gender Differences***

Multi-group analyses were used to explore gender differences in path coefficients (Wickrama et al., 1995). A combined model was run for men and women where pathways were free to vary by gender. One by one, pathways that were non-significant for both women and men were trimmed from the model. Using the trimmed model, freely estimated parameters for men and women were then recorded. Next, one at a time, each parameter was constrained to be equal across groups. Chi-square difference tests between the unconstrained and constrained models indicated whether there were significant gender differences for a given path coefficient. For clarity, only pathways that were significantly different at  $p < .10$  are displayed in Table 4. The effect of anger on violent crime was greater among men ( $\Delta \chi^2(1) = 7.90^{**}$ ,  $p < .01$ ). Likewise, the influence of discrimination on IPV perpetration was also stronger among men ( $\Delta \chi^2(1) = 9.73^{**}$ ,  $p < .01$ ). Lastly, gender differences in the effects of deviant values on IPV ( $\Delta \chi^2(1) = 3.59^{\dagger}$ ,  $p = .058$ ) and neighborhood crime on the endorsement of violence ( $\Delta \chi^2(1) = 3.55^{\dagger}$ ,  $p = .059$ ) were marginally significant and greater for men than women.

**Table 4***Results from Multi-group Analysis*

Path	B Women	Men	$\chi^2$	df	$\Delta \chi^2(1)$	$p$ -value for $\Delta \chi^2(1)$
Anger → Violent Crime						
Bs equal for both	.42**	.42**	51.11	34		
Bs free to differ	.28**	.87**	43.21	35		
					7.90**	.005
Discrimination → IPV						
Bs equal for both	.18	.18	52.94	34		
Bs free to differ	-.19	.56**	43.21	35		
					9.73**	.002
Deviant Values → IPV						
Bs equal for both	.28*	.28*	46.80	34		
Bs free to differ	-.01	.51**	43.21	35		
					3.59†	.058
Neighborhood Crime → Endorsement of Violence						
Bs equal for both	.13*	.13*	46.76	34		
Bs free to differ	.09	.17*	43.21	35		
					3.55†	.059

Note. Unstandardized coefficients presented. † $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ .

***Effects of Limiting Sample to Participants in Romantic Partnerships***

In order to explore the idea that limiting the analysis to women and men in romantic partnerships might produce selection bias, independent samples t-tests were used to compare the adolescent predictors, proposed mediators, and levels of violent crime between single participants and those in romantic relationships. Table 5 presents the means and standard deviations for all variables for women and men in relationships, alongside men and women who were single. The results of the independent samples t-tests, also depicted in Table 5, indicated that there were no significant differences between women in relationships and those who were single. Men in relationships versus those that were single differed only in their average reports of neighborhood crime in adolescence and in their endorsement of violence. Specifically, men in



relationships reported greater neighborhood crime in adolescence on average ( $M = .47$ ,  $SD = .43$ ) than men who were single ( $M = .35$ ,  $SD = .37$ ) ( $t(204.55) = .234$ ,  $p = .020$ ). Likewise, men in relationships more strongly endorsed the use of violence on average ( $M = 2.44$ ,  $SD = .45$ ) than men who were single ( $M = 2.32$ ,  $SD = .44$ ) ( $t(285) = 2.07$ ,  $p = .040$ ).

**Table 5***Results of Independent Samples T-test*

	<b>Women</b>			<b>Men</b>		
	<u>Mean (SD)</u>		<u>t (df)</u>	<u>Mean (SD)</u>		<u>t (df)</u>
	Relationship	Single		Relationship	Single	
Harsh Parenting	.52 (.36)	.54 (.41)	-.14 (389)	.47 (.39)	.54 (.38)	-1.35 (294)
Friends' Delinquency	.29 (.28)	.27 (.25)	.72 (389)	.32 (.29)	.27 (.26)	1.54 (294)
Neighborhood Crime	.46 (.41)	.43 (.37)	.57 (389)	.47 (.43)	.35 (.37)	2.34 (204.55)*
Racial Discrimination	.67 (.56)	.69 (.51)	-.24 (359)	.65 (.57)	.67 (.68)	-.19 (279)
Endorsement of Violence	2.27 (.45)	2.25 (.40)	.35 (385)	2.44 (.45)	2.32 (.44)	2.07 (285)*
Low Self-Control	1.47 (.31)	1.51 (.29)	-1.01 (385)	1.51 (.33)	1.47 (.32)	.93 (285)
Deviant Values	1.32 (.44)	1.33 (.43)	-.42 (385)	1.44 (.55)	1.44 (.60)	-.03 (285)
Anger	1.73 (.59)	1.71 (.64)	.31 (395)	1.78 (.66)	1.62 (.55)	1.96 (290)
Violent Crime	.43 (1.03)	.38 (1.25)	.44 (424)	.82 (1.87)	.63 (1.63)	.93 (325)

*Note.* \* $p < .05$ .

## CHAPTER 6

### DISCUSSION

The purpose of this dissertation was to investigate the influence of various adolescent experiences on the perpetration of interpersonal violence in young adulthood using a longitudinal study of Black men and women. While previous research has suggested that adolescent exposure to harsh parenting (Ehrensaft et al., 2003; L. G. Simons et al., 2014; Topitzes et al., 2012), neighborhood crime (Reed et al., 2009; Simons & Burt, 2011; Zimmerman & Messner, 2010), friends' delinquency (Nofziger & Kurtz, 2005; Ramirez et al., 2012; Simons, Stewart, et al., 2002), and racial discrimination (Burt et al., 2017; Caldwell et al., 2004; Sutton et al., 2019), increase the risk of young adulthood violence perpetration, little research has assessed these effects while controlling for the influence of the others. Moreover, most studies of interpersonal violence focus on only one form of violent behavior—either violent crime or intimate partner violence (IPV). By assessing these two outcomes simultaneously, we can more readily identify their shared precursors and unique risk factors. To further comprehend how the included adolescent experiences shaped violent crime and IPV in young adulthood, I tested four potential mediators emphasized by popular criminological theories: the endorsement of violence, deviant values, low self-control, and anger (Agnew, 2015; Akers & Jennings, 2015; Britt & Rocque, 2015).

My first research question focused on how adolescent exposure to harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination directly affected the perpetration of violent crime and IPV in young adulthood. Results revealed that each of these

adolescent experiences were significantly and positively associated with one another—that is, the frequency of exposure to one was related to greater reports of the others. Further, the majority of the experiences were correlated with violent crime and IPV at the bivariate level. Yet, when the effects of all four experiences were assessed simultaneously, results demonstrated that some were more powerful predictors of violent crime, while others were more strongly associated with IPV.

### **Adolescent Experiences & Violent Crime**

First, focusing on the outcome of violent crime, results revealed that exposure to neighborhood crime increased later engagement in violent crime for women and men. Women's violent crime was also predicted by exposure to harsh parenting, whereas friends' delinquency predicted violent crime among men. The finding that neighborhood crime was impactful for violent crime is consistent with Patchin et al. (2006), which indicated that exposure to neighborhood violence increased the likelihood of assaulting someone and possessing a weapon, net the effects of peer delinquency and parental supervision. The influence of harsh parenting on women's violent crime aligns with Simons and Sutton's (2021) research, which demonstrated physically abusive parenting to predict crime among women, but not among men. Relevantly, past work that has shown harsh parenting to predict men's violent crime has relied on substantiated cases of child abuse and neglect (Milaniak & Widom, 2015; Topitzes et al., 2012). Thus, additional research is needed to understand how harsh parenting more broadly (e.g., including verbal and physical aggression) influences men's violent crime.

The significant impact of friends' delinquency on men's violent crime aligns with previous research on exposure to peer violence and violent offending (Nofziger & Kurtz, 2005). The finding that friends' delinquency was not as impactful for women contradicts Zimmerman

and Messner (2010); however, their study did account for exposure to harsh parenting. As my results demonstrated that friends' delinquency was strongly correlated with neighborhood crime and harsh parenting, it is plausible that that friends' delinquency is simply less impactful for women's violent crime once these effects are accounted for.

Unexpectedly, racial discrimination did not significantly affect violent crime once the other adolescent experiences were accounted for. This differs from previous FACHS studies (Burt et al., 2017; Burt et al., 2012; Simons & Sutton, 2021) that have examined the effects of racial discrimination on criminal or delinquent behavior more broadly (i.e., not specific to violent acts). Relatedly, Burt et al. (2017) found the effects of young adulthood racial discrimination (Waves 5 and 6) had a stronger influence on general crime at Wave 6 than earlier experiences with racial discrimination (Waves 1 through 4). It is likely that more proximal exposure to discrimination would have a greater impact on violent crime. It is also worth noting that experiences with racial discrimination were strongly associated with neighborhood crime, which impacted violent crime for women and men.

### **Adolescent Experiences & Intimate Partner Violence**

Considering the adolescent predictors of IPV, results indicated that women's IPV perpetration was predicted by harsh parenting and friends' delinquency, while the only predictor of men's IPV was racial discrimination. The salience of harsh parenting for women's IPV is in line with past work on parenting and dating violence (Simons et al., 2012). Similarly, the effect of friends' delinquency on women's IPV is consistent with Paat and Markham (2016), which found time spent delinquent peers increased psychological aggression toward romantic partners, regardless of gender. Nonetheless, greater research is needed that investigates gender differences in the effects of peers on IPV.

Though past research has found racial discrimination to be influential for men's IPV (Lavner et al., 2018; Sutton et al., 2019), it was unexpected that this was the only adolescent predictor that significantly predicted men's IPV perpetration. It is plausible that racial discrimination may be a more chronic and pervasive stressor in the lives of Black men than experiences with harsh parenting, neighborhood crime, and friends' delinquency. Indeed, scholars have suggested that chronic racial discrimination is likely to foster irritability and negative emotions which can undermine relationship well-being (Bryant et al., 2010). However, additional research is needed focused on gender differences in the impact of racial discrimination, specifically focusing on interpersonal violence. Indeed, past work showing racial discrimination to increase women's emotional and physical IPV perpetration accounted for the effects of community violence, but this research did not consider exposure to harsh parenting or peer violence (Stueve & O'Donnell, 2008).

Adolescent experiences with neighborhood crime did not significantly affect IPV once the other adolescent experiences were accounted for. Few studies have investigated the impact of neighborhood crime on IPV, and those that have were cross-sectional and/or did not account for other sources of exposure to violence (Malik et al., 1997; Reed et al., 2009). Thus, further longitudinal research is needed to determine whether exposure to neighborhood crime has a lasting impact on IPV.

In sum, there was limited overlap in the adolescent predictors of violent crime and IPV. Indeed, harsh parenting was the only adolescent predictor to predict both forms of interpersonal violence, and this was only among women. My next set of research questions focused on four potential mechanisms through which the included adolescent experiences impacted interpersonal violence—the endorsement of violence, deviant values, low self-control, and anger. There was

some support for each of the mediators when tested independently. Yet, when all mediators were tested simultaneously, results indicated that some were more influential for violent crime and IPV than others.

### **The Mechanisms Leading to Violent Crime**

In initial models testing each mechanism individually, women's violent crime was predicted by their deviant values, low self-control, and anger, whereas men's violent crime was affected by all four of the included mechanisms. Nonetheless, when all mediators were tested concurrently (i.e., controlling for the effects of the others), anger emerged as the strongest mechanism leading to women and men's violent crime. This finding is consistent with Jang and Rhodes (2012), which found anger to mediate the relationship between strain and violent crime. More broadly, such findings support general strain theory, in that different adolescent experiences heightened anger which led to violent criminal coping (Agnew, 2006). Among women only, deviant values also persisted in mediating some of the relationships between the included adolescent experiences and violent crime. Women's deviant values emerged from close affiliation with deviant peers, supporting a social learning perspective (Akers & Jennings, 2015). For men, on the other hand, anger reduced the effects of all other mechanisms on violent crime to non-significance, yielding the most evidence in favor of general strain theory.

### **The Mechanisms Leading to Intimate Partner Violence**

Turning to the outcome of IPV, the individual models revealed that women's IPV was influenced by their endorsement of violence, low self-control, and anger, while men's IPV was impacted by their endorsement of violence, deviant values, and anger. However, when all mechanisms were tested simultaneously, findings revealed that women's anger and endorsement of violence were the strongest predictors of their IPV perpetration, while men's anger and

deviant values best predicted their IPV. Overall, this pattern of findings again demonstrates the most support for general strain theory. Moreover, these results are consistent with previous work showing anger to increase hostility and aggression toward romantic partners (L. G. Simons et al., 2014). The finding that women's endorsement of violence additionally remained a salient predictor of their IPV also advances social learning theory, in that women's affiliation with delinquent peers increased their endorsement of violence, subsequently heightening their IPV (Akers & Jennings, 2019). Similarly, men's deviant values, not specific to the use of violence, were associated with friends' delinquency and later IPV.

While there was limited overlap in the strongest adolescent predictors of violent crime and IPV, there were some commonalities in the mechanisms leading to both forms of interpersonal violence. Namely, anger led to violent crime and IPV for both genders. Overall, this dissertation yielded a complex pattern of findings about the pathways to young adulthood interpersonal violence. Nonetheless, given the dearth of research that has simultaneously examined the outcomes of violent crime and IPV, future work must seek to replicate the findings from the current study.

### **Implications for Policy & Practice**

My findings carry several implications for policy and practice. First, targeted and broad efforts should be made to reduce racial disparities in exposure to violence. As a result of systematic and systemic racism, Black Americans disproportionately experience poverty, concentrated disadvantage, residential segregation, and other forms of discrimination that increase the likelihood of witnessing or experiencing violence (Sheats et al., 2018). Researchers have argued that racial disparities in poverty would be significantly reduced by expanding economic security programs such as housing vouchers, providing larger child tax credits, and



raising Supplemental Nutrition Assistance Program (SNAP) benefits (Trisi & Saenz, 2021). Policy makers should further seek to eliminate inequities in public school funding and quality given the wealth of connections between educational outcomes and well-being. Black students are more likely to live in low-income areas and thus, attend under-resourced schools as a consequence of public school funding relying heavily on local property taxes (Kijakazi et al., 2019). By targeting structural racism across multiple contexts, we can begin to reduce disproportionate exposure to crime and violence among Black adolescents.

Second, we need to find ways to lessen the harm associated with being exposed to violence. In a qualitative study of African American youth who had been exposed to violence, youth described the need for greater access to mental health resources and safe environments to process traumatic experiences (Woods-Jaeger et al., 2019). One program that has had success is the Cognitive Behavioral Intervention for Trauma in Schools (CBITS), which is a school-based mental health program that engages existing school social workers, teachers, and parents to reduce the effects of trauma among students (Horton, 2019). Likewise, family-centered interventions such as the Strong African American–Teen (SAAF–T) program, designed for adolescents ages 14 to 16, and the Adults in the Making (AIM) program, designed for ages 17 to 18, have been shown to reduce the harmful effects of racial discrimination by strengthening protective caregiving practices (Brody et al., 2021). By providing safe spaces and opportunities for adolescents to process trauma connected to family, neighborhood, peer, and societal violence, they may be less likely to engage in interpersonal violence as young adults.

Third, efforts to prevent further engagement in interpersonal violence are needed to disrupt the mechanisms contributing to violent crime and IPV among young adults. The findings from this dissertation suggest we must intervene on levels of anger as well as beliefs and

attitudes towards violence and crime. Among interventions for current perpetrators of IPV, research has shown the strongest support for cognitive behavioral therapy (Eckhardt et al., 2013). Successful interventions for violent offending more broadly have emphasized the importance of recognizing and disrupting beliefs that contribute to aggressive behavior (Gilbert & Daffern, 2010). Ultimately, by targeting negative emotions and beliefs in adolescence and young adulthood, we can better prevent future engagement in violence.

### **Study Limitations & Strengths**

There are some limitations to the current study. First, as all study participants were Black Americans, further research is needed among individuals of different racial and ethnic groups. It is plausible that racial discrimination may be less salient for interpersonal violence among non-Black individuals given the pervasiveness and severity of discrimination experienced by Black Americans, particularly surrounding the criminalization of Black men. Second, self-reported data might be susceptible to social desirability bias, particularly with respect to reporting violent and criminal behaviors. Moreover, men may be less likely to report the use of violence towards romantic partners than women. Third, as there was no available measure of anger at Wave 4, anger was assessed at Wave 5 (one wave later than the other mechanisms). It is possible that anger had a stronger influence on the outcomes assessed given the overlap in the measurement of anger, violent crime, and IPV at Wave 5.

Despite limitations, this dissertation has several strengths. I used four waves of data from a community-based sample of Black women and men. I considered four distinct adolescent experiences, including harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination. I assessed two types of interpersonal violence (i.e., violent crime and IPV), which provides a more nuanced understanding of interpersonal violence than research focused on

violent crime or IPV alone. Finally, I simultaneously tested four mediators based in several dominant criminological perspectives (i.e., social learning theory, *Code of the Street*, social control theory, the general theory of crime, and general strain theory).

## **Conclusion**

Findings from this dissertation demonstrated that adolescent experiences with harsh parenting, neighborhood crime, friends' delinquency, and racial discrimination impacted young adulthood interpersonal violence in a multitude of ways. While there was some overlap in the predictors and mechanisms leading to violent crime and IPV, there were several differences. When the other adolescent experiences were accounted for, exposure to neighborhood crime directly predicted violent crime for both genders. Harsh parenting also influenced women's violent crime, while friends' delinquency shaped men's violent crime. IPV perpetration, in comparison, was predicted by harsh parenting and friends' delinquency for women and racial discrimination among men. Turning to the mechanisms connecting these experiences to interpersonal violence, anger was the strongest predictor of both kinds of interpersonal violence among women and men. Deviant values also contributed to women's violent crime and men's IPV. For women only, endorsing violence also significantly impacted their IPV. Taken together, these results demonstrate the complexity of the pathways leading to young adulthood violent crime and IPV. To disrupt these processes, we must: (1) seek to reduce adolescent exposure to violence and discrimination, (2) lessen the harms of exposure, specifically targeting anger and beliefs about crime and violence, and (3) intervene on interpersonal violence early, to prevent future violence from occurring.

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APPENDIX A  
MEASURE ITEMS

<b>OUTCOMES (WAVES 5 &amp; 6)</b>	
<b>Violent Crime</b>	
Scale: 0 (0 times), 1 (1-2 times), 2 (3-5 times), 3 (Engaged 6 or more times) Items: 5	
<p>How many times in the past year did you...?</p> <ul style="list-style-type: none"> <li>• get into a fight with someone with the idea of seriously hurting him or her?</li> <li>• pull a knife or gun on someone?</li> <li>• shoot or stab someone?</li> <li>• use a weapon in a fight?</li> <li>• carry a hidden weapon such as a knife or a gun?</li> </ul>	
<b>Intimate Partner Violence (IPV) Perpetration</b>	
Scale: 0 (Never), 1 (Sometimes), 2 (Often), 3 (Always) Items: 5	
<p>Target respondent report - during the past month, how often did you...</p> <ul style="list-style-type: none"> <li>• slap or hit your romantic partner with your hands?</li> <li>• throw things at your romantic partner?</li> <li>• strike your romantic partner with an object?</li> <li>• insult or swear at your romantic partner?</li> <li>• shout or yell at your romantic partner because you were mad at (him/her)?</li> </ul>	
<b>ADOLESCENT PREDICTORS (WAVE 3)</b>	
<b>Harsh Parenting</b>	
Scale: 0 (Never), 1 (Sometimes), 2 (Often), 3 (Always) Items: 12	
<p>During the past 12 months, how often did your [CAREGIVER]...</p> <ul style="list-style-type: none"> <li>• push, grab, hit, or shove you?</li> <li>• get so mad at you that [HE/SHE] broke or threw things?</li> <li>• slap or hit you with [HIS/HER] hands?</li> <li>• strike you with an object?</li> <li>• throw things at you?</li> <li>• get angry at you?</li> <li>• shout or yell at you because [HE/SHE] was mad at you?</li> <li>• threaten to hurt you physically?</li> <li>• criticize you or your ideas?</li> </ul>	

<ul style="list-style-type: none"> <li>• argue with you whenever you disagreed about something?</li> <li>• boss you around a lot?</li> <li>• insult or swear at you?</li> </ul>
<b>Neighborhood Crime</b>
Scale: 0 (Never), 1 (Sometimes), 2 (Often)
Items: 8
<p>During the past six months, how often was there a...</p> <ul style="list-style-type: none"> <li>• fight in your neighborhood in which a weapon like a gun or knife was used?</li> <li>• violent argument between neighbors?</li> <li>• gang fight?</li> <li>• sexual assault or rape?</li> <li>• robbery or mugging?</li> <li>• murder?</li> <li>• drinking in public in your neighborhood?</li> <li>• people selling or using drugs in your neighborhood?</li> </ul>
<b>Friends' Delinquency</b>
Scale: 0 (None of them), 1 (Some of them), 2 (All of them)
Items: 9
<p>During the past 12 months, how many of your close friends have...</p> <ul style="list-style-type: none"> <li>• Attacked someone with a weapon or with the idea of hurting them?</li> <li>• Hit someone with the idea of hurting them?</li> <li>• Used a weapon, force, or strong-arm methods to get money or other things from people?</li> <li>• Run away from home?</li> <li>• Skipped school without an excuse?</li> <li>• Purposely damaged or destroyed property that did not belong to them?</li> <li>• Stolen something worth less than \$25?</li> <li>• Stolen something worth \$25 or more?</li> <li>• Gone joyriding, that is, taken a motor vehicle such as a car or motorcycle, for a ride or drive without the owner's permission?</li> </ul>
<b>Racial Discrimination</b>
Scale: 0 (Never), 1 (Once or twice), 2 (a few times), 3 (frequently)
Items: 11
<p>How often has/have...</p> <ul style="list-style-type: none"> <li>• someone said something insulting to you just because of your race or ethnic background?</li> <li>• a storeowner, salesclerk, or person working at a place of business treated you in a disrespectful way just because of your race or ethnic background?</li> <li>• the police hassled you just because of your race or ethnic background?</li> <li>• someone ignored you or excluded you from some activity just because of your race or ethnic background?</li> </ul>

- someone suspected you of doing something wrong just because of your race or ethnic background?
- someone yelled a racial slur or racial insult at you just because of your race or ethnic background?
- someone threatened to harm you physically just because of your race or ethnic background?
- you encountered people who are surprised that you, given your race or ethnic background, did something really well?
- you been treated unfairly just because of your race or ethnic background?
- you encountered people who didn't expect you to do well just because of your race or ethnic background?
- someone discouraged you from trying to achieve an important goal just because of your race or ethnic background?

#### **MEDIATORS (WAVE 4)**

##### **Endorsement of Violence**

Scale: 1 (Strongly disagree), 2 (Disagree), 3 (Agree), 4 (Strongly agree)

Items: 12

##### **Violence as a legitimate strategy (6 items)**

- Sometimes you have to use physical force or violence to defend your rights. Do you...
- Sometimes you need to threaten people in order to get them to treat you fairly. Do you...
- People do not respect a person who is afraid to fight physically for his or her rights. Do you...
- Behaving aggressively is often an effective way of dealing with someone who is taking advantage of you. Do you...
- It is important to show other people that you cannot be intimidated. Do you...
- People tend to respect a person who is tough and aggressive. Do you...

##### **Street code (6 items)**

- It is important to let others know that if they do something wrong to you, you will make them pay for it. Do you...
- If someone uses violence against you, it is important that you use violence against him or her to get even. Do you...
- Being viewed as tough and aggressive is important for gaining respect. Do you...
- It is important not to back down from a fight or challenge because people will not respect you. Do you...
- It is important to show courage and heart and not be a coward in a fight or challenge in order to gain or maintain respect. Do you...
- It is okay to disrespect or beat up others (even if they have done nothing to you) if it will bring you respect. Do you...

<b>Deviant Values</b>
Scale: 1 (Very wrong), 2 (Fairly wrong), 3 (A little bit wrong), 4 (Not at all wrong) Items: 7
How wrong do you think it is for someone your age to...? <ul style="list-style-type: none"> <li>• hit someone with the idea of hurting them?</li> <li>• steal something worth less than \$50?</li> <li>• use marijuana?</li> <li>• steal something worth more than \$50?</li> <li>• shoplift something from a store?</li> <li>• sell marijuana or other illegal drugs?</li> <li>• use illegal drugs other than marijuana?</li> </ul>
<b>Low Self-Control</b>
Scale: 1 (Not at all true), 2 (Somewhat true), 3 (Very true) Items: 13
Poor self-control (7 items) <ul style="list-style-type: none"> <li>• When you ask a question, you often jump to something else before getting an answer.</li> <li>• You have to have everything right away.</li> <li>• You have to be reminded several times to do things.</li> <li>• You have a lot of accidents.</li> <li>• You could be described as careless.</li> <li>• You like to switch from one thing to another.</li> <li>• If you find that something is really difficult, you get frustrated and quit.</li> </ul> Risk-taking tendencies (6 items) <ul style="list-style-type: none"> <li>• You could do something most people would consider dangerous like driving a car fast.</li> <li>• You would prefer doing something dangerous rather than sitting quietly.</li> <li>• You enjoy taking risks.</li> <li>• You would enjoy fast driving.</li> <li>• You would do almost anything for a dare.</li> <li>• Life with no danger would be dull for you.</li> </ul>
<b>Anger</b> (*Evaluated at Wave 5)
Scale: 1 (Almost never), 2 (Sometimes), 3 (Often), 4 (Almost always) Items: 7
<ul style="list-style-type: none"> <li>• I have a fiery temper. Does this describe you?</li> <li>• I am quick-tempered. Does this describe you...</li> <li>• I am a hotheaded person. Does this describe you...</li> <li>• I fly off the handle. Does this describe you...</li> <li>• It makes me furious when I am criticized in front of others. Does this describe you...</li> <li>• When I get frustrated, I feel like hitting someone. Does this describe you...</li> <li>• When I get mad, I say nasty things. Does this describe you...</li> </ul>