Published in final edited form as:

Crim Justice Behav. 2012 July 1; 39(7): 910–922. doi:10.1177/0093854812438160.

Self-Reported Childhood Physical Abuse and Perpetration of Intimate Partner Violence: The Moderating Role of Psychopathic Traits

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Abstract

Whereas considerable evidence links childhood physical abuse with later perpetration of intimate partner violence (IPV), research to identify moderators of this relationship will increase our understanding of which victims of childhood abuse are at risk for later IPV. The present study examined dimensions of psychopathy as moderators of the relationship between physical abuse in childhood and perpetration of IPV in a sample of criminal offenders. Results indicated that, among individuals with higher levels of impulsive-irresponsible (i.e., Lifestyle) traits of psychopathy, childhood physical abuse was associated with later perpetration of IPV. Findings have implications for the propensity toward IPV perpetration among individuals who have experienced childhood physical abuse.

Keywords

child abuse; psychopathy; intimate partner violence; aggression; antisocial behavior

Childhood physical abuse is a widespread and serious public health problem. Numerous negative outcomes have been associated with childhood physical abuse, including internalizing disorders such as depression and anxiety, suicidal and self-injurious behavior (Malinosky-Rummell & Hansen, 1993) and externalizing behavior, such as substance abuse (Widom, Ireland, & Glynn, 1995). Childhood physical abuse is also a risk factor for interpersonal violence (Malinosky-Rummell & Hansen, 1993; Lansford et al., 2007) and the proposal that childhood abuse engenders a “cycle of violence” (Widom, 1992) has received considerable empirical support (Jaffee, Caspi, Moffitt, & Taylor, 2004; English, Widom, & Brandford, 2002; Widom & White, 1997).

Some of the strongest evidence in support of the cycle of violence comes from reports that physical abuse in childhood is linked to later perpetration of intimate partner violence (IPV; Clarke, Stein, Sobota, Marisi, & Hanna, 1999; Ehrensaft et al., 2003; Fang & Corso, 2008; Herrenkohl et al., 2004; White & Widom, 2003). However, the majority of individuals who experience physical abuse in childhood do not go on to perpetrate IPV (Ehrensaft et al., 2003). Rather, the perpetuation of the cycle of violence appears to fall to a relative minority of childhood abuse victims. Given the diverse outcomes for childhood abuse victims it

appears likely that a wide variety of environmental and characterological factors play important roles in determining which abused individuals go on to commit violent acts (Widom, 1989). The identification of such moderators may have substantial implications for understanding risk for IPV perpetration.

Victims of childhood physical abuse are more likely to exhibit some forms of externalizing problems and antisocial behavior if they are subjected to severe abuse, multiple forms of abuse, or multiple abusers (Brown & Anderson, 1991; Herrenkohl, Herrenkohl, & Toedter, 1983). Supportive family and peer relationships can reduce the impact of childhood abuse on subsequent psychopathology and violence (Egeland, Jacobvitz, & Sroufe, 1988; Martin & Beezley, 1977) although these findings have not always been replicated (Taylor & Kliewer, 2006). Finally, individual factors, including cognitive aptitude and emotional stability, predict the likelihood of subsequent violent behavior (Egeland, 1988). Although some studies have also suggested that personality features (including anger, hostility, and impulsivity) are important moderators or mediators of the relationships between childhood physical abuse and subsequent violent behavior (e.g., Egeland et al., 1988; Francis & Wolf, 2008; Lewis, 1992), few peer-reviewed studies have explicitly examined personality pathology as a moderator of the influence of childhood physical abuse on IPV. Even so, several forms of personality pathology have been identified among the shared correlates of childhood abuse and IPV. Specifically, disorders such as psychopathy, borderline personality disorder, and antisocial personality disorder have been linked to both childhood physical abuse (Luntz & Widom, 1994) and IPV (Ehrensaft, Cohen, & Johnson, 2006). Of these personality disorders, psychopathy is most robustly associated with general violence (Leistico, Salekin, DeCoster, & Rogers, 2008), and is widely used in clinical and forensic settings to estimate risk for violence (Walsh & Walsh, 2006). Preliminary evidence suggests that, in addition to being associated with general violence, psychopathy may be associated with IPV (Hilton, Harris, & Rice, 2001; Spidel et al., 2007). Moreover, studies of heterogeneity among IPV perpetrators have identified a subtype of generally violent/antisocial batterers characterized by high levels of antisocial and psychopathic traits (Holtzworth-Munroe & Stuart, 2001; Walsh et al., 2010).

Numerous studies have reported associations between childhood physical abuse and psychopathy or related disorders, and adult psychopathy has been linked to childhood abuse across gender and ethnicity (Koivisto & Haapasalo, 1996; Lang, af Klintegerg, & Alm, 2002; Odgers et al., 2008; Patrick, Zempolich, & Levensten, 1997; Weiler & Widom, 1996). Antisocial personality disorder overlaps considerably with impulsive-antisocial traits of psychopathy (Hart & Hare, 1989) and is also associated with childhood physical abuse. In addition, childhood abuse has been extensively linked to conduct disorder, a childhood precursor of both antisocial personality disorder and psychopathy (Kaplan et al., 1998; Kunitz, Levy, McCloskey, & Gabriel, 1998; McCabe, Lucchini, Hough, Yeh & Hazen, 2005). The pattern of interrelationships among childhood abuse, psychopathy, and IPV raises the possibility that the characterological predisposition to violence associated with psychopathic traits potentiates the violence risk associated with childhood physical abuse such that the cycle of violence may be especially likely among victims who are higher on measures of psychopathic traits.

The most widely used and well-validated measure of psychopathy in adults is the Psychopathy Checklist-Revised (PCL-R; Hare, 2003). Two correlated dimensions underlie PCL-R scores, Factor 1 (F1), affective and interpersonal traits, and Factor 2 (F2), impulsive, antisocial lifestyle. These factors can be further subdivided into correlated lower-order dimensions: F1 can be parsed into arrogant, deceitful interpersonal style (Interpersonal facet), and deficient affective experience (Affective facet); F2 can be parsed into impulsive, irresponsible lifestyle (Lifestyle facet) and prodigious antisocial behavior (Antisocial facet);

Hare, 2003). Most evidence suggests that relationships between psychopathy and violence are chiefly reliant on impulsive-antisocial traits (Walsh & Kosson, 2008). Moreover, F1 and F2 exhibit different patterns of correlations with negative emotionality (Blonigen, Hicks, Krueger, Patrick, & Iacono, 2005). Factor 1 scores are orthogonal to or negatively correlated with internalizing (i.e., mood and anxiety) symptomatology in adults and children (Blonigen et al., 2005; Frick, Lilienfeld, Ellis, Loney, & Silverthorn, 1999; Widiger, 2006). By contrast, F2 scores are linked to negative emotionality (Benning et al., 2003; Hale, Goldstein, Abramowitz, Calamari, & Kosson, 2004; Lynam & Derefinko, 2006), and are highly correlated with externalizing pathology, which includes antisocial behavior disorders such as antisocial personality disorder, substance abuse, and personality characteristics such as impulsivity and disinhibition (Krueger, 2006). Given the relationships of F2 scores to these characteristics, which are also associated with IPV (Dutton, 2003; Moffitt, Krueger, Caspi, & Fagan, 2000; Shafer, Caetano, & Cunradi, 2004), we hypothesized that risk for IPV perpetration would be greater among victims of childhood physical abuse who have high levels of impulsive-antisocial traits, as reflected by the Lifestyle and Antisocial Facets of the four-facet model. By contrast, there is some indication that interpersonal-affective traits of psychopathy, reflecting a “hard to socialize temperament” (Lykken, 1995), may predispose individuals to antisocial behavior regardless of childhood experiences (Farrington, 1997; Wootton, Frick, Shelton, & Silverthorn, 1997). Thus, although these traits may reflect a callousness that increases the likelihood of criminal or violent behavior, these traits are less likely to interact with childhood abuse in association with IPV.

We are interested in clarifying whether there are interactions between childhood physical abuse and psychopathic traits for several reasons. First, adding to the understanding of factors that confer risk for IPV may inform the design and delivery of interventions aimed its prevention or reduction. Additionally, the combination of psychopathic traits with other important risk factors, such as abuse, may lead to increased ability to predict IPV and may yield data that contribute to violence risk assessments. Finally, integrating psychopathic traits within the larger nomological network that includes environmental stressors will lead to an increased understanding of the processes that underlie relationships between psychopathy and various forms of violence (Farrington, 2006).

In this paper, we report an investigation of the association between childhood physical abuse and later IPV in a sample of male criminal offenders. It is important to study abuse among offenders due to its high prevalence (Malinosky-Rummell and Hanson, 1993), and the offender sample provided adequate variability in psychopathy scores. We hypothesized a positive relationship between the two constructs. In order to clarify the relationships among childhood physical abuse, IPV, and psychopathy, we tested psychopathic traits as moderators of the relationship between abuse and IPV, using the four-facet PCL-R model. Given the relationships between impulsive-antisocial traits of psychopathy, negative emotionality, and disinhibition, we hypothesized an interactive relationship between childhood physical abuse and the Lifestyle and Antisocial components in association with IPV. Specifically, we hypothesized that abuse would interact with levels of both of these facets such that, among individuals high on each, childhood physical abuse would be associated with IPV, whereas this relationship would be weaker or absent among individuals low in impulsive-antisocial traits. Although there is evidence suggesting that the affective component of psychopathy is associated with antisocial behavior regardless of traumatic family experiences, links between the affective and interpersonal traits of psychopathy and violence are somewhat inconsistent across studies (e.g., see Walsh & Kosson, 2008, for a review). For this reason we examined the relationship between abuse and affective and interpersonal traits in exploratory analyses. Finally, we examined the relationships of psychopathy and childhood physical abuse to self-reported general aggression in order to determine whether results for IPV extended to generally aggressive behavior.

Method

Participants

Participants were 75 males, ages 18–58 (mean age = 34.0, SD = 11.4), participating in a pretrial supervision program subsequent to receiving criminal charges. The racial and ethnic makeup of the sample was 39 African Americans (52%), 23 European Americans (30.7%), 8 Latino Americans (10.7%), and 5 persons of other race/ethnicity (6.6%). Data were collected as part of a larger study on psychopathology and violence (Swogger, You, Cashman-Brown, & Conner, 2011).

Procedures

Following a brief announcement about the study, study personnel met individually with interested individuals to describe the study and obtain informed consent for participation. Consenting individuals ($n = 267$) completed a number of group-administered, self-report measures (including assessments of childhood abuse and IPV) and were paid for their time. All forms were checked for errors prior to the participant leaving. The rate of participation was 73.80%. A random subset of these individuals ($n = 100$) was invited to complete a second session within the next three weeks involving a comprehensive, semi-structured interview that assessed education, relationships, family life, and criminal and work history. All invited individuals agreed to participate in the second session, and participants were compensated for their time. Following the interview, participants' institutional files were reviewed and criminal history data were gathered from a criminal database. Due to potential differences in the correlates of male and female perpetration of IPV (Gilfus, Trabold, O'Brien, & Fleck-Henderson, in press; Holzworth-Munroe, 2005; Stith et al., 2000), data from the 25 females in the subset of individuals who took part in the second session was not analyzed, leaving a sample size of 75.

Measures

Psychopathy—The Psychopathy Checklist-Revised (PCL-R; Hare, 2003) was completed based upon information from the interview, file review, and review of the criminal history database. Extensive research attests to the reliability and validity of PCL-R scores (Hare, 2003). Two raters were present for 23% of the PCL-R interviews. Interrater reliability was very good to excellent (Cicchetti, 1994) for PCL-R total scores (intraclass $r = .91$), and for the Interpersonal (intraclass $r = .85$), Affective (intraclass $r = .81$), Lifestyle (intraclass $r = .90$), and Antisocial ($r = .95$) facet scores. The mean sample PCL-R score was 22.7 (SD = 7.0) and mean PCL-R facet scores were as follows: Interpersonal (M = 4.4, SD = 2.2), Affective (M = 4.6, SD = 1.9), Lifestyle (M = 5.7, SD = 2.3), and Antisocial (M = 6.3, SD = 3.3).

Childhood Physical Abuse—Following Dube et al. (2001) an item based on the Adverse Childhood Experiences Questionnaire (Anda et al., 1999) was used to assess abuse. Participants were asked to report on a 1-to-5 scale from “never” to “very often,” the frequency with which, before they were 18, a parent, step-parent, or adult living in the home hit them hard enough to leave marks or cause injury. Forty-five percent of the sample reported at least one instance of childhood physical abuse (Mean score = 1.83, SD = 1.10). In order to provide preliminary evidence for the validity of the abuse item in our sample, we analyzed its association with indicators of negative affectivity. The childhood physical abuse item was associated with Psychiatric Diagnostic Screening Questionnaire (PDSQ; Zimmerman, 2000) symptom counts of depression ($r = .37$, $p < .01$) and posttraumatic stress disorder ($r = .32$, $p < .01$), supporting its validity.

Intimate Partner Violence—Participants were asked to report their frequency of perpetration of IPV during the past year on separate 0–4 scales, from “never” to “too many times to count.” Intimate partner violence consisted of kicking, biting, punching, or beating up a partner. Twenty-eight percent of the sample acknowledged engaging in at least one instance of IPV during the past year (Mean score = .56, SD = 1.17).

General Aggression—General aggression was assessed using the 5-item aggression subscale of the Life History of Aggression Questionnaire, a reliable and valid measure of overt aggression (LHAQ; Coccaro, Berman, & Kavoussi, 1997). The LHAQ uses 0–4 scales to assess the frequency, since age 13, of different types of aggression from “none” to “more events than can be counted.” In the present sample, internal consistency for the aggression subscale was adequate ($\alpha = .88$) and general aggression was associated with IPV ($r = .48, p < .01$).

Lifetime Criminal Charges—Participants’ number of violent and nonviolent charges was recorded following a review of participants’ supervision file criminal history and a check of a countywide criminal history database. Violent charges were coded as in prior studies (e.g., Walsh, Swogger, & Kosson, 2004), and included the following: robbery, assault, weapons charges, kidnapping, harassment, and sex crimes. Individuals in the study averaged 3.0 (SD = 3.4) lifetime violent charges. They averaged 20.0 (SD = 15.9) lifetime nonviolent charges.

Results

Data Screening

No outliers (> 3 SDs from the mean) were detected on any variable. Childhood physical abuse and IPV exhibited non-normal distributions, which were corrected with a square-root transformation. Because all analyses yielded equivalent results using transformed and untransformed variables, we report only results using untransformed variables. Childhood physical abuse did not correlate higher than $r = .36$ with any PCL-R facet, indicating an absence of pronounced multicollinearity. No demographic variables, including ethnicity, highest grade completed, and age, were associated with IPV, and thus none were included as covariates.

Primary Analyses

As shown in Table 1, none of the psychopathy facet scores were related to IPV scores. Childhood physical abuse was positively related to IPV and to the Interpersonal and Affective PCL-R facet scores. A multiple regression (see Table 2), conducted to test the hypothesis that Lifestyle facet scores would moderate the association between childhood physical abuse and IPV scores revealed a significant abuse X Lifestyle interaction, ($\Delta R^2 = .08, \beta = .27, p < .05$). We followed this finding with a simple slope analysis (Aiken & West, 1991) in order to determine the association of abuse and IPV at low (one SD below the mean), medium (mean), and high (one SD above the mean) levels of the Lifestyle facet. Abuse was strongly associated with IPV scores at medium ($\Delta R^2 = .11, \beta = .30, p < .01$) and high ($\Delta R^2 = .18, \beta = .46, p < .01$) levels of the Lifestyle facet. The association between childhood physical abuse and IPV was not significant at low levels of the Lifestyle facet ($\Delta R^2 = .03, \beta = .19, p = .14$). There were no childhood physical abuse interactions with the Interpersonal, Affective, or Antisocial facets of psychopathy (p s $> .79$).

Supplementary Analyses

Because of the possibility that levels of overall violence associated with the Lifestyle facet or abuse had an impact on the likelihood of IPV, we conducted additional regressions in which violent charges were entered as a covariate in the first step. Controlling for violent

charges did not change the results, including the abuse X Lifestyle facet interaction ($\Delta R^2 = .06$, $\beta = .98$, $p < .05$). Finally, to see whether the current results for IPV extended to general aggression, we re-ran the primary analyses, replacing IPV with the LHAQ aggression subscale score as the criterion variable. General aggression was related to both childhood physical abuse ($r = .36$, $p < .01$) and IPV scores ($r = .33$, $p < .01$), and to scores on the Lifestyle facet of psychopathy ($r = .43$, $p < .01$). In a multiple regression, the abuse X Lifestyle facet interaction term was not significant ($\Delta R^2 < .01$, $\beta = .31$, $p = .43$), indicating the interaction was unique to IPV.

Discussion

The present study examined the relationship between childhood physical abuse and later IPV among criminal offenders, testing psychopathic traits as moderators of this relationship. In our study rates of childhood physical abuse (45%) and IPV perpetration (28%) were consistent with prior studies of offenders (Stalans, Hacker, & Talbot, 2010; Weeks & Widom, 1998). As expected based on prior studies, abuse and IPV were related. Impulsive and irresponsible (Lifestyle) traits of psychopathy moderated the abuse/IPV association such that the relationship was accentuated at higher levels of these traits. Moreover, the interaction was reliable in a supplementary analysis that included overall levels of violent behavior as a covariate, suggesting that a propensity toward general violence was not responsible for the results. Contrary to our hypothesis, scores on the Antisocial facet of psychopathy did not moderate the relationship between childhood physical abuse and IPV.

If replicated, these results may contribute to the clarification of the “cycle of violence”. With regard to childhood physical abuse and IPV our findings provide preliminary evidence that the greatest propensity for violence perpetration involving intimate partners arises among abused individuals with high levels of impulsive, irresponsible traits. Our findings are consistent with a model whereby the experience of childhood physical abuse among disinhibited persons increases the likelihood of IPV perpetration. The specificity of our findings to IPV is intriguing; the abuse X Lifestyle facet interaction was associated with IPV but not with general aggression. There are several possible explanations for these specific effects. First, there is some evidence that childhood maltreatment is associated with the development of addictions (Widom, White, Czaja, & Marmorstein, 2007) and numerous psychological problems (Allen, 2008; Malinosky-Rummell & Hansen, 1993) that contribute to disturbances in intimate relationships in adulthood (Colman & Widom, 2004). Alternatively, or perhaps additively, abuse in childhood may increase negatively biased interpretations of the behavior of one’s intimate partner in adulthood. There is evidence that maltreated children are more likely than non-maltreated children to interpret ambiguous social stimuli as threatening (Ornduff, 2000) and to attribute hostile intentions to social partners (Dodge, Petit, Bates, & Valente, 1995). These maladaptive interpersonal schemas may mediate the relationship between childhood maltreatment and adult IPV (Crawford & Wright, 2007). In the context of the disinhibition reflected in high Lifestyle facet scores, psychological distress and maladaptive interpretations regarding the actions of an intimate partner might be particularly conducive to IPV. Future research into the mediating role of problematic interpersonal schemas might provide useful information about the mechanisms that link childhood abuse with IPV for persons who are high in impulsive-irresponsible traits of psychopathy. It is possible, given that the Lifestyle facet is associated with negative affectivity, that heightened emotional reactivity plays a facilitating role in IPV among abused individuals. By contrast, general aggression among offenders is a broader construct that may be determined by a greater number of factors, reducing the predictive utility of the demonstrated interaction.

Early intervention may be important for reducing IPV among child victims of physical abuse. Our findings indicate that abused children who exhibit impulsivity may have an especially high propensity toward violence in later intimate relationships. For these children, it may be important to include in their treatment components that may prevent later IPV. For example, Maiuro and Avery (1996), in their work with adults, have identified numerous important targets for psychosocial treatments. These areas include individuals' defenses against acknowledgment of responsibility, increasing detection and management of anger responses, increasing assertiveness, bargaining and communication skills, and modifying attitudes toward members of the opposite sex. If replicated, our findings suggest that special attention to these areas among children and adolescents with impulsive and irresponsible traits may help to prevent future IPV. Indeed, early interventions that target problems with impulsivity and emotional lability may assist with the development of healthy interaction styles with intimate partners as youth at risk for IPV mature (Dutton, 2003). We acknowledge, however, that our findings are preliminary, and that anger management, adaptive communication skills, and appropriate assertiveness are important for *all* children to learn.

Notably, there was no bivariate relationship in the present study between PCL-R total or facet scores and IPV. This is consistent with some prior work among offenders (e.g., Swogger, Walsh, & Kosson, 2007) and may reflect characterological heterogeneity among perpetrators of IPV (Walsh et al., 2010). The high rates of childhood physical abuse in our sample are consistent with the well-established relationship between childhood maltreatment and criminal behavior (Widom, 1989; Widom & Maxfield, 2001). The replication of the interaction after controlling for overall violence propensity suggests that this finding is robust among offenders. Nonetheless, the finding is novel and should be considered preliminary pending further replication.

Our study has several noteworthy limitations. First, our sample size was modest, and our sample was composed entirely of men. Recent research has highlighted the importance of heterogeneity among IPV perpetrators (Holtzworth-Munroe & Stuart, 1994; Walsh et al., 2010), and a larger sample may have allowed us to examine potentially important differences in patterns of association across perpetrator subtypes. Moreover, although recent research has identified important commonalities across male and female perpetrators (Walsh et al., 2010) gender differences continue to play an important role in our appreciation of partner violence; future research that examines relationships among child abuse and IPV among females has the potential to make a distinct contribution to the literature. Second, the study was cross-sectional. Although our conceptualization of the Abuse X Lifestyle facet interaction as potentially giving rise to IPV is based upon the identification of physical abuse that occurred prior to age 18, longitudinal examinations of these phenomena are necessary to provide direct temporal evidence consistent with a causal model. Third, the retrospective assessment of childhood abuse is not optimal given the potential for underreporting due to memory or social desirability biases (Fang & Corso, 2008). Although there is evidence that childhood abuse can be assessed retrospectively by self-report with reasonable accuracy (Widom & Shepard, 1996), longitudinal studies would enable greater confidence with regard to the accuracy of data on abuse. Moreover, the incorporation of objective measures of abuse, along with self-report measures, in future studies would further enhance coverage of the construct. Our use of one question to assess childhood physical abuse may have contributed to low sensitivity that reduced statistical power (Cohen, Brown, & Smiles, 2001). Nonetheless, the use of a small number of questions rather than a large protocol to define child maltreatment is common and has even been recommended to maximize specificity in childhood maltreatment research (Fang & Corso, 2008). Finally, it is important to note that findings from studies of IPV may vary according to methodological approaches to its assessment (Johnson, 2006). Thus, we consider our findings preliminary

and future studies should incorporate multiple methods of assessing IPV, including those that shed light on the context in which IPV occurs.

Acknowledgments

This publication was supported in part by NIDA grant K23 DA027720 to Marc T. Swogger and NIH grant R25 MH068564 to Eric D. Caine. This publication was also supported by Grant Number UL1 RR024160 from the National Center for Research Resources (NCRR), a component of the National Institutes of Health (NIH), and the NIH Roadmap for Medical Research. Its contents are solely the responsibility of the authors and do not necessarily represent the official view of NCRR or NIH. Information on NCRR is available at <http://www.ncrr.nih.gov/>. We thank Barbara Darby, Craig McNair, and Mary Spagnola-Marsh for their helpful suggestions. We also thank Janette Keyser and Carla D'Amore for data collection/management.

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Figure 1. Results of a simple slope analysis showing the relationship (R^2) of childhood physical abuse scores to self-reported IPV perpetration at low, medium, and high levels of the PCL-R Lifestyle Facet.

Table 1

Intercorrelations among primary study variables.

Variable	1	2	3	4	5	6	7
1. abuse	-	.37**	.28*	.36**	.28*	.13	.07
2. IPV	-	-	.10	.06	-.04	.17	-.01
3. PCL-R	-	-	-	.73**	.73**	.67**	.54**
4. Interpersonal	-	-	-	-	.56**	.22	.36**
5. Affective	-	-	-	-	-	.34**	.25*
6. Lifestyle	-	-	-	-	-	-	.17
7. Antisocial	-	-	-	-	-	-	-

Note. abuse = childhood physical abuse. IPV = intimate partner violence. PCL-R = Psychopathy Checklist-Revised total scores. Interpersonal, Affective, Lifestyle, and Antisocial refer to the four PCL-R facets.

Table 2

Multiple regressions examining relationships of abuse scores, PCL-R Lifestyle facet scores, and the abuse X Lifestyle interaction with self-reported IPV.

	Variable	β	R^2
Step 1	abuse	.37 **	.14 **
Step 2	abuse	.35 **	.12 **
	Lifestyle	.12	.02
Step 3	abuse	.32 **	.11 **
	Lifestyle	.19	.04
	abuse X Lifestyle	.27 *	.08 *
Overall $R^2 = .22^{**}$			

Note. abuse = childhood physical abuse. Lifestyle = scores on the Lifestyle facet of the PCL-R,

**
 $p < .01$,

*
 $p < .05$