The Long-Term Consequences of Child Abuse and Neglect in Men

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The Graduate Center, City University of New York
THE LONG-TERM CONSEQUENCES OF CHILD ABUSE AND NEGLECT IN MEN

by

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THE CITY UNIVERSITY OF NEW YORK
ABSTRACT
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Advisor: Distinguished Professor Cathy Spatz Widom, Ph.D.

Research indicates that the annual incidence of child maltreatment is around 10% and that more than one-quarter of children have, at least indirectly, experienced some form of violence. Prospective studies find that in high-income countries, like the United States, there are moderate correlations between childhood maltreatment and low educational achievement, low skilled employment, depression, suicide attempts, and alcohol problems, as well as strong correlations with obesity, behavior problems in childhood and adolescence, and criminal behavior. Despite the high costs of child abuse and neglect—both direct and indirect—and decades of research and public health, justice, and social service investment in prevention and intervention, child maltreatment persists and affects large numbers of children each year.

While there is an established body of research examining the causes and long-term consequences of childhood abuse and neglect, there remains a gap in understanding the unique consequences of childhood abuse and neglect for boys and men. This gap is surprising given that the base rates of specific behaviors and outcomes are known to differ in men and women. Even the most basic outcome variables that might be of interest in considering the long-term consequences of child abuse and neglect—e.g., alcohol and drug use and abuse, criminal activity, psychopathology, Post-Traumatic Stress Disorder (PTSD), obesity, physical health outcomes, and cognitive function—are known to have different base rates in men and women. Despite this, the causes of observed sex differences, particularly in psychopathology, are poorly understood.
The current study investigates the long-term consequences of child abuse and neglect in men. In particular, the study examines outcomes in the following domains: mental health and internalizing and externalizing psychopathology; criminal arrest; romantic, platonic, and sexual relationships; self-esteem; locus of control; and educational achievement. A review of empirical findings on the male gender role and long-term consequences of child abuse and neglect specifically in men and boys is followed by testing several hypotheses related to the potential interaction between child abuse and neglect outcomes and male sex. The analysis uses data from Widom’s specialized cohort design study in which abused and neglected children were matched with non-abused and non-neglected children and followed prospectively into adulthood. The study examines the men from the follow-up sample of individuals interviewed from 1989 through 1995 (N = 614). The overall sample included 338 men in the abuse and neglect group matched with 276 controls. The mean age of the men is 29 years.

Key findings indicate that men with a history of abuse and neglect have at least as great a risk in young adulthood for internalizing behavior as externalizing behavior, are at increased risk for poor educational attainment, have lower self-esteem, and report lower satisfaction with romantic relationships. The findings are reported by group (abuse and neglect versus control) and by type of abuse and neglect, which is a significant predictor for some outcomes. Implications of the findings are discussed and future directions identified.

*Keywords:* child abuse and neglect, consequences, male, gender, masculinity
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solely those of the author and do not necessarily represent the position of the United States Department of Justice or any other funding agency, the City University of New York, the dissertation Committee, or Dr. Widom.

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The Long Term Consequences of Child Abuse and Neglect in Men

Child maltreatment is defined by the United States Centers for Disease Control and Prevention (CDC) as acts of commission (child abuse) and omission (child neglect) “by a parent or other caregiver that results in harm, potential for harm, or threat of harm to a child” (Leeb, Paulozzi, Melanson, Simon, & Arias, 2008, p. 11).\(^1\) One study using a nationally representative sample reported that the annual incidence of maltreatment in children 17 years old and younger was 10.2%, about 1 in 16 children in the study had experienced a sexual victimization, and more than one-quarter had indirectly experienced some form of violence (Finkelhor, Turner, Ormrod, & Hamby, 2009). The CDC has estimated that the annual financial cost of confirmed cases of child abuse—physical, sexual, and psychological—is $124 billion (CDC, 2012; Fang, Brown, Florence, & Mercy, 2012). Prospective studies find that in high-income countries, like the United States, there are moderate correlations between childhood maltreatment and low educational achievement, low skilled employment, depression, suicide attempts, and alcohol problems, as well as strong correlations with obesity, behavior problems in childhood and adolescence, and criminal behavior (Gilbert, Widom, Browne, Fergusson, Webb, & Janson, 2009). Despite the high costs of child abuse and neglect—both direct and indirect—and decades of research and public health, justice, and social service investment in prevention and intervention, child maltreatment persists and affects large numbers of children each year.

The most recent report available from the U.S. Department of Health and Human Services indicates that reports of child abuse and neglect were evenly distributed between boys (48.9%) and girls (50.6%), with girls having a slightly higher incidence (9.8 per 1,000) than boys (9.0 per 1,000) (Children's Bureau, 2015). Despite this distribution, the vast majority of studies

\(^1\) The CDC defines anyone under 18 years old at the time of maltreatment as a child (Leeb, Paulozzi, Melanson, Simon, & Arias, 2008).
of the long-term consequences of abuse and neglect focus on females, and those that include males rarely test for sex interactions or report relative effect sizes across sex (Thompson, Kingree, & Desai, 2004).

More than 20 years ago, the National Research Council’s Panel on Child Abuse and Neglect called for study of potential unique impacts of abuse and neglect on boys (National Research Council, 1993). Despite this call, and an implicit restatement of the ongoing need in the most recent version of that report (Petersen, Joseph, & Feit, 2014), little research focusing on the unique consequences of abuse and neglect for boys has been published. While sex is routinely controlled-for in empirical studies of the consequences of child abuse and neglect, there has been no comprehensive assessment of the consequences of child abuse and neglect for men across multiple domains of functioning.

This gap in the literature is surprising given that the base rates of specific behaviors and outcomes are known to differ in men and women. Even the most basic outcome variables that might be of interest in considering the long-term consequences of child abuse and neglect—e.g., alcohol and drug use and abuse, criminal activity, psychopathology, Post-Traumatic Stress Disorder (PTSD), obesity, physical health outcomes, and cognitive function—are known to have different base rates in men and women. Despite this, the causes of sex differences, particularly in psychopathology, are poorly understood (Zahn-Waxler, Shirmcliff, & Marceau, 2008). Questions of whether neglect versus sexual abuse versus physical abuse and combinations of the three types of abuse and neglect impact boys in unique ways are also unanswered and largely uninvestigated in the existing literature. Outcomes that are observed to differ between boys and men who are statistically similar, raise the fundamental question of what the risks and protective factors are for boys who experience childhood maltreatment. Both a theoretical model for understanding how being male influences the long-term consequences of abuse and neglect and
empirical studies investigating the interaction are necessary components of the broader study of child abuse and neglect, particularly if the ultimate goal is to identify the mechanisms responsible for men with similar maltreatment histories having different outcomes.

For decades, feminist and race theory critiques of both psychology and medicine have rightly pointed out that research pools are frequently disproportionately composed of straight, white men, and that findings from white male research subjects are frequently uncritically generalized as representative of all human experience (McHugh, Koeske, & Frieze, 1986; Mohiuddin & Hilleman, 1993). While it is critical to acknowledge and take steps to eliminate the bias that results from an overrepresentation of straight, white men in psychological and medical research samples, a distinction must be drawn between treating males as the normal reference group in research settings—which is the legitimate critique leveled at research samples meant to produce generalizable findings—and research examining the biological, psychological, and social factors that uniquely impact men. Research focusing on men (themselves, not as a referent “normal”) is important, for the same reasons Levant (1996) argued two decades ago: because men are disproportionately represented among “substance abusers; the homeless; perpetrators of family and interpersonal violence; parents estranged from their children; sex addicts and sex offenders; victims of homicide, suicide, and fatal automobile accidents; and victims of life-style and stress-related fatal illnesses” (p. 259). These facts remain true 20 years later. Men are more likely to have used illicit drugs in their lifetime, in the past year, and in the past month (Center for Behavioral Health Statistics and Quality, 2015); more likely to be homeless (U.S. Conference of Mayors, 2007); much more likely to die in a motor vehicle crash (Insurance Institute for Highway Safety, 2014); more likely to be in prison (U.S. Bureau of Prisons, 2016); and more likely to die from life-style and stress-related fatal illness (National Center for Health Statistics & Centers for Disease Control and Prevention, 2015). Given that
child abuse and neglect is associated with many of the same adverse outcomes (Gilbert, Widom, Browne, Fergusson, Webb, & Janson, 2009), understanding the long-term consequences for abused and neglected men is a key step in developing primary, secondary, and tertiary interventions to effectively ameliorate such social and individual outcomes.

The current study addresses part of the gap in the research literature by investigating some of the long-term consequences of child abuse and neglect in men. In particular, the study examines outcomes in the following domains: mental health and internalizing and externalizing behaviors, criminal arrest, romantic and platonic relationships, self-esteem, locus of control, and educational achievement.

Literature Review

The Importance of Context in Child Abuse and Neglect Research

Context is important in the study of child abuse and neglect because the perception of the child, parents, family, and society about whether a certain behavior is abusive or neglectful can influence what constitutes child abuse and neglect from the perspective of the child and society. Parke and Collmer’s (1971) definition of child abuse is explicitly culturally relative. They define it as “non-accidental physical injury (or injuries) that are the result of acts (or omissions) on the part of parents or guardians that violate the community standards concerning the treatment of children” (Parke & Collmer, 1975, p. 513). Another culturally relative definition of child maltreatment is defined as “acts of omission or commission by a parent or guardian that are judged by a mixture of community values and professional expertise to be inappropriate and damaging” (Garbarino & Garbarino, 1980, p. 8). Gill (1970) also offers a relative definition that focuses on the intent underlying the behavior toward the child: physical abuse is “the intentional, non-accidental use of physical force, or intentional non-accidental acts of omission, on the part of a parent or caretaker interacting with a child in his care, aimed at hurting, injuring,
or destroying that child” (Gill, 1971, p. 638).

Theoretical models conceptualizing the long-term consequences of child abuse and neglect recognize the importance of a child’s contextual niche. For example, transactional-bioecological models describe a developmental trajectory that is contextualized by the child’s individual traits, in the context of his or her family, which in turn, is influenced by being part of the community (Lynch & Cicchetti, 1998). Such theories conceptualize a child’s development as embedded in layers of individual, family, and community contexts, each of which influences and interacts with behavioral and physiological outcomes, including cognitive and intellectual, social and behavioral, psychological and emotional, and physical and neurological outcomes. Importantly such models recognize that, while related, the individual, family, and community are not coextensive domains (Widom, 2014). Different theoretical approaches also recognize the impact of individual and social factors on long-term outcomes for children. For example, the stress process model proposes that social factors (gender, social class, marital status, age, etc.) in childhood are related to long-term physical and mental health outcomes, as mediated by the conditional effects of life events, chronic stress, social support, self-esteem, and coping skills (Pearlin, Menaghan, Lieberman, & Mullan, 1981; Wheaton, 2010). Similarly, the biopsychosocial model (BPS) (Engel, 1977; Grinker, 1994) posits that an individual’s biological and psychological genotype and phenotypes interact with each other and with social factors to influence how individuals adaptively respond to stress. While each of these models has its relative strengths, what each of them has in common is the recognition that an individual’s social context interacts with individual experience and biology to influence development throughout the lifecycle.

The complexity of the developmental context of children presents a challenge for researchers interested in understanding the impacts of events on a child’s developmental
outcomes. If child abuse and neglect is, at least to a point, a heterogeneous and contextually bound construct (Garbarino & Garbarino, 1980; Gill, 1971; Parke & Collmer, 1975; Lynch & Cicchetti, 1998), then researchers must make a decision—either explicitly or implicitly—about what contextual variables will be accounted for in their studies of the consequences of child abuse and neglect. Some have argued that children should only be studied by reference to their developmental niche (Fuller & García Coll, 2010; Worthman, 2010; Yamagishi, 2011). A developmental niche, similar to a biological niche in evolutionary biology terms, is made up of three components: social and physical context, cultural child rearing and educational practices, and the psychological characteristics of caregivers (Bugental & Johnston, 2000; Harkness, et al., 2007). Within any niche, caregivers, child, and those with whom the child and caregivers interact will operate with an ethnotheory, that is, a scheme of ideas and beliefs developed to explain the world around them (Lau, 2010; Tucker, 2007). Even those who argue that the psychological differences between males and females are minimal (Hyde, 2005), recognize that there are variables that show meaningful differences between males and females. Zell, Krizan, and Teeter (2015) recently examined the average absolute differences between males and females in 106 previously published meta-analyses and found that across a broad range of outcomes, sex difference effect sizes were quite small. Despite the small sex differences in the aggregate, however, there were certain domains in which the effects were significantly larger. Similarly, there are robust empirical findings of gender differences in rates of specific mental illnesses, but not overall rates of mental illness (e.g., Kessler, 2003; Thoits, 2010). These findings strongly suggest that there are some instances in which sex differences play a meaningful role in individual behavior and functioning.

If an individual’s gender role is always a key variable in his behavior (Brannon, 1976; Smiler, 2004), then understanding male gender identity is key to understanding the mechanism(s)
underlying the observed developmental outcomes unique to men. While the developmental niche and ethnotheory of males, specifically, may not make a difference in overall outcomes for men in the context of childhood abuse and neglect, it may well be relevant to understanding why some specific types of outcomes for men are associated with childhood abuse and neglect.

Development of the Male Gender Role

Masculine gender role norms have been broadly conceptualized in two ways: one approach treats masculinity as a constellation of traits which are acquired and manifested by men, and the other approach characterizes masculinity as a normative standard that is specific to a region, culture, time, and/or group (Thompson & Bennett, 2015). Thompson and Bennett (2015) summarize the former conceptualization as a masculine ideology emerging from social, regional, ethnic, and group standards of manhood and the latter as masculinity beliefs that are the norms that individuals have internalized as a model of manhood. Recognizing both constructions is important because the construct of masculinity is often indexed to the dominate culture, which in the United States means that masculinity norms are the norms of white, middle-upper class heterosexual men (Mahalik, et al., 2003). While the construct of masculinity is stable across many contexts, times, and places (e.g., men are providers, men are self-reliant, big boys don’t cry) (Gilmore, 1990; McCrae, Terracciano, & Project, 2005), it is not absolutely universal in all respects. For example, race can contextualize masculinity and vice versa. Lazur and Majors (1995) highlighted the manifestations of masculinity specific to African-American men (“cool pose” actions and attitudes), Latino men (machismo), Native-American men (maintaining a connection to traditions and elders), and Asian-American men (forgoing personal autonomy for the benefit of family). Here, for practical reasons, the male gender role is treated, essentially, monolithically. The reader is cautioned, however, that there is every reason to believe that in reality the context in which boys’ masculinity develops differs in meaningful ways. Gay,
bisexual, transgender, genderqueer, individuals with XY chromosomes, and men of color are likely to have highly specific contextual factors that influence their gender role development (Adams, 2007; Roberts, Rosario, Slopen, Calzo, & Austin, 2013).

Whatever a boy’s developmental niche, however, his own internal representation of masculinity is based upon both self-concept and social and sociocultural influences (Smiler, 2004). While there is individual and social variation, self-conceptualization of maleness is bounded by a handful of core beliefs about what masculinity is (Mahalik, et al., 2003). One empirically validated measure of core male gender role traits and beliefs, the Conformity to Masculine Norms Inventory (CMNI; Mahalik, et al., 2003), identifies 11 factors associated with the masculine gender role: winning, emotional control, risk-taking, violence, dominance, playboy (i.e., multiple romantic partners), self-reliance, primacy of work, power over women, disdain for homosexuals, and pursuit of (high) status. Another core requirement of masculinity—perhaps the umbrella requirement—is that “masculinity is the opposite of femininity” (Smiler, 2004, p. 24). This has been referred to as the antifemininity mandate of manliness (Smiler, 2004; Vandello & Bosson, 2013).

While certain traits may be associated with masculinity by society and in individual self-conceptualization, manifesting all or some of those traits is not necessarily sufficient for one to “be a man.” One of the key findings from gender research over the past several decades is that male identity is neither the sole result of biological determinism nor a social construct into which one is automatically placed, but a social status that can be achieved, threatened, and lost (Vandello & Bosson, 2013). The construct of manhood as a social status has been observed across cultures (Gilmore, 1990; McCrae, Terracciano, & Project, 2005), and experimental research supports the notion that rather than being ascribed on the basis of biology, manhood must be earned (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008).
The Importance of Being a Man

Like any social status, manliness can be threatened. Pleck (1995) highlights the importance of the subjective value an individual man places on adherence to cultural norms of male behavior in defining his own individual sense of manliness. Experimental evidence supports the notion that the interaction between cultural norms and individual identity is key for men, showing that males are attentive to threats to their subjective sense of masculinity and actively seek to counter such threats when they are perceived to call into question their masculine status (Vandello & Bosson, 2013). In one series of experiments, for example, Bosson, Prewitt-Freilino, and Taylor (2005) found that heterosexual men who were asked to visualize themselves participating in stereotypically feminine activities (e.g., dancing in a ballet class) reported self-conscious discomfort and a belief that, had they been seen participating in the activity, they would be misclassified by others as gay (Bosson, Prewitt-Freilino, & Taylor, 2005). In a follow-up study, heterosexual men were asked to rate their self-conscious discomfort while they were actually participating in a hairstyling activity (operationalizing a stereotypically feminine behavior) across three conditions. Men who had made a public disclaimer attesting to their heterosexuality before undertaking the activity reported less discomfort than those who made a private disclaimer, who in turn reported less discomfort than those who had no opportunity to give any disclaimer asserting their heterosexuality (Bosson, Prewitt-Freilino, & Taylor, 2005).

Child abuse and neglect may interact with and compound negative effects that follow when men fail to conform to gender role norms. In one longitudinal study, boys in the top decile of childhood gender nonconformity showed 0.34 standard deviations more depressive symptoms at ages 12-30 years (Roberts, Rosario, Slopen, Calzo, & Austin, 2013). A history of abuse and being bullied explained about one-half the observed increase, while bullying and childhood
abuse, taken separately, each accounted for one-third the increase in depressive symptoms for those who were gender nonconforming in their youth.

Reports of self-conscious discomfort for men who engage in gender nonconforming behavior might be explained, in part, by findings that men who violate core masculinity norms are subjected to social condemnation (Pleck, 1981) and the finding that when men perceive that they are not “liv[ing] up to their own perceptions of the ‘ideal male[,]’ they suffer self-devaluation and poor personal adjustment” (Eisler & Skidmore, 1987, p. 124). Eisler and Skidmore (1987) proposed that “masculine gender role stress” resulted when men perceived specific situations as causing stress because “they judge themselves unable to cope with the imperatives of the male role or when a situation is viewed as requiring ‘unmanly’ or feminine behavior” (pp. 124-125). The implications of the imperative to pursue and maintain manliness are discussed in the next section.

Implications of Male Gender Role Striving

Striving for the status conferred by achieving the masculine ideal is not free from consequences. Indeed, “many of the characteristics viewed as desirable in men can have negative side effects on the men themselves and on those close to them” (Levant, 1996, p. 261). That 20-year-old observation was not then novel. In the 1950’s, Hacker (1957) described the burdens of masculinity, including the sex role imperatives of attaining professional success, being a good provider, achieving prestige, being a good lover, and being a good father.

Informed by Hacker’s (1957) analysis, Pleck (1981, 1995) argued that the strains that result from meeting gender role expectations could be grouped into three types, all of which can have negative consequences for a man’s adaptive functioning. Discrepancy-strain occurs when a man cannot live up to his own expectations of masculinity. This type of strain has been associated with adverse impacts in men’s relationships. Specifically, men’s ratings of their romantic
relationship satisfaction are found to be negatively correlated with their ratings of their adherence to traditional masculine norms (Burn & Ward, 2005). This was also true for women in the study who rated themselves to have high compliance with masculine norms. This finding would suggest that men face something of a paradox inasmuch as adhering to the traditional masculine gender role requires men to be good lovers, husbands, and fathers, and yet adherence to the masculine gender role adversely impacts their relationship satisfaction and that of their heterosexual partners. The finding that women rated high in masculine traits also show this trend suggests that masculine social norms, rather than biology, drive the downward pressure on relationship satisfaction.

The second type of strain identified by Pleck (1981, 1995) is male gender role trauma. Male gender role trauma results from both the male gender role socialization process (e.g., primary school taunts of “faggot” and other bullying behavior meted out in retribution for the display of any feminine behavior by a boy) and the trauma associated with the necessity of renouncing emotional experience in order to reach the masculine ideal (1981, 1995). The final type of strain is male gender role dysfunction. This type encapsulates the strain occasioned by the mandates of masculinity that are dysfunctional and lead to negative outcomes for men and others (Pleck, 1981, 1995). The next section moves from the general theoretical strains associated with male gender role development to examine the impacts on male development in the context of a specific strain: childhood abuse and neglect.

Internalizing and Externalizing Behavior in Men with a History of Childhood Abuse and Neglect

Historically, pathological behavior has been broadly categorized using two factors: internalizing (mood and anxiety disorders) and externalizing (antisocial and substance use disorders) (Martel, 2013). In the popular construction, men more often express externalizing behavioral pathologies and women more often express internalizing pathologies. More than 20
years ago, Downey, Feldman, Khuri, and Friedman (1994) proposed that the consequences of child abuse may parallel gender differences in psychopathology, with maltreated boys being more likely to externalize and become perpetrators of violence than their male peers who did not experience childhood abuse and maltreated girls more likely to internalize and become depressed and anxious than their peers.

Mood and anxiety disorders. One traditional measure of internalizing behavior is mood and anxiety disorders. Child abuse and neglect has been identified as increasing the risk of Major Depressive Disorder (MDD) (Widom, DuMont, & Czaja, 2007). In a study specifically examining whether gender moderates risk for MDD as a long-term consequence of abuse and neglect, Arnow and colleagues (2011) studied the self-report data of 5,673 adult HMO patients, and found that being female was associated with increased odds of current MDD, but there was no evidence of a gender × self-reported abuse and neglect interaction in increasing the risk of depression (Arnow, Blasey, Hunkeler, Lee, & Hayward, 2011). Horwitz, Widom, McLaughlin, and White (2001) found that men with a history of childhood abuse and neglect had significantly higher rates of dysthymia than controls; however, differences by different types of abuse and neglect were not investigated in that study.

Some published literature theorizes that male victims of sexual abuse, in particular, will exhibit externalizing behavior, including sexual risk taking (Chandy, Blum, & Resnick, 1996). Despite this hypothesis, there is empirical evidence suggesting the opposite. For example, a study using a cross-sectional self-report survey design with a large sample (N=2,485; 1,369 boys) of students in school in South Australia (mean age=14 years) found that boys who reported a history of sexual abuse were significantly more likely to report suicidal ideation, suicide attempts and self-harming behavior than those who did not report childhood sexual abuse, when controlling for self-reported current depression, hopelessness, and environmental
variables (Martin, Bergen, Richardson, Roeger, & Allison, 2004). Dube and colleagues (2005) found that men reporting sexual abuse were at double the odds of reporting a suicide attempt, as compared to controls. Interestingly, men in the study reported that 40% of their abusers were women, and when the gender of the perpetrator was analyzed, outcomes for male victims of sexual abuse did not appear to vary to a large degree, except with respect to reporting suicide attempts. The adjusted odds ratio of a male victim of a female abuser reporting a suicide attempt over controls was 1.3, while it was 2.6 for abuse by a male perpetrator (Dube, et al., 2005). This finding would seem consistent with the hypothesis that the gender context of abuse and neglect is a key consideration.

Substance abuse. Substance abuse is a traditional indicator of externalizing behavior. Child abuse and neglect has been associated with increased risk of arrest for alcohol and/or drug related offenses (Chandy, Blum, & Resnick, 1996; Ireland & Widom, 1994), and there are a number of studies finding that abuse and neglect is associated with alcohol and drug use and abuse throughout adolescence and adulthood (Enoch, 2011). There is a significant sex difference in the findings, however, with studies of alcohol and drug use following abuse and neglect most consistently and robustly associated with substance abuse in women, but with overall equivocal findings with respect to men. In one study, men in the abuse and neglect group were not found to be at increased risk for alcohol abuse as compared to controls at average age 29 (Widom, Ireland, & Glynn, 1995) or average age 40 (Widom, Marmorstein, & White, 2006; Widom, White, Czaja, & Marmorstein, 2007). Child maltreatment is, however, associated with higher rates of adult arrest for alcohol and/or drug-related offenses for men (Ireland & Widom, 1994).

Specifically with respect to sexual abuse, a number of studies have found that men who reported childhood sexual abuse were significantly more likely to be chemically dependent versus a community sample (Rohsenow, Corbett, & Devine, 1988). MacMillan and colleagues
(2001) also found that men who reported physical abuse in childhood did not have higher rates of
drug use or abuse compared to men who did not report physical abuse, but did find that men who
reported a history of sexual abuse are at increased risk for alcohol problems and drug use (Dube,
et al., 2005).

Antisocial behavior. A twin study by Ficks, Dong, and Waldman (2014) examined
potential sex differences in the development of psychopathic traits in youth. They found no sex
differences across three traits thought to underlie the psychopathy construct—impulsivity,
narcissism, and callous-unemotionality—and concluded that the genetic and environmental
contributions to psychopathic traits were the same in males and females. They did, however,
find significantly greater variance in impulsive traits in boys resulting from “nonshared
environmental influences” (Ficks, Dong, & Waldman, 2014). Unanswered is the question of
what in the environment (or, presumably, what in the interaction between the environment,
genome, and psychology) of boys leads to the development of impulsive traits. Other research
has found that a history of childhood abuse and neglect significantly increased the risk of
meeting criteria for psychopathy (Weiler & Widom, 1996) and antisocial personality disorder
(ASPD; Widom, 1998). Findings further suggest that childhood physical abuse is associated
with reactive aggression in violent offenders, with and without psychopathic traits (Kolla,

One of the earliest and most consistent findings from Widom’s research is that while
males in the sample have significantly higher rates of juvenile offending, adult criminality, and
violent criminal behavior than females, men in the abuse and neglect condition are not
statistically more likely to have a documented crime of violence than controls. This appears
unique to men in the sample, as women in the abuse and neglect group have a significantly
increased chance of having an adult record of violence compared to women with no history of
abuse or neglect (Widom, 1989a; Widom & Maxfield, 2001). With respect to arrest for any non-traffic offense as an adult or juvenile in the Widom sample at average age of 32.5, the size of the abuse and neglect effect in men (Adjusted Odds Ratio (AOR)= 1.35) was smaller than for women (AOR= 2.13) (Maxfield & Widom, 1996). These findings do not suggest that there was no impact of abuse and neglect in the male sample. Indeed, the men in the abuse and neglect group, while not more likely to have an arrest for violent crime overall, had a significantly greater number of violent offenses, when they had any, compared to controls without an abuse or neglect history (Maxfield & Widom, 1996). For men in the Widom sample at an average follow-up age of 32.5, those with histories of abuse and neglect, while not showing an increased risk for arrest for a crime of violence or alcohol problems, did show significantly increased risk for being arrested for property offenses, offenses against public order, and drug offenses (Widom & Maxfield, 2001).

Other prospective studies have yielded similar findings with respect to the risk of abuse and neglect associated with future criminal activity for men. In the Chicago Longitudinal Study, which included 1,539 children from low income families, Mersky and Topitzes (2010) found that boys were more likely to self-report having an arrest and documented incarceration (for any offense) than females at follow-up age of 24 years, and participants with a history of any type of childhood maltreatment were significantly more likely to have a history of incarceration (for any offense) than those without.

The Cambridge Study in Delinquent Development has studied 411 males from a working-class neighborhood in London born in the same year. Among other findings, boys in the study who were neglected were found to have significantly higher teacher-rated problems in behavior, lack of interest in school, and poor school attendance, as well as low verbal and non-verbal IQ, compared to the non-neglected boys (Kazemian, Widom, & Farrington, 2011).
Further findings showed that the odds of a neglected boy having a criminal conviction in adolescence were 4.35 times than that of non-neglected boys ($p<0.01$), although there was evidence to suggest that other types of abuse associated with neglect interacted with the increase in risk (Kazemian, Widom, & Farrington, 2011). While abuse and neglect in general, and physical abuse in particular, have been associated with an increase in the likelihood of arrest for sex crimes, sexual abuse does not appear to increase the risk (Widom & Ames, 1994; Widom & Massey, 2015).

Educational Achievement in Men with a History of Childhood Abuse and Neglect

About 78% of men in the United States who entered a public high school in the 2011-2012 school year (the most recent data available) graduated with a degree in four years (Stetser & Stillwell, 2014). The four-year, on-time graduation rate for boys is substantially lower in some jurisdictions, Nevada being the lowest at 55% (Stetser & Stillwell, 2014). While the known impacts of child abuse and neglect are sufficiently broad that they could be expected to extend to educational settings, research examining the relationship between childhood maltreatment and educational outcomes is rare. A recent review of literature published on the subject between 1990 and 2013 found just 16 empirical articles and four research syntheses that had outcome variables related to educational achievement (Romano, Babchishin, Marquis, & Fréchette, 2015). In general, the review found that a history of maltreatment most affected educational achievement for boys and adolescents; was most strongly associated with a history of neglect, as distinct from physical abuse; and was characterized by impairments in academic performance that included lower grade point averages and higher rates of being held back (Romano, Babchishin, Marquis, & Fréchette, 2015). Research in New Zealand suggests that childhood physical and sexual abuse are associated with failing to graduate from high school, attend college, and obtain a college degree, but that controlling for social, family, and individual
context fully mediated the relationship between physical and sexual abuse and educational outcomes (Boden, Horwood, & Fergusson, 2007). This leaves open the question of what educational outcome differences one might detect in a study that controls for those factors prospectively. While these findings suggest that there is a relationship between childhood abuse and neglect and lower education achievement, there is little explanation for why abused and neglected boys do worse academically. General disruption of the boy’s environment, including school, seems to be important. Beyond that, research has suggested that school age children with a history of physical abuse are judged by peers to be more aggressive and less cooperative, and they also have lower social status with peers (Salzinger, Feldman, Hammer, & Rosario, 1993). This may suggest that maltreated boys find school, in particular, to be a more hostile environment than their peers.

There is a direct relationship between educational achievement and individual success in the labor market. The Organisation for Economic Co-operation and Development (OECD) reports that on average among OECD countries, over 80% of the population with tertiary education is employed (OECD, 2014). The OECD average falls to over 70% for people with upper secondary or post-secondary non-tertiary education and to less than 60% for those without an upper secondary education. (OECD, 2014). In the US, educational achievement is tied to employment and earning power in the labor market, and it is causally associated with adaptability to change in the labor market and transition back into the labor force from a period of unemployment (Riddell & Song, 2011). For men in particular in the United States, those with higher levels of education have higher rates of employment at all ages 20-64 years (Kena, et al., 2015).

Vandello and Bosson (2013) identified increased anxiety and stress, risky and aggressive behavior, and an avoidance of situations and behaviors that might be seen to be unmanly as being
driven by men’s attempts to hold onto their precarious manhood. One of the anxiety provoking stressors they identified was the masculine mandate to be a good provider. Their research has found that men reported that they thought others saw them as “less of a man” if they had lost, or were to lose, their jobs (Michniewicz, Vandello, & Bosson, 2014). Childhood maltreatment may negatively impact boys’ academic achievement, which can, in turn, negatively impact their success in the labor market, which can, in turn, negatively impact their self-perceived masculinity.

Relationships in Men with a History of Childhood Abuse and Neglect

Masculinity is also an important consideration for its role in platonic and romantic relationships for men. Boys, in general, have a larger number of friends and foster friendship through shared activities, while girls average a smaller number of friends and maintain those relationships through self-disclosure (Maccoby, 2002). Again, the sex of those interacting with men, even in platonic relationships, is an important issue for men, and the role of masculine gender norms in men’s relationships can manifest in unexpected ways. One example that highlights how omnipresent male gender norms are in influencing the nature and consequences of men’s relationships can be seen in an experimental study that found that men who are a subordinate of a female boss in a masculine domain lose social status. They are paid less than men who work for a gender-role conforming supervisor, suggesting that, “at least for male professionals, high status demands masculinity, and vice versa” (Brescoll, Uhlmann, Moss-Racusin, & Sarnell, 2012, p. 357). These findings related to a relationship over which a man has little control suggest that men may face unique challenges in relationships more generally.

Turning back to the potential interaction between the male context and child abuse and neglect, maltreated children are known to show deficits in emotional processing, resulting in
difficulties in understanding, recognizing, and expressing emotion that persist into adulthood (Young & Widom, 2014). Such deficits, coupled with the masculine gender norms of not showing emotion, alexithymia, and being in control, particularly with respect to women, would reasonably be expected to lead to difficulties in succeeding in interpersonal relationships. Specific consequences of childhood maltreatment can compound these difficulties. For example, Widom, Czaja, and Paris (2009) found that childhood abuse and neglect is associated with increased likelihood of meeting criteria for Borderline Personality Disorder (BPD) in men. This has important implications for their relationships, as BPD is characterized by unstable interpersonal relationships, unstable sense of self, and difficulty with emotion regulation (American Psychiatric Association, 2013). For males with histories of childhood physical abuse, the odds of meeting criteria for BPD were 4.01, compared to controls ($p \leq .01$) (Widom, Czaja, & Paris, 2009).

There is also evidence to suggest that child abuse and neglect impacts romantic and sexual relationships. In one study, at average follow-up age of 41 years, individuals with a history of abuse and neglect were more likely to report early sexual contact (OR = 1.75) and to have been involved in prostitution (OR=2.35) than their peers who did not have a history of childhood maltreatment. Men in the study were significantly more likely to report early sexual contact and nearly twice the odds, versus controls, of having engaged in sex in exchange for money or having a record for a prostitution offence (OR=1.92, $p \leq 0.05$) (Wilson & Widom, 2009).

Another consideration is how those with whom a maltreated boy interacts affect the long-term outcomes for that boy, and relationship quality may impact how boys respond to the experience of childhood abuse and neglect. Perceived social support from both family and friends has been seen to predict fewer trauma symptoms in individuals who report sexual abuse,
emotional abuse, emotional neglect, and physical neglect types of maltreatment for men (Evans, Steel, & DiLillo, 2013). One additional finding highlights how social expectations about men can impact interactions in familial settings. A study of removal of children by a social service agency in cases of abuse and neglect found that men who physically abuse and neglect children are significantly less likely to have their children removed than women who commit the same offenses (Crawford & Bradley, 2016). Beyond punctuating the fact that men’s familial relationships are contextually unique, this finding raises the question of what the boys of abusive fathers in those cases are learning about society’s expectations of men as fathers and husbands.

Summary

Camille Paglia wrote that a “woman simply is, but a man must become. Masculinity is risky and elusive. It is achieved by a revolt from woman, and is confirmed only by other men” (Paglia, 1992, p. 82). The foregoing literature review seems to provide some empirical support for this characterization of masculinity. In summarizing the research, several themes emerge. First, beyond their biological sex, boys have no choice but to contend with (consciously or not) individual, familial, and community notions of masculinity that for any individual will be influenced by a mix of internalized self-identity and social construction. The development of a man’s identity as a man is bounded by certain traits of masculinity such as being a winner, being in control of emotions, taking risks, and pursuing power. To “be a man,” also requires contending with the antifemininity mandate. Experiences and behaviors that a male, himself, perceives to be unmanly, or thinks others will judge to be unmanly, can have adverse impacts on his self-esteem and self-perceived efficacy, as well as carrying the risk of social condemnation. There is good evidence to suggest that men are subject to social judgments and potentially adverse consequences related to their platonic, romantic, and familial relationships.
Second, evidence for the hypothesis that men manifest psychopathology specifically in externalizing ways and respond to childhood maltreatment by externalizing is dubious. This can be seen in the findings that while men do not seem to be at increased risk for Major Depression after childhood maltreatment, they may be at increased risk for lower level, though more persistent, depressed mood in the form of dysthymia. Evidence that men are not more likely to commit crimes of violence as the result of childhood maltreatment and evidence of increased risk of suicide for some types of abuse further call into question the externalizing hypothesis.

Third, it appears that there is an emerging body of evidence supporting the conclusion that boys generally, and boys who are maltreated specifically, are at increased risk for not completing a high school degree on time. They are also at risk of not going on to college and of not completing a college degree. Given the strong relationship between educational attainment and success in the labor market and the interaction between being able to be a provider and self-perceptions of masculinity, boys who do not succeed academically are at risk for a cascade of failure, socially and in terms of self-esteem.

Fourth, evidence suggesting that childhood physical abuse, specifically, is associated with 1) reactive aggression in violent offenders, with and without psychopathic traits; 2) that sexual abuse, specifically, is associated with suicidality; and 3) that poor educational achievement is most strongly associated with neglect highlight another theme. That is, the literature reveals that the type of abuse and/or neglect a boy experiences may play an important role in the long-term consequences of maltreatment.

Finally, boys, by virtue of being boys, are at increased risk for a host of adverse outcomes from homelessness to lifestyle and stress-related fatal illness and boys who experience childhood abuse and neglect are also at increased risk for a host of adverse long-term consequences across many domains from mental health to education to criminal offending. Despite the potential
compounding of risk for boys who are maltreated, there is no coherent body of research empirically describing the unique response to childhood abuse and neglect in men.

The Current Study

Purpose

The purpose of the current study is to investigate long-term consequences of child abuse and neglect in men. In particular, the study examines outcomes in the following domains: mental health and internalizing and externalizing behaviors, criminal arrest, romantic and platonic relationships, self-esteem, locus of control, and educational achievement.

Hypotheses

Based on the literature reviewed and theoretical considerations, this study tests these hypotheses:

*Hypothesis 1:* Males with documented histories of child abuse and/or neglect are at increased risk for externalizing behaviors (e.g., violent offending, early sexual experiences, Antisocial Personality Disorder (ASPD) diagnosis, drug and alcohol abuse diagnosis), but not at higher risk for diagnoses reflecting internalizing disorders (e.g., Dysthymia, Major Depressive Disorder, and Generalized Anxiety Disorder) compared to matched controls.

*Hypothesis 2:* Although prior literature is not consistent with respect to the consequences of child abuse and neglect for men in terms of alcohol and/or drug problems, it is hypothesized here that males with documented histories of child abuse and/or neglect are at higher risk for meeting DSM diagnostic criteria for substance abuse/dependence.

*Hypothesis 3:* Males with documented histories of child abuse and/or neglect are at increased risk for poor educational outcomes, compared to matched controls.
Hypothesis 4: Males with documented histories of child abuse and/or neglect are at increased risk for poor outcomes on intimate and platonic relationship indicators, compared to matched controls.

Hypothesis 5: The consequences of child abuse and neglect in males will vary by the type of abuse and/or neglect. Specifically:

Hypothesis 5A: Male victims of sexual abuse are at increased risk for meeting diagnostic criteria for internalizing behavior compared to men without a history of sexual abuse.

Hypothesis 5B: Neglected males, specifically, are at increased risk for poor relationship outcomes, compared to matched control men.

Hypothesis 5C: Physically abused boys, specifically, are at increased risk for ASPD diagnosis and criminal arrest, compared to men without histories of physical abuse.

Methodology

Research Design and Data Collection

The current study represents secondary analyses of data collected by C. S. Widom. With Widom’s permission, the below description of the research design, subjects, and variables are adapted, in part, from previously published material. This prospective cohort design study includes a large group of children (ages 0-11 at the time of documented abuse and neglect, mean age = 6 years). Approximately half of the children have a history of substantiated abuse and neglect (N=908) based on court records and the other half are matched controls (N=667) (Widom, 1989a). From the start, the study was specifically designed to incorporate methodological rigor, including 1) an unambiguous operationalization of abuse and neglect; 2) a prospective design; 3) separate abused and neglected groups; 4) a large sample; 5) a control
group matched for age, sex, race, and social class; and 6) a follow-up beyond adolescence and into adulthood (Widom, 1989a). This research utilizes a specialized cohort design (Leventhal, 1982) in which abused and neglected children were matched with non-abused and non-neglected children and followed prospectively into adulthood.

The initial phase of the research was undertaken to examine the relationship between early childhood abuse and/or neglect and subsequent delinquent and violent criminal behavior by comparing official juvenile and adult criminal records for a large group of abused and neglected children and matched comparisons (see Widom, 1989b). Detailed information about the abuse or neglect incident and family composition and characteristics was obtained from the files of a juvenile court and probation department, the authority responsible for cases of abused, neglected or dependent, and delinquent children. Juvenile court and probation department records were also examined for the comparison subjects. Adult criminal histories for all subjects were compiled from searches conducted during 1987-1988 at three levels of law enforcement: local, state, and federal. Searches also extended to the Bureau of Motor Vehicles and marriage license records to find social security numbers to assist in tracing subjects through criminal records. In 1994, official criminal records (city, state, and federal law enforcement agencies) were again searched (Maxfield & Widom, 1996).

The prospective nature of the study helps to disentangle the effects of childhood victimization from other potential confounding effects. Because of the matching procedure, subjects are assumed to differ only in the risk factor: that is, having experienced court substantiated childhood neglect, sexual abuse, physical abuse, and/or some combination of the three. Since it is obviously not possible to randomly assign children to abuse conditions, the assumption of group equivalency is an approximation. The comparison group may also differ from the abused and neglected individuals on other variables nested with abuse or neglect. If the
control group included subjects who had been officially reported as abused, at some earlier or later time period, this would jeopardize the design of the study. Therefore, official records were checked and any proposed comparison group child who had an official record of abuse or neglect in their childhood was eliminated. In these cases ($n=11$), a second matched subject was assigned to the control group to replace the individual excluded.

Subjects

The rationale for identifying the abused and neglected group was that their cases were serious enough to come to the attention of the authorities. Only court substantiated cases of child abuse and neglect were included by Widom ($N=908$). Cases were drawn from the records of county juvenile and adult criminal courts in a metropolitan area in the Midwest during the years 1967 through 1971. To avoid potential problems with ambiguity in the direction of causality, and to ensure that temporal sequence was clear (that is, child abuse and neglect $\rightarrow$ subsequent outcomes), included abuse and neglect cases were restricted to those in which children were less than 12 years of age at the time of the abuse or neglect incident.

The nature of the abuse and neglect cases fell into three categories. *Physical abuse* cases included injuries such as bruises, welts, burns, abrasions, lacerations, wounds, cuts, bone and skull fractures, and other evidence of physical injury. *Sexual abuse* charges varied from felony sexual assault, fondling or touching, rape, sodomy, and incest. *Neglect* cases reflected a judgment that the parents' deficiencies in childcare were beyond those found acceptable by community and professional standards at the time. These cases represented extreme failure to provide adequate food, clothing, shelter, and medical attention to children.

A critical element of this design was the establishment of a comparison or control group, matched as closely as possible on the basis of sex, age, race, and approximate family socio-economic status during the original study period. To accomplish this matching, the sample of
abused and neglected cases was first divided into two groups on the basis of their age at the time of the abuse or neglect incident. Children who were under school age at the time of the abuse or neglect were matched with children of the same sex, race, date of birth (± 1 week), and hospital of birth through the use of county birth record information. Of the 319 abused and neglected children under school age, there were matches for 229 (72%). For children of school age, records of more than 100 elementary schools for the same time period were used to find matches with children of the same sex, race, date of birth (± 6 months), same class in same elementary school during the years 1967 through 1971, and home address, within a five-block radius of the abused or neglected child, when possible. Out of 589 school-age children, there were matches for 438, representing 74% of the group. Overall, there were 667 matches (73.7%) for the abused and neglected children.

Matching for social class is important because it is theoretically plausible that any relationship between child abuse or neglect and later outcomes is confounded or explained by social class differences. It is difficult to match exactly for social class because higher income families could live in lower social class neighborhoods and vice-versa. The matching procedure used here is based on a broad definition of social class that includes neighborhoods in which children were reared and schools they attended. Similar procedures, with neighborhood school matches, have been used in studies of people with schizophrenia (Watt, 1972) to match approximately for social class. In a more recent textbook, Shadish, Cook, and Campbell (2002) also recommend using neighborhood and hospital controls to match on variables-related outcomes, when random sampling is not possible. Busing was not in effect at the time of the matching, and students in elementary schools in the study jurisdiction were from small, socio-economically homogeneous neighborhoods.
The subjects in the original sample are 1,575 individuals [908 cases of abuse/neglect (697 neglect, 160 physical abuse, and 153 sexual abuse), and 667 matched controls]. About 20 years after the original sample was identified, follow up interviews were conducted with participants between 1989 and 1995. Of the original sample, 1292 were located and 1196 (76%) interviewed. The present study examines the men from the follow-up sample of individuals interviewed during the 1989-1995 data collection (N = 614). The overall sample included 338 subjects in the abuse and neglect group matched with 276 controls. The mean age of the men in the sample at the first interview was 28.86 years. The abuse and neglect group was further categorized into three types: neglect (n=286), physical abuse (n=63), and sexual abuse (n=20). The number of participants in each category exceeds the total number of abuse and neglect men because some had more than one type of court-substantiated abuse and neglect.

Measures and Variables

In testing each of the hypotheses, group (abuse and neglect versus control) is treated as a dichotomous independent variable (i.e., presence or absence of a documented history of abuse and neglect), with the control group being coded as zero. To test hypotheses that predict that outcomes might vary based upon the specific type of abuse and/or neglect (physical abuse, sexual abuse, and neglect), these are analyzed separately as independent variables (coded dichotomously, 0=absence; 1=presence), instead of being aggregated into one overall group labeled “child abuse and neglect.” Generally, use of the phrase “type of abuse” herein denotes an analysis in which type of abuse is used as the independent variable. All of the information reported here is based on information collected during the follow-up interviews conducted during 1989-1995 or official records of arrest through 1994.

The National Institute of Mental Health Diagnostic Interview Schedule revised (DIS-III-R; Robins, Helzer, Cottler, & Goldring, 1989), which corresponds to DSM-III-R diagnoses
(American Psychiatric Association, 1987), was used to assess lifetime and current diagnosis. The mean $\kappa$ value, as a measure of concordance between lay interviewers’ and psychiatrists’ diagnoses when using the DIS-III is 0.69, the mean sensitivity is 75%, and the mean specificity is 94% (Robins, Helzer, Croughan, & Ratcliff, 1981).

Internalizing/Externalizing behaviors. Computer-assisted scoring of the DIS-III-R indicated whether participants met criteria for a lifetime and/or current diagnosis of major depressive disorder (MDD), Dysthymia, or Generalized Anxiety Disorder (GAD), using the then-current DSM criteria. Externalizing was assessed through data on arrests for non-traffic offenses and current and lifetime DSM-III-R antisocial personality disorder (ASPD) and alcohol and drug dependence diagnoses from the DIS-III-R (see below for details).

In addition, a modified version of Rotter’s (1966) 29-item Internal-External Locus of Control Scale (LoCS) is used to assess self-perceived agency. The Likert-type LoCS assesses the extent to which one tends to view outcomes as resulting from factors within one’s control (an internal locus of control) or as resulting from external forces such as luck or chance (an external locus of control). The original scale has good predictive, discriminant, and internal validity (Rotter, 1966). For the men in the present sample, Cronbach’s $\alpha=0.63$ for the LoCS. There is some empirical evidence suggesting that in adolescent boys an internal locus of control, as measured by the LoCS, is associated with lower levels of aggression, while an external locus of control is positively associated with physical, verbal, and indirect aggression (Breet, Myburgh, & Poggenpoel, 2010).

Self-esteem is assessed using Rosenberg’s Self-Esteem Scale (RSES; 1979). The RSES (1979) is a widely used measure of global self-worth and is broadly considered to be a reliable and valid measure of self-esteem (Robins, Hendin, & Trzesniewski, 2001). For the men in the present sample, Cronbach’s $\alpha=0.83$ for the RSES.
Substance dependence/abuse. The DIS-III-R (Robins, Helzer, Cottler, & Goldring, 1989) was also used to gather information on alcohol and drug abuse/dependence diagnoses. Substance dependence and abuse were operationalized based upon computer-assisted scoring of the DIS-III-R indicating whether participants met criteria for a lifetime and current diagnosis of substance (alcohol and drug or alcohol or drug) dependence and/or abuse using the then-current DSM criteria. Substance use/abuse was treated as a variable associated with externalizing behavior.

Educational outcomes. Participants were asked to report their highest grade of school completed, college degrees (if any), attendance at technical, trade, or vocational schools, participation in apprenticeships, community college attendance, whether they had ever repeated a grade, and whether they had been held back more than once. The self-reported responses serve as variables for educational outcome analyses. Self-reported playing hooky and school suspension variables were used to ensure that outcomes were not different as a result of one group not being in school.

Relationship outcomes. Platonic relationship outcomes were operationalized through the following variables: whether the participant reported ever getting together with close friends, getting together with neighbors, or attending religious services; a self-report rating of social life satisfaction on a four point Likert-type scale; and whether a participant reported having had trouble with a boss at work in the past year. These variables were selected for their face validity.

For romantic relationship outcomes, the following variables were included: marital history, duration of cohabitation, current marital status (including currently divorced or separated), number of marriages, and whether the participant had ever been in an exclusive relationship. A mean score for nine romantic relationship questions (such as whether the man was able to depend on his partner and whether he wishes his partner paid more attention to him) was calculated and included in the analysis. Other romantic relationship variables, selected for
their face validity, included: total months married; current marital status; throwing things at a spouse; whether the participant reported having had sexual relations outside his marriage, reported ever having been monogamous for one or more years, or reported ever having walked out on his partner. Sexual relationship items, including age of first sex, sex with >3 people outside of marriage, and sex with ≥10 people in 1 year were also included in the analysis, the latter as an indicator of promiscuity. As described in more detail below, attempts to reduce these variables to create a higher order latent construct did not yield satisfactory statistical properties.

Control variables. Where appropriate, analyses controlled for age and race. The age of the subjects at the first follow-up interview was used as a control variable and race was dichotomized as White and non-White. The sample is 64% White, not of Hispanic origin and 33% Black, not of Hispanic origin. Two percent of the sample is Black of Hispanic origin. All Black participants were included in the non-White race category.

Analysis Procedures

All statistical analyses were conducted using IBM SPSS v.21 (IBM Corp., 2012). Principal component and confirmatory factor analyses (CFA) were used to attempt data reduction. Attempts to reduce a number of outcome variables (education, employment, platonic relationships, and romantic relationships) and create higher order latent constructs did not yield satisfactory psychometric properties, as Eigenvalues were generally <1, communalities tended to be <0.7, and/or residuals were >0.05. For example, it was thought that six components (service in the armed forces, getting together with close friends, getting together with neighbors, attending religious services, self-reported satisfaction with social life, and self-reported trouble with a boss at work in the last year) might represent one or more latent variables representing platonic relationships. While the results for these analyses tended to suggest a latent variable,
there was only one variable before the bend in the scree plot, 86.0% of the non-redundant residuals had absolute values greater than 0.05, and the Eigenvalues for many of the components were below one. Therefore, individual variables were used as separate outcomes in logistic regressions, ANOVAs, and univariate linear regressions. Composite variables for romantic relationships (mean of romantic relationship items) and social life satisfaction rating from participants were also included.

Univariate statistics on all variables and scales were examined for outliers and statistically significant skewness. Preliminary bivariate analyses were followed by multivariate analyses. Group (abuse/neglect versus control) was treated as a dichotomous independent variable. In selected analyses, type of abuse (physical or sexual) or neglect was treated as a dummy independent variable. Because types of abuse and neglect are not distributed randomly across the sample and because there are well-documented associations between certain demographic characteristics and a number of the outcome variables, all analyses controlled for age and race.

An Analysis of Variance/univariate general linear analysis was employed to examine differences by group (abuse/neglect versus control) and by type of abuse/neglect (physical and sexual abuse and neglect) on all continuous outcomes of interest to address the relevant hypotheses. Partial eta squared was calculated as a measure to estimate effect size. Logistic regression was used to assess dichotomous outcomes and adjusted odds ratios are reported to reflect effect size.

The data satisfied all assumptions for the analyses conducted. In the case of the logistic regression analyses, the data passed a check for multicollinearity using cutoffs of VIF <10 and Tolerances >0.10. Five multivariate outliers were identified using calculated Malhalanobis values. Due to the small number of multivariate outliers, and the fact that those present could be
accounted for as due to coding artifact, no data were removed because it is thought the large sample size overcomes the influence of the outliers.

Power

A power analysis was conducted for the current study. A total sample size of 220 would provide a power of 0.95 (\(\alpha = .05\)) to detect a small to moderate effect equivalent to an effect size of \(w=0.3\). Given the sample size of 338 abused and neglected men and 276 controls, it was determined that there is sufficient power to detect differences among the groups, particularly since groups were aggregated to compare the abuse/neglect and control groups in most analyses. Still, because the number of individuals in the study with a history of sexual (\(n=20\)) and physical (\(n=63\)) abuse is relatively small, the analyses may have had insufficient power to detect meaningful differences, particularly for individuals with a history of sexual abuse.

Protection of Human Subjects

This study involves secondary analyses of previously collected data. This protocol has been reviewed and approved by the City University of New York Institutional Review Board (IRB). This research did not involve disclosure to the researcher of any of the subjects’ personally identifiable information. Prior to the beginning of the data analysis reported herein, the IRB reviewed and approved the secondary analysis of the data.

Results

Externalizing Results

Men with a history of abuse and neglect were at increased odds of meeting diagnostic criteria for Antisocial Personality Disorder in their lifetime (AOR=1.85 [1.24-2.76], \(p<0.001\)), compared to control males. When examining lifetime ASPD diagnosis by type of abuse, neither physical nor sexual abuse was associated with increased risk. However, men with a history of neglect were at nearly twice the risk for meeting lifetime ASPD criteria (AOR=1.96 [1.30-2.95],
The same pattern held for current (at mean age 29 years) diagnosis of ASPD, with the abuse and neglect group and the neglect men, specifically, at increased risk for meeting criteria, but not men with a history of physical or sexual abuse. Table 1 reports the detailed results for the DSM-III psychiatric diagnoses externalizing outcomes, both current and lifetime, including ASPD.

Although all the men in this study had high rates of substance abuse, the findings for lifetime and current Alcohol Dependence and Drug Dependence diagnosis did not reveal a statistically significant difference between abused and neglected men and controls (see Table 1). Further analyses by type of abuse/neglect also showed no statistically significant difference between men with a history of physical or sexual abuse or neglect versus controls for current or lifetime diagnoses. Table 2 shows that there were statistically significant between-group differences for the maltreated and control group men in terms of criminal offending. Abused and neglected males were at increased risk for having an arrest as a juvenile, adult, and as a juvenile or adult (any arrest). Roughly 10% more men in the child abuse and neglect group had a history of juvenile and adult offending compared to men in the control group. Also reported in Table 2, there were no differences found between the abused and neglected and control males in terms of arrests for crimes of violence as a juvenile, adult, or either. The only significant difference for crimes of violence, specifically, was that men with a history of physical abuse were at significantly increased risk for arrest for a juvenile offense of violence, compared to their peers without a history of childhood maltreatment (AOR=2.65 [1.05-6.7], \( p=0.04 \)).

Internalizing Results

With respect to internalizing measures, abused and neglected males did not differ from control males in terms of meeting criteria for lifetime or current diagnoses for Major Depressive Disorder. However, abused and neglected males had significantly increased risk for meeting
criteria for lifetime diagnoses of Dysthymia (AOR=3.09 [1.66-5.74], p<0.001), and Generalized Anxiety Disorder (AOR=2.29 [1.12-4.67], p<0.02). See Table 3. The same pattern was observed for the abuse and neglect group meeting criteria for current diagnoses of Dysthymia (AOR=5.49 [1.60-18.78], p<0.01), and Generalized Anxiety Disorder (AOR=3.31 [1.33-8.24] p<0.01).

These findings did not hold across all types of abuse and neglect. For lifetime Dysthymia diagnosis, individuals with histories of physical abuse and neglect were at increased risk (AORs=3.50 and 3.19, respectively), compared to their peers in the control group, but men who experienced sexual abuse were not (AOR=2.10 [0.43-10.32], p=0.36). Only the neglect group was at statistically significant increased risk of meeting the criteria for lifetime GAD diagnosis (AOR=2.41 [1.16-4.99], p=0.02). Although men with histories of physical abuse (AOR=2.11 [0.69-6.39], p=0.19) and sexual abuse (AOR=2.29 [0.45-11.58], p=0.32) had increased odds of lifetime GAD diagnosis, these results did not reach conventional levels of significance, possibly because of the smaller sample size in these two groups.

Locus of Control and Self-Esteem

Men with a history of childhood abuse and neglect had slightly higher (M=2.00, SD=0.38) external locus of control than those in the control group (M=1.93, SD=0.38). Although this observed overall group difference was statistically significant (p=0.02; ηp² =0.01), the absolute difference in the scores was very small, less than one-tenth of a point (see Table 4). All types of abuse were associated with higher external locus of control versus the control group, as well, but the difference was not significant for men with history of sexual abuse and did not quite meet conventional levels of significance for physical abuse and neglect (both p=0.06).

Men with a history of child abuse and neglect also had lower self-esteem scale scores (M=4.24, SD=0.59) than controls (M=4.40, SD=0.52). The difference was statistically
significant \( (p<0.01; \eta_p^2=0.02) \), and all types of child abuse and neglect predicted lower scores on the self-esteem measure, compared to the men in the control group (see Table 4).

Educational outcomes

Table 5 presents findings for educational outcomes. A higher percentage of the abused and neglected boys failed to complete 12 years of education compared to the control group boys (55% versus 35.5%), and the adjusted odds ratio was 2.24 (95% C.I.=1.62-3.11; \( p<.001 \)). On average, abused and neglected boys completed 10.93 years (S.D.=1.8) of education while boys in the control group completed a full year more (M=11.99 years, S.D.=2.2). This same pattern emerged when examining years of education by type of abuse, and the largest effect was seen in boys with a history of childhood sexual abuse, who were nearly four times more likely than males in the control group to fail to complete 12 years of education (AOR=3.86 [1.42-10.53], \( p<.01 \)). With respect to the mean of years of school completed, all types of childhood abuse and neglect predicted lower levels of educational attainment compared to the control group boys. The effect was largest for boys with a history of childhood neglect (\( \eta_p^2 =0.06 \)), although boys with a history of sexual abuse had the lowest number of mean years of education (10.15 years).

Boys in the abuse and neglect group also had twice the odds of repeating a grade (AOR=1.99 [1.42-2.80], \( p<.001 \)), but were not at increased risk of repeating a grade more than once (AOR=1.35 [0.70-2.63], \( p=.037 \)). This was true for all types of abuse, and boys with a history of childhood sexual abuse were again at the highest increased risk of repeating a grade compared to the boys in the control group (see Table 5). The men in the abuse and neglect group did not differ significantly from men in the control group in self-reported history of expulsion or playing hooky from school, although the rates for both groups were extremely high. More than half the men in both groups reported having been expelled and more than 70% of both groups reported having played hooky from school. Just as the two groups showed no difference in
expulsion or playing hooky, they also showed no difference in post-secondary education (technical school, junior college, college) or training program participation.

Platonic relationship outcomes

Table 6 shows the results for the platonic relationship outcomes for the abused and neglected and control group men. Overall, significantly more of the men in the abuse and neglect group reported never getting together with close friends than men in the control group (12% versus 6%; AOR=2.15 [1.19-3.88], p=0.01), but only the neglect group, specifically, was more likely to report never getting together with close friends versus men in the control group. Men with a history of abuse and neglect were also more likely to report never attending church, synagogue, or prayer group (51% versus 38%; AOR=1.80 [1.28-2.53], p=0.01). In examining the type of abuse/neglect, men with histories of neglect and sexual abuse reported never attending church, synagogue, or prayer groups at statistically higher rates than men in the control group (Table 6). The difference was not significant for the physical abuse group, even though more men with a history of childhood physical abuse reported never attending religious activities (51.4%) than control men (37.7%).

Table 6 also shows that there were no overall group differences in reports of never getting together with neighbors or in reporting trouble with a boss in the past year. However, men with a history of childhood physical abuse were about twice as likely to report trouble with a boss in the past year as men in the control group (AOR=2.12 [1.16-3.87], p=.01).

Overall, men with a history of child abuse and neglect reported significantly higher social life dissatisfaction ratings than men without a history of childhood abuse and neglect (see Table 7). The mean score for the abuse and/or neglect group was 1.99 on a four point scale compared to a mean of 1.8 for the men in the control group ($\eta_p^2 =0.01$, $p=0.01$). The qualitative description for a score of 2 was “somewhat satisfied.” This was the case for all types of abuse and neglect,
with physical abuse and sexual abuse showing the highest dissatisfaction ratings.

Romantic relationship outcomes

Turning to romantic relationship outcomes (see Table 8), more than 70% of the men in the study reported being married at mean age 29 years. There was no significant difference in the marriage rate for men with a history of child abuse and neglect versus those in the control group. Men with a history of childhood abuse and neglect were, however, significantly more likely to have ever walked out on a partner than men in the control group. Approximately 25% of the abused and neglected men reported having walked out on a partner compared to 15% of controls (AOR=2.21 [1.44-3.40], p=0.00). Men with a history of abuse and neglect were also more likely to report having thrown objects at a spouse (AOR=1.57 [1.06-2.33], p=0.03), but not having been the first to hit or throw an object at a spouse. Also reported in Table 8, men with a history of childhood abuse and neglect had been married for about a year less than men in the control group (M=4.3 years versus M=5.5 years, p=0.01).

There were no item-level differences between the abuse and neglect group and controls in responses to self-reported qualitative romantic relationship items (Table 9). For example, when asked to rate the extent to which they felt like they could talk to a romantic partner about things that are important to them on a 4-point Likert-type scale, men in both the control and abuse and neglect groups had a mean score of 3.67, where 1=not at all and 4=almost always. Some greater variation was observed when analyzing the data by type of abuse and neglect. For example, on that same question, despite the absence of any difference between the groups, men with a history of sexual abuse reported a mean score of 3.33, which was significantly different than their peers in the control group (p=.04, η²p =.02). Differences by type of abuse/neglect were also observed in the “can tell partner just about anything” and “avoid talking to partner because of how he/she might react” items for men with a history of physical abuse. When the mean of the romantic
relationship item responses was calculated (with some items reverse coded), an overall group difference was observed. Men with a history of childhood abuse and neglect reported a mean score of 2.11, while men in the control group reported a mean score of 2.45 \( (p=.04, \eta^2_p = .01) \). The lowest mean score was reported by the men with a history of neglect \( (M=2.04, p=.01, \eta^2_p = .01) \), which was the only type of abuse that was significantly different from the control group.

There were no group differences in reports of having had sex with more than three people outside of marriage, and this was the case for all types of abuse and neglect (Table 10). Similarly, there were no overall differences between the groups in terms of their reporting having had sex with ten or more people in one year (promiscuity), although men with a history of sexual abuse were more likely to report having had sex with ten or more partners in one year compared to men in the control group \( (AOR=2.39 \ [0.90-6.37], p=0.08) \). Given the small sample size and large AOR, this is thought to be a meaningful finding of increased risk. There was no overall difference between the abused and neglected and control men in terms of age of fist sexual experience (Table 9), although there was a non-significant trend for men with a history of neglect, who did report having sex earlier, on average, than men in the control group.

Discussion

The results presented here paint a far more subtle picture than is suggested by the broadly held assumptions that maltreated boys externalize in response to the abuse or neglect, becoming perpetrators of violence, and that boys who are sexually abused, in particular, will exhibit externalizing behavior (Chandy, Blum, & Resnick, 1996; Downey, Feldman, Khuri, & Friedman, 1994). While males with documented histories of child abuse and/or neglect were at increased risk for meeting diagnostic criteria for Antisocial Personality Disorder, the only specific type of maltreatment for which this held true was neglect. Physically and sexually abused boys were not
at increased risk for meeting lifetime or current criteria for ASPD diagnosis. Similarly, while those with a history of childhood abuse and neglect were at increased risk for juvenile and adult arrests, the only specific type of abuse and neglect for which this held true was neglect. When looking at whether the men in the sample had had any arrest (juvenile or adult), the abuse and neglect group and those with sexual abuse and neglect types of abuse were at increased risk, but those with a history of physical abuse were not. The findings for any arrest for violence were different. Men with a history of physical abuse were the only group at increased risk for a crime of violence as a juvenile. They were not at increased risk for a crime of violence overall, or as adults. This finding is consistent with, but expands somewhat, on previous findings with this sample. It was previously known that men in the abuse and neglect group were not more likely to have an arrest for violent crime overall (Maxfield & Widom, 1996). These findings further consider that question by type of abuse, distinguishing between any arrest and any arrest for a violent crime, clarifying that some types of abuse and neglect are associated with an increased risk for any arrest, while physically abused boys, specifically, are at risk for having an arrest for a crime of violence as juveniles. Taken together with previous findings that those in the abuse and neglect group have a greater number of violent offenses compared to controls without an abuse or neglect history (Maxfield & Widom, 1996), this suggests that for some, but not all, boys who experience abuse and/or neglect there is an increased risk for an initial arrest and for persistent offending as measured by number of arrests. Further research is necessary to determine if the individuals at increased risk for any arrest and arrest for a crime of violence and those at risk for persistent offending are the same individuals.

Neither overall maltreatment status nor type of abuse and/or neglect was associated with increased risk for meeting diagnostic criteria for alcohol or drug dependence. Similarly, there were no group or type of abuse or neglect differences in the sexual behaviors reported by
participants (i.e., age of first sexual experience, sex with >3 people outside of marriage, sex with ≥10 people in 1 year). Taken together, these findings do not support the blanket hypothesis that maltreated boys externalize in ways that are distinct from their peers. More specifically, physically and sexually abused boys did not have a statistically significant increased risk for ASPD diagnosis, criminal arrest, alcohol and drug dependence, or early sexual activity. With respect to the increased risk for ASPD, however, some caution is warranted because the effect sizes observed, while not significant, suggest an increased risk. What the data also show is that while child abuse and neglect, generally, does increase the risk for some externalizing behaviors, it is men with a history of childhood neglect that are most consistently at increased risk across the broadest number of externalizing outcomes assessed in this study. While physically abused boys are at increased risk for arrest for a crime of violence as juveniles, the image of the physically or sexually abused boy who inexorably and universally becomes antisocial and acts out through substance abuse, crime, and early sexual behavior, compared to the control boys, is not supported by these findings.

Conversely, men with a history of child abuse and neglect were found to be at increased risk for meeting diagnostic criteria for Dysthymia and GAD at mean age 29 years. Men with a history of abuse and neglect, generally, and physically abused and neglected men, specifically, were at increased risk of meeting lifetime and current Dysthymia diagnostic criteria. For these men with a history of physical abuse and neglect, the increase in risk for the persistent mild depression of Dysthymia was more than three times that for men without a history of child abuse or neglect. Men with a history of childhood neglect were more than twice as likely to meet lifetime GAD criteria than control men, whereas physically and sexually abused boys were not at increased risk.

Finally, men with a history of child abuse and neglect reported higher external locus of
control and lower self-esteem than men in the control group. These findings may be important to consider in tandem with the DSM-III-R findings because perceptions of locus of control are known to moderate stress responses in individuals (Lefcourt, 1983), with external locus of control being associated with higher levels of stress (Abouserie, 1994) and poorer coping with life stress (Carton & Nowicki, 1994). Individuals with higher external locus of control also tend to engage in less adaptive behaviors (Demellow & Imms, 1999), and external locus of control is associated with greater psychopathology, particularly anxiety disorders (Brown & Naragon-Gainey, 2013; Gallagher, Bentley, & Barlow, 2014). Locus of control may be a particularly important factor to consider in future studies of child abuse and neglect in men. Given that a tenet of masculinity is being in control and self-sufficient and that childhood maltreatment may be perceived as completely beyond a boy’s control, the impacts on locus of control and self-esteem may mediate the long-term consequences of abuse, particularly anxiety and depressive disorders.

One particularly noteworthy finding is that maltreated boys in this sample have at least as great a risk for internalizing as externalizing psychopathology in young adulthood. As a result, the first hypothesis is not supported. Men with a history of childhood abuse and neglect are at increased risk for some externalizing behaviors, but they are also at increased risk for internalizing behaviors. One possible explanation for these findings is that past observations relied upon data with a retrospective attribution bias, a possible flaw that is controlled for in the design of the present study. For example, Chandy, Blum, and Resnick (1996) relied upon participants’ retrospective self-report of sexual abuse history as support for the theory that male victims of sexual abuse, in particular, will exhibit externalizing behavior. The current finding is consistent with other recent findings. For example, a recent study using structural equation analysis to assess externalizing and internalizing behaviors in children with a history of abuse
and neglect found that sexual abuse did not influence risk for internalizing or externalizing behaviors, but physical abuse, emotional abuse, and neglect were all associated with both internalizing and externalizing behaviors, not one or the other (Vachon, Krueger, Rogosch, & Cicchetti, 2015).

The second hypothesis, predicting that males with documented histories of child abuse and/or neglect will be at higher risk for meeting DSM diagnostic criteria for alcohol and substance dependence, was not supported. While men with a history of child maltreatment may be at increased risk for being arrested for alcohol and/or drug related offenses (Chandy, Blum, & Resnick, 1996; Ireland & Widom, 1994), maltreated men in the current study were not at increased risk for meeting lifetime or current diagnostic criteria for alcohol and/or drug dependence. As Enoch (2011) pointed out, there is not conclusive evidence one way or the other about the relationship between early adversity and alcohol and drug dependence in men (the link is clear in women). The current findings reinforce the lack of a connection between experiencing childhood maltreatment and subsequent drug and alcohol dependence for men. Young-Wolff, Kendler, Ericson, and Prescott (2011) found in a twin study that the relationship between maltreatment and subsequent alcohol dependence was mediated by adverse environmental conditions. In some ways, that may help explain why no group (abuse/neglect versus control) differences were observed in rates of alcohol and drug dependence in the current study. Rates of alcohol and drug use for both the abuse and neglect and control group are quite high and both groups are from lower SES backgrounds, so the high rates and lack of difference between the groups may result from adverse environmental conditions that were common to both the abuse and neglect group and the control group.

The results do, however, strongly support the third hypothesis that men with a history of abuse and/or neglect have poorer educational outcomes than controls. The abused and neglected
boys were more than twice as likely as boys in the control group not to complete 12 years of school, and they also had twice the odds of repeating a grade. The maltreated boys did not differ from controls in reported expulsions or playing hooky, seemingly ruling those out as possible explanations for the failure to complete 12 years of education. When examined by type of abuse, more than half of the boys with a history of each type of abuse and/or neglect failed to complete 12 years of education. Boys with a history of sexual abuse appeared to be at particularly high risk of not completing 12 years of education, with 70% failing to reach that milestone. Men with a history of sexual abuse also had the lowest mean years of education (10.15) of all subjects. On average, the abuse/neglect males completed 11 years of education, compared to 12 years for the male controls, revealing that the abused and neglected boys came relatively close to completing 12 years of education, but for some reason were not able to cross the high school finish line.

Having less education is associated with higher levels of psychological stress (Cohen & Janicki-Deverts, 2012), so the implication of this finding may be particularly important because a lack of a high school diploma is a significant handicap that might well mediate and/or moderate a number of subsequent outcomes (including many of those tested here) across the lifecycle. Beyond this, not having a high school diploma is likely to limit economic opportunities and access to the social benefits that are associated with increased levels of education.

The results also support the fourth hypothesis, that is, that men with a history of abuse and neglect are at increased risk for poor outcomes on intimate and platonic relationship indicators, compared to matched controls. First, overall abuse and neglect and each of the specific types of abuse and neglect reported being more dissatisfied with their social lives than matched control men. In addition, men with a history of abuse and neglect overall were about twice as likely to report never getting together with close friends and never attending religious services as men in the matched control group; however, when examined by type of abuse or
neglect, the difference was statistically significant only for the neglected men. Neglected men (and men with histories of sexual abuse) were also more likely to report never attending religious services. In contrast, men with a history of childhood physical abuse were about twice as likely to report trouble with their boss in the last year compared to men in the control group.

Turning to romantic relationships, there were no differences between the men in the abuse and neglect group (overall or by specific type) compared to the control men in the extent to which they were currently married at mean age 29 years. However, in general, men with a history of abuse and neglect had been married about a year less than men in the control group. This was also the case for men with a history of childhood neglect, but not those with a history of physical or sexual abuse. A full quarter of men with a history of abuse and neglect reported having walked out on a romantic partner, and for men with a history of sexual abuse, that rose to 47%. The men with a history of abuse and neglect also reported lower romantic relationship satisfaction than those in the control group. This was also the case for the men with a history of neglect, but not for the men with a history of physical or sexual abuse. Together these differences in indicators of platonic and romantic relationships seem to suggest some increase in relationship difficulty for men with a history of child abuse and neglect.

The platonic and romantic relationship outcomes observed in the current study highlight the potential importance of the interaction between the male context and child abuse and neglect. The demands of masculine gender norms (not showing emotion, alexithymia, and being in control, particularly with respect to women) add layers of complexity to navigating interpersonal relationships under the best circumstances. The additional burden of the consequences of childhood abuse and neglect (e.g., lower educational attainment, lower self-esteem, lower internal locus of control, etc.) may make the development and maintenance of relationships particularly challenging. One could speculate that negative experiences in social relationships
from an early age could promote subsequent adverse outcomes. For boys, this might be particularly true with school relationships. For example, some research has shown that children with a history of physical abuse are judged by peers to be more aggressive and less cooperative and to have lower social status with peers (Salzinger, Feldman, Hammer, & Rosario, 1993). Thus, the relationship and educational findings reported here might be the result of the interaction between masculinity and child abuse and neglect, rather than springing from distinct etiological wells.

The fifth hypothesis was also confirmed inasmuch as the consequences of abuse and neglect in males were observed to vary by the type of abuse and/or neglect. Specifically, neglected males followed into young adulthood were at increased risk for both internalizing and externalizing as measured by lifetime and current dysthymia, GAD, and ASPD diagnosis. They were at increased risk for arrest, but not violent arrest, and for not completing high school and repeating a grade. They were also at increased risk for poor relationship outcomes, including fewer total months married, lower positive experience with and from their romantic partners, and never getting together with close friends.

Physically abused boys, specifically, were not at increased risk for meeting current or lifetime ASPD diagnosis, nor were they at increased risk for any adult or juvenile criminal arrest when followed up into young adulthood. Physically abused boys showed increased risk for dysthymia and GAD (i.e., internalizing) diagnoses and had lower self-esteem scores on average. Like all types of childhood abuse and neglect, their educational outcomes were worse than their peers in the control group, having an average of 11 years of education. They also were more likely to report trouble with their boss in the past year. Taken together with the findings that men with a history of childhood physical abuse report differences in their assessments of their romantic relationships, lower social life satisfaction, and increased risk for juvenile arrest for a
violent offense, this may suggest that physically abused boys are at greater risk for communication problems in interpersonal situations. There may be a link between being physically abused and resorting to violence when other types of behavior do not prove successful in achieving desired outcomes.

Men with a history of childhood sexual abuse were not found to be at increased risk for the internalizing and externalizing diagnoses included in this study. They did, however, report the lowest self-esteem of any group in the study and were at increased risk for arrest as an adult or juvenile. As with all their peers in the abuse and neglect group, young men with a history of childhood sexual abuse had worse educational outcomes than those in the control group; men with a history of sexual abuse completed the fewest years of education, just 10.15 on average. They were also at the greatest increased risk for ever having walked out on a partner and for reporting sex with ≥10 people in 1 year. These two findings may suggest that men with a history of sexual abuse can form a different type of attachment with intimate partners, perhaps perceiving intimate relationships as more transactional than do their peers.

Finally, although the power analyses indicated that there was substantially less power to detect differences for the males in the sexual and physical abuse groups, compared to the controls, the current findings suggest that there were significant differences for certain consequences. For example, the percentage of men with a history sexual abuse (n=20) who did not complete 12 years of education is higher than for all the men with a history of childhood abuse and neglect, 70.6% versus 54.7%, and the risk for those with a history of sexual abuse is also statistically significantly higher, p=.01, AOR=3.86, versus AOR=2.24. A similar example can be seen in the juvenile arrest for a crime of violence for men with a history of childhood physical abuse (n=63).
Implications and Future Directions

In summarizing the findings reported here, it is important to note that in most instances a majority of men with a history of child maltreatment do not experience negative outcomes. The increases in risk reported here should not be construed as evidence that childhood maltreatment invariably leads to negative outcomes. On the contrary, a significant percentage of the maltreated boys appear to be resilient.

For those boys who do have negative outcomes compared to their peers, the findings of this study paint a picture of a maltreated boy who at age 29 is a man at increased risk for being a little sad, mildly depressed, and anxious. He views the world as a place less within his control than his peers and judges himself in slightly less favorable terms than his peers judge themselves. He is somewhat more likely to have been arrested and far less likely to have a high school degree than his peers who do not have a documented history of abuse and neglect. He rates his social life as slightly less satisfying than his peers in the control group. It took him a year longer to get married than his peers in the control group, he rates his romantic relationship a little less satisfying than those peers, and he is more likely to have walked out on his partner than his peers. In contrast, the widespread assumptions about his increased risk for promiscuous sexual behavior, alcohol and drug abuse, and violence, compared to his peers, are not supported by these findings.

The finding that men with a history of abuse and/or neglect, particularly physical abuse and neglect, are at increased risk for persistent, low level depressive symptoms and anxiety must be noted. To the extent that research with abused and neglected boys has looked for Major Depression (as an outcome itself or as an indicator of internalizing behavior), the more subtle symptoms of Dysthymia may be going undetected. The current findings did not identify ways in which men with a history of childhood maltreatment are at increased risk for psychopathology,
but prior reports of their increased suicide risk (Dube, et al., 2005; Martin, Bergen, Richardson, Roeger, & Allison, 2004) coupled with the findings of persistent low-level depression and anxiety associated with other types of maltreatment support looking for subtle signs and manifestations of psychopathology in at-risk boys. Masculine gender norms coupled with childhood maltreatment may make men particularly adept at suffering silently with subtle symptoms.

Across all types of abuse and neglect, men with a history of child maltreatment were at increased risk of not completing 12 years of education. These findings do not address the reasons that the abused and neglected boys do not complete high school. But it is possible that this failure to graduate is the direct result of also being at increased risk for repeating a grade, which increases the opportunity costs for completing high school. It is also reasonable to question, however, whether both findings might not be the result of some other factor. For example, it could be that efforts a boy takes and strategies he deploys in an attempt to mitigate the impact of abuse and neglect might involve him in attempts to escape from home and/or dropping out of school at the earliest opportunity, in order to change his circumstances and support himself. This would explain their increased risk of not completing high school. Another possibility is that boys who experience abuse and neglect have difficulty with the social aspects of school (Salzinger, Feldman, Hammer, & Rosario, 1993). Given the cost to the individual and society of a man failing to get a high school diploma, it is critically important that research be undertaken to identify interventions that allow young men with a history of abuse and neglect to finish high school. This might involve an intervention that allows them to change their living situations without dropping out of school and allows them a way to support themselves financially while they finish the final year, on average, of their high school education.

Researchers and public policy makers have tended to neglect the impacts of neglect, but
a mounting body of evidence shows neglect to be a significant predictor of negative long-term consequences. The findings of this study provide additional evidence. Boys in this study who were neglected in childhood seemed to fair worse in a broader range of domains than their abused peers. This is perhaps not a surprising finding if one conceptualizes abuse as a trauma—which can be overcome with sufficient resilience—and neglect as robbing boys of adaptive strategies ab initio. At the broadest level, the findings reported here suggest that childhood neglect is particularly strongly associated with negative outcomes in young adulthood. This may be because boys who are not neglected are better able to contextually integrate abuse into their adaptive strategies, whereas neglected boys lack the basic building blocks to cope with the health, educational, social, and interpersonal challenges they will inevitably encounter as they develop throughout their lifecycle.

Finally, sex and gender are important and fundamental constitutional elements of the human organism, and ignoring their importance in studies of developmental outcomes risks failing to identify how the male gender role can protect individuals with a history of abuse and neglect or how they can place individuals at increased risk for negative outcomes as a result of childhood maltreatment.

Limitations

Because this study was designed using substantiated cases of child abuse and neglect to operationalize the construct, these findings cannot be generalized to cases of abuse and neglect that might not have come to the attention of the courts. That said, given that some level of undetected abuse and neglect in the control group is likely present, statistically significant between-group differences should be all the more reliable. There are a number of other limitations represented in this study that are common in cumulative risk studies. These include potential bias in selection of risk variables and operationalization of constructs via those
variables; an inability to examine dose-response relationships related to the frequency and severity of the abuse and neglect experienced by either the experimental or control group; and potential unaccounted-for incidences of risk, including outcomes specific to those boys who experienced multiple types of abuse. Finally, both the boys in the abuse and neglect group and the control group were from lower socioeconomic status backgrounds. As a result, the findings reported in this study may not generalize to individuals of socioeconomic statuses not represented in this sample.
Tables
Table 1

*Externalizing Outcomes: DSM-III Psychiatric Diagnoses for Males with Histories of Child Abuse and Neglect Versus Controls Followed Up in Young Adulthood*

<table>
<thead>
<tr>
<th>Group or Type</th>
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<th>Current</th>
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<th>p</th>
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<td></td>
<td>%</td>
<td>AOR</td>
<td>95% CI</td>
<td></td>
<td>AOR</td>
<td>95% CI</td>
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<tr>
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<td>95% CI</td>
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<td>1.1</td>
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<td>1.85</td>
<td>[1.2-2.8]</td>
<td>&lt;0.001</td>
<td>20.1</td>
<td>1.1</td>
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<td>1.59</td>
<td>[0.8-3.1]</td>
<td>0.19</td>
<td>14.3</td>
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<td>[1.3-3.0]</td>
<td>&lt;0.001</td>
<td>20.7</td>
<td>1.1</td>
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</table>

| Note: AOR=Adjusted Odds Ratio controlling for race and age; CI=Confidence Interval. |
### Table 2

**Internalizing Outcomes: DSM-III Psychiatric Diagnoses for Males with Histories of Child Abuse and Neglect Versus Controls Followed Up in Young Adulthood**

#### Dysthymia Diagnosis

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<th></th>
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<td>%</td>
<td>AOR</td>
<td>95% CI</td>
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<td>3.09</td>
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#### Generalized Anxiety Disorder Diagnosis

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<td>95% CI</td>
<td>p</td>
<td>%</td>
<td>AOR</td>
<td>95% CI</td>
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<td>2.29</td>
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#### Major Depressive Disorder Diagnosis

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<td>95% CI</td>
<td>p</td>
<td>%</td>
<td>AOR</td>
<td>95% CI</td>
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<td>[0.7-2.3]</td>
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<td>1.23</td>
<td>[0.6-2.5]</td>
<td>0.56</td>
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<td>1.44</td>
<td>[0.6-3.79]</td>
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<td>0.46</td>
<td>100</td>
<td>0.00</td>
<td>[0.0-]</td>
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<td>10.5</td>
<td>1.39</td>
<td>[0.8-2.5]</td>
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*Note: AOR=Adjusted Odds Ratio controlling for race and age; CI=Confidence Interval.*
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*Note: SD=Standard Deviation; df=Degrees of Freedom. *Rotter (1966,) higher score=greater external locus of control; *Rosenberg (1979), higher score=greater self-esteem
Table 4

*Juvenile and Adult Arrest Outcomes for Males with Histories of Child Abuse and Neglect Versus Controls Followed Up in Young Adulthood*

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Group or Type</th>
<th>%</th>
<th>AOR</th>
<th>95% CI</th>
<th>p</th>
<th>%</th>
<th>AOR</th>
<th>95% CI</th>
<th>p</th>
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<td></td>
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<tr>
<td></td>
<td>Abuse and Neglect (n=338)</td>
<td>36.1</td>
<td>1.70</td>
<td>[1.2-2.2]</td>
<td>0.00</td>
<td>8.6</td>
<td>1.75</td>
<td>[0.9-3.4]</td>
<td>0.10</td>
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<tr>
<td>Juvenile Arrest</td>
<td>Any Physical Abuse (n=63)</td>
<td>19.0</td>
<td>0.73</td>
<td>[0.4-1.5]</td>
<td>0.38</td>
<td>12.7</td>
<td>2.65</td>
<td>[1.1-6.7]</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Any Sexual Abuse (n=20)</td>
<td>35.0</td>
<td>1.93</td>
<td>[0.7-5.2]</td>
<td>0.19</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
<td>Any Neglect (n=286)</td>
<td>38.1</td>
<td>1.81</td>
<td>[1.3-2.6]</td>
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<td>8.0</td>
<td>1.60</td>
<td>[0.8-3.2]</td>
<td>0.18</td>
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<td>Control (n=276)</td>
<td>51.4</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Abuse and Neglect (n=338)</td>
<td>61.2</td>
<td>1.51</td>
<td>[1.1-2.1]</td>
<td>0.01</td>
<td>27.2</td>
<td>1.04</td>
<td>[0.7-1.5]</td>
<td>0.85</td>
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<td>Adult Arrest</td>
<td>Any Physical Abuse (n=63)</td>
<td>52.4</td>
<td>1.17</td>
<td>[0.7-2.1]</td>
<td>0.58</td>
<td>20.6</td>
<td>0.71</td>
<td>[0.4-1.4]</td>
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<tr>
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<td>Any Sexual Abuse (n=20)</td>
<td>60.0</td>
<td>1.63</td>
<td>[0.6-4.2]</td>
<td>0.31</td>
<td>35.0</td>
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<td>[0.6-4.1]</td>
<td>0.38</td>
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<tr>
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<td>Any Neglect (n=286)</td>
<td>61.2</td>
<td>1.47</td>
<td>[1.0-2.1]</td>
<td>0.03</td>
<td>27.3</td>
<td>1.03</td>
<td>[0.7-1.5]</td>
<td>0.87</td>
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<td></td>
<td>Abuse and Neglect (n=338)</td>
<td>67.8</td>
<td>1.56</td>
<td>[1.1-2.2]</td>
<td>0.00</td>
<td>29.6</td>
<td>1.03</td>
<td>[0.7-1.5]</td>
<td>0.89</td>
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<td>Any Physical Abuse (n=63)</td>
<td>52.4</td>
<td>0.88</td>
<td>[0.5-1.5]</td>
<td>0.66</td>
<td>25.4</td>
<td>0.82</td>
<td>[0.4-1.5]</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>Any Sexual Abuse (n=20)</td>
<td>80.0</td>
<td>3.35</td>
<td>[1.1-10.4]</td>
<td>0.04</td>
<td>35.0</td>
<td>1.35</td>
<td>[0.5-3.6]</td>
<td>0.55</td>
</tr>
<tr>
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<td>Any Neglect (n=286)</td>
<td>67.5</td>
<td>1.50</td>
<td>[1.1-2.1]</td>
<td>0.02</td>
<td>29.4</td>
<td>1.01</td>
<td>[0.7-1.5]</td>
<td>0.97</td>
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*Note:* AOR=Adjusted Odds Ratio controlling for race and age; CI=Confidence Interval.
<table>
<thead>
<tr>
<th>Group or Type</th>
<th>Did Not Complete 12 Years of School</th>
<th>Repeated One Grade</th>
<th>Years of School Completed</th>
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<td>%</td>
<td>AOR</td>
<td>95% CI</td>
</tr>
<tr>
<td>Control</td>
<td>35.5</td>
<td>30.4</td>
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<tr>
<td>Abuse and Neglect</td>
<td>54.7</td>
<td>2.24</td>
<td>[1.6-3.1]</td>
</tr>
<tr>
<td>Any Physical Abuse</td>
<td>51.4</td>
<td>2.17</td>
<td>[1.2-3.8]</td>
</tr>
<tr>
<td>Any Sexual Abuse</td>
<td>70.6</td>
<td>3.86</td>
<td>[1.4-10.5]</td>
</tr>
<tr>
<td>Any Neglect</td>
<td>53.9</td>
<td>2.19</td>
<td>[2.2-1.6]</td>
</tr>
</tbody>
</table>

*Note: AOR=Adjusted Odds Ratio controlling for race and age; CI=Confidence Interval; SD=Standard Deviation; df=Degrees of Freedom.*
### Table 6

**Platonic Relationship Outcomes for Males with Histories of Child Abuse and Neglect Versus Controls Followed Up in Young Adulthood**

<table>
<thead>
<tr>
<th>Group or Type</th>
<th>Never get together with close friends</th>
<th>Never attend a church, synagogue, or prayer group</th>
<th>Never get together with neighbors</th>
<th>Report trouble with boss in past year</th>
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<tbody>
<tr>
<td></td>
<td>%</td>
<td>AOR [95% CI]</td>
<td>p</td>
<td>%</td>
</tr>
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<td>Control</td>
<td>6.2</td>
<td>37.7</td>
<td>40.6</td>
<td>22.8</td>
</tr>
<tr>
<td>Abuse and Neglect</td>
<td>12.4</td>
<td>2.15 [1.19-3.88]</td>
<td>0.01</td>
<td>50.6</td>
</tr>
<tr>
<td>Any Physical Abuse</td>
<td>11.4</td>
<td>2.12 [0.82-5.45]</td>
<td>0.12</td>
<td>51.4</td>
</tr>
<tr>
<td>Any Sexual Abuse</td>
<td>5.9</td>
<td>1.61 [0.33-7.80]</td>
<td>0.56</td>
<td>70.6</td>
</tr>
<tr>
<td>Any Neglect</td>
<td>12.9</td>
<td>2.23 [1.22-4.07]</td>
<td>0.01</td>
<td>48.4</td>
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</table>

*Note: AOR=Adjusted Odds Ratio controlling for race and age; CI=Confidence Interval.*
Table 7

*Social Life Satisfaction Rating for Males with Histories of Child Abuse and Neglect Versus Controls Followed Up in Young Adulthood*

<table>
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<th>Group or Type</th>
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<td>partial $\eta^2$</td>
<td>$F$</td>
<td>df</td>
<td>$p$</td>
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<td>Control</td>
<td>1.80 (0.8)</td>
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<td>0.01</td>
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<td>8.43</td>
<td>1</td>
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<td>4.59</td>
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<td>0.03</td>
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<tr>
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<td>1.96 (0.9)</td>
<td>0.01</td>
<td>4.85</td>
<td>1</td>
<td>0.03</td>
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*Note: SD=Standard Deviation; df=Degrees of Freedom. Scale: 1=Very Satisfied, 2=Somewhat Satisfied, 3=Somewhat Dissatisfied, 4=Very Dissatisfied*
Table 8

*Romantic relationship outcomes for males with histories of child abuse and neglect versus controls followed up in young adulthood.*

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Group or Type</th>
<th>Mean (SD)</th>
<th>partial $\eta^2$</th>
<th>F</th>
<th>df</th>
<th>p</th>
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<td>Total Months married</td>
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<td>7.14</td>
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<td>0.01</td>
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<td>0.01</td>
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<td>0.04</td>
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<td>0.79</td>
<td>[0.4-1.5]</td>
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<td>1.23</td>
<td>[0.3-4.6]</td>
<td>0.76</td>
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<td>Any Neglect</td>
<td>73.0</td>
<td>0.81</td>
<td>[0.6-1.2]</td>
<td>0.31</td>
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<td>Throw things at a spouse</td>
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<td>1.57</td>
<td>[1.1-2.3]</td>
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<td>47.1</td>
<td>2.30</td>
<td>[0.8-6.3]</td>
<td>0.11</td>
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<td>1.42</td>
<td>[0.9-2.2]</td>
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</tr>
<tr>
<td>First to throw things at spouse</td>
<td>Control</td>
<td>9.8</td>
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<td>Abuse and Neglect</td>
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<td>1.22</td>
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<td>1.31</td>
<td>[0.4-3.9]</td>
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<td>1.38</td>
<td>[0.3-6.8]</td>
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<td>[0.6-2.2]</td>
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<td>15.2</td>
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<td>[1.4-3.4]</td>
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<td>3.96</td>
<td>[1.4-11.2]</td>
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<td></td>
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<td>Any Neglect</td>
<td>24.6</td>
<td>2.07</td>
<td>[1.3-3.3]</td>
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</tr>
<tr>
<td></td>
<td>Control</td>
<td>66.3</td>
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<tr>
<td>Abuse and Neglect</td>
<td>63.9</td>
<td>0.93</td>
<td>[0.5-1.7]</td>
<td>0.80</td>
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<td>Any Sexual Abuse</td>
<td>94.1</td>
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<td>[0.0-]</td>
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<td>Any Neglect</td>
<td>62.5</td>
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<td>[0.5-1.8]</td>
<td>0.89</td>
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</tbody>
</table>

*Note:* SD=Standard Deviation; df=Degrees of Freedom; AOR=Adjusted Odds Ratio controlling for race and age; CI=Confidence Interval.
Table 9

*Self-reported romantic relationship quality items for males with histories of child abuse and neglect versus controls followed up in young adulthood.*

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Group or Type</th>
<th>Mean</th>
<th>SD</th>
<th>partial $\eta^2$</th>
<th>F</th>
<th>df</th>
<th>p</th>
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<tbody>
<tr>
<td>Wish partner paid more attention</td>
<td>Control</td>
<td>1.91</td>
<td>1.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Abuse and Neglect</td>
<td>1.78</td>
<td>1.01</td>
<td>0.00</td>
<td>1.61</td>
<td>1</td>
<td>0.21</td>
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<td>Any Physical Abuse</td>
<td>1.70</td>
<td>0.91</td>
<td>0.01</td>
<td>1.41</td>
<td>1</td>
<td>0.24</td>
</tr>
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<td></td>
<td>Any Sexual Abuse</td>
<td>2.13</td>
<td>1.06</td>
<td>0.00</td>
<td>0.68</td>
<td>1</td>
<td>0.41</td>
</tr>
<tr>
<td></td>
<td>Any Neglect</td>
<td>1.76</td>
<td>1.03</td>
<td>0.01</td>
<td>1.88</td>
<td>1</td>
<td>0.17</td>
</tr>
<tr>
<td>Can depend on partner when you really need him/her</td>
<td>Control</td>
<td>3.91</td>
<td>0.34</td>
<td></td>
<td></td>
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<td></td>
<td>Abuse and Neglect</td>
<td>3.86</td>
<td>0.47</td>
<td>0.00</td>
<td>1.26</td>
<td>1</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>Any Physical Abuse</td>
<td>3.95</td>
<td>0.22</td>
<td>0.00</td>
<td>0.59</td>
<td>1</td>
<td>0.44</td>
</tr>
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<td>4.00</td>
<td>0.00</td>
<td>0.01</td>
<td>1.04</td>
<td>1</td>
<td>0.31</td>
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<td>Any Neglect</td>
<td>3.84</td>
<td>0.51</td>
<td>0.01</td>
<td>1.48</td>
<td>1</td>
<td>0.27</td>
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<td>Partner creates problems with your family or friends</td>
<td>Control</td>
<td>1.44</td>
<td>0.80</td>
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<td></td>
<td>Abuse and Neglect</td>
<td>1.54</td>
<td>0.89</td>
<td>0.00</td>
<td>1.23</td>
<td>1</td>
<td>0.27</td>
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<td>1.48</td>
<td>0.88</td>
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<td>0.06</td>
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<tr>
<td></td>
<td>Any Sexual Abuse</td>
<td>1.47</td>
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<td>0.00</td>
<td>0.02</td>
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<td>0.90</td>
</tr>
<tr>
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<td>Any Neglect</td>
<td>1.55</td>
<td>0.90</td>
<td>0.00</td>
<td>1.37</td>
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<tr>
<td>Can tell partner just about anything</td>
<td>Control</td>
<td>3.64</td>
<td>0.60</td>
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<td>0.61</td>
<td>0.00</td>
<td>0.84</td>
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<td>Any Physical Abuse</td>
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<td>0.02</td>
<td>4.70</td>
<td>1</td>
<td>0.03</td>
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<td></td>
<td>Any Sexual Abuse</td>
<td>3.53</td>
<td>0.74</td>
<td>0.00</td>
<td>0.41</td>
<td>1</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>Any Neglect</td>
<td>3.68</td>
<td>0.62</td>
<td>0.00</td>
<td>0.54</td>
<td>1</td>
<td>0.46</td>
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<tr>
<td>Can rely on partner for practical things</td>
<td>Control</td>
<td>3.80</td>
<td>0.45</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Abuse and Neglect</td>
<td>3.76</td>
<td>0.58</td>
<td>0.00</td>
<td>0.46</td>
<td>1</td>
<td>0.50</td>
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<td></td>
<td>Any Physical Abuse</td>
<td>3.85</td>
<td>0.43</td>
<td>0.00</td>
<td>0.45</td>
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<td>0.50</td>
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<td>3.60</td>
<td>0.83</td>
<td>0.01</td>
<td>2.31</td>
<td>1</td>
<td>0.13</td>
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<tr>
<td></td>
<td>Any Neglect</td>
<td>Control</td>
<td>Abuse and Neglect</td>
<td>Any Physical Abuse</td>
<td>Any Sexual Abuse</td>
<td>Any Neglect</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------</td>
<td>---------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-----------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Avoid talking to partner because of how he/she might react</td>
<td>3.78 0.57 0.00 0.17 1 0.68</td>
<td>2.47 0.88</td>
<td>2.41 0.97 0.00 0.42 1 0.52</td>
<td>2.13 0.99 0.02 4.93 1 0.03</td>
<td>2.33 1.18 0.00 0.33 1 0.57</td>
<td>2.41 0.97 0.00 0.37 1 0.54</td>
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</tr>
<tr>
<td>Partner shows concerns for your feelings and problems</td>
<td>Control 3.78 0.46</td>
<td>Abuse and Neglect 3.80 0.50 0.00 0.17 1 0.68</td>
<td>Any Physical Abuse 3.88 0.40 0.01 1.53 1 0.22</td>
<td>Any Sexual Abuse 3.60 0.74 0.01 1.84 1 0.18</td>
<td>Any Neglect 3.81 0.49 0.00 0.32 1 0.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can count on partner for understanding and advice</td>
<td>Control 3.61 0.61</td>
<td>Abuse and Neglect 3.59 0.69 0.00 0.12 1 0.73</td>
<td>Any Physical Abuse 3.75 0.44 0.01 1.85 1 0.17</td>
<td>Any Sexual Abuse 3.61 0.61 0.00 0.74 1 0.39</td>
<td>Any Neglect 3.59 0.70 0.00 0.12 1 0.73</td>
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</tr>
<tr>
<td>Can talk with partner about things important to you</td>
<td>Control 3.67 0.55</td>
<td>Abuse and Neglect 3.67 0.66 0.00 0.00 1.00</td>
<td>Any Physical Abuse 3.80 0.41 0.01 2.03 1 0.16</td>
<td>Any Sexual Abuse 3.33 0.98 0.02 4.46 1 0.04</td>
<td>Any Neglect 3.68 0.65 0.00 0.07 1 0.80</td>
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</tr>
<tr>
<td>Mean of romantic relationship items&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Control 2.45 1.60</td>
<td>Abuse and Neglect 2.11 1.80 0.01 6.03 1 0.01</td>
<td>Any Physical Abuse 2.31 1.80 0.00 0.37 1 0.54</td>
<td>Any Sexual Abuse 2.54 1.60 0.00 0.60 1 0.81</td>
<td>Any Neglect 2.04 1.80 0.01 8.07 1 0.01</td>
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<td></td>
</tr>
</tbody>
</table>

<sup>Note:</sup> SD=Standard Deviation; df=Degrees of Freedom. <sup>a</sup>Mean rating of the nine items reported in this table: 1=Not at All, 2=A Little, 3=Sometimes, 4=Almost always. Some items were reverse coded in calculating the mean. Partner refers to husband, wife, or partner.
Table 10

Sexual Relationship Outcomes for Males with Histories of Child Abuse and Neglect Versus Controls Followed Up in Young Adulthood

<table>
<thead>
<tr>
<th>Group or Type</th>
<th>Sex with &gt;3 people Outside Marriage</th>
<th>Sex with ≥10 People in 1 Year</th>
<th>Age at First Sex</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>AOR</td>
<td>95% CI</td>
</tr>
<tr>
<td>Control</td>
<td>6.5</td>
<td>1.58</td>
<td>[0.8-3.0]</td>
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<tr>
<td>Abuse and Neglect</td>
<td>8.6</td>
<td>1.58</td>
<td>[0.8-3.0]</td>
</tr>
<tr>
<td>Any Physical Abuse</td>
<td>8.6</td>
<td>1.12</td>
<td>[0.4-3.6]</td>
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<tr>
<td>Any Sexual Abuse</td>
<td>11.8</td>
<td>1.77</td>
<td>[0.4-9.0]</td>
</tr>
<tr>
<td>Any Neglect</td>
<td>9.0</td>
<td>1.58</td>
<td>[0.8-3.1]</td>
</tr>
</tbody>
</table>

Note: AOR=Adjusted Odds Ratio controlling for race and age; CI=Confidence Interval; SD=Standard Deviation; df=Degrees of Freedom.
References


http://www.cdc.gov/media/releases/2012/p0201_child_abuse.html


https://www.bop.gov/about/statistics/statistics_inmate_gender.jsp


