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Examining the Gendered Effects of Prior Victimization on Delinquency Type among Justice-Involved Youth

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Examining the Gendered Effects of Prior Victimization on Delinquency Type among
Justice-Involved Youth

By

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A DISSERTATION

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Abstract

The purpose of this dissertation is to examine the manner in which different types of prior victimization affect juveniles' offense type. There is a strong relationship between victimization and offending, meaning that victims are more likely to be offenders and offenders are more likely to be victims, but the exact nature of this relationship remains imprecise. Youth with a history of victimization have an increased risk of delinquency and justice system involvement during adolescence and adulthood. Additionally, a majority of incarcerated youth report having experienced at least one type of victimization before their system involvement and youths' victimization experiences tend to differ by gender. Many scholars have argued that victimization elicits unique effects on females' illicit behavior and pathways into criminal behavior but the empirical research regarding the gendered effects of victimization on offending are mixed. This dissertation seeks to explore the relationships between justice-involved youths' prior victimization experiences and their current criminal behavior using the Survey of Youth in Residential Placement (SYRP) 2003 (Sedlak, 2003). The SYRP is currently the only large-scale, nationally representative sample that collects detailed information directly from justice-involved youth about their prior victimization experiences. One of the

primary goals of this dissertation is to determine whether youth with a history of victimization are involved in the justice system for different offenses than non-victimized youth. I will also examine whether different types of victimization and polyvictimization are related to specific forms of offending or a variety of offenses. Finally, I will examine whether the effects of different victimization types on different offense categories are the same for males and females while controlling for other relevant factors known to influence delinquency. Overall, justice-involved youth with a history of victimization were more likely to be system-involved for violent offenses, while youths without a history of victimization were more likely to be involved for minor, non-violent offenses. I found that different types of victimization were related to specific forms of offending rather than general delinquency, and that these relationships varied by gender.

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CHAPTER I

The high prevalence of American youth who experience victimization makes it an important health issue. One nationwide study found that among youth aged 1 month to 17 years, 14% experienced some form of child maltreatment in the past year (Finkelhor, Turner, Shattuck, & Hamby, 2013). Youth who experience one type of victimization are more likely to experience other types of victimization (Finkelhor, Ormrod, & Turner, 2007, 2009). For example, children who were physically abused were also more likely to experience sexual abuse, neglect, bullying, or witness family violence. Polyvictimization is the experience of different types of victimizations and a significant proportion of children who identify as victims of single forms of violence are actually polyvictims (Finkelhor, Ormrod, & Turner, 2007, 2009). Victimization in various forms (e.g., physical or sexual abuse, or witnessing violence) during childhood and adolescence can adversely affect youths' outcomes across many life domains, including an increased risk for antisocial and criminal behavior (Mersky, Topitzes, & Reynolds, 2012; Smith & Thornberry, 1995; Widom, 1989). Additionally, it appears that "more is worse" when it comes to childhood victimization, such that youth who experience polyvictimization have more serious maladaptive behavior compared youth who experience just one type of victimization (Cyr et al., 2013; Scott-Storey, 2011; Soler, Kirchner, Paretilla, & Forns, 2013; Turner, Finkelhor, & Ormrod, 2010).

There is a strong relationship between victimization and offending, meaning that victims are more likely to be offenders and offenders are more likely to be victims (Chamberlain & Moore, 2002; Jennings, Piquero, & Reingle, 2012; Lauritsen & Laub,

2007). The exact nature of this relationship remains imprecise, as it is unclear if victimization causes offending, offending causes victimization, or if there are other factors that influence both. We know that youth who reported being victimized through both self-reports or official case records are at a higher risk for criminal involvement in adolescence and adulthood (Smith & Thornberry, 1995; Widom, 1989; Widom & Maxfield, 1996). Additionally, a majority of youth detained in the juvenile justice system report having experienced at least one type of victimization before their system involvement (Abram et al., 2004; Becker & Kerig, 2011; Dierkhising et al., 2013). Justice-involved youths' victimization experiences tend to differ by gender, such that females report higher rates of interpersonal victimization and males report higher rates of indirect victimization (i.e., witnessing serious violence; Cauffman et al., 1998; Foy, Ritchie, & Conway, 2012; Truman, 2011; Truman & Langton, 2014). Females also have more extensive histories of sexual abuse and polyvictimization than males (Dierkhising et al., 2013; Ford et al., 2007).

The general overlap between victimization and offending has been found by studies using diverse samples, methods, and social contexts (e.g., Berg et al., 2012; Ousey, Wilcox, & Fisher, 2011; Schreck, Stewart, & Osgood, 2008). While criminologists have increasingly incorporated victimization into explanations of offending, many aspects of the victim-offender relationship remain under-researched and poorly understood (see Berg, 2012). One open question is whether justice involved youth with histories of victimization are involved in the system for the same types of offenses as youth without histories of victimization. Another question is whether different types of victimization are related to different types of offending. For example, it is unclear

whether childhood sexual abuse is more strongly related to later sexual offending versus violent or drug offending (Herrera & McCloskey, 2001). Furthermore, there is mixed evidence regarding whether different forms of victimization affect delinquency the same for males and females (Asscher, Van der Put, & Stams, 2015; Higgins, 2004; Van der Put et al., 2015).

The purpose of this dissertation was threefold. The first was to examine whether youth with histories of victimization were involved in the justice system for different offenses than youth without prior victimization. The second purpose was to examine how prior victimization experiences were related to delinquents' types of offending. The third purpose was to examine whether these relationships differed for males and females. I build on the previous literature by examining how different types of prior victimization affect different types of offending and how these relationships vary for males and females. Specifically, I add to the literature because most prior studies have not tested how different forms of victimization, both by themselves and co-occurring with other types of victimization, affect different types of offending, and how these relationships are moderated by gender. Most prior studies also do not control for polyvictimization, which is problematic because examining just one type of victimization without controlling for the inter-correlations between different types of victimization and polyvictimization may artificially inflate the effect of that particular type of trauma (Finkelhor, 2008; Green et al., 2010; Herrenkohl & Herrenkohl, 2009). I also add to the literature by using a nationally representative sample of justice-involved youth, the Survey of Youth in Residential Placement (SYRP), to examine the relationships between prior victimization

(and polyvictimization) and subsequent offending, which allows my findings to be generalized to the larger population of justice-involved youth.

The SYRP is currently the only large-scale, nationally representative sample that collected detailed information directly from justice-involved youth about their prior victimization and delinquency experiences (Sedlak, 2003). My findings provide more detail than previous studies regarding the gendered relationships between specific types of prior victimization and subsequent delinquent types among justice-involved youth. Thus, my findings enhance our understanding of the developmental implications of prior victimization among juvenile delinquents by specifying the direction and strength of the effect of five different types of prior victimization and polyvictimization on six distinct forms of offending among males and females. Many studies have found that victimization is related to several negative outcomes, including an increased risk for antisocial/criminal behavior (Macmillan, 2001). Furthermore, youth who experience polyvictimization are at increased risk for losing the fundamental capacities necessary for normal development, successful learning, and a productive adulthood (Finkelhor et al., 2010; Schilling, Aseltine, & Gore, 2007). Thus, the especially high rates of prior victimization among justice-involved youth and gender differences in victimization experiences warrants further inquiry.

Despite the high prevalence of victimization among children and adolescents, the majority of victimized youth who end up in the justice system never receive help in recovering from the psychological damage caused by this experience (Listenbee et al., 2012). My findings could inform programming needs among juvenile detention centers so that victimized youth who end up in the system could receive the services to deal with

their prior victimization, for perhaps the first time. If youth correctional centers would target treatment toward youth with the most detrimental victimization histories, perhaps they could help break the potential cycle of victimization and maladaptive behavior. For example, if I find that one type of victimization is more strongly related to violent offending for both males and females, then the results would underscore the importance of developing effective services for all youth with this background. Findings such as this would also highlight the need to target prevention strategies toward that type of childhood victimization and to reduce its negative effects on the outcomes to which it is strongly related (e.g., violent or sexual offending). This is important, more generally, because researchers have found that victimization is associated not only with offending but also with mental health and substance use problems, low educational attainment, self-destructive behavior, and increased odds of further victimization (Finkelhor et al., 2011; Macmillan, 2001).

In the remainder of this chapter, I discuss the relevant literature on the difficulty defining victimization, prevalence rates of victimization, the effects of victimization on delinquency, the victim-offender overlap, and gender differences in the effects of victimization. I then anchor my dissertation in the feminist pathways theory and conclude by laying out my research questions and proceed to the second chapter where I discuss the methodology of this dissertation.

Defining Victimization

The study of different forms of victimization and their effects is fragmented across several disciplines and studies on the effects of victimization are typically

organized around specific outcomes, such as mental health issues, criminal behavior, or educational attainment. Researchers in various disciplines operationalize the concept of victimization differently, but victimization is a broad umbrella which includes both direct and indirect forms (Finkelhor, 2008). Victimization is distinct from trauma or life stress in that victimization inherently implies a power relationship in which one person/party dominates another (Hagan, 1989). To illustrate, victimization does not include the accidental death of a parent or parental divorce, whereas the trauma or life stress constructs do include these events.

Victimization is difficult to define due to the fragmentation of terminology and diverse definitions/operationalized measures in the study of victimization across and within disciplines. Victimization is a broad concept that includes many categories of specific types of violence, such as, sexual and physical abuse, emotional or psychological abuse, physical neglect, and bullying (Maas, Herrenkohl, & Sousa, 2008). Researchers and practitioners across several disciplines use different terminology to refer to the underlying concept of victimization, such as, abuse, exposure to violence, adverse childhood experiences, interpersonal trauma, or child maltreatment (see Musicaro et al., 2017 for a review of overlapping constructs of interpersonal victimization).

Criminologists tend to focus more on violent victimization types, which are interactions in which someone was physically attacked, raped, or robbed (Macmillan, 2001).

However, victimization can also be emotional, psychological, nonviolent, or negligent, as is the case with neglect of a child (i.e., not providing food, clothing or safety). For the purposes of this dissertation, the term victimization will encompass both direct victimization, which individuals experience first-hand (i.e. physical, sexual, emotional

abuse), and indirect victimization, where a person witnesses violence (i.e. seeing someone seriously injured).

Early research on victimization tended to consider the effects of only a single type or category of victimization at a time. This was problematic because it likely led scholars to overestimate the effects of a particular type of victimization if not controlling for other types of victimization or polyvictimization at the same time (see Fallon et al., 2010; Herrenkohl & Herrenkohl, 2009). As a result, more recent studies have examined multiple forms of victimization concurrently, but this body of research is still fragmented into different conceptual frameworks. For example, the adverse childhood experiences (ACEs) framework has emphasized physical and mental health outcomes related to the absence of a protective adult figure during childhood (Felitti et al., 1998). The ACEs framework has gained popularity among criminologists in recent years as a means to explain negative life experiences and offending patterns (Baglivio & Epps, 2015; Levenson & Socia, 2016; Wolff, Baglivio, & Piquero, 2016). Even though recent studies have done a better job examining multiple types of violence concurrently, they still have theoretical and methodological problems (e.g., sampling and measurement differences). The mixed findings about the effects of victimization on particular outcomes may be a result of variations across studies in factors such as: (1) the number of victimization types assessed, (2) the analytical strategy employed, and (3) the type of covariates included (Arata et al., 2007; Herrenkohl & Herrenkohl, 2009; Higgins & McCabe, 2001; Petrenko et al., 2012).

Most studies on polyvictimization have focused on adolescents' mental health outcomes, rather than on behavioral outcomes among adolescents like violence and

delinquency. Overall, these studies suggest that (1) polyvictimization has a stronger relationship with trauma symptoms than experiencing repeated victimizations of a single type; and (2) polyvictimization explains most of the psychological consequences of individual forms of victimization (see Finkelhor, Ormrod, & Turner, 2007, 2009; Turner, Finkelhor, & Ormrod, 2010). Exposure to multiple types of victimization is associated with more severe mental health outcomes and substance use in both childhood and adulthood when compared to the effects of just one type of victimization (Appleyard et al., 2005; Arata et al., 2005; Bensley et al., 1999a, 1999b). For example, Cyr and colleagues (2013) found that most of the individual victimization categories they examined were significantly associated with mental health symptoms when polyvictimization was ignored. Once polyvictimization was included in the models, however, most individual victimization relationships were either no longer significant or greatly reduced. Furthermore, after controlling for all individual victimization types, polyvictimization was the only victimization variable that significantly explained mental health symptoms (Cyr et al., 2013). Overall, these findings highlighted the importance of examining polyvictimization, in addition to looking at various types of victimization because examining just one type of victimization may artificially inflate the effect of that particular type of trauma (see Herrenkohl & Herrenkohl, 2009). The degree to which polyvictimization influences youth outcomes is understudied, but it is likely that more victimization is worse in terms of its effect on maladaptive behavior (Finkelhor et al., 2013).

It is important to acknowledge before going any further that experiencing victimization is not deterministic of negative outcomes, rather it increases the risk of

negative outcomes (e.g., offending, physical and mental health problems, substance abuse, low education, homelessness, self-harm, teen parenting). The magnitude of the effects of victimization on various outcomes partially depends on the responses of others to the victim, such as family members, peers, schools, communities, and state agencies (Finkelhor, 2008). All of these support systems play a role in alleviating the trauma and distress that victimization causes and promoting healthy coping mechanisms and resilience in victims. Furthermore, not all individuals with delinquent behavior have a history of victimization. Rather, victimization is just one factor among many disadvantages (or adversities) which can accumulate over time and influence youths' odds of maladaptive behavior.

The Prevalence of Victimization and Polyvictimization

The sheer number of youth in the United States who experience victimization makes it a public health concern, as one in eight children experience a confirmed case of maltreatment before turning 18 (Wildeman et al., 2014). The prevalence, correlates, and consequences of youth victimization in the United States has gained increasing attention by scholars, practitioners and policy-makers over the last few decades. In 1979, United States Surgeon General declared violence a public health crisis of the highest priority and since that time, many government resources have gone towards understanding the prevalence, risk factors, consequences, treatment, and prevention of childhood victimization. In 2012, the Attorney General's Task Force on Children Exposed to Violence reported that about two-thirds of American youth have been exposed to at least one type of victimization during their lifetime (Listenbee et al., 2012).

The National Survey of Children Exposed to Violence (NSCEV) estimated that 46 million of the 76 million (61%) children aged 1 month to 17 years currently residing in the United States are exposed to violence, crime, and abuse every year (Finkelhor et al., 2013). More specifically, two-fifths of youth experienced physical abuse in the last year, while about 6% experienced sexual victimization in the past year (Finkelhor et al., 2013). However, the past year victimization rates for males and females are different. Although only 6% of American youth experienced sexual victimization in the last year, this rate was about twice as high for females compared males (Finkelhor et al., 2013). Females were also more likely than males to experience relational aggression, dating violence, and sexual harassment in the past year. Conversely, males were significantly more likely than females to experience physical abuse by a caregiver, assault with injury by anyone (including peers and siblings) and to witness violence (see also Abram et al., 2004). The lifetime victimization rates for youth are higher than the last-year prevalence rates, and the gender differences noted above remained when considering lifetime victimization rates (Finkelhor et al., 2013). One notable difference when examining lifetime exposure was that females were significantly more likely to experience emotional abuse and sexual victimization than males (Finkelhor et al., 2013).

The rates of prior victimization among justice-involved youth is much higher than the rate of victimization among the nationally representative samples detailed above. Findings from several studies using diverse samples have revealed that as high as 90% of detained youth offenders report having experienced at least one type of direct victimization, with many experiencing polyvictimization, before entering the juvenile justice system (Abram et al., 2004; Dierkhising et al., 2013; Ford et al., 2013). For

example, Wood and colleagues (2002) used a matched sample design of 200 incarcerated juvenile delinquents and 200 high school youth not involved in the justice system, and found that the incarcerated sample reported significantly more direct (i.e., physical and sexual abuse) and indirect violence exposure. The incarcerated sample reported significantly higher levels of prior sexual victimization than the high school sample and these rates were significantly higher for both female samples than for either male sample (Wood et al., 2002). Consistent with these findings, Dierkhising and colleagues (2013) found that 90% of justice-involved youth experienced multiple victimization types while only 10% experienced a single type. They also found that female youth had significantly higher rates of sexual abuse and rape compared to males. Similar to other studies, males reported higher rates of witnessing violence than females (Abram et al., 2004; Dierkhising et al., 2013; Ford et al., 2007).

As previously noted, polyvictimization refers to the experience of multiple different victimization types, such as physical abuse, sexual victimization, bullying, and witnessing violence, and is not just multiple episodes of the same kind of victimization (Finkelhor, Ormrod, & Turner, 2007). The NSCEV demonstrated that as many as 1 in 10 children in the United States are polyvictims, or had 6 or more direct victimizations in a single year (Finkelhor et al., 2013). Other scholars found that among victimized youth, only one in four report experiencing a single type of victimization, suggesting that polyvictimization may be the norm among youth exposed to violence, rather than the exception (see also Dierkhising et al., 2013; Herrenkohl & Herrenkohl, 2009). The sheer prevalence of polyvictimization in the general population speaks to the importance of examining polyvictimization when studying the effects of various types of victimization

on adverse outcomes. Researchers who only examine the effects of a single victimization type without controlling for polyvictimization run the risk of artificially inflating the effect of that single type of victimization (Herrenkohl & Herrenkohl, 2009). In summary, polyvictims are an especially vulnerable segment of youth who appear to be exposed to many adversities. The degree to which polyvictimization influences youth outcomes is understudied, but it is likely that more victimization is worse in terms of its effect on maladaptive behavior (Finkelhor et al., 2013).

The Adverse Effects of Childhood Victimization

Over fifty years ago, Kempe and colleagues (1962) published a seminal article on “the battered child syndrome,” which exposed the negative effects of physical abuse. Since that time, the negative effects of victimization on child and adolescent development and wellbeing have been documented across several disciplines in the social, psychological, and health sciences (Cicchetti & Toth, 2005; McCrory, De Brito, & Viding, 2012; Mersky, Topitzes, & Reynolds, 2012). Macmillan (2001) reviewed research on the consequences of victimization for psychological health, criminal involvement, and socioeconomic attainment over the life-course and concluded that victimization has far-reaching and potentially long-lasting effects on individual wellbeing within all three of these domains. However, there is a lot of variability in how individuals’ respond to victimization on a number of outcomes, including delinquency, so there remains much we do not understand about the effects of victimization on individuals’ wellbeing. Studying the causes of heterogeneity in individuals’ responses to victimization is an important challenge for scholars (Afifi & Macmillan, 2011). The type

of victimization an individual experiences is just one dynamic that may contribute to this heterogeneity. For example, distinct types of victimization or polyvictimization may be linked to increased risk for specific types of offending. Yet, the empirical literature has been inconsistent on the specific associations between types of victimization and individual outcomes on delinquent involvement. Next, I review the literature on the effects of victimization on delinquency.

The Negative Effects of Childhood Victimization on Delinquency

Considerable research has already established that childhood victimization in various forms increases the likelihood of juvenile delinquency and adult criminal behavior (English, Widom, & Brandford 2002; Mersky & Reynolds 2007; Smith & Thornberry 1995). An early study of incarcerated youth found that juveniles who experienced direct or indirect (witnessed) violence as children were incarcerated for more violent offenses than youth not exposed to violence as children (Lewis et al., 1979). Hartstone & Hansen (1984) found that violent male delinquents had a higher rate of child maltreatment than non-violent delinquents. Yet, much of the early research on this topic was purely descriptive and/or suffered from methodological issues, such as not examining multiple types of victimization, using retrospective information or using small non-representative samples identified by public agencies (e.g., child welfare, juvenile justice system; Finkelhor, 2008).

Dodge, Bates, and Pettit (1990) conducted one of the first studies that directly examined the effects of childhood physical abuse on later violence using a representative sample of children that were severely physically abused in early life but were not

necessarily identified by public agencies. They used a social learning/trauma related framework, which suggests that the modelling and imitation of others' behavior plays a central role in the etiology of delinquency, especially behavior that is traumatic and becomes stored in memory (Bandura, 1973). Social control theory posits that abused and neglected youth have weakened social ties to family and conventional society, and thus less inhibition or social controls to inhibit offending (Akers et al., 1979; Akers & Jennings, 2009; Bandura, 1976). Directly experiencing or witnessing violence may model violent behaviors and attitudes that victims might draw upon later as an appropriate means of solving problems (Akers et al., 1979; Spaccarelli, Coatsworth, & Bowden, 1995). Dodge and colleagues (1990) used a representative longitudinal sample of 309 children and found that physical abuse was a risk factor for later aggressive behavior, even after controlling for relevant ecological and biological factors. Thus they argued that youth who are victimized may have had limited exposure to examples of healthy, nonviolent behavior which may have reduced youths' capacity to interpret emotional cues and regulate their own mental or emotional states and thus increases the likelihood that they resort to violence in their interactions with others (Dodge, Bates, & Pettit, 1990; Ruback, Clark, & Warner, 2014). However, they did not examine other forms of victimization, like sexual abuse or witnessing violence, which may have had unique or cumulative effects on later violence.

Cathy Spatz Widom is perhaps the most well-known scholar in this area for developing the "intergenerational transmission of violence" hypothesis, which suggests that abused children become abusers, and victims of violence become violent offenders (Widom, 1989a, 1989b). Her research also draws upon social learning theory by arguing

that being the victim of violence as a child would provide a model for the youth to learn and imitate violence when they grow up (Akers et al., 1979, Bandura, 1973). Widom's hypothesis, also known as the "cycle of violence," became the premier developmental hypothesis for the study of child maltreatment. Widom's research (1989c) is notable because she used a prospective matched cohort design that overcame many of the methodological limitations of prior studies. Research prior to this had been cross-sectional and suffered from methodological problems, such as non-representative sampling and/or lack of control group, and inconsistency in the operationalization of maltreatment and outcomes (Widom, 1989c). Specifically, she identified a sample of 908 children who had substantiated cases of childhood abuse or neglect who were processed by courts from 1967 to 1971, and followed them into adulthood, tracking their criminal behavior as a juvenile and adult. She also had a comparison group of 667 children, not officially recorded as abused or neglected, who were matched to the abused group by age, race, sex, socioeconomic status, and jurisdiction. Widom (1989a, 1989b) found that being a victim abused or neglected in childhood increased the likelihood of arrest as a juvenile by 59%, and as an adult by 28%. Additionally, the abused sample had a higher risk for being arrested for a violent offense (i.e., 11% of the abused group was arrested for a violent crime compared to 8% of the control group).

The results of Widom's (1989a) seminal study revealed that victimization in childhood increases the likelihood of all criminal behavior, not just violent offenses. It is important to note that Widom's (1989b) study also found that being neglected and being physically abused were the only two types of abuse that were associated with being arrested for violence. This finding highlighted the importance of studying neglect in

addition to physical abuse, as neglect also has criminogenic consequences. Overall, Widom's (1989a) study supported the cycle of violence hypothesis by indicating that being physically abused was associated with increased risk of violent crime. There are several studies that find some support for the cycle of violence and social learning theory, that children who experience or witnesses violence in their family growing up are more likely to react violently when dealing with frustration (Ehrensaft et al., 2003; Mihalic & Elliott, 1997; Spaccarelli, Coatsworth, & Bowden, 1995).

Widom and Maxfield (1996) provided a 6-year follow-up on the official arrest records of the participants in Widom's (1989a) study, which increased the average age of participant follow-up from 26 to 32. These findings were generally consistent with the earlier findings that being abused or neglected as a child increased the likelihood of arrest as a juvenile by 59%, as an adult by 28% and for a violent crime by 30% (Widom & Maxfield, 1996). Additionally, maltreated children were younger at the time of their first arrest, committed nearly twice as many offenses, and were arrested more frequently (Widom & Maxfield, 1996). Finally, they found that experiencing abuse and neglect placed females at an increased risk for violent and drug arrests compared to males who were abused or neglected (more on this below). Thus, their findings indicated that gender is an important factor to consider when studying the relationship between child abuse and subsequent delinquency, as it could moderate the relationship between child abuse and delinquency type (Widom & Maxfield, 1996).

English, Widom, and Branford (2002) furthered this research using the same sample by examining the risk of arrest for violence by the type of abuse/neglect youth suffered. They found that children who experience any maltreatment (i.e., physical,

sexual, or emotional abuse, and neglect) had higher rates of arrest compared to the control group. Specifically, all maltreated children were 4.8 times more likely to be arrested as juvenile; 2 times more likely to be arrested as an adult, and 3.1 times more likely to be arrested for a violent crime than matched controls (English, Widom, & Branford, 2002). These findings were in contrast with the earlier findings by Widom (1989b) and Maxfield and Widom (1996) who found that only physical abuse and neglect were associated with higher rates for violence.

Two other research groups have conducted large-scale, prospective studies with comparable control groups that assessed the link between officially documented cases of childhood victimization and subsequent delinquency (i.e., Smith & Thornberry, 1995; Zingraff, Leiter, Myers, & Johnson, 1993). Zingraff and colleagues (1993) compared a random sample of children with substantiated maltreatment reports with two comparison groups and found that maltreated children had higher rates of status offenses than the control groups. Zingraff and colleagues (1994) later found that the increased risk of delinquency was dependent on the type of maltreatment youth experienced, specifically that neglect and physical abuse increased youths risk of delinquency relative to the control groups (but not sexual abuse). Smith and Thornberry (1995) used data from the Rochester Youth Development Study and found that youth who experienced any type of victimization had higher rates of self- and official-reported general delinquency, violent offending, and illicit drug use in young adulthood, even after controlling for prior problem behavior. Consistent with English, Widom, and Branford (2002), they later found that different types of victimization produced similar negative outcomes on general and violent offending (Smith, Ireland, & Thornberry, 2005). In summary, all three

prospective studies suggest that victimized children have an increased risk of arrest in both adolescence and adulthood, although they had mixed results regarding whether specific types of victimization were related to specific types of offending.

Many other studies since then have found a strong relationship between prior victimization and subsequent delinquency (Chang, Chen, & Brownson, 2003; Fagan, Piper, & Cheng, 1987; Lauritsen & Quinet, 1995). Findings from the National Longitudinal Study of Adolescent Health (ADD Health) indicate that childhood maltreatment doubles the risk of engaging in any crime, and those odds increased if children/youth experienced multiple types of maltreatment (Currie & Tekin, 2006). Additionally, the severity of abuse was related to more serious criminal behavior (Currie & Tekin, 2006). Using the National Youth Survey, Fagan (2003, 2005) found that physical abuse during adolescence had immediate and long-term effects on the prevalence and frequency of self-reported violent and non-violent crimes, drug use, and intimate partner violence.

This general overlap between victimization and offending has been found by studies using diverse samples, methods, and social contexts (e.g., Berg et al., 2012; Malvaso, Delfabbro, & Day, 2018; Ousey, Wilcox, & Fisher, 2011). Scholars have argued that the causes of victimization and offending cannot be properly understood independent of one another (Gottfredson, 1984; Hindelang, 1976; Lauritsen & Laub, 2007). Jennings, Piquero, & Reingle, (2012) found a robust relationship between being a victim and a perpetrator by doing an extensive review of 37 studies that use a variety of statistical techniques and vary across historical, cultural, and international assessments. Most of the studies Jennings and colleagues (2012) identified used either a routine

activities/lifestyle theory or self-control theory to frame their study of the victim-offender overlap. In short, routine activities/lifestyle theory focuses on the influence that opportunity structures and risky lifestyles have on the likelihood of committing an offense or experiencing victimization (Cohen & Felson, 1979; Hindelang, Gottfredson, & Garofalo, 1978). Routine activities and lifestyles refer to the common way individuals use their time and can include both vocational activities, like working or going to school, and leisure activities, such as going out at night, shopping, or drinking with friends. Self-control theory, formally known as general theory of crime, posit that a lack of socialization due to poor parenting in childhood leads to low self-control, which leads to delinquent activity (Gottfredson & Hirschi, 1990). Schreck (1999) later used self-control theory to argue that people with low self-control are more likely to put themselves in risky situations due to their impulsiveness and short-sightedness, which may lead to increased exposure to both offending and victimization. Overall, Jennings and colleagues' (2012) review found robust support for the victim-offender overlap, as 31 studies found considerable support for the overlap between victimization and offending and 6 studies found mixed/limited support (Jennings et al., 2012). They contend that routine activities/lifestyles theory is the most recognizable and supported theoretical perspectives that attempts to explain the victim-offender overlap.

Offending Subtypes

A handful of studies have differentiated the effects of childhood victimization on delinquency types (e.g., violent, nonviolent, or drug offending), although many of them suffer from methodological flaws, such as not examining several types of victimization or

polyvictimization, and small sample sizes. For example, Mersky and colleagues (2012) found that among delinquent youth, experiencing any form of childhood maltreatment increased the odds of being convicted for a violent or drug offense as an adult, but not a nonviolent offense. However, they did not examine which type(s) of maltreatment youth experienced, thus they did not test whether certain types of maltreatment were associated with violent or drug offending (Mersky, Topitzes, & Reynolds, 2012). Malvaso, Delfabbro & Day (2018) conducted a systematic review of 62 studies on the methodological features of the victimization–offending association and discussed how various methodological factors (limitations) influenced the nature of the relationship found among the examined studies.

Several studies have found that a specific type of childhood victimization was associated with a similar type of offending behavior (e.g., physical abuse increases odds of violent offending; Briere & Runtz, 1990; Dutton & Hart, 1992). Maas and colleagues (2008) conducted a systematic review concerning the link between maltreatment and juvenile violence and found that physical abuse in childhood was the most consistent predictor of later youth violence. Additionally, a handful of studies have found that youth who experienced sexual abuse were more likely to commit sexual offenses than youth with other childhood victimization experiences (Bagley, Wood, & Young, 1994; Ford & Linney, 1995; see Jespersen, Lalumière, & Seto, 2009 for a meta-analysis). However, these studies typically only examined the effects of one type of victimization on offending, thus they may have inflated the observed relationship by not controlling for other types of victimization or polyvictimization. Furthermore, there are a number of other studies that failed to demonstrate these specific associations (Higgins & McCabe,

2000, 2003; Widom & Armes, 1994). For example, findings from the ADD Health data indicated that prior physical abuse was not associated with later violence, but sexual abuse and neglect were related to later violence (Yun, Ball, & Lim, 2011). Although the above studies suggest there may be different relationships between types of child victimization and delinquency types, most did not consider the co-occurrence of victimizations that often prevails among maltreatment (see Dong et al., 2004; Finkelhor, Ormrod, & Turner, 2007).

English, Widom, and Branford (2002) conducted one of the early studies that examined the effects of multiple types of victimization and found nearly one fourth of children who experienced multiple types of victimization were later arrested for a violent crime. More recently, Van der Put and colleagues (2015) examined over 13,000 youth on probation in Washington State over a five year period and found that victims of physical abuse and polyvictims had significantly more violent offenses compared to non-victims (using official juvenile court records). Additionally, both of these studies found that victims of only sexual abuse were the least likely to be arrested for any or violent crime compared victims of physical abuse, neglect or polyvictimization (English, Widom, & Branford, 2002; Van der Put et al., 2015).

Finally, there appears to be a dose-response relationship between victimization and negative outcomes, as several studies have found that youth who experience more types of abuse, have more serious maladaptive behavior than youth who experience a single type of victimization (Chaffin & Hanson, 2000; Scott-Storey, 2011). For example, Smith and Thornberry (1995) found that multiple types of victimization were predictive of higher rates of delinquency. Margolin and colleagues (2010) also found that youth who

experience violence in multiple domains (i.e., parent-to youth aggression, marital physical aggression, and community violence) were at an increased risk for delinquent behaviors compared to youth who experience violence in only one domain. Maas and colleagues (2008) also found that co-occurring types of abuse significantly increased the likelihood of later youth violence perpetration, above single types of abuse. In summary, these studies suggest that youth who experience polyvictimization are more likely to commit violent and more incidents of delinquency compared to youth who experience just one type of victimization (Cyr et al., 2013; Ford et al., 2010; Soler et al., 2013). Another source of heterogeneity that will be described in detail in the next section is how victimization and polyvictimization may illicit different effects on males and females.

Gender Differences in the Effects of Victimization

Research on gender difference of the effects of victimization on delinquency is mixed; some scholars have found that victimization has stronger effects on females' delinquency, some found it has stronger effects on males' delinquency, and still others have found the effects are similar across genders (Allwood & Bell, 2008; Asscher et al., 2015; Herrera & McCloskey, 2001). For example, Begle and colleagues (2011) found that boys who were physically abused and/or witnessed violence were more likely to engage in later delinquency and drug use than non-victimized boys and they did not find this pattern among females. There is also empirical support for the opposite, however, that victimization has a stronger effect on females' violence, delinquency, and drug use, (Herrenkohl et al., 2004; Widom & Maxfield, 2001; Widom, Marmorstein, & White, 2006). For example, Herrera and McClosky (2001) found that females who were

physically abused in childhood were more likely to be arrested for violent offenses than their male counterparts. Finally, there are many studies that report no gender differences in the effects of victimization and subsequent violence or delinquency (Moylan et al., 2010; Widom, Czaja, Dutton, 2014; Wolfe et al., 2003). Yun, Ball, and Kim (2011) found that gender did not moderate the relationship between prior victimization and violent delinquency using a nationally representative sample of youth (ADD Health),

It is also important to point out the findings of Topitzes, Mersky, and Reynolds (2011), who found that child maltreatment predicted juvenile delinquency among males, but not females. However, child maltreatment predicted adult crime for both genders; thus, they conclude that the effects of child maltreatment on delinquent behavior may be delayed in girls (Topitzes, Mersky, & Reynolds, 2011). These studies point to the importance of examining different types of victimization on specific types of offending separately for males and females.

Males constitute the majority of offenders arrested and processed through the justice system for most types of delinquency and crime (Steffensmeier & Allan, 1996). Due to the under-representation of females in both the juvenile and criminal justice system, scholars and public officials have paid less attention to understanding females offending (e.g., etiology, prevalence/incidence of offending, desistence from crime) than males (Chesney-Lind & Sheldon, 2014). Consequently, there is less known about the characteristics of female offending than males, or whether there are gender differences in the correlates of offending. However, scholars have long suggested that victimization elicits unique effects on women's illicit behavior and pathways into criminal behavior (Bloom et al., 2005; Daly, 1992; Salisbury & Van Voorhis, 2009; Steffensmeier & Allan,

1996). Numerous studies have revealed that justice-involved females have higher rates of prior victimization, mental health issues and substance use problems than males (Blum, Ireland, & Blum, 2003).

Feminist Pathways

Males constitute the majority of offenders arrested and processed through the justice system for most types of delinquency (Sickmund et al., 2017). Female offenders have generated less attention generally on issues such as etiology, prevalence, and desistence from crime due to their under-representation in both the juvenile and criminal justice system (Chesney-Lind & Sheldon, 2014). Concern over the link between victimization and delinquency is not a novel theme in criminology and several theories have been used to explain this overlap including general theory of crime, general strain theory, subcultural theory, social learning theory, and numerous life-course and developmental perspectives, including the feminist pathways perspective. For example, social learning theory posits that directly experiencing or witnessing violence may model violent behaviors and attitudes that victims might draw upon later as an appropriate means of solving problems (Akers et al., 1979; Bandura, 1976; Spaccarelli, Coatsworth, & Bowden, 1995). Yet, most criminological theories and the empirical work associated with them were developed and tested on males, and applied to female offenders as an afterthought (Chesney-Lind & Pasko, 2013). Feminist theorists challenged the notion that these male-based theories were applicable to girls (Chesney-Lind & Pasko, 2013). I anchor my dissertation within the feminist pathway perspective because it argues that

victimization is a risk factor that uniquely influences females' pathway into crime and to the justice system (Belknap, 2007; Bloom et al., 2005; Daly, 1992).

The pathways perspective emerged in the 1980s to investigate whether women have distinct pathways to initial criminal behavior and recidivism compared to men (Chesney-Lind & Rodriguez, 1983; Daly, 1992). This perspective stipulates that victimization is a risk factor that uniquely influences women's pathway into crime, as the types of victimization men and women experience are gendered (Belknap, 2007; Bloom et al., 2005; Daly, 1992). The pathways perspective hypothesizes that victimization may give rise to other problems that increase women's odds of criminal behavior, such as mental illness, substance use, running away from home and dysfunctional relationships (Chesney-Lind, 2002; Daly, 1992; Kilpatrick et al., 2000, 2003; Logan et al., 2002). It argues that many victimized girls become offenders as a survival and/or resistance strategy (Bloom et al., 2005; Gilfus, 1993). For instance, girls may run away from home because of abuse in the home and may end up on an escalating pathway to crime and detention in adulthood (DeHart et al., 2014). Girls who run away from home risk ending up living on the streets, which, in turn, can lead to being arrested and potentially detained for a status offense, drug use, theft, or prostitution (Belknap, 2007). These pathways have not been considered salient for male offenders; as most criminological theories suggest that males follow more traditional paths into criminal behavior, such as associating with antisocial peers, low self-control, or having weak bonds to conventional society (Akers et al., 1979; Gottfredson & Hirschi, 1990; Hirschi, 1969, Sampson & Laub, 1993).

Although several theories have been used to explain the overlap between victimization and offending, much of the empirical research has been purely descriptive,

such as reports of the prevalence of victimization histories among offenders. Moreover, prior research has typically relied on small convenience samples and utilized poor measures of victimization and offending behavior. Thus, we need more research to better understand the nature of the relationship between prior victimization and subsequent delinquency. Research on gender differences of the effects of victimization on delinquency is mixed; some scholars find victimization has stronger effects on females' likelihood to engage in violence, while some find it has stronger effects on males' general delinquency, and still others find the effects are similar across genders (Allwood & Bell, 2008; Asscher et al., 2015; Herrera & McCloskey, 2001). If victimization does have a stronger effect on violence for girls, it remains unclear if the stronger effect of victimization for girls applies to other types of offending such as drug or property crime (see Herrera & McCloskey, 2001). Several questions still need to be addressed even though the victim-offender association is robust across numerous contexts and methodologies. Specifically, it is unknown whether specific types of victimization and polyvictimization are associated with specific types of offending among juveniles, and whether these relationships differ for males and females.

Although association between victimization and offending is robust, some argue these gendered relationships indicate varying trajectories from trauma to delinquency for males and females (e.g., Kerig & Becker, 2010). In summary, it remains unclear if victimization elicits different effects for males and females or whether it depends on the type of victimization and the outcome being examined. As described above, some studies have found that victimization has a stronger effect on delinquency for females, while

others have found the opposite, or no gender differences. Thus, the nature of the relationship between prior victimization and subsequent delinquency remains imprecise.

The Current Study

I identified three gaps in prior studies that warrant more research. Specifically, little is known about whether youth with victimization histories are involved in the justice system for different types of offenses than youth without a history of victimization. Second, little is known whether specific types of victimization or polyvictimization are associated with specific types of offending. Finally, we have much to learn regarding how gender interacts with the effects of victimization on delinquency types (Asscher, Van der Put, & Stams, 2015; Higgins, 2004; Van der Put et al., 2015). I address these gaps in the literature by examining how patterns of prior victimization relate to patterns of offending among a nationally representative sample of justice-involved youth. This dissertation addressed three questions:

1. Are youth with histories of victimization involved in the justice system for different offenses than youth without prior victimization?
2. Are different types of victimization related to specific forms of offending or a variety of offenses?
3. Do the relationships between victimization type and offending types vary by gender?

My findings will provide more detail than previous studies about the complex and gendered relationships between prior victimization and delinquency among justice-involved youth. The findings will enhance our understanding of the developmental

implications of victimization among juvenile delinquents. This is important because it could inform programming needs among juvenile detention centers so that victimized youth who end up in the system could receive the services to deal with their prior victimization, for perhaps the first time. It is also important because researchers have found childhood victimization to be associated not only with criminal behavior but also with mental health issues and an increased risk for further victimization throughout life (e.g., Finkelhor, Ormrod, & Turner, 2007; Finkelhor et al., 2011).

CHAPTER II

Methods

Data Source

This study utilizes secondary data from the Survey of Youth in Residential Placement (SYRP) 2003 (Sedlak, 2003), which is a restricted dataset available through Inter-University Consortium for Political and Social Research (ICPSR). The SYRP was the only large-scale, nationally representative sample that collected detailed information directly from justice-involved youth about their prior victimization experiences. Unlike many general population and incarcerated adolescent samples, the sample I used is well suited to my topic because I have enough females to make meaningful comparisons across gender and victimization backgrounds (Sedlak & Bruce, 2010). The SYRP interviewed justice-involved youth between the ages of 10 and 20 in a multi-stage cluster sampling procedure. The SYRP is part of the Office of Juvenile Justice and Delinquency Prevention (OJJDP) collection of surveys that provide statistics on youth in custody in the juvenile justice system. In short, OJJDP realized there was a need for data collected directly from incarcerated youth and they already had an ongoing program to advance a comprehensive array of complementary and interlocking national surveys (Sedlak, 2010). The SYRP is the third and most recent (2003) addition to this constellation of surveys, which also includes the Census of Juveniles in Residential Placement (CJRP) established

in 1997 and the Juvenile Residential Facility Census (JRFC) which was established in 2000 (Sickmond, 2002a, 2002b). The CJRP and the JRFC are biennial mail surveys of residential facility administrators conducted in alternating years.

The SYRP drew a nationally representative sample from all youth in state and local facilities that were identified by the CJRP and the JRFC (Sedlak, 2010). Thus, the SYRP is a unique addition to these surveys in that it is the only survey to gather information directly from youth in custody. The self-administered survey provides fundamental information that is not currently obtainable in any other way to researchers and practitioners, specifically information regarding the characteristics and backgrounds of the youth, their victimization histories, their service needs and the services they received while in custody, their perceptions of safety and security in detention, and their expectations for the future (Sedlak, 2010).

Study Design

The SYRP asked youth about their backgrounds, offense histories, the facility, drug/alcohol experiences, and expectations for the future. The surveys were electronic, and used an audio computer-assisted self-interview (ACASI) system to ask questions and record answers. With ACASI, youth wore headphones and heard a pre-recorded interviewer's voice read the words on the screen. Youth indicated their response choice by touching it on the screen and the computer program automatically navigated to the next appropriate question based on the youth's earlier answers, storing all the data anonymously and securely. This method is beneficial because it eliminates literacy problems, encourages candid answers on sensitive topics, and permits strong privacy and

confidentiality. Youths' survey responses were never associated with their identities and their facility identifiers were removed before data were unencrypted for analysis. Sedlak and her team of researchers at Westat (2012) designed the SYRP this way so they could ask youth about their victimization experiences, both before and during incarceration, without having enough information to provide reports to child protection authorities. The questions used in this dissertation can be found in Appendix B.

Sampling Design

The SYRP used a stratified, two-stage, probability-proportional-to-size (PPS) sample design. Facilities were sampled in the first stage using a function of the facility offender count as the size measure and then clusters of youth were sampled from each selected facility in the second stage. The sample included 290 facilities selected from a total of 3,893 facilities on the census listings in August 2001 and/or September 2002. Of the 290 facilities initially identified for study participation, 204 juvenile justice facilities across 36 states participated in the survey (70.3% response rate). A total of 7,073 youth from these facilities completed the survey out of the total 9,495 eligible youth who were sampled between March and June 2003 (74.5% response rate; see Sedlak et al., 2012 for a detailed methodology report).

The SYRP is weighted so the sample of 7,073 youth reflect the sampling probabilities of both the facility and youth and adjust for nonresponse at both levels. Survey weights must be used in all analyses of the SYRP data to compute valid totals and proportions and to guard against underestimating standard errors (Sedlak et al., 2012). In this way, the survey of 7,073 provided accurate estimates of the size and characteristics

of the national youth offender population in custody, which is estimated as more than 100,000 youth (Sedlak et al., 2012). This sample was well suited to my topic because nearly 15% of the sample is female, leaving me enough females to make meaningful comparisons across gender and victimization backgrounds, which is lacking in most adolescent and incarcerated samples.

For this dissertation, I removed 758 (10.7%) youth with missing data. Two-hundred and twenty seven youth were missing information on the most serious offense (64 youth had no offense reported, 142 said something else¹, and 21 were missing/blank). Another 272 youth were missing information on at least one of the victimization measures. Finally, I removed 259 youth (3.7%) whose most serious offense was a technical violation of probation and parole. This left an unweighted sample of 6,315 youth, 24% ($n = 1,518$) of which were female. Once the sample weights were applied this resulted in a sample of 88,982 and 14.6% of which were female ($n = 13,021$). T-tests of the full and reduced sample used for this dissertation can be found in Table A9 in Appendix A.

Survey Instrument and Variables

Dependent variable. The dependent variable was most serious offense type for which youth are currently incarcerated. Most serious offense type was measured with 13 dichotomous indicators of the most serious offense for which the youth was currently

¹ When a youth had said he or she was in custody because of an offense but did not report any offense in the subsequent questions (i.e., they selected "none of the above" in response to all the crime questions), or reported only that they had done "something else" not listed in the series of offense questions (i.e., had not identified a specific crime). In these cases, the ACASI presented the screen that instructed the youth to raise their hand to ask for assistance. The SYRP field staff administering the survey then spoke with the youth to resolve the discrepancy (Sedlak et al., 2012, p. 3-4).

incarcerated and included the following in order of seriousness: *Murder, rape, kidnapping, robbery, assault, arson, burglary, auto theft, selling drugs, nonviolent property* (unauthorized use of a vehicle, theft, vandalism, trespassing), *drug possession/ drug use, carrying a weapon*, and *other nonviolent* (running away, prostitution, DUI, drunk in public, underage alcohol use, curfew violation, truancy). Respondents were coded 1 “Yes” for the most serious offenses type they were convicted of and 0 “No” for all other offense types.

The 13 categories for most serious offense type were also collapsed into 6 categories for parsimony and based on the type of offense (i.e., violent, property, drug). Three of the six reduced categories remain the same as the original 13 categories and included: *Rape, Carrying a weapon*, and *Other nonviolent offense*. The three categories that changed in the collapsed six categories were the following: *Violent offense* included murder, kidnapping, robbery, and assault; *Property offense* included arson, burglary, auto theft, theft, vandalism, and trespassing; and *Drug offense* included selling drugs, drug possession, testing positive for drugs. The descriptives of the dependent variable coded as 13 and 6 collapsed categories are displayed in Table 1.

Independent variables. Prior victimization was assessed using five dichotomous variables and two variables representing *polyvictimization*. The five dichotomous variables included whether the youth was *physically abused as a child, molested as a child, had forced sex growing up, experienced emotional abuse when growing up, and witnessed serious violence*. These measures were created based on a series of survey questions that inquired if the youth had ever been physically, sexually, or emotionally

abused, raped or witnessed someone seriously injured or killed. All of the questions inquired about youths' victimization experiences prior to their current incarceration.

Responses to the five victimization variables were coded as dichotomous variables, with 1 "Yes" and 0 "No."

Table 1. Descriptives of dependent variable

	%	(SD)	Range
Most serious offense – 13 categories			
Murder	2.7	(.16)	0 – 1
Rape	7.6	(.26)	0 – 1
Kidnapping	0.5	(.07)	0 – 1
Robbery	9.2	(.29)	0 – 1
Assault	25.7	(.44)	0 – 1
Arson	1.3	(.11)	0 – 1
Burglary	7.2	(.26)	0 – 1
Auto Theft	6.5	(.25)	0 – 1
Selling drugs	6.6	(.25)	0 – 1
Nonviolent property (unlawful vehicle use, theft, vandalism, trespassing)	10.3	(.30)	0 – 1
Drug possession/use (testing positive for drugs)	10.8	(.31)	0 – 1
Carrying a weapon	2.8	(.16)	0 – 1
Other nonviolent (running away, prostitution, DUI, drunk in public, underage alcohol use, curfew, truancy)	8.6	(.28)	0 – 1
Most serious offense – 6 categories			
Violent (murder, kidnap, robbery, assault)	38.1	(.49)	0 – 1
Rape	7.6	(.25)	0 – 1
Property (arson, burglary, auto theft, theft, vandalism, trespassing)	25.5	(.44)	0 – 1
Drugs (selling, possession, testing positive)	17.4	(.38)	0 – 1
Carrying a weapon	2.8	(.16)	0 – 1
Other nonviolent	8.6	(.28)	0 – 1
<i>N</i> =	(88,982)		

Physical abuse was based on the question: "When you were living with your family or in another household, did a grown-up in your life hit, beat, kick, or physically abuse you in any way?" About 34% of the sample indicated yes on this variable.

Molestation was based on a survey question that asked: "While you were living with your family or in another household did a grown-up ever touch your private parts when you

didn't want them to, or make you touch their private parts?" Exactly 10% of the sample indicated they had been molested as a child. *Youth had forced sex growing up* asked: "While you were living with your family or in another household did a grown-up ever force you to have sex?" Over 7% of youth indicated they had experienced forced sex growing up. I chose to include the previous two variables as separate measures because there was considerable variation in the responses to the molested as a child and youth had forced sex questions even though 5.7% indicated yes for both ($n = 5,069$). For example, some youth indicated they had been molested as a child but did not have forced sex ($n = 3,888$, or 4.4%), while others indicated they had forced sex growing up but were not molested ($n = 1,498$, or 1.7%).

Emotional abuse was based on one question that asked youth: "While you were living with your family or in another household did you ever get scared or feel really bad because grown-ups called you names, said mean things to you, or said they didn't want you?" Over a quarter (28.5%) of youth indicated yes on this variable. *Witnessed serious violence* was based on one question that asked: "Have you EVER in your whole life seen someone severely injured or killed (in person, not in the movies or on TV)?" Over two-thirds of the full sample (68.5%) indicated yes on this variable. I examined the multicollinearity diagnostics due to the high correlation between the five victimization measures. The tolerance levels (.568 – .981), variance inflation factors (1.019 – 1.761), and the standard error of the regression coefficients (.004 – .008) were in acceptable ranges for all regression analyses.

Polyvictimization was an additive scale of the number of victimization types youth experienced growing up (physical abuse, molestation, forced sex, emotional abuse,

and witnessed serious violence). This scale ranged from zero to five and had a mean of 1.49 (SD=1.25). About one in five youth (20.8%) indicated they had not experienced any of these victimization types. Moreover, 41% indicated that they experienced a single type of victimization, 18.2% indicated experiencing two types, 12.9% experienced three types, 4.0% experienced four types, and 3.3% experienced all five types of victimization. I also created a *polyvictimization dummy* variable, as proposed by Finkelhor and colleagues (2005), which was coded 1 “Yes” if youth experienced three or more victimization types. The dummy measure was used in later models because the additive polyvictimization measure created multicollinearity issues with the five individual victimization types. The descriptives of all the victimization variables are displayed in Table 2.

Control variables. The other predictor variables I included are also shown in Table 2 and include information on youths’ demographics (gender, age, race), education (below modal grade, suspension or expulsion in year before custody, and expert-diagnosed learning disability), family background (living situation before custody and growing up, whether youth has or is expecting children of their own), prior criminal involvement (prior custody, prior probation, and prior conviction), and offense-related information (whether youth had accomplices, were in a gang, and substance use during offense).

Female – This is a dummy variable for whether the youth was female and in the unweighted sample, 24% of the respondents in the sample were female, but this is reduced to 14.6% once the sample weights are applied (because female facilities were oversampled in stage one of the sampling procedures).

Table 2. Descriptives of independent variables

	%	(SD)	Range
Childhood victimization			
Any type of victimization	79.4	(.41)	0 – 1
Physically abused as child	34.2	(.47)	0 – 1
Molestation	10.1	(.30)	0 – 1
Youth had forced sex growing up	7.4	(.26)	0 – 1
Emotionally abused as child	28.5	(.45)	0 – 1
Witnessed serious violence	68.5	(.47)	0 – 1
Polyvictimization (# types experienced)			
0	20.6	(.41)	0 – 1
1	41.0	(.49)	0 – 1
2	18.2	(.39)	0 – 1
3	12.9	(.34)	0 – 1
4	4.0	(.20)	0 – 1
5	3.3	(.18)	0 – 1
Polyvictimization dummy (≥ 3)	20.2	(.40)	0 – 1
Female	14.6	(.35)	0 – 1
Age at interview (in Oct. 2002)	16.1	(1.50)	10 – 20
Race/ethnicity			
White, non-Hispanic	33.1	(.47)	0 – 1
Black, non-Hispanic	31.5	(.46)	0 – 1
Hispanic	24.2	(.43)	0 – 1
Native American, Asian, Hawaiian	2.9	(.17)	0 – 1
Other, or \geq two races	8.4	(.28)	0 – 1
Below modal grade	49.6	(.50)	0 – 1
School suspension year before custody	58.3	(.49)	0 – 1
School expulsion year before custody	28.9	(.45)	0 – 1
Learning disability (expert-diagnosed)	30.4	(.46)	0 – 1
Lived with parent(s) before arrest	75.5	(.43)	0 – 1
Lived with parent(s) growing up	88.7	(.32)	0 – 1
Prior foster/group home	15.4	(.36)	0 – 1
Prior custody	67.4	(.47)	0 – 1
Prior probation	83.8	(.37)	0 – 1
Prior conviction	84.7	(.36)	0 – 1
Had accomplices for offense	57.4	(.50)	0 – 1
Gang member at time of offense	29.3	(.46)	0 – 1
Substance use at time of offense			
None	53.9	(.50)	0 – 1
Using alcohol (only)	4.9	(.22)	0 – 1
Using drugs (only)	18.8	(.39)	0 – 1
Using both alcohol & drugs	22.2	(.42)	0 – 1
Have or expecting child(ren)	20.6	(.40)	0 – 1
<i>N</i> =	(88,982)		

Age at interview – This represents the age of youth when they were interviewed in October 2002, not the age they were when they entered the facility. Thus, this variable represents youth who are older than when they committed the actual offense for which they are currently incarcerated. I also calculated the age of youth when they were incarcerated in current facility, but 115 youth were missing information about how many days they had been incarcerated. The age at interview ranged from 10 to 20 with a mean of 16.1 years (SD= 1.50), while the mean age at time incarcerated was 14.9 years (SD=1.48) and ranged from 9 to 19 years old. For all analyses, *age at interview* was used in order to include all cases.

Race/ethnicity – There are five dummy variables to represent the race/ethnicity of youth, one for each of the following: *white (non-Hispanic)*, *black (non-Hispanic)*, *Hispanic*, *Native American/Asian/Hawaiian*, and *Other or \geq two races*. There were six youth who refused to answer this question and were coded as Other or \geq two races. Youth were primarily white (33.1%) or black (31.5%). Nearly quarter of youth were Hispanic (24.1%), while about 3% were Native American, Asian or Hawaiian, and 8.4% were Other or \geq two races.

Education/trouble at school - There are four dummy variables that represent the various issues youth reported having at school, including whether youth were below their modal grade, had a learning disability, and were suspended or expelled from school during the year before they were taken into custody. *Below modal grade* was created using the youth's age as of October 15, 2002 to derive youth's status relative to modal grade. Half of youth (49.6%) were below the modal grade relative to their age. The variable *learning disability (expert-diagnosed)* asked youth whether they had ever been

diagnosed of a learning disability in their life. Almost a third of youth in custody (30.4%) reported that they had been diagnosed with a learning disability by an expert, which is significantly higher than the 5% of youth between the ages of 10 and 20 in the general population who are diagnosed with a learning disability (U.S. Office of Special Education Programs, 2003). Two dichotomous variables representing *school suspension year before custody* and *school expulsion year before custody* were based on one question that asked youth to check items they experienced in during the year before they were taken into custody for their present stay. They could choose more than one answer and two of the items were “got suspended?” and “got expelled?” Youth were coded 1 “Yes” for school suspension and expulsion if they checked the respective items and all other youth were coded 0 “No”. About 60% of youth reported they had been suspended and nearly 30% had been expelled in the year before custody.

Family/Living Situations: I created three dummy variables to represent youths’ living situation while growing up and before their arrest including the following: lived with parent(s) before arrest, lived with parent(s) growing up, and has been in foster care or group home prior to incarceration. *Lived with parent(s) before arrest* was a variable based on who youth reported living with when they were taken into custody. The majority of youth reported living with one parent when taken into custody (45.8%), while 29.7% were living with two parents and one-fourth of youth (24.5%) were not living with either parent. This measure was coded into a dummy variable to represent whether you were living with at least one parent before arrest (1 “Yes” and 0 “No”). The variable *lived with parent(s) growing up* was also a dichotomous variable reflecting whether at least one parent helped take care of youth when they were growing up. Almost half of youth

(45.7%) reported that two parents helped raise them, although this could have been in separate households. A slightly lower percentage (43%) had just one parent caring for them when they were growing up and 11.3% had no parental care while growing up. *Prior foster/group home* was coded 1 “Yes” and 0 “No” based on whether youth had ever been in foster care or group home when growing up, of which 15.4% of youth reported in the affirmative.

Criminal history: I used three dichotomous measures indicating the type of prior criminal involvement youths’ had, including whether youth had experienced *prior custody*, *prior probation* and *prior conviction*. Each of these three measures were coded 1 “Yes” and 0 “No”. The majority of youth reported prior custody (67.4%), prior probation (83.8%), and prior conviction(s) (84.7%) before the current offense for which they are incarcerated. Only 5.8% of youth reported no prior involvement or conviction in the justice system, while 9.5% reported prior involvement but no conviction.

Offense specific variables: There are three variables to represent various offense characteristics including: *had accomplices for offense*, *gang member at time of offense*, and *substance use at time of offense*. The dichotomous variable *had accomplices for offense* was based off the question, “Did you commit/were you accused of committing this crime with someone else?” Youth were coded 1 “Yes” and 0 “No” and over half of youth (57.4%) had accomplices for their offense. *Gang member at time of offense* was also a dichotomous variable code 1 “Yes” and 0 “No”, asking youth, “At the time you (committed/were accused of committing) (this crime/any of these crimes) were you involved in a gang? Over a quarter of youth (29.3%) reported being involved in a gang at the time of offense. The last offense specific measure was a series of four dichotomous

variables asking youth about their substance use at time of offense. Responses were coded 1 “Yes” and 0 “No” for the following four categories: *no substance use during offense, using alcohol only, using drugs only, and using both alcohol and drugs*. Over half of youth reported no substance use during offense (53.9%), while about 4.9% reporting using only alcohol, 18.8% reported using drugs alone, and 22.2% were using both drugs and alcohol at the time of offense.

Have or expecting child(ren) was a dichotomous variable based on youths’ response to two survey questions about whether they already had children or were expecting one. Responses were dummy coded 1 “Yes” and 0 “No”. Over 14% of youth in custody reported that they have children, and more males than females had children (15.1% versus 9.1%). These rates are much greater than in the general population where 2% of males and 6% of females between ages 12 and 20 report having children of their own (U.S. Census Bureau, 2004). Over 12% of youth, some of whom already have children, also reported that they were an expecting a child (i.e., 5.6% of females reported they are pregnant; 13.5% of males reported that someone is pregnant with their child). Overall, 20.6% of youth in custody already had or were expecting children.

The results of all bivariate and multivariate analyses are presented in Chapter 3.

CHAPTER III

Results

Analytic Procedures

This chapter contains the results of the effects of prior victimization on offending and the extent to which there are gender differences in these relationships. Data were analyzed using several quantitative methods, bivariate, and multivariate tests in IBM SPSS Statistics 24. I first present the results of the bivariate analyses and T-tests of offense type for victims versus non-victims to address my first research question. I then present the multivariate logistic regression analysis of the effects of victimization on each offense type to address my second question. I conclude with gender-specific bivariate and multivariate analyses of victimization on offense types to determine whether these effects differed for females and males. I present the gendered analysis in three steps, starting with the descriptives and T-tests of the female and male youth samples, followed by the multivariate logistic regression models for each gender, and finishing with the equality of coefficients tests to determine whether effects differ for females and males. All of the final multivariate models presented below were examined for multicollinearity and no significant issues were revealed. I present the B coefficients and their standard errors in the tables of all the logistic regression models, however, in text I present results in terms of Odds Ratios, or $\text{Exp}(B)$ as a more practical way of interpreting the results.

Delinquency Types for Non-Victims and Victims

My first research question asked whether youth with histories of victimization were involved in the justice system for different offenses than youth without prior victimization. I addressed this question by providing percentages of the most serious offense for which youth were incarcerated for the non-victim and victim youth samples (Table 3). I also conducted T-tests to identify significant differences in offense type between the non-victim and victim groups. A non-significant T-test means that the percentages are statistically similar for non-victims and victims. A positive sign in the T-test column means that victims were more likely to be incarcerated for that offense, while a negative sign means that offense type was more prevalent among non-victims.

Table 3. Descriptives and T-test of offense type for non-victims and victims

	Non-victim %	Victim %	T-test
13 categories			
Murder	1.3	3.0	+ **
Rape	7.3	7.4	
Kidnapping	0.1	0.6	+ **
Robbery	9.1	9.2	
Assault	20.8	27.0	+ **
Arson	1.7	1.2	- **
Burglary	6.1	7.4	+ **
Auto Theft	7.2	6.6	- *
Selling drugs	6.0	6.7	+ **
Nonviolent property (unlawful vehicle use, theft, vandalism, trespassing)	11.1	10.1	- **
Drug possession/use (+ drug test)	14.7	9.8	- **
Carrying a weapon	2.6	2.8	
Other nonviolent (running away, prostitution, DUI, drunk in public, underage alcohol use, curfew, truancy)	11.6	7.9	- **
6 categories			
Violent (murder, kidnap, robbery, assault)	31.3	39.9	+ **
Rape	7.3	7.6	
Property (arson, burglary, auto theft, theft, vandalism, trespassing)	26.1	25.3	
Drugs (selling, possession, positive drug test)	20.7	16.5	- **
Carrying a weapon	2.6	2.8	
Other nonviolent	11.6	7.1	- **
<i>N</i> =	(19,227)	(73,199)	

Note: Significant difference between victimized and non-victimized samples ** $p \leq .001$ * $p \leq .01$

The findings revealed there were significantly more non-victims than victims in five offense categories, whereas victims had higher percentages in five different offense categories (see Table 3). A closer examination of these differences revealed that all five offense categories with a higher percentage of non-victims were non-violent offenses (i.e., arson, auto theft, nonviolent property, drug possession/use, other nonviolent). However, three of the five significant values for victims were violent offenses: murder, kidnapping, and assault (burglary and selling drugs were the other nonviolent categories). To illustrate, 27% of victims were incarcerated for assault compared to 20.8% of non-victims. Thus, it appears that youth with a history of victimization are disproportionately incarcerated in the juvenile justice system for violent offenses, while youths without a history of victimization are disproportionately involved for nonviolent property, drug and other nonviolent offenses. There were no differences between non-victimized and victimized youth incarcerated for rape, robbery, or auto theft within the 13 offense categories

Turning to the models of the reduced six category offenses, the same patterns hold; significantly more youth with a history of victimization were incarcerated for a violent offense and non-victimized youths were disproportionately incarcerated for drug and other nonviolent offenses. Consistent with the 13 category offenses, nearly 40% of victimized youth were incarcerated for a violent offense (i.e., murder, kidnapping, robbery, assault) compared to 31% of non-victimized youth. Also similar to the 13 category offenses, non-victimized youth were incarcerated for a drug (20.7%) or other nonviolent offense (11.6%) at a significantly higher rate than victimized youth (16.5% and 7.1%, respectively). Overall, it appears that a higher proportion of justice-involved

youth with any type of prior victimization were incarcerated for violent offenses, while a higher proportion of youths without a history of violence were incarcerated for non-violent, minor offenses.

Logistic Regression Models of Each Offense Type

My second research question asked whether different types of victimization were related to specific forms of offending or a variety of offenses. I answered this question by running multivariate logistic regression models to examine the effects of each victimization type and polyvictimization on all six offense categories (Table 4). I chose to use the six offense categories over the 13 categories in order to present a more parsimonious model. I included for all the control variables described above in the final models. Some victimization types did not have a significant effect on various offense types, and only significant coefficients are presented in Table 4.

To begin, it is clear from coefficients going in different directions for each model that the effect of victimization on offending depended on both the type of victimization and type of offense under examination. Furthermore, each victimization type was not just positively or negatively related to all types of offending. For example, physical abuse was positively related to violent offending and rape, but negatively related to property, drug, and weapon offenses after controlling for all other predictors. Specifically, youth who were physically abused as a child were 17% more likely to be incarcerated for a violent offense and 93% more likely to be incarcerated for perpetrating rape.²

² The 17% and 93% are Odds Ratios, or $\text{Exp}(B)$, from the final models. Only B coefficients are shown in all tables. However, Odds Ratios are used in text when talking about the increase or decrease a victimization type had on an offense category.

Table 4. Logistic regression models of each offense type with all predictors

	Violent	Rape	Prop.	Drug	Weapon	Other
Physical abuse	.16** (.02)	.64** (.04)	-.07* (.02)	-.44** (.03)	-.59** (.07)	--
Molestation	--	.74** (.06)	-.21** (.04)	-.46** (.05)	--	.28** (.06)
Forced sex	--	1.26** (.06)	--	-.27** (.05)	-1.94** (.19)	-.46** (.06)
Emotional abuse	--	--	.11** (.03)	-.17** (.03)	-.22* (.08)	.18** (.04)
Witness serious violence	.23** (.02)	-.35** (.04)	--	--	.41** (.05)	-.34** (.03)
Polyvictimization dummy	-.25** (.03)	.30** (.06)	--	.31** (.05)	.85** (.12)	--
Female	.37** (.02)	-4.08** (.12)	-.29** (.03)	.33** (.03)	-.58** (.08)	.82** (.03)
Age at interview	--	-.19** (.01)	-.04** (.01)	.15** (.01)	--	--
Black, non-Hispanic	.44** (.20)	-.38** (.04)	-.35** (.02)	--	.46** (.07)	--
Hispanic	.13** (.02)	-.47** (.04)	-.07* (.02)	-.17** (.03)	.98** (.07)	.29** (.03)
Native Am., Asian, Hawaiian	.75** (.04)	-.58** (.10)	-.17** (.05)	-.55** (.07)	-.80* (.26)	-.51** (.09)
Other, or ≥2 races	.17** (.03)	--	-.42** (.03)	--	.97** (.09)	--
Below modal grade	-.09** (.01)	.12** (.03)	--	.15** (.02)	--	--
School suspension	.20** (.02)	.15** (.03)	--	-.09** (.02)	-.35** (.05)	-.33** (.03)
School expulsion	.34** (.02)	-.38** (.04)	--	-.33** (.02)	--	-.30** (.03)
Learning disability	--	.57** (.03)	--	-.29** (.02)	--	--
Lived w/ parent(s) before arrest	--	.11* (.04)	--	--	--	-.13** (.03)
Lived w/ parent(s) growing up	--	.19** (.05)	--	--	-.57** (.07)	--
Prior foster/group home	.25** (.02)	.66** (.04)	-.15** (.02)	-.46** (.03)	-.84** (.08)	-.19** (.04)
Prior custody	.13** (.02)	-.56** (.03)	.13** (.02)	-.10** (.02)	--	--
Prior probation	-.50** (.02)	-1.25** (.03)	.25** (.03)	1.02** (.04)	-.34** (.06)	1.40** (.05)
Prior conviction	-.18* (.04)	-.60** (.04)	.35** (.03)	--	.33** (.06)	.18** (.04)
Had accomplices for offense	.27** (.02)	-.90** (.03)	.86** (.02)	-.61** (.02)	-.84** (.05)	-.67** (.03)
Gang member at time of offense	.43** (.02)	.22** (.04)	-.35** (.02)	-.30** (.02)	.42** (.05)	-.34** (.03)

Table 4. Continued

	Violent	Rape	Prop.	Drug	Weapon	Other
Using alcohol (only)	.73** (.03)	-.98** (.09)	-.25** (.04)	-.47** (.06)	-.26* (.10)	-.22** (.05)
Using drugs (only)	-.14** (.02)	-.92** (.06)	-.13** (.02)	1.31** (.02)	-.69** (.06)	-1.56** (.05)
Using both alcohol & drugs	.39** (.02)	-.24** (.05)	-.34** (.02)	.71** (.03)	-1.32** (.08)	-1.13** (.04)
Have or expecting child(ren)	.25** (.02)	-.59** (.05)	-.30** (.02)	--	.49** (.05)	-.12** (.03)
Constant	-1.29**	2.24**	-1.12**	-4.48**	-2.80**	-2.45**
Nagelkerke R ²	.09	.35	.07	.14	.12	.16

Notes: Reference categories: White, No substance use during offense. B coefficients reported from logistic regression models (with standard errors in parentheses). ($n = 88,982$) ** $p \leq .001$. * $p \leq .01$.

One of the strongest relationships that emerged from the regression models was that youth who experienced molestation and/or forced sex were at an increased risk of incarceration for perpetrating rape. Specifically, youth who were molested as a child were 109% more likely to be incarcerated for rape and youth who had forced sex as a child were 254% more likely to be involved in the justice system for perpetrating rape.

The effects of emotional abuse on youths' offending was significant in initial models, but weakened to non-significance for many offense categories after adding all the control variables to the model. Youth who experienced emotional abuse had an increased risk of incarceration for property or other nonviolent offenses (12% and 19% respectively), but a decreased odds of being incarcerated for a drug or weapon offense [*Odds Ratio (OR)* = .85 and .80, respectively]. Consistent with prior research about the damaging effects of indirect violence, I found that youth who witnessed serious violence were significantly more likely to be incarcerated for a violent (26%) or weapon offense (50%), but less likely to be incarcerated for rape or other nonviolent offenses ($OR = .71$ for both).

Youth who experienced polyvictimization (three or more types of victimization) were significantly more likely to be incarcerated for rape (35%), drugs (36%) and

weapon offenses (103%). Yet inconsistent with prior research, polyvictimization was negatively related to violent offenses after controlling for all other predictors ($OR = .78$). Thus it appears that various types of victimization are related to different forms of offending for youth involved in the justice system. Different types of victimization were positively related to various offense types and the relationships varied between positive and negative depending on the offense. The strongest relationships or pattern between victimization and subsequent offending was that youth who were incarcerated for rape had significant histories of physical abuse, molestation, rape, and polyvictimization.

Gender-Specific Analyses of Prior Victimization on Offense Types

My last research question asked whether the relationships between victimization type and offending type varied for males and females. I addressed this question in three steps, beginning with descriptives and T-tests of all the variables for the female and male sample in order to see how the samples varied in terms of why youth were incarcerated, their victimization histories, and how males and females differed on the control variables (found in Table 5). My second step was to run a series of multivariate logistic regression models separately for males and females to determine the effect of each victimization type and polyvictimization on the six offense categories while controlling for all other factors (Tables 6 and 7). Finally, I conducted equality of coefficients tests (z-tests) for all the coefficients from the final logistic regression models for the female and male samples to test whether the effects were significantly different across genders (Clogg, Petkova, & Haritou, 1995; Paternoster, Brame, Mazerolle, & Piquero, 1998). Only the significant

effects are shown for each gender in Tables 6 and 7, but all effects for both genders are shown in Table 8 for the equality of coefficients tests.

Descriptives and T-tests of the female and male youth samples. A non-significant finding means that the percentages are statistically similar for females and males. A positive sign in the T-test column means that females had a significantly higher percentage of the corresponding variable, while a negative sign means that males had a higher percentage.

It is clear from the analyses displayed in Table 5 that justice-involved females look different from their male counterparts, both in terms of the reason they were incarcerated and their prior victimization histories. As expected in a nationally representative sample, males were over-represented in the justice-system compared to females and composed 85.4% of the sample ($n = 75,961$). Regarding why youth were incarcerated, females were more likely to be incarcerated for a violent, drug or other nonviolent offense, whereas males were more likely to be incarcerated for rape, property or weapon offenses. More specifically, 41.6% of females were incarcerated for a violent offense and the majority of these females were incarcerated for assault (36.4%), followed by robbery (3%) and murder (1.5%). About 37.5% of males were incarcerated for a violent offense, but only 24% of them were there for assault, followed by robbery (10%), and murder (3%). Females were also incarcerated more often for drug offenses (18.6% vs. 17.2%) and other nonviolent offenses (15.7% vs. 7.4%) than males. On the contrary, males were more likely than females to be incarcerated for rape (8.8% vs. 0.6%), property offenses (26.2% vs. 21.4%), and weapon offenses (3% vs. 1.3%).

Table 5. Descriptives and T-tests of the female and male samples

	Females (14.6%)		Males (85.4%)		T-test
	%	(SD)	%	(SD)	
Most serious offense					
Violent offense	41.6	(.49)	37.5	(.48)	+ *
Rape	0.6	(.08)	8.8	(.28)	- *
Property offense	21.4	(.41)	26.2	(.44)	- *
Drug offense	18.6	(.39)	17.2	(.38)	+ *
Carrying a weapon	1.3	(.12)	3.0	(.17)	- *
Other nonviolent	15.7	(.36)	7.4	(.26)	- *
Childhood victimization					
Physically abused as child	53.6	(.50)	30.8	(.46)	+ *
Molested as child	32.2	(.47)	6.3	(.24)	+ *
Forced sex growing up	21.2	(.41)	5.0	(.22)	+ *
Emotionally abused as child	54.6	(.50)	24.0	(.43)	+ *
Witnessed serious violence	65.6	(.48)	69.0	(.46)	- *
Polyvictimization (# types experienced)	2.27	(1.60)	1.35	(1.12)	+ *
0	15.4	(.36)	21.5	(.41)	- *
1	22.6	(.42)	44.1	(.50)	- *
2	19.4	(.40)	18.0	(.38)	+ *
3	17.2	(.38)	12.1	(.33)	+ *
4	12.9	(.34)	2.5	(.16)	+ *
5	12.5	(.33)	1.7	(.13)	+ *
Polyvictimization dummy (≥ 3)	42.6	(.50)	16.3	(.37)	+ *
Age at interview (in Oct. 2002)	15.7	(1.37)	16.1	(1.52)	- *
White, non-Hispanic	38.5	(.49)	32.2	(.47)	+ *
Black, non-Hispanic	22.1	(.42)	33.1	(.47)	- *
Hispanic	24.7	(.43)	24.1	(.43)	
Native American, Asian, Hawaiian	2.8	(.17)	2.9	(.17)	
Other, or ≥ 2 races	11.9	(.32)	7.8	(.27)	+ *
Below modal grade	44.8	(.50)	50.4	(.50)	- *
School suspension year before custody	56.1	(.50)	58.7	(.49)	- *
School expulsion year before custody	24.6	(.42)	29.7	(.46)	- *
Learning disability (expert-diagnosed)	23.1	(.42)	31.6	(.47)	- *
Lived with parent(s) before arrest	69.2	(.46)	76.6	(.42)	- *
Lived with parent(s) growing up	85.0	(.36)	89.3	(.31)	- *
Prior foster/group home	23.5	(.42)	14.0	(.35)	+ *
Prior custody	68.8	(.46)	67.1	(.47)	+ *
Prior probation	85.5	(.35)	83.5	(.37)	+ *
Prior conviction	85.6	(.35)	84.5	(.36)	+ *
Had accomplices for offense	58.0	(.49)	57.3	(.49)	
Gang member at time of offense	22.9	(.42)	30.4	(.46)	- *
No substance use at time of offense	51.0	(.50)	54.4	(.50)	- *
Using alcohol (only) at time of offense	2.9	(.17)	5.2	(.22)	- *
Using drugs (only) at time of offense	18.5	(.39)	18.8	(.39)	
Using alcohol & drugs during offense	27.1	(.44)	21.3	(.41)	+ *
Have or expecting child(ren)	12.8	(.33)	21.9	(.41)	- *
N =		(13,021)		(75,961)	

Note: * Significant difference between female and male sample ($p \leq .001$).

Consistent with prior research, justice-involved females had more extensive victimization histories than to males, although most youth reported at least one type of victimization, regardless of gender. Females had significantly higher prevalence rates of every form of victimization except witnessing serious violence. Over half of females (53.6%) reported experiencing physical abuse as a child compared to 31% of males. Almost a third (32%) of the girls were molested as a child, 21% were raped, and 55% were emotionally abuse as a child, compared to 6% of boys who were molested, 5% who were raped, and 24% who were emotionally abused. Slightly more males than females reported witnessing serious violence (69% vs. 66%), although this was the most reported type of victimization for both genders. Furthermore, justice-involved females had far higher rates of polyvictimization than males, as 43% of females reported three or more victimization types compared to 16% of males.

The results of the control variables generally conformed to results from previous research. As shown in Table 5, there were many differences between the female and male samples on demographics, living situations, criminal history, and education. Notably, females tended to be slightly, but significantly, younger than males (mean ages of 15.7 and 16.1). Interestingly, males were more likely to have lived with their parents growing up (89.3%) and right before their arrest (76.6%), compared to 85% of females who lived with a parent growing up and 69% who lived with a parent before arrest. Contrary to this, more girls than boys had been in a prior foster/group home (23.5% to 14%, respectively).

Multivariate effects of prior victimization on offenses types for females. The multivariate logistic regression models predicting offense type for females are displayed

in Table 6. Overall, it was difficult to distinguish a consistent pattern of effects from the various forms of victimization on offending types. For example, physical abuse increased girls' odds of being incarcerated for a violent offense by 31%, but had a negative effect on property and drug offenses after controlling for polyvictimization and all other predictors ($OR = .73$ and $.74$, respectively). Forced sex while growing up decreased females' odds of being incarcerated for a weapon offense ($OR = .05$), but witnessing serious violence increased females' odds of being incarcerated for carrying a weapon by over 500%. It was interesting that molestation had a positive effect on other nonviolent offending, but forced sex had a negative effect on other nonviolent offending, as both of these victimization types are sexual in nature.

Table 6. Logistic regression models predicting offense type for females (with controls)

	Violent	Rape	Prop.	Drug	Weapon	Other
Physical abuse	.27** (.05)	--	-.32** (.06)	-.30** (.07)	--	--
Molestation	--	--	--	-.26** (.08)	--	.28** (.09)
Forced sex	.29** (.06)	--	--	--	-2.93** (.50)	-.27* (.09)
Emotional abuse	--	--	--	--	--	.27** (.07)
Witness serious violence	.24** (.05)	--	--	--	1.87** (.32)	-.58** (.06)
Polyvictimization (≥ 3)	--	--	.50** (.09)	--	--	-.32* (.11)
Nagelkerke R ²	.15	.24	.10	.20	.32	.19

Note: Reference categories: White, No substance use during offense. B coefficients shown with standard errors in parentheses. ** $p \leq .001$. * $p \leq .01$. ($n = 13,031$)

The initial models (not shown, available upon request) showed that physical abuse increased girls' odds of perpetrating rape by 135%. Once everything was included in the final models, however, none of the victimization types were significantly related to females' odds of perpetrating rape. Polyvictimization only remained significantly related to property ($OR = 1.65$) and other nonviolent offending ($OR = .73$) in the final models.

Thus, these findings are inconsistent with previous findings indicating that polyvictimization is associated with an increased risk of violent offending (Maas et al., 2008; Van der Put et al., 2015).

Multivariate effects of prior victimization on offenses types for males: Turning to the analyses of the males, there are some distinct patterns regarding the effects of victimization on offending types (Table 7). After controlling for polyvictimization and all other predictors, physical abuse exerted a positive effect on males' odds of incarceration for a violent offense and rape, and a negative effect on drug and weapon offenses. Specifically, males who experienced physical abuse as a child were 15% more likely to be incarcerated for a violent offense than males not physically abused as a child. Similarly, males who witnessed serious violent were 25% more likely to be incarcerated for a violent offense than males not exposed to indirect violence.

Several victimization types increased the likelihood of males' being incarcerated for rape, including physical abuse (90% increase), molestation (112%), forced sex (272%), and polyvictimization (35%). One of the strongest effects of victimization on males' offending was that boys who experienced forced sex growing up were 272% more likely to be incarcerated for perpetrating rape. Forced sex also exerted significant effects on four additional offense types, decreasing males' odds of violent, drug, weapon, and other nonviolent offenses ($OR = .72, .55, .18, \text{ and } .57$ respectively). It is important to note that forced sex still exerted these effects after polyvictimization was added to the model, which increased males' odds of perpetrating rape by 35%.

Table 7. Logistic regression models predicting offense type for males (with controls)

	Violent	Rape	Prop.	Drug	Weapon	Other
Physical abuse	.14** (.02)	.64** (.04)	--	-.47** (.03)	-.70** (.08)	--
Molestation	-.14* (.05)	.75** (.06)	-.41** (.05)	-.67** (.07)	--	.34** (.08)
Forced sex	-.33** (.05)	1.31** (.06)	--	-.61** (.08)	-1.72** (.21)	-.56** (.09)
Emotional abuse	--	--	.17** (.03)	-.27** (.04)	--	--
Witness serious violence	.23** (.02)	-.36** (.04)	--	-.06* (.02)	.35** (.05)	-.25** (.03)
Polyvictimization (≥ 3)	-.25** (.04)	.30** (.06)	-.13* (.04)	.45** (.05)	.83** (.13)	.19** (.07)
Nagelkerke R ²	.10	.33	.08	.15	.12	.14

Note: Reference categories: White, No substance use during offense. B coefficients shown with standard errors in parentheses. ** $p \leq .001$. * $p \leq .01$. ($n = 75,961$)

Males who experienced polyvictimization were also at an increased risk of being incarcerated for a drug offense by 57%, a weapon offense by 130%, and other nonviolent offenses by 20%. It was unexpected that all five victimization types had a negative effect on males' odds of incarceration for a drug offense, yet polyvictimization increased males' odds of drug offending by 57%. In other words, it appears that only boys who experienced three or more types of victimization were more likely to be incarcerated for drugs (either using or selling), whereas males who just experienced one type of victimization were less likely to be incarcerated for drug offenses.

Similarly, polyvictimization increased males' odds of incarceration for carrying a weapon by 130%, as did witnessing serious violence by 43%. However males who experienced physical abuse or had forced sex were at a decreased odds of incarceration for a weapon offense ($OR = .50$ and $.18$, respectively). Polyvictimization also increased males' odds of incarceration for other nonviolent offenses by 20%, as did molestation (by 41%). It was interesting that polyvictimization increased males' odds of other nonviolent offending by 20% because the pathways perspective predicts this relationship for females

(which I found polyvictimization had a negative effect on girls' odds of incarceration for other nonviolent offenses). Similar to the females, males who experienced forced sex or witnessed serious violence had a decreased odds of incarceration for other nonviolent offenses ($OR = .57$ and $.78$). Lastly, emotional abuse only exerted one negative and one positive effect on males' offending: it increased males' odds of being incarcerated for a property offense by 19%, but was negatively related to incarceration for a drug offense ($OR = .77$).

Equality of coefficients tests in the effects of victimization on offending. Finally, I calculated equality of coefficients tests on the gender-specific effects of victimization on each type of offending to determine whether these effects differed for females and males (Table 8). It is important to note that just because an effect is significant for one gender but not the other, we cannot conclude these effects vary significantly across gender without conducting equality of coefficients tests. For example, the effect of polyvictimization on violent offending was significant for males ($B = -.25, p \leq .001$) but not females; however, the magnitude of these effects were not different across genders (evidenced by the non-significant z -test = 1.05, $p > .05$). This can happen with equality of coefficients tests when one group has more statistical power due to a larger sample size than a comparison group (Clogg et al., 1995; Paternoster et al., 1998). Another odd thing that can happen with equality of coefficients tests is that you can get a significant z -test even when the regression coefficients are non-significant for both groups, when the coefficients are going in opposite directions, and the standard errors are small. For example, the effect physical abuse on other nonviolent offending was significantly different for males and females ($Z = 3.04, p \leq .01$) even though neither of the gendered

coefficients of physical abuse on other nonviolent offending were significant (i.e., $B = .16$ for females and $-.09$ for males). Thus, I caution readers to look beyond the significance sign of the z-tests to determine whether the equality of coefficients tests have any practical or substantive meaning.

Table 8: Gender-specific logistic regression models predicting each offense type and equality of coefficient tests

	Violent offense			Rape			Property offense		
	Female	Male	z-test	Female	Male	z-test	Female	Male	z-test
Physical abuse	.27** (.05)	.14** (.02)	2.37 [†]	.60 (.38)	.64** (.04)	-1.2	-.32** (.06)	-.03 (.02)	-4.99**
Molestation	.06 (.06)	-.14** (.05)	2.71*	-.10 (.37)	.75** (.06)	-2.25 [†]	-.10 (.07)	-.41** (.05)	3.64*
Forced sex	.29** (.06)	-.33** (.05)	8.04**	.40 (.34)	1.31** (.06)	-2.63*	-.13 (.07)	.06 (.06)	-2.15 [†]
Emotional abuse	-.10 (.05)	-.04 (.03)	-.97	-.32 (.36)	.11 (.04)	-1.19	-.13 (.06)	.17** (.03)	-4.37**
Witness serious violence	.24** (.05)	.23** (.02)	.25	-.05 (.32)	-.36** (.04)	.96	.12 (.06)	-.04 (.02)	2.70*
Polyvictimization (≥ 3)	-.16 (.08)	-.25** (.04)	1.05	.62 (.52)	.30** (.06)	.61	.50** (.09)	-.13* (.04)	6.16**
Nagelkerke R ²	.15	.10		.24	.33		.10	.08	

Table 8 continued

	Drug offense			Carrying a weapon			Other nonviolent		
	Female	Male	z-test	Female	Male	z-test	Female	Male	z-test
Physical abuse	-.30** (.07)	-.47** (.03)	2.29 [†]	.62 (.26)	-.70** (.08)	1.92	.16 (.07)	-.09 (.04)	3.04*
Molestation	-.26* (.08)	-.67** (.07)	3.76**	.36 (.24)	.07 (.13)	7.61**	.28** (.09)	.34** (.08)	-.52
Forced sex	.07 (.08)	-.61** (.08)	5.94**	-2.93** (.50)	-1.72** (.21)	-2.23 [†]	-.27* (.09)	-.56** (.09)	2.25 [†]
Emotional abuse	.10 (.07)	-.27** (.04)	4.81**	-.11 (.29)	-.21 (.08)	.33	.27** (.07)	.10 (.05)	2.05 [†]
Witness serious violence	.001 (.06)	-.06* (.02)	1.01	1.87** (.32)	.35** (.05)	4.65**	-.58** (.06)	-.25** (.03)	-4.69**
Polyvictimization (≥ 3)	-.04 (.10)	.45** (.05)	-8.66**	-.05 (.38)	.83** (.13)	-2.19 [†]	-.32* (.11)	.19** (.07)	-3.98**
Nagelkerke R ²	.20	.15		.32	.12		.19	.14	

Notes: Reference categories: White, No substance use during offense. B coefficients reported from logistic regression models (with standard errors in parentheses). ** $p \leq .001$ * $p \leq .01$ [†] $p \leq .05$
 N Females = 13,021 and Males = 75,961.

Table 8 shows that the effects of victimization on offending were significantly different for females and males on 25 of the 36 effects (6 offenses types were regressed

on 6 victimization types). For example, four out of six effects of physical abuse were significantly different across gender, as noted by the significant z-tests comparing the regression coefficients of physical abuse on males and females' violent, property, drug and other nonviolent offenses. To illustrate, physical abuse had a positive effect on both males' and females' odds of incarceration for a violent offense but the effect was more pronounced among females ($z = 2.37, p \leq .05$). The effects of physical abuse on property offending were also significantly different across genders, as it decreased females' odds of incarceration for a property offense but had a non-significant effect on males' odds of incarceration for property offense (and the magnitude of these effects were significantly different across genders: $z = -4.99, p \leq .001$). Despite the differences in the significant effects across the gender-specific analyses (female vs. male), the magnitude of the effects of being physically abused on perpetrating rape or carrying a weapon did not differ between genders (as indicated by the equality of coefficients tests), so it can be inferred that experiencing physical abuse affected males and females odds of incarceration for rape and carrying a weapon similarly.

Five of the six equality of coefficients tests for molestation were significant across genders. Among males, molestation decreased odds of incarceration for a violent or property offense ($B = -.14$ and $-.41, p \leq .001$) and had no significant effects on females' odds of incarceration for a violent or property offense, and the magnitude of these effects were different across genders ($z = 2.71, p \leq .01$). Thus it can be inferred that molestation affected males and females odds of incarceration for a violent or property offense differently. Conversely, molestation had a negative effect on drug offenses for both males

and females but the magnitude of these effects varied significantly, namely the effects were more pronounced for males ($z = 3.76, p \leq .001$).

Similarly, all six equality of coefficients tests for forced sex were significantly different across males' and females' offending types. Notably, forced sex had significantly stronger effects on the following offenses among males: violent offense (negative effect), rape (positive), drug offense (negative), and other nonviolent offense (negative).

Three of the effects of emotional abuse were different for females and males, namely the effects on property, drug, and other nonviolent offenses. The magnitude of the regression coefficients of emotional abuse on property and drug offenses were stronger for males, while the effects of emotional abuse on other nonviolent offending were more pronounced for females. Specifically, emotional abuse exerted a positive effect on males' odds of incarceration for a property offense and a negative effect on their odds of a drug offense, but emotional abuse had no effect on females' odds of property or drug offenses. Emotional abuse increased girls' odds of incarceration for other nonviolent offenses and had no effect on boys' likelihood of incarceration for other nonviolent offenses, and the magnitude of these effects were significantly different across genders ($z = 2.05, p \leq .05$).

Three of the effects of witnessing serious violence were different across females and males: the effects on property offenses (although non-significant for both genders), weapon offenses, and other nonviolent offenses. Witnessing serious violence increased both genders likelihood of incarceration for carrying a weapon and decreased their likelihood of incarceration for other nonviolent offenses. The magnitude of both of these effects were stronger for females.

Finally, the effects of polyvictimization on offending were different across gender for four types of offending; namely the effects on property offenses (stronger for females), drug offenses (stronger for males), weapon offenses (stronger for males), and other nonviolent offenses (stronger for females). To elaborate, polyvictimization increased females' but decreased males' odds of incarceration for a property offense, and the positive effect on females was more pronounced than the negative effect on males. Polyvictimization increased males' likelihood of incarceration for a drug or weapon offense but had no influence on females' drug or weapon offending. An unexpected finding was that polyvictimization significantly increased males' likelihood of incarceration for other nonviolent offenses but decreased females' odds of incarceration for other nonviolent offending. These effects are the opposite of the main hypotheses of the pathways perspective, which argues that victimization will play a particularly important role in girls' likelihood of incarceration for drug and other nonviolent offenses.

I now turn attention to the final chapter where I revisit the research questions, summarize the main findings and discuss the unique contribution of my research and their implications within the wider literature and juvenile justice system. I also acknowledge the limitations of my dissertation and provide suggestions for future research.

CHAPTER IV

Discussion

I addressed three research questions in this dissertation. First, prior research suggests that a majority of justice-involved youth have experienced victimization before their system involvement and that youth incarcerated for violent offenses typically had more extensive victimization histories (Abram et al., 2004; Becker & Kerig, 2011; Dierkhising et al., 2013). Consistent with this, I found there were significant differences between the types of offenses for which victimized and non-victimized youth were incarcerated. Specifically, victimized youth were significantly more likely than non-victimized youth to be incarcerated for violent offense. Meanwhile, non-victimized youth were more likely to be incarcerated for drug and other nonviolent offenses compared to youth with any past victimization. Overall, justice-involved youth with a history of victimization were significantly more likely to be system-involved for violent offenses, while youths without a history of victimization were more likely to be involved for minor or non-violent offenses. This finding is consistent with Widom's (1989a) cycle of violence hypothesis (or the intergenerational transmission of violence), which suggests that abused children become abusers, or that violence begets violence. Other criminological theories, namely social learning theory, have argued that abused children will be more likely to be violent when they grow up because they may imitate the violence they experienced/learned as children (Akers et al., 1979, Bandura, 1973).

Second, I examined whether different types of prior victimization and polyvictimization were related to specific forms of offending or general delinquency. Similar to some prior studies, I found different types of victimization were significantly related to various offense types, and the relationships varied between positive and negative depending on the offense (e.g., Fagan, 2005; Smith, Ireland, & Thornberry, 2005; Widom & Maxfield, 1996). The clearest pattern among prior victimization and subsequent offending were the strong, positive effects prior physical abuse, molestation, rape and polyvictimization had on youths' likelihood of being incarcerated for perpetrating rape. This is consistent with some prior studies that found that youth who were sexually abuse were more likely to commit sexual offenses than non-victimized youth (Bagley, Wood, & Young, 1994; Ford & Linney, 1995; Jespersen, Lalumière, & Seto, 2009).

Physical abuse also had a significant positive effect on youths' likelihood of being incarcerated for a violent offense, but a negative effect on youths' odds of incarceration for a property, drug or weapon offense. This is somewhat consistent with some of the early prospective studies, although none of those studies controlled for polyvictimization (English, Widom, & Branford, 2002; Widom, 1989a; Widom & Maxfield, 1996). However not all studies found that physical abuse leads to future violence, as findings from the ADD Health data indicated that physical abuse was not associated with future violent delinquency, but sexual abuse and neglect were (Yun, Ball, & Lim, 2011).

Contrary to physical abuse, molestation exerted a negative effect and forced sex had no effect on youths' likelihood of being incarcerated for a violent offense. It was interesting that molestation had a positive effect on other nonviolent offending, but

forced sex had a negative effect on other nonviolent offending, as both of these victimization types are sexual in nature. This finding may justify the need for scholars to separate sexual molestation from forced sex (or rape) as a child since the effects of these victimization types vary on additional offense types as well.

Emotional abuse increased youths' odds of incarceration for a property or other nonviolent offense, and witnessing serious violence increased youth's odds of a violent or weapon offense. One of the more surprising findings was that polyvictimization increased youth's odds of being incarcerated for rape, drug and weapon offenses, but was negatively related to violent offenses after controlling for all other predictors. Much of the prior research noted above concluded that polyvictimization typically has stronger effects on outcomes compared to individual types of victimization, yet much of this literature is focused on mental health outcomes rather than delinquency (Chaffin & Hanson, 2000; Finkelhor et al., 2013; Scott-Storey, 2011). The few studies that focused on problem behavior found that polyvictimized adolescents reported more delinquent acts and more serious delinquency than when compared youth who experienced just one type of victimization (Cyr et al., 2013; Ford et al., 2010; Soler et al., 2013). Future researchers should compare the offense profiles of polyvictimized youth to youth who only reported one type of victimization.

Finally, my third research question asked whether there were gender differences in the effects of prior victimization types on subsequent offending. Males constitute the majority of offenders arrested and processed through the justice system for most types of delinquency and this pattern held in my nationally representative sample of justice-involved youth, as only 14.5% of youth were females (see Steffensmeier & Allan, 1996).

Further, male's predominant involvement in crime and delinquency resulted in theories developed around male offending. Theorists who study female offenders argue that victimization is a unique risk factor for females which affects their pathways into delinquency and the justice system differently than it affects males and male offending (Chesney-Lind & Sheldon, 2014; Daly, 1992). Few researchers, however, have examined how victimization experiences relate to offending for both males and females.

Broadly speaking, many of the expected gender-specific descriptions of delinquent youth were supported, however, there were some exceptions. One of the most surprising findings was more girls than boys were incarcerated for a violent offense, which was primarily driven by the high percentage of girls incarcerated for assault. Bootstrapping, or relabeling minor offenses into more serious offenses, may help explain why there is such a high prevalence of girls in my sample incarcerated for a violent offense (Feld, 2009; Pasko & Dwight, 2010). For instance, girls' minor aggression may be more likely to be labeled and processed through the juvenile justice system as a violent offense or assault, compared to boys (Chesney-Lind & Pasko, 2013). Relabeling and bootstrapping behaviors that were once categorized as status offenses into violent offenses cannot be ruled out as a cause for higher assault arrest statistics (Steffensmeier et al., 2005). Mayer's (1994) examination of over 2,000 cases of girls referred to Maryland's juvenile justice system for assault revealed that about half of cases involved family centered violence, such as a girl hitting her mom and her mom subsequently pressing charges. Furthermore, Pasko's (2006) in-depth analysis of girls on probation found that girls were more likely to be charged with simple assault rather than a status offense if a girl pushed someone out of the way or threw a small object at her guardian

while trying to run away. The shift in how domestic violence, particularly child-to-parent violence is handled by police may help account for the high prevalence of girls in my sample incarcerated for assault (see also Buzawa & Hotaling, 2006). In studies completed a decade earlier than my study this type of behavior would have been labeled “incorrigibility” by parents and police, which is a status offense (Chesney-Lind & Pasko, 2013, p. 39).

Similar to prior research, I found that the females incarcerated in the juvenile justice system had more extensive histories of victimization than males (Dierkhising et al., 2013; Ford et al., 2007; Truman & Langton, 2014). Significantly more females than males reported every type of prior victimization, except for witnessing serious violence, in which 69% of males and 66% of females reported experiencing. Females also had higher rates of polyvictimization than males, with 43% of females experiencing three or more victimization types compared to 16% of males. This is all consistent with the pathways perspective, which argues that girls who end up in the justice system look differently than boys, particularly in terms of their victimization histories (Daly, 1992).

Female offenders typically have higher rates of victimization compared to male offenders, but we do not know whether these differences in victimization histories helps explain the variance in offense types between genders (Dierkhising et al., 2013; Messina & Grella, 2006, Van der Put et al., 2015). The feminist pathways perspective is the premier criminological theory that argues that victimization plays a unique role in women's deviant behavior and pathways into criminal behavior, in part because the different rates of various victimization types that males and females experience (Belknap, 2007; Chesney-Lind & Rodriguez, 1983; Daly, 1992). The pathways perspective suggests

that abused girls may become offenders due to strategies of survival and/or resistance to further victimization (Bloom et al., 2005; Gilfus, 1993). It also hypothesized that victimization may give rise to other problems such as mental illness, substance use, and involvement in the justice system (Chesney-Lind, 2002; Daly, 1992; Kilpatrick et al., 2003). Contrary to this, males are thought to follow more traditional paths into criminal behavior, such as associating with antisocial peers, low self-control, or having weak bonds to conventional society (Gottfredson & Hirschi, 1990; Hirschi, 1969; Sampson & Laub, 1990, 2003).

Although females experienced significantly more victimization than males in the sample, I found mixed support for the pathways perspective when I examined the multivariate effects of prior victimization on offending. Many of the predicted effects from the pathways perspective for females were absent, or the effects were more pronounced for males than females. Recall that the pathways perspective argues that victimization increases females' likelihood of committing lower level offenses (e.g., drug use, running away, prostitution, petty theft). Consistent with the pathways perspective, I found that molestation and emotional abuse increased girls' odds of being incarcerated for other nonviolent offenses. Contrary to the pathways perspective, physical abuse had no effect, and forced sex and polyvictimization decreased female' odds of being incarcerated for other nonviolent offenses. Physical abuse and molestation exerted also decreased female' odds of being incarcerated for a drug offense. This directly contradicts what the feminist pathways perspective hypothesizes (Bloom, Owen, & Covington, 2005; Daly, 1992, Salisbury & Van Voorhis, 2009). Although polyvictimization was not significant for most of females' offenses, it did increase females' odds of incarceration

for a property offense by 65%, which is consistent with the pathways perspective. Thus, support for the pathways perspective in the multivariate results for the female sample is mixed.

Turning to the males, there were more significant effects of prior victimization on every category of males' offense type than there were for females. Physical abuse during childhood and witnessing serious violence increased males' likelihood of being incarcerated for a violent offense, which is consistent with prior research on the cycle of violence (Dutton & Hart, 1992; Widom, 1989a, Widom & Maxfield, 2001) and social learning theory (Akers et al., 1979). Many scholars have found that exposure to community violence, or witnessing abuse and domestic violence has deleterious effects (Finkelhor et al., 2009; Graham-Bermann et al., 2012; Hawke et al., 2009; Moretti et al., 2006). Youth who experience these types of indirect violence are significantly more likely to be involved in deviant and criminal behaviors than youth who do not witness these types of violence. My findings were consistent with this for both genders, specifically that witnessing serious violence increased youths odds of incarceration for a violent offense and carrying a weapon. Future research examining the effects of victimization on offending should include measures of indirect violence, or victimization that youth experience vicariously, as these effects were robust for males and females in my study.

Consistent with social learning theory, males who were physically abused, molested or had forced sex growing up had an increased likelihood of being incarcerated for rape after controlling for all other types of victimization and polyvictimization. Other prior studies have provided some support that youth who experience sexual abuse are

more likely to perpetrate that same kind of behavior, or to become sexually violent (Bagley, Wood, & Young, 1994; Dutton & Hart, 1992; Ford & Linney, 1995; Jespersen, Lalumière, & Seto, 2009). Although I could not determine why males perpetrated rape in my sample, Watkins and Bentovim (1992) have suggested that young male victims of sexual abuse attempt to exert control over their victimization experiences by going on to sexually abuse others (i.e., reenactment). The implications of this particular finding is that preventing childhood sexual abuse may reduce the number of sex offenders in time. Prevention methods might include programs that educate children about healthy boundaries and how to report inappropriate touching to safe adults, or prevention could be through treatment programs for adults who are likely to, or known to, sexually offend against children, especially against boys (see Jespersen, Lalumière, & Seto, 2009).

Emotional abuse was as whole, not very predictive of offending for either gender and when it was significant the effect sizes were rather small. Perhaps emotional abuse on its own is not that significant for subsequent offending but may affect youths' mental health or substance use (i.e. more internalizing behaviors). Similarly, polyvictimization was not very predictive of females' offending but was significant for all six offense types for males. This was somewhat inconsistent with prior research that found that polyvictimization has more harmful effects on youths' outcomes when compared to just one type of victimization (Cyr et al., 2013; Ford et al., 2010; Soler et al., 2013). However, most prior studies were concerned with the effects of polyvictimization on youth mental health rather than their delinquency. I intend to look at the effects of different victimization types and polyvictimization on youth's mental health issues during incarceration in future research using the SYRP (e.g., symptoms of depression, anxiety,

suicide ideation, hallucinations, and anger). There were other significant gender differences in the effects of prior victimization on offense type noted by the equality of coefficients tests which I intend to explore more in the future.

Unique Contributions of Research

This dissertation extended previous research in several important ways. First, the current study improved on past research by examining the separate effects of five distinct types of victimization and polyvictimization on six forms of offending. I also examined how these effects vary for males and females. Prior research has primarily examined the effects of one or two types of victimization on any type of offending (or general offending). This method is problematic because I found that different types of victimization are related to different forms of offending, so combining all offense types into one category may reduce or suppress the effects of victimization on distinct offending types.

Another important strength of my study is that I examine the effects of multiple types of victimization and polyvictimization, as recent work suggests that various forms of violence tend to co-occur and interact in a way that is more detrimental to development than the effect of one type alone (Finkelhor, 2008). As noted above, prior studies that only examined the effects of one type of victimization, like sexual abuse, without controlling for the inter-correlations between different types of victimization and polyvictimization may have artificially inflated the effects of the examined victimization type (Finkelhor, 2008; Green et al., 2010; Herrenkohl & Herrenkohl, 2009; Scott, Varghese, & McGrath, 2010). Thus, my study adds to our understanding the individual

effects of various victimization types and the cumulative effect of polyvictimization on youths' offending type, and how these relationships vary by gender.

Limitations

A few limitations to my dissertation warrant discussion. First, I lack a control group of youth not involved in the justice system, and the so-called treatment variable (i.e. victimization) is not randomly assigned throughout the sample. However, the fact that I used a nationally-representative sample of justice-involved youth helps make my findings more generalizable to youth in the juvenile justice system.

Another limitation is that the measures of prior victimization and most serious offense were based on youths' self-reports, which may be subject to poor memory/recall problems, or an unwillingness to admit past victimization experiences (Decety & Yoder, 2016; Maxfield & Babbie, 2005; Miller & Kirsh, 1987, Ptacek, Smith, & Dodge, 1994). It is also possible that females were more open to reporting prior victimization, especially sexual victimization, than males due to traditional gender norms requiring males to be tough and in control of sexual encounters and thus not a victim (Hislop, 2001; Lisak, 1994). A related concern is that some participants may not have been able to answer questions about their prior victimization accurately or truthfully if they suffered abuse before they were able to remember or comprehend what happened to them (e.g., before age 4; Finkelhor, 2008). However, victimization that kids experience as an infant or toddler can still exert long-lasting adverse effects on their development (Finkelhor et al., 2013).

Concerning the reliability and validity of the prior victimization measures, a plethora of research in the psychology of survey response area has focused on factors that can improve recall, and argues that using context cues improves retrieval (Bradburn, 2004; Tourangeau, Rips, & Rasinski, 2000). Future survey research examining childhood victimization may wish to utilize memory aids that address recall error and uncertainty in surveys, such as the event history calendar or enhanced contextual priming (Belli, 1998; Tourangeau et al., 2000; Yoshihama, 2009). However, a strength of the SYRP data and the prior victimization measures is that it has a wide scope by asking youth about different types of victimization they experienced rather than just having an umbrella victimization measure. The SYRP also collected detailed information about youths' victimization experiences which I did not utilize in this dissertation but plan to explore in future research, as these details might help explain the heterogeneity in effects on offending (such as how many times youth experienced each victimization type, who was the perpetrator, and what, if any, injuries youth sustained from each type of victimization).

Another limitation is that I cannot determine causality between the victimization predictors and the outcomes because there are several other factors or variables that might explain the co-variance between these variables for which I cannot rule out. For example, a few variables known to influence both victimization and delinquency that I could not control for include self-control, biological factors like Monoamine oxidase A (MAOA), and aggregate level factors (e.g., neighborhood the youth grew up in). Relatedly, a limitation to my study is that I could not examine the actual mechanisms through which victimization affected offending and how these mechanisms may vary by

gender (see Gover, 2002). For example, victimization may affect youths' mental health, which may then influence delinquency. Moffitt and Caspi (2001) note that abused children do not usually become violent individuals immediately after their victimization; rather, they follow complex pathways through adolescence, where they experience various psychological and behavioral problems before displaying delinquent or violent behavior. In other words, the time between victimization and the manifestation of negative behavioral effects is difficult to study, especially when there are possible moderating variables that may cause heterogeneity in how individuals or groups respond to victimization, such as, race, personality, biological factors (see also McGloin & Widom, 2001).

There were some interesting findings regarding the effects of the control variables on each offense type. With regard to racial differences, all minority groups (or non-white youth) were significantly more likely to be incarcerated for a violent offense compared to white youth. Additionally, youth who were black, Hispanic and other/ ≥ 2 races were significantly more likely to be incarcerated for a weapon offense compared to white youth. These racial differences remained after controlling for other pertinent variables (e.g., prior criminal justice involvement, gang membership, accomplices for offense). It would be worth exploring these racial differences in future research and would be particularly interesting to examine whether race moderates the effects of prior victimization on subsequent offending. Future researchers should also examine these effects on the intersection between race and gender (e.g., to see whether victimization affects black males the same way it does black females or white males).

Conclusions

The number of children in America that experience and witness violence makes it an important public health issue, as three-fifths of American youth are exposed to at least one type of victimization before adulthood (Listenbee et al., 2012). Childhood exposure to violence is not limited to one gender, racial/ethnic group, neighborhood, or socio-economic class; it occurs in every type of community and group of children, although the rates of particular types of victimization may vary by demographics (Finkelhor et al., 2013; Listenbee et al., 2012). Nonetheless, childhood victimization places an enormous burden on society in terms of cost to our health care, child welfare, and justice systems. One of the astronomical costs that childhood victimization has on society, pertaining to this dissertation, is that it increases the risk for criminal involvement (Mersky, Topitzes, & Reynolds, 2012; MacMillan, 2001; Widom & Maxfield, 1996).

The strong relationship between prior victimization and subsequent delinquency has been consistently documented using a variety of samples, social contexts and methods (Berg et al., 2012; Smith & Thornberry, 1995; Widom & Maxfield, 1996). Yet, many aspects of the victimization-offending relationship remain under-researched and poorly understood. One of these aspects is how victimization affects juvenile offenders' pathway into delinquency. As discussed in Chapter I, justice-involved youth report higher rates of prior victimization and polyvictimization compared to youth in the general population (Abrams et al., 2004; Dierkhising et al., 2013; Ford et al., 2007). These youths' victimization histories vary by gender, such that female youth report higher rates of molestation and polyvictimization while males report higher rates of witnessing serious violence (Ford et al., 2013; Foy et al., 2012; Wolpaw & Ford, 2004; Wood et al.,

2002). However, there is much we do not know regarding justice-involved youth's victimization histories, including whether victimized youth are involved in the system for different offenses than non-victimized youth, whether youths' prior victimization experiences are related to their later justice system involvement, and whether different types of victimization are specifically or generally related to various offenses. We also do not know how gender interacts with the relationships between prior victimization and subsequent offending among juvenile delinquents.

Although some attempts have been made to look at the unique effects of prior victimization on subsequent offending, prior research has not moved beyond analyzing the type of victimization that has taken place and how this affects any type of later criminal behavior. For example, many previous studies have examined how any type of victimization increases youths' odds of general offending. However, my findings suggest that the effects of some victimization types are related to specific types of offending, particularly for males. Thus, it is important that future research look beyond the general victimization and offending relationship. Future research should attempt to parse out the unique relationships between victimization and offending types, and separate these analyses by gender, as effects between males and females differed significantly across many abuse types and offending types.

Criminological literature has consistently found that females engage in less delinquent behavior than males and scholars have attributed this gender gap to lower rates of aggression among females, better impulse control, and quicker neuropsychological maturation (Lauritsen, Heimer, & Lynch, 2009; Moffitt, 1993; Steffensmeier & Allan, 1996). However, the present study found that females who had

experienced physical abuse as a child had higher levels of violent offending compared to their male counterparts. Similar to Weir & Kaukinen's (2015) results, this finding contradicts a vast body of literature on gender and crime and suggests that childhood physical abuse is a major risk factor for the increased violent offending for females.

Numerous scholars have long claimed that males are more likely to externalize reactions to their abuse, whereas females more often internalize them (Dembo, Williams, Wothke, Schneider, & Brown, 1992; Fantuzzo & Lindquist, 1989; Friedrich, 1988; Summit, 1983). Future research should look not only at how various forms of victimization affect criminal behavior but also internalizing problems, such as, mental health problems, eating disorders, self-harm behavior, and suicide ideology/behavior. Perhaps I did not find many of the expected results from the pathways perspective because victimization has a stronger effect on girls' internalizing problems compared to their criminal behavior. I intend to look at females' mental health issues and how they are related to prior victimization types in future research.

The most obvious implication of my study is that early prevention of childhood abuse and exposure to violence may reduce the number of youth who engage in subsequent criminal behavior. Preventing child abuse is the most desirable option for both genders, however there will always be people who use and abuse other humans, and children, for their own purposes, whether for pleasure, releasing anger and frustration or merely exerting control over someone. Thus, intervention and treatment programs crucial in responding to children and youth who have been subjected to others' abusive acts. Youth who end up in the juvenile justice system should be screened for prior victimization so they can receive treatment for their abuse to help them cope with the

adverse effects of their experiences. Treatment programs for both genders should focus on providing alternative ways to cope with anger, impulse control, as well as teach empathy, cognitive problem solving skills, and verbal communication skills. Treatment programs should also focus on helping both males and females who are incarcerated through a transition from adolescence to adulthood while providing mental health, medical, and family support services. Such treatment may help end the cycle of violence and reduce the likelihood that youth will recidivate and end up in the criminal justice system as an adult.

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APPENDIX A**Attrition Analysis****Table A9.** Weighted descriptives and T-test of the full and reduced samples

Variable	Full		Reduced		T-test
	%	(SD)	%	(SD)	
Most serious offense					
Murder	2.5	(.16)	2.7	(.16)	**
Rape	7.6	(.27)	7.6	(.25)	
Kidnapping	0.5	(.07)	0.5	(.07)	
Robbery	8.3	(.28)	9.2	(.29)	**
Assault	24.0	(.43)	25.7	(.44)	**
Arson	1.2	(.11)	1.3	(.11)	*
Burglary	6.6	(.25)	7.2	(.26)	**
Auto Theft	6.1	(.25)	6.5	(.25)	**
Selling drugs	6.1	(.24)	6.6	(.25)	**
Nonvio. prop (unlawful car use, theft, vandalism, trespass)	9.6	(.29)	10.3	(.30)	**
Drug possession/use (testing positive for drugs)	9.7	(.30)	10.8	(.31)	**
Carrying a weapon	2.5	(.16)	2.8	(.16)	**
Other nonviolent (running away, prostitution, DUI, drunk in public underage alcohol use, curfew, truancy)	8.1	(.27)	8.6	(.28)	**
Technical violation / no offense reported	6.2	(.08)	--	--	
Childhood victimization					
Any type of victimization	78.3	(.41)	79.4	(.41)	**
Physically abused as child	34.1	(.47)	34.2	(.47)	
Molestation	10.1	(.30)	10.1	(.30)	
Youth had forced sex growing up	7.1	(.26)	7.4	(.26)	*
Emotionally abused as child	29.1	(.45)	28.5	(.45)	**
Witnessed serious violence	67.3	(.47)	68.5	(.47)	**
Polyvictimization (# types experienced)	1.45	(1.23)	1.5	(1.25)	**
0	21.7	(.41)	20.6	(.41)	**
1	40.4	(.49)	41.0	(.49)	**
2	18.9	(.39)	18.2	(.39)	**
3	12.1	(.33)	12.9	(.34)	**
4	3.9	(.19)	4.0	(.20)	
5	3.0	(.17)	3.3	(.18)	**
Polyvictimization dummy (≥ 3)	19.0	(.39)	20.2	(.40)	**
Female	15.2	(.36)	14.6	(.35)	**
Age at interview (in Oct. 2002)	16.1	(1.54)	16.1	(1.50)	
Race/ethnicity					
White, non-Hispanic	33.8	(.47)	33.1	(.47)	**
Black, non-Hispanic	30.9	(.46)	31.5	(.46)	**
Hispanic	23.6	(.43)	24.2	(.43)	**
Native American, Asian, Hawaiian	3.1	(.17)	2.9	(.17)	*

Other, or \geq two races	8.7	(.28)	8.4	(.28)	*
Below modal grade	48.5	(.50)	49.6	(.50)	**
School suspension year before custody	57.2	(.49)	58.3	(.49)	**
School expulsion year before custody	28.0	(.45)	28.9	(.45)	**
Learning disability (expert-diagnosed)	30.3	(.46)	30.4	(.46)	
Lived with parent(s) before arrest	74.6	(.43)	75.5	(.43)	**
Lived with parent(s) growing up	88.5	(.32)	88.7	(.32)	
Prior foster/group home	16.2	(.40)	15.4	(.36)	**
Prior custody	66.4	(.47)	67.4	(.47)	**
Prior probation	82.6	(.38)	83.8	(.37)	**
Prior conviction	83.9	(.37)	84.7	(.36)	**
Had accomplices for offense	55.2	(.50)	57.4	(.50)	**
Gang member at time of offense	28.5	(.45)	29.3	(.46)	**
Substance use at time of offense					
None	55.9	(.50)	53.9	(.50)	**
Using alcohol (only)	4.5	(.21)	4.9	(.22)	**
Using drugs (only)	17.5	(.38)	18.8	(.39)	**
Using both alcohol & drugs	20.9	(.41)	22.2	(.42)	**
Have or expecting child(ren)	19.7	(.40)	20.6	(.40)	**
<i>N</i> =	(101,036)		(88,982)		

Notes: Significant difference between samples ** $p \leq .01$, * $p \leq .05$, Two-tailed test. The reduced sample had 758 youth removed who were missing data on offense or victimization measures, and youth who's most serious offense was a technical violation. The descriptives shown here are weighted, as instructed by Sedlak et al (2012).

APPENDIX B

Survey Questions Used in this Dissertation

AE0010. Are you male or female?

Male1
 Female..... 2

AE0020. Are you Spanish, Hispanic or Latino?

Yes..... 1
 No 2

AE0040. What is your race? You may choose more than one answer.

White..... 1
 Black or African American 2
 American Indian or Alaska Native3
 Asian.....4
 Native Hawaiian or other Pacific Islander5
 Other..... 6

AE0060.* For your present stay, when did you come to this facility? Please enter the month and year. _____ / _____

AE0090. Do you have any children?

Yes..... 1
 No 2

AE0100. Is there a girl currently pregnant with your child?

Yes..... 1 (GO TO Section B)
 No 2 (GO TO Section B)

AE0110. Are you currently pregnant?

Yes..... 1 (GO TO Section B)
 No 2 (GO TO Section B)

CE0010. Are you here because you were told you violated the terms of your probation or parole*?

Yes..... 1
 No 2 (GO TO CE0090)

CE0090. Were you convicted of the crime that led to your being placed here? To be convicted means a judge found you guilty or you pled guilty to a crime.

Yes..... 1 (GO TO CE0110 Intro)
 No 2 (GO TO CE0100)

Now we are going to show you five different lists of crimes. Please read through each list and pick what you were (convicted of/arrested for/accused of) doing. Please only include the crime or crimes that led directly to your being placed here.*

CE0110. Here is the first list. Please pick what you were (convicted of/arrested for/accused of) doing. Remember to tell us only about what led directly to your being placed here.* You may choose more than one answer.

Violating Curfew.....	1
Running away from home.....	2
Skipping school without an excuse.....	3
Using or having alcohol in your possession.....	4
None of the above	95

CE0120. Here is the second list. Please pick (anything else/what) you were (convicted of/arrested for/accused of) doing. Remember to tell us only about what led directly to your being placed here.* You may choose more than one answer.

Selling drugs	1
Using or having an illegal drug in your possession.....	2
None of the above	95

CE0130. Here is the third list. Please pick (anything else/what) you were (convicted of/arrested for/ accused of) doing. Remember to tell us only about what led directly to your being placed here.* You may choose more than one answer.

Using force or threat to get money or things from someone (robbery).....	1
Attacking or hitting someone, also known as assault.....	2
Having or trying to have sexual relations with someone against their will	3
Killing someone	4
Kidnapping someone	5
None of the above	95

CE0140. Here is the fourth list. Please pick (anything else/what) you were (convicted of/arrested for/accused of) doing. Remember to tell us only about what led directly to your being placed here.* You may choose more than one answer.

Stealing or trying to steal a car or other motor vehicle	1
Taking a car or other motor vehicle for a drive without the owner's permission ..	2
Breaking into a locked building to steal something, aka burglary.....	3
Stealing or trying to steal money or things, also known as theft.....	4
Purposely setting fire to a house, building, car or other property	5
Purposely damaging or destroying property that did not belong to you	6
None of the above	95

CE0150. Here is the last list. Please pick (anything else/what) you were (convicted of/arrested for/accused of) doing. Remember to tell us only about what led directly to your being placed here.* You may choose more than one answer.

Driving a car under the influence of alcohol or drugs	1
Being drunk in public	2

Carrying a weapon.....	3
Being paid for having sexual relations with someone.....	4
Trespassing	5
Something else... ..	6
None of the above	95

Now I would like to ask you a few questions about the crime(s) you just described to me. Just to remind you, this includes {display reported crimes}.

CE0160. Were you (accused of being) under the influence of alcohol or drugs during (this crime/any of these crimes)?

Yes..... 1 (SEE SKIP INSTRUCTION BELOW)

No 2 (GO TO CE0190)

SKIP INSTRUCTION FOR "YES" (CE0160=1):

Go to CE0180 if only one crime reported.

CE0170. Which of these crimes were you (accused of being) under the influence of drugs or alcohol? You may choose more than one answer.

List crimes selected as alternatives

Put all alternatives on the same screen

FILL FOR CE0170

"accused of being" = (CE0030=2 or CE0030=don't know or refused) or (CE0090=2 or CE0090=don't know or refused) List up to six crimes. If more than six crimes reported add "something else you said you were (convicted of/accused of)" and repeat question with list of next six crimes reported.

CE0180. Which of the following were you (accused of being) under the influence of?

Alcohol 1

Drugs 2

Both 3

CE0190. (Did you commit/ Were you accused of committing) (this crime/any of these crimes) with someone else?

Yes..... 1 (SEE SKIP INSTRUCTION BELOW)

No 2 (GO TO CE0210)

CE0200. Which of these crimes (did you commit/were you accused of committing) with someone else?

List crimes selected as alternatives introduction before CE0160.

Put all alternatives on the same screen

CE0210. At the time you (committed/were accused of committing) (this crime/any of these crimes) were you involved in a gang?

Yes..... 1

No 2

CE0330. At the time you were (first taken into custody* for the crime(s) that led to your stay here/taken into custody for your present stay) who were you living with? You may choose more than one answer.

- Your Mother 1
- Your Father..... 2
- Step-parent 3
- Foster parent 4
- Your Grandparents 5
- Your sister or brother 6
- Other relatives 7
- Your Friends 8
- Boyfriend or Girlfriend..... 9
- Group home..... 10
- I was living by myself 11
- I was homeless 12
- Other..... 13

CE0380. During the year before you (were first taken into custody* for the crime(s) that led to your stay here/were taken into custody for your present stay) did you ever do any of the following? You may choose more than one answer.

- Win an award.....1
- Participate in sports or clubs.....2
- Get good grades3
- Skip classes.....4
- Repeat a grade5
- Get suspended6
- Get expelled.....7
- None of the above8

GE0010. Since coming to this facility, † have you been attending school?

- Yes..... 1
- No 2 (GO TO GE0025)

GE0020. What grade are you in? Touch the screen to enter the number of the grade.

GE0025 What was the last grade you were in? Touch the screen to enter the number of the grade. _____ (GO TO BOX G1)

GE0060. Has an expert, such as a doctor or a school counselor, ever told you that you have a learning disability?

- Yes..... 1
- No 2

Next, we'd like to ask you about when you were living with your family or in another household. These questions are about grown-ups who take care of you, like parents, babysitters, adults who live with you or others who watch you.

JE0430. When you were living with your family or in another household, did a grown-up in your life hit, beat, kick, or physically abuse you in any way?*

- Yes..... 1
 No 2 (GO TO JE0480)

JE0480. While you were living with your family or in another household did you ever get scared or feel really bad because grown-ups called you names, said mean things to you, or said they didn't want you?

- Yes..... 1
 No 2 (GO TO JE0510)

JE0510. While you were living with your family or in another household did a grown-up ever touch your private parts when you didn't want them to, or make you touch their private parts?*

- Yes..... 1
 No..... 2 (GO TO JE0560)

JE0560. While you were living with your family or in another household did a grown-up ever force you to have sex?*

- Yes..... 1
 No 2 (GO TO Box J1)

KE0120. (Not counting the conviction that led to your stay here, how many other times/How many times) have you been convicted of (list of crimes from KE0110)?

- One time 1
 Two times 2
 Three times..... 3
 Four times..... 4
 Five or more times 5

KE0140. Not counting this time, how many times have you been put in a facility where you stayed overnight for getting into trouble with the law? Please select the number.

- One time 1
 Two times 2
 Three times..... 3
 Four times..... 4
 Five or more times 5

KE0150. Have you ever been put on probation?

- Yes..... 1
 No 2

End Screen (Display to ALL Youth): If anything in this interview has upset you, you can talk to a counselor by calling the 1-800 number on the consent form that will be given to you at the end of this interview. The facility has agreed that youth who participate in this interview will be granted a private telephone call with a counselor at your request. You won't have to give your name or the name of this facility when you call.