A Prospective Investigation of the Relationship Between Child Maltreatment and Indicators of Adult Psychological Well-Being

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Abstract

The study of psychological well-being will advance understanding of child maltreatment effects and resilience processes. In this study, the mean level of anger in adulthood was significantly higher for those identified 3 decades earlier as having been maltreated. Mean levels of self-esteem, autonomy, purpose in life, perceived (fewer) constraints, and happiness and satisfaction were lower for those who were maltreated according to child welfare reports. Officially recorded child maltreatment was moderately (r < .30) correlated with several psychological well-being indicators and predictive of adult anger, self-esteem, autonomy, and happiness/life satisfaction, after accounting for childhood SES, gender, and other sources of data on child abuse and neglect. Parent-reported abusive disciplining also uniquely predicted several outcomes, as did a measure of observed child neglect to a lesser extent.

Keywords

child maltreatment; child abuse; child neglect; adult psychological well-being

INTRODUCTION

There is increasing evidence of the negative impact of abuse and neglect on adult mental health and well-being (Greenfield & Marks, 2010; T. I. Herrenkohl, Hong, Klika, Herrenkohl, & Russo, 2011; Reinherz, Giaconia, Carmola Hauf, Wasserman, & Paradis, 2000; Vranceanu, Hobfoll, & Johnson, 2007). Results show that the emotional pain and psychological trauma associated with child maltreatment can become later manifest in poor psychosocial functioning and impairment during adolescence and adulthood (Cohen, Brown, & Smailes, 2001; Ehrensaft et al., 2003; T. I. Herrenkohl, 2011a; T. I. Herrenkohl, Sousa, Tajima, Herrenkohl, & Moylan, 2008; Widom, 2000). In a recent study, Herrenkohl and colleagues (T. I. Herrenkohl et al., 2011) found that rates of moderate to severe depression

were significantly higher for adults who had been maltreated. Children with official record reports of abuse and neglect reported depression in adulthood at more than twice the rate of others in the sample (24% compared to 6.9%, respectively). The rate of moderate to severe anxiety was also significantly higher for those who had been maltreated (24%) compared to others (8%). Findings of other studies point to similar trends and patterns in mental health disorders (Reinherz et al., 2000; Vranceanu et al., 2007; Walker et al., 1999; Werner & Smith, 2001; Widom, 2000).

While studies of child maltreatment and mental disorders are important, there is more to learn about how this form of early adversity affects later psychological health and well-being (Greenfield & Marks, 2010; Kia-Keating, Dowdy, Morgan, & Noam, 2011). A more comprehensive examination of psychological health and well-being could include a range of adult outcomes and indicators, such as measures of self-esteem, personal agency, and self-control, or overall happiness and life satisfaction (Greenfield & Marks, 2010). Studies that extend beyond the more commonly measured and better documented measures of mental disorders will advance understanding of the long-term impacts of child maltreatment while helping to broaden the way researchers and practitioners assess and evaluate adult mental health. Taking a broader view of mental health should also help build capacity for studies of resilience, where the goal is to identify individuals who function well despite the traumas they experienced in childhood (Guterman, 2004; T. I. Herrenkohl, 2011b; Institute of Medicine, 1994; Klika & Herrenkohl, in press).

Studies of Adult Well-Being

The current study focuses on several psychological well-being scales, several of which were previously published in reports from the Midlife in the United States (MIDUS) national household study (Brim, Ryff, & Kessler, 2004; Greenfield & Marks, 2010). Data for the current investigation are from the Lehigh Longitudinal Study, which began in the 1970s to examine the antecedents and consequences of child maltreatment (R. C. Herrenkohl & Herrenkohl, 1981; T. I. Herrenkohl et al., 2011). The Lehigh study has continued for over 30 years and is now focused primarily on how child participants, some of whom were involved with child welfare for abuse and neglect, are functioning as adults (T. I. Herrenkohl et al., 2011).

A primary goal of this study is to add to what is known about the long-term impacts of child maltreatment. A secondary goal to study the predictive salience of different measures of child maltreatment (abuse and neglect) available in the Lehigh dataset. Measures of child maltreatment are derived from several data sources, including child protective service (child welfare) records, caregivers' (primarily mothers') reports of their abusive disciplining practices, and observations of neglect identified from parent-child interactions. The advantage of looking at these different measures within the same analysis is to establish whether an association of one variable (e.g., child welfare abuse/neglect) with another (e.g., self-esteem) is bound to a particular data source, or if the association is more generalizable and consistent across the sources. This approach also allows for the assessment of a predictor's unique effect with respect to a given outcome, which may help isolate from which reporter or data source the strongest prediction of adult mental health and well-being will emerge. Finally, the inclusion of data from caregivers' reports and independent observations should help overcome concerns voiced by researchers about the limitations of official record data and the likely underestimation of abuse occurrence reflected in these data (Jaffee, Caspi, Moffitt, Polo-Tomas, & Taylor, 2007).

A review of the literature produced several relevant studies on adult mental health and well-being, although few studies appear to have explored prospective connections between child maltreatment and these outcomes. An exception is a study by Greenfield and Marks (2010),

although their study relies on retrospective data. A brief summary of that study is provided below. Several studies from the MIDUS project mentioned previously provide context for the current investigation. These studies focus mostly on how measures of adult well-being are proximally linked. For example, Lachman and Weaver (1998) focused on the extent to which perceived self-control moderated the effect of social class differences in well-being. Results suggest that, regardless of social class status, perceiving oneself as having greater control (i.e., more mastery and fewer constraints) is associated with more life satisfaction, better health, and less depression. In another MIDUS study, Prenda and Lachman (2001) found that the relation between future planning and life satisfaction was mediated by perceived control.

Richards and Huppert (2011) investigated the relation between behaviors and personality characteristics of youth and adult well-being (defined as having few emotional problems, more work satisfaction, and being more socially engaged). Their research showed that positive dispositions and behaviors during adolescence (e.g., high popularity, social, happy and contented) were associated in adulthood with fewer emotional problems, more satisfaction with work, and better social interactions.

A study by Greenfield and Marks (2010) comes closest to that of our current investigation. They examined whether retrospectively reported psychological and physical abuse by mothers and fathers was associated with lower scores on adult well-being measures of self-acceptance, environmental mastery, personal growth, purpose in life, autonomy, and positive relations with others. The authors found that reports of psychological abuse by mothers and fathers were associated with lower scores of well-being in adulthood. Physical abuse by fathers (but not mothers) was also associated with poorer psychological well-being among adults.

Research on resilience in maltreated children provides additional information on adult functioning, although not exclusively mental health and well-being.(T. I. Herrenkohl, 2011b). In one study, McGloin and Widom (2001) examined the extent to which maltreated children achieved thresholds of positive functioning in several interrelated areas of work, education, and emotional functioning (i.e., fewer substance use and mental health problems). They found that up to 74% of participants who were abused and neglected as children met at least one criterion of resilience when they were later assessed between the ages of 18 and 41, although a much smaller percentage (22%) met their overall threshold for resilience of six of eight positive functioning indicators.

Werner and Smith (2001) examined the extent to which the men and women who had experienced child maltreatment and other risk factors were later satisfied with their lives and positively oriented to the future. They found that actually most participants (60% of men and 70% of women) were satisfied with life at age 40; many had maintained realistic goals for education and employment as adults, and as many or more had goals for the future (pp. 166–167). The message from these studies is that individuals have a remarkable ability to rebound from early life adversities and to appear functional at later life stages, despite the difficulties they endured earlier in life. Although in the current investigation we study outcomes relevant to resilience, our goal was more simply to explore the relation between prospectively measured child maltreatment variables and on well-being indicators measured many years later in adulthood.

Objectives

For the current study, we examine several measures of adult psychological well-being. Outcomes include adult self-reports of anger proneness, self-esteem, acceptance, autonomy, purpose in life, self-directedness, constraints, and happiness and life satisfaction. Mean

levels and correlations of adult outcomes with child maltreatment are investigated as a first step. Regression analyses are then used to examine the relation between child maltreatment and adult outcomes, controlling for child socioeconomic status (SES) and gender. Regressions were conducted in MPlus (Muthén & Muthén, 2004) to allow for the use of Maximum Likelihood (ML) estimation, which maximizes the analysis sample by taking into account all available data.

METHODS

Sample

Data are from the Lehigh Longitudinal Study, which is described in detail in various earlier publications. Briefly, the study began in 1973 – 1974 as the evaluation portion of a child abuse and neglect treatment and prevention program in two counties of Eastern Pennsylvania. Selection of the sample was accomplished over a 2-year period by the two county child welfare agencies who referred to the study all new and some ongoing cases in which there was at least one abused or neglected child 18 months to 6 years of age in the home. The children served by child welfare agencies (for abuse or neglect) participated in one of several group settings (Head Start, day care; middle-income nursery programs). It was from these settings, also within the same two-county area, that children outside of child welfare caseloads were recruited. The fully integrated sample contained 457 children, just over half (n = 249) of whom had been involved with child welfare for alleged abuse or neglect.

The original sample is relatively gender balanced, 248 (54%) males and 209 females. The racial and ethnic composition of the sample is relatively homogeneous but generally consistent with the makeup of the two-county area from which participants were drawn: 1.3% (n = 6) American Indian/Alaska Native, 0.2% (n = 1) Native Hawaiian or Other Pacific Islander, 5.3% (n = 24) Black or African American, 80.7% (n = 369) White, 11.2% (n = 51) more than one race, and 1.3% (n = 6) unknown. Just over 7% (n = 33) self-identify as Hispanic or Latino and 91.5% (n = 418) self-identify as Not Hispanic or Latino. For a small percentage, 1.3% (n = 6), the ethnicity of the child was unknown. Eighty-six percent of children were from two-parent households. The income level of 63% of families at the time was below $700 per month. Other families had incomes that ranged to over $3,000 per month.

Longitudinal design—The first "preschool" wave of the study took place in 1976 – 1977 when children recruited to the study were 18 months to 6 years of age. A second "school-age" assessment was conducted in 1980 – 1982. A third "adolescent" assessment of all youth participants (91% of the original sample) was conducted in 1990 – 1992. When they were assessed in adolescence, participants were 18 years of age on average (range: 14 – 23).

An adult wave of the study was completed in 2010, after intensive locating and interviewing of 80% of the sample still living (N = 357). The primary data collection instrument for the recent adult assessment was a comprehensive, interviewer-administered survey of about 3.5 hours in length. The survey was programmed on laptop computers and administered using computer assisted personal interviewing (CAPI) technology. Those not interviewed were actively pursued until numerous interviewing attempts failed or they requested we not contact them further. Participants were at the time about 36 years of age (range = 31 – 41 years). The retained sample remains gender balanced: 171 (47.9%) females and 186 (52.1%) males. An analysis of the currently retained sample showed that, although more of the child welfare abuse group was lost to attrition (68% retained compared to 79% in the child welfare neglect group and over 80% in other groups), there were no significant group differences in gender, age, childhood SES, or parent-reported neglect or physical discipline.

Measures

Adult psychological health and well-being—Measures of adult well-being consist of anger proneness, self-esteem, acceptance, autonomy, purpose in life, directedness, constraints, and happiness and life satisfaction. All but anger and self-esteem were previously validated in the MIDUS study (Brim et al., 2004). Means and standard deviations are shown separately for the child welfare and comparison groups (Table 1).

Anger proneness (Turner, Russell, Glover, & Hutto, 2007) was measured with six items (e.g., "When I get angry, I stay angry"; "I yell at people"). For each item, respondents were asked to indicate whether the statement is "very much like me," "much like me," "somewhat like me," "not like me," "not like me at all." Items were combined so that higher scores reflect more anger proneness ($\alpha = 88$).

Self-esteem was measured using the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965), scored "strongly agree," "agree," "disagree," and "strongly disagree." Example items include "I feel that I am a person of worth, at least on an equal plane with others"; "I feel that I have a number of good qualities"; and " All in all, I am inclined to feel that I am a failure." Several items were reversed so that higher scores on the combined measure reflect higher self-esteem ($\alpha = .90$).

Autonomy is the ability to be oneself and to resist social pressures to think and act in certain ways (Ryff, 1989; Ryff & Keyes, 1995). This construct was measured by three items, scored "strongly agree," "somewhat agree," "a little agree," "a little disagree," "somewhat disagree," and "strongly disagree." Items include "I tend to be influenced by people with strong opinions"; I have confidence in my own opinions, even if they are different from the way most other people think"; and "I judge myself by what I think is important, not by the values of what others think is important." The two positive items were reversed so that higher scores on the combined measure reflect more autonomy ($\alpha = .42$).

Purpose in life is experiencing meaning in life and having goals for the future (Ryff, 1989; Ryff & Keyes, 1995). This construct was measured by two items, scored "strongly agree," "somewhat agree," "a little agree," "a little disagree," "somewhat disagree," and "strongly disagree." Items include "I live life one day at a time and don't really think about the future"; "I sometimes feel as if I've done all there is to do in life." Items were combined so that higher score reflect more perceived purpose in life. These two items are correlated around .36 (p < .001).

Self-directedness is being intentional and goal directed (Ryff, 1989; Ryff & Keyes, 1995). This construct was measured by three items, scored "a lot," "some, "a little," and "not at all." Items include "I like to make plans for the future"; "I know what I want out of life"; "I find it helpful to set goals for the near future." Items were reversed so that higher scores on the composite measure reflect more planning and directedness ($\alpha = .66$).

Constraints is a measure of perceived obstacles and helplessness. This construct was measured by seven items, scored "strongly agree," "somewhat agree," "a little agree," "a little disagree," "somewhat disagree," and "strongly disagree." Example items include "There is little I can do to change the important things in my life" and "I often feel helpless in dealing with the problems of life." Items were scored so that higher scores on the composite measure reflect fewer perceived constraints ($\alpha = .86$).

Happiness and life satisfaction combines two items scored on a scale of 0 (worst possible) to 10 (best possible). Participants responded to the questions: "Overall these days, how happy

are you with your life?" and "Overall these days, how satisfied are you with your life?" These two variables are correlated around .87 (p < .001).

To account for possible demographic differences in the independent and dependent variables, we controlled for *gender* (1 = male, 2 = female) and childhood *socioeconomic status* (SES). SES is a composite variable that defines mothers' occupational status and education level, family income in the preschool period, and total rooms in a family's house. Each indicator on this scale was standardized before all were summed, providing a single composite SES score for each child.

Child abuse and neglect—Officially recorded *child abuse and neglect* reports are reflected in the original study design. Individuals with childhood reports of either abuse or neglect were coded 1 and all others in the sample coded 0. Those with official child maltreatment reports totaled 181 of the 357 adult participants, 83 females and 98 males. Other sources of data on child maltreatment include *parent reports of abusive disciplining*. In the preschool and school-age waves of the study, parents were asked about a range of disciplining practices, including those of an abusive nature, such as putting soap in child's mouth, biting child, biting child so as to bruise, putting pepper in child's mouth, slapping child's face, slapping child so as to bruise, pulling child's hair, hitting child with stick or other hard object, hitting child with hard object so as to bruise, burning child, and burning child so as to leave a mark. In the preschool wave of the study, parents (primarily mothers) were asked about the frequency with which they disciplined their children "prior to the last three months" and "during last three months." In the school-age assessment, the practices were assessed for the past year. Each practice was rated for severity by a group of 24 child welfare workers and child development specialists and then assigned a severity weight, which ranged from 1 – 3 (R. C. Herrenkohl, Herrenkohl, Egolf, & Wu, 1991). These weights were combined to form a composite measure. Scale scores for the analysis sample range from −4.10 to 7.26 (mean = .09, SD = 2.26).

A measure of observed neglect from the early (preschool) wave of the study was also included. *Neglect* is a measure that combines observers' ratings of mothers' negative emotional and/or physical interactions with a child and physical evidence of a child's having been poorly cared for (e.g., child not clean, having visible injuries). Ratings are based on characteristics of the child observed during parent-child interactions (E. C. Herrenkohl, Herrenkohl, Toedter, & Yanushefski, 1984). Scale scores for the analysis sample range from 1.11 to 10.73 (mean = .04, SD = 2.28).

Analysis Procedures

Mean-level scores and bivariate correlations were examined as a first step. Data were then analyzed using multivariate linear regression models in which variables were entered in three steps: Step 1: officially recorded child maltreatment; Step 2: officially recorded child maltreatment, SES, and gender; Step 3: officially recorded child maltreatment, SES, gender, parent-reported abusive disciplining, and neglect. This order of entry allowed us to assess differences between those with and without child welfare involvement before and after adding SES and gender to the analysis. The addition of the abusive discipline and neglect variables in the final step of the model allowed us to examine whether the officially recorded abuse and neglect variable remained significant after accounting for other sources of data in the study on child maltreatment. It also allowed us to assess for the unique effects and differential prediction of child abuse and neglect based on other data sources.

RESULTS

Means and standard deviations for the adult well-being measures are shown in Table 1. As shown, means of these measures are generally lower for those who had been involved with child welfare. Tests of differences in the means of these two groups revealed that all but directedness differed significantly between the groups, with p-values below .05.

Correlations among the variables are shown in Table 2. Correlations generally are in the moderate range, with some approaching or exceeding .5 (e.g., anger and self-esteem, self-esteem and constraints, self-esteem and happiness/life satisfaction). Significant correlations for officially recorded child maltreatment and the adult outcomes range from −.13 for autonomy to −.26 for happiness and life satisfaction. Parent-reported physically abusive discipline is also correlated with several of the adult well-being measures, including anger (r = .21), self-esteem (r = −.15), and happiness/life satisfaction (r = −.22). Neglect is negatively correlated with self-esteem (r = −.19), autonomy (r = −.15), purpose in life (r = −.14), constraints (r = −.20), and happiness/life satisfaction (r = −.16).

Results of the multivariate regression models are shown in Table 3. Table 3 includes the standardized regression coefficients for the 3-step model, which starts in Step 1 with the official record maltreatment variable. Step 2 adds SES and gender. Step 3 adds physically abusive discipline and neglect.

Results show that officially recorded maltreatment is significantly related to all but directedness in Step 1 (standardized coefficients [β] of −.13 to −.26). With the addition of SES and gender in Step 2, the official maltreatment variable is no longer statistically significant for outcomes of purpose in life or constraints, and the standardized regression coefficient for anger dropped to marginal significance (p < .10). However, official child maltreatment remains a significant predictor of self-esteem (β = −.19, p < .01), autonomy (β = −.23, p < .001), and happiness/life satisfaction (β = −.23, p < .001).

With the addition of parent-reported abusive discipline and neglect in Step 3, there was little change from Step 2 with respect to significant predictors. The official record maltreatment variable remains a significant predictor of the four adult outcomes that were revealed in Step 2, with only slight reductions in the size of the coefficients from those earlier models. In addition, this variable re-emerged in Step 3 as a significant predictor of adult anger (β = .13, p < .05).

Interestingly, parent-reported abusive disciplining was uniquely predictive of anger (β = .18, p < .01), self-esteem (β = −.14, p < .05), and happiness/life satisfaction (β = −.22, p < .001). Observed neglect was significantly predictive of autonomy (β = −.13, p<.05) and constraints (β = −.14, p<.05), suggesting that these other sources of data on child maltreatment provide information not found in the official record data.

DISCUSSION

Results of this study suggest that children who were maltreated and involved with child welfare for abuse and neglect have, as adults, lower scores on several interrelated scales of psychological well-being. In addition, prospectively measured, parent-reported abusive disciplining of children appears to add to the prediction of several outcomes, suggesting that these data capture an aspect of abusive parenting not reflected in child welfare reports. Additionally, observed neglect appears to have at least a few independent effects on adult psychological well-being, although significant results were fewer overall. These results point to the need for multiple data sources on child maltreatment and the possibility that measures will not predict outcomes uniformly.

Collectively, findings continue to show the detrimental, long-term consequences of child maltreatment, which, in this case, extend beyond commonly assessed mental health disorders of depression and anxiety (T. I. Herrenkohl et al., 2011; Reinherz et al., 2000). To the extent that variables like those tested are added to routine assessments of mental health outcomes, a fuller understanding of child maltreatment sequelae will be achieved and more information will become available for prevention and intervention programs. In fact, outcome measurement could extend into other interrelated areas and include aspects of an individual's social and interpersonal networks, relationships, and work and leisure practices (Kosterman et al., 2005). Further research is also needed to investigate the overlap in these and the more commonly studied mental health disorders to rule out the possibility that findings are redundant. Post hoc analyses conducted with our data on adult well-being and depression measured by the Beck Depression Inventory (BDI) (Beck, Steer, & Garbin, 1988) produced mostly moderate but significant correlations in the range of −.13 (autonomy) to −.74 (happiness and satisfaction). Anger and depression were correlated at .54 (p < .001). Thus, while these variables appear related, they are conceptually distinct and are apparently not redundant (Kia-Keating et al., 2011).

Future studies should attend to protective factors and potential buffers of child maltreatment, such as social and instrumental support and educational attainment (Richards & Huppert, 2011), to learn how psychological well-being can be enhanced and long-term negative consequences avoided. Further, it is also important to consider the developmental stability of psychological well-being measures and to study how well-being changes over time as a function of social and environmental influences (T. I. Herrenkohl, 2011b).

Limitations of this study include a restricted number of well-being indicators derived from self-report data. Additionally, in that the analysis plan for this study required that outcome measures be examined separately, regression models do not account for correlations among the well-being indicators. Other limitations include the lack of attention to underlying mechanisms and possible buffers of maltreatment effects. However, our goal was to expand the range of psychological variables typically included in studies of long-term outcomes of child maltreatment, and in that regard, results make an important contribution to the research literature.

Acknowledgments

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Table 1

Means and Standard Deviations for Adult Well-Being

Variable	Full Sample	Child Maltreatment	Comparison	Statistical Test (t-test) of Differences in the Means
Anger	14.05 (9.29)	14.95 (5.54)	13.12 (4.80)	t = 3.33 **
Self-esteem	22.98 (5.54)	21.77 (6.00)	24.24 (4.71)	t = −4.29 ***
Autonomy	4.64 (0.80)	4.53 (0.85)	4.75 (0.73)	t = −2.54 *
Purpose in life	4.22 (1.29)	4.04 (1.33)	4.41 (1.23)	t = −2.73 **
Directedness	3.32 (0.62)	3.27 (0.68)	3.36 (0.55)	t = −1.28
Constraints	4.43 (1.15)	4.25 (1.24)	4.62 (1.03)	t = −2.98 **
Happiness and life satisfaction	7.99(1.84)	7.52 (2.06)	8.46 (1.46)	t = −4.68 ***

*
p < .05;

**
p < .01;

***
p < .001.

Table 2

Correlations of Variables in the Analysis

Variables	2	3	4	5	6	7	8	9	10	11	12
1. O-R child maltreatment	-.58***	-.04	.06	.41***	.17**	-.22***	-.13*	-.15**	-.07	-.16**	-.26***
2. SES	---	-.00	-.18**	-.36***	-.16**	.17**	-.06	.23***	.03	.17***	.19***
3. Gender		---	-.03	-.04	.02	-.08	.04	-.03	-.05	-.06	-.06
4. P-R abusive discipline			---	-.01	.21**	-.15*	-.10	-.11	-.02	-.04	-.22**
5. Neglect				---	.09	-.19**	-.15*	-.14*	.03	-.20**	-.16*
6. Anger					---	-.49***	-.18**	-.26***	-.25***	-.42***	-.46***
7. Self-esteem						---	.41***	.32***	.29***	.67***	.67***
8. Autonomy							---	.21***	.11*	.34***	.23***
9. Purpose in life								---	.32***	.47***	.22***
10. Directedness									---	.32***	.23***
11. Constraints										---	.55***
12. Happiness and life satisfaction											---

O-R = Official record; P-R = Parent report

Table 3

Hierarchical Regression Results

Independent Variables	Anger	Self-Esteem	Autonomy	Purpose in Life	Directedness	Constraints	Happiness and Life Satisfaction
Step 1							
O-R child maltreatment	.17**	−.22***	−.13*	−.15**	−.07	−.16**	−.26***
Step 2							
O-R child maltreatment	.12+	−.19**	−.23***	−.02	−.07	−.09	−.23***
SES	−.09	.06	−.18**	.22***	−.01	.12+	.05
Gender	.03	−.09+	.03	−.03	−.05	−.06	−.07
Step 3							
O-R child maltreatment	.13*	−.18**	−.20**	−.01	−.09	−.06	−.22**
SES	−.05	.00	−.19**	.20**	.00	.08	.01
Gender	.03	−.09+	.03	−.03	−.05	−.06	−.09
P-R abusive discipline	.18**	−.14*	.08	−.08	−.02	−.03	−.22***
Neglect	.01	−.11	−.13*	−.04	.06	−.14*	−.07

***
p < .001;

**
p < .01;

*
p < .05;

+
p < .10; coefficients are standardized values. O-R =Official record; P-R = Parent report