



Disengaged parenting: Structural equation modeling with child abuse, insecure attachment, and adult symptomatology[☆]

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ABSTRACT

Based on attachment theory, we hypothesized that self-reported childhood experiences of disengaged parenting (DP) would predict adults' psychological symptoms even more than, on average, childhood sexual, physical, or psychological abuse. In a large ($N = 640$) university sample, bootstrapped multiple regression analyses indicated that although various forms of child maltreatment were correlated with symptomatology at the univariate level, DP was the primary multivariate predictor. Structural equation modeling indicated significant direct paths from (a) DP to both nonsexual child maltreatment and sexual abuse, (b) DP and nonsexual child maltreatment to insecure attachment, and (c) sexual abuse and insecure attachment to symptomatology. There were significant indirect effects of DP on psychological symptoms through sexual and nonsexual abuse, as well as through attachment. These results suggest that although child abuse has direct and indirect impacts on psychological symptoms, exposure to DP may be especially detrimental, both by increasing the risk of child abuse and by virtue of its impacts on attachment insecurity. They also support the potential use of attachment-oriented intervention in the treatment of adults maltreated as children.

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1. Introduction

The last several decades have witnessed a growing literature on the psychological effects of childhood maltreatment. First focused on the effects of childhood physical and sexual abuse, and then expanding to emotional or psychological maltreatment, this literature has documented a wide range of short- and long-term psychological impacts, ranging from anxiety and depression to posttraumatic stress, dysfunctional or self-destructive behavior, sexual disturbance, somatic preoccupation, and relational difficulties (see reviews by [Chen et al., 2010](#); [Hillberg, Hamilton-Giachritsis, & Dixon, 2011](#);

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Norman, Byambaa, De, Butchart, Scott, & Vos, 2012). Beyond the effects of abuse, psychological neglect also has been identified as a risk factor for symptomatology, with some studies suggesting substantial effects on early and later psychological and social development (Hart, Brassard, Binggeli, & Davidson, 2002; Hildyard & Wolfe, 2002; Khaleque, 2015).

Notably, these various forms of child maltreatment have all been linked to later insecure attachment (e.g., Beaudoin, Hebert, & Bernier, 2013; Briere, Godbout, & Runtz, 2012; Sroufe, Egeland, Carlson, & Collins, 2005; Unger & De Luca, 2014). Attachment theory proposes that early parental or caretaker behaviors towards the infant or child interact with in-borne biological systems that are focused on safety, especially in relation to separation from, or loss of, the primary caretaker(s), to produce characteristic patterns of relating to others, especially those in close relationships (Bowlby, 1988). When early parental/caretaker relationships are characterized by danger, deprivation, loss, rejection, or unavailability, children may develop insecure attachment styles, often seen as some combination of anxiety about relationships and avoidance of closeness (Simpson & Rholes, 1998). Insecure attachment, in turn, is associated with a number of subsequent mental health problems (Cassidy & Shaver, 2010). Significantly, attachment insecurity in childhood has also been shown to be associated with insecure attachment in adult romantic relationships (Feeney & Noller, 1990; Fraley, 2002; Nosko, Tieu, Lawford, & Pratt, 2011), supporting the theoretical notion of continuity of attachment status across the lifespan (Fraley & Roisman, 2015).

The contributions of childhood psychological neglect to this process are complex, especially in light of the diverse aspects of this form of maltreatment. Psychological neglect has been variously characterized as involving chronic rejection, ignoring or overlooking the child's needs, understimulation, emotional nonresponsiveness, and denying or withholding emotional support or love (Hart et al., 2002). Definitions of neglect range from "engaging in chronic or extreme spousal abuse in the child's presence, allowing a child to use drugs or alcohol, refusing or failing to provide needed psychological care, constantly belittling the child and withholding affection" (American Humane Association, n.d.) to "passive or passive-aggressive inattention to a child's emotional needs, nurturing or emotional well-being" (American Psychological Association, n.d.).

Given this complexity, it often is unclear which aspects of the neglect construct are related to what outcomes (Crouch & Milner, 1993). For example, there are little data available to discriminate the possible effects of rejection and actively dismissive parenting from less intentional, yet potentially equally harmful, actions such as inattention, distraction, or lack of awareness of the child's needs. Whereas the former may be more accurately seen as psychological abuse, the latter may include caretaker psychological disturbance or dysfunction, such as dissociation; distraction or interference by anxiety, depression, psychosis, substance abuse, or adverse social environments; and/or the effects of unprocessed or unresolved prior trauma and neglect (Liotti, 2004; Madigan et al., 2006; Siegel, 1999), all of which have been associated with later problems for the child, including disorganized attachment and significant psychological disturbance (Solomon & George, 2011; Zajac & Kobak, 2009).

Especially impactful may be a specific child-rearing style referred to as *uninvolved parenting* (Maccoby & Martin 1983), characterized by caretaker emotional disengagement, emotional distance, lack of warmth, and indifference. Although seemingly less immediately threatening than acts of commission such as physical or sexual abuse, the attachment literature suggests that caretaker uninvolvedness may be especially detrimental (Sroufe, Egeland, Carlson, & Collins, 2005). For example, the Minnesota Longitudinal Study of Parents and Children found that caretakers who evidenced sustained psychological unavailability were especially likely to have insecurely attached children, some of whom developed significant psychological difficulties (Erickson & Egeland, 1987; Sroufe et al., 2005).

In the present study, we sought to evaluate the effects of a specific aspect of uninvolved caretaking, which we refer to as *disengaged parenting* (DP). This construct involves the psychological unavailability described by Egeland and colleagues, but not the dismissive or rejecting qualities sometimes attributed to this category (Hart et al., 2002). Instead, we operationalized parental disengagement as lack of awareness of the child's ongoing experience, inattention, distraction, diminished reactivity, and, potentially, dissociation. Although this construct does not directly imply malignant intent or harsh treatment, we nevertheless hypothesized that, given research on the effects of attachment figure misattunement and nonresponsivity (e.g., Maccoby & Martin, 1983; Sroufe et al., 2005; Stern, 1985), DP would be specifically injurious, in fact to a greater extent than other forms of child maltreatment. In addition, because caretakers who are less psychologically engaged with, and attached to, their child might be more at risk for maltreating them, or not protecting them, we also hypothesized that DP would be associated with a greater risk of child abuse, and that both DP and child abuse would subsequently be related to symptomatology.

Finally, given the attachment literature, we hypothesized that the relationship between DP and nonsexual abuse on psychological symptoms would be mediated by insecure attachment, whereas sexual child abuse would have direct effects on psychological symptomatology, irrespective of attachment status. Regarding the latter, although intrafamilial child abuse is known to potentially impact attachment security (Baer & Martinez, 2006; Cicchetti & Toth, 1995), extrafamilial child abuse does not directly involve caretakers, and thus may have fewer impacts on the attachment process. Because sexual abuse more frequently occurs outside of the family context (Finkelhor, Hotelling, Lewis, & Smith, 1990; Ogrodnik, 2010), we hypothesized that it would be less related to intrafamilially-related attachment disturbance than parental psychological or physical abuse, which is, by definition, usually intrafamilial.

2. Method

2.1. Participants

Participants were 770 students (72% women; 28% men) who were recruited from undergraduate psychology courses at a mid-size western Canadian university. Age ranged from 17 to 53 years ($Md = 20$; $M = 21.4$; $SD = 3.18$), with 714 (92.7%) of participants aged 25 or younger. The majority were White/Caucasian (73%), with the remainder being 19% Asian, 5% mixed race, 3% each Indigenous and “other,” and 2% each Hispanic and Black/African-Canadian. Family of origin income prior to age 18 for 82% of the sample was \$50,000 CAN or higher. Most (67%) of the sample had at least one parent with a university degree. The majority were native English speakers (97%), and were single/never married (84%), while 15% were married or living as married, and 1% were separated, divorced, or widowed.

2.2. Measures

2.2.1. Disengaged parenting. A new measure, the *Disengaged Parenting Scale (DPS)*, was developed for this study. As presented in [Appendix A](#), this scale consists of 10 items, asking participants to select the number that “best describes how at least one of your parents (or other adults who were in charge of you) were with you when you were under age 12.” Scored from 1 (*never*) to 5 (*very often*), these items refer to the extent to which one or both parents were distracted, psychologically nonresponsive, and/or inattentive in their interactions with the respondent when he or she was a younger child. Typical items are *Seemed to be in his or her own world*, *Didn't pay any attention to me*, *Didn't react when I said or did things*, and *Didn't notice when I was hurt or upset*.

2.2.2. Child abuse. Psychological maltreatment was evaluated in the present study using the Psychological Abuse scale of the Psychological Maltreatment Review (PMR; [Briere et al., 2012](#)). The PMR evaluates various forms of noncontact maltreatment by each parent or parental figure prior to age 18, in the average year. Respondents are asked to answer each item on a 0 (*never*) to 6 scale (*over 20 times a year*), “separately for your mother (or other woman who lived with you when you were a child) and father (or other man who lived with you when you were a child).” If you had different men and/or women living with you when you were a child, pick the person who was around the longest in your life.”

Typical Psychological Abuse items include *Said mean things about you*, *Yelled at you*, *Criticized you*, *Ridiculed or humiliated you*, and *Called you names*. In the present study, scores were summed across mothers and fathers when there were scores for both parents ($n = 623$, 97.3%), whereas when there was only one parent/caretaker in the participant's life ($n = 17$, 2.7%), that one parent/caretaker's score was doubled to match the metric of the two-parent score. The resultant variable had a Cronbach's α of 0.93. Although the PMR also contains a general Psychological Neglect scale, the content of some of its items partially overlap with those of the DPS scale. Because, as noted earlier, DPS is likely a component of emotional neglect, we chose not to include this more heterogeneous variable in the current study.

Childhood physical abuse (CPA) was assessed by a brief, two-item screening tool, based on a measure developed by [Leserman, Drossman, and Li \(1995\)](#). Participants indicated whether a parent had “hit, kicked, or beaten” them or “seriously threatened your life” in an average year prior to age 18, on a scale ranging from 0 (*never*) to 6 (*over 20 times a year*), for both mothers and fathers. In the present study, CPA was considered present if participants indicated at least one of the above behaviors for either parent.

Childhood sexual abuse (CSA) was assessed using a modification of a screening measure developed by [Leserman et al. \(1995\)](#). Six items addressed specific “unwanted” sexual behaviors prior to age 14, ranging from genital exposure to intercourse, that yielded a single four-point sexual abuse index, with values being 0 = no CSA, 1 = noncontact CSA (exposure or threats), 2 = unwanted sexual contact short of intercourse, and 3 = oral, anal, or vaginal penetration. This variable has been used in other studies (e.g., [Lind, Aggen, Kendler, York, & Amstadter, 2016](#); [Vaillancourt-Morel et al., 2016](#)), where it has correlated as expected with symptomatology.

Each of these child abuse variables were included in a bootstrapped multiple regression analysis to determine their relative predictive validity before and after DP was taken into account. Further, childhood physical and psychological abuse were used as indicators of a latent “nonsexual child abuse” variable in a structural equation model (SEM) analysis. Sexual abuse, on the other hand, was employed as a single measured variable in order to determine any differences between sexual and nonsexual maltreatment. See the Statistical Analysis section for a description of bootstrapping and structural equation modeling and their applications in this study.

2.2.3. Attachment. Attachment insecurity in adults was measured using the 36-item Experiences in Close Relationships scale (ECR; [Brennan, Clark, & Shaver, 1998](#)), composed of two 18-item subscales labeled attachment *anxiety* (i.e., anxiety about rejection, with feelings of personal unworthiness regarding interpersonal relationships) and *avoidance* (i.e., avoidance of intimacy, with interpersonal distrust and relational avoidance), each rated on a 7-point Likert-type scale. The reliability, construct, predictive, and discriminant validity of the two scales have been demonstrated in many studies (e.g., [Crowell, Fraley, & Shaver, 1999](#); [Godbout, Dutton, Lussier, & Sabourin, 2009](#)). In the present study, alpha coefficients were high

($\alpha = 0.94$ for anxiety; $\alpha = 0.93$ for avoidance). The two attachment scales of the ECR (anxiety and avoidance) were used as indicators of a latent adult attachment variable in the structural equation model.

2.2.4. Psychological symptoms. Psychological symptomatology was measured by the Trauma Symptom Inventory-2 (TSI-2, Briere, 2011). A normed and standardized self-report measure, the TSI-2 consists of 12 clinical scales, each composed of 10 items. Responses reflect the frequency of self-reported symptoms over the previous 6 months, rated on a scale of 0 (*never*) to 3 (*often*). Although many of the symptoms evaluated by the TSI-2 are more common among trauma-exposed individuals, it does not specifically link symptoms to any adverse event. As a result, scores on, for example, the *Depression*, *Anger*, or *Somatization* scales may reflect nontraumatic etiologies as well as potentially trauma-specific ones. Confirmatory factor analyses (Briere, 2011; Godbout et al., 2016) indicate that there are four underlying sources of variance in the TSI-2, which can be scored as summary scales: 1) *Self-Disturbance* (consisting of Insecure Attachment, Impaired Self-Reference, and Depression scales), 2) *Posttraumatic Stress* (Dissociation, Defensive Avoidance, Intrusive Experience, and Anxious Arousal scales), 3) *Externalization* (Anger, Tension Reduction Behavior, Sexual Disturbance, and Suicidality scales), and 4) *Somatization* (General Somatization and Pain-Related Somatization subscales).

Because we sought to examine the mediation of any maltreatment-symptom relationships by separately assessing insecure attachment, a modified version of the total TSI-2 score (the sum of all scales except Insecure Attachment) was used as the dependent variable in the multiple regression analysis reported below. Similarly, the four factor scales of the TSI-2 were used as indicators of a latent symptomatology variable in the structural equation model, but with the modified Self-Disturbance factor no longer including the Insecure Attachment scale.

2.3. Procedure

Participants were recruited for a study of “psychological and physical health and life experiences” through an online subject recruitment system used by the university’s psychology department. The study was approved by the university’s Human Research Ethics Board. Participants received bonus marks towards their final grade in an introductory psychology course in return for their participation. The study was conducted in small groups in a computer lab setting on campus in groups of 5–10 people who accessed the link to the survey on a lab computer. Informed consent was obtained from participants before they began the study. Information on the purpose of the study was provided in written form following completion of the questionnaire and, because of the nature of the study, participants were provided with a list of local psychological resources to access if needed.

2.4. Statistical analysis

2.4.1. Bootstrapped step-wise regression. Step-wise linear regression analysis was used to evaluate the relationship between DP, child abuse variables, insecure attachment, and the modified total TSI-2 score. Because some of the variables (e.g., sexual abuse, the DPS, and the modified total TSI-2 score) were unlikely to be normally distributed, bootstrapping (Efron & Tibshirani, 1993) was applied to assess the significance of multivariate tests, with the recommended 1000 random re-samples with replacement. This computationally intensive methodology corrects for bias associated with nonnormal predictor and dependent variable distributions, and generates confidence limits and *p* values for the true value of coefficients (Chernick, 2007; Erceg-Hurn & Mirosevich, 2008). The resultant bootstrap statistics are asymptotically more accurate than those obtained through classic parametric testing (DiCiccio & Efron, 1996). In the present study, both non-bootstrapped regression (β) weights and bootstrap-corrected *p* values are reported.

In order to test the incremental and simultaneous validity of the DPS scale, age, gender, and child abuse (i.e., sexual, physical, and psychological maltreatment) were entered as a group into the regression analysis at Step 1, and DP was added at Step 2. Of interest was whether DP was a predictor of symptoms after controlling for child abuse, and whether child abuse continued to predict symptomatology once DP was taken into account. Insecure attachment was added at Step 3, in order to determine whether DP continued to be a significant predictor of symptomatology or would be mediated by attachment status.

2.4.2. Structural equation modeling. Structural equation models (SEMs), using Mplus, version 7 (Muthén & Muthén, 1998–2012), were run to examine whether (a) the relationship between DP and psychological symptoms would be mediated by sexual and nonsexual child abuse, and (b) insecure attachment would fully mediate the path from DP to symptomatology, and at least partially mediate the paths from sexual and nonsexual child abuse to symptomatology.

SEM was computed using the robust method, correcting for the expected non-normal distributions. Several fit indices were used to verify if the specified models were good representations of the data, as described by Hu and Bentler (1999) and Kline (2016). First, given that the chi-square statistic is sensitive to sample size (Jöreskog & Sörbom, 1993; Kline, 2016), we used the ratio of chi-square to degrees of freedom (χ^2/df). A good fit is indicated by a χ^2/df ratio of less than 5.0 (Jöreskog & Sörbom, 1993), a comparative fit index (CFI; Bentler, 1990) of 0.90 or higher, and a root mean square error of approximation (RMSEA; Steiger, 1990) value of less than 0.08 (Hu & Bentler, 1999; Browne & Cudeck, 1993). A 90% confidence interval (CI) is presented along with the RMSEA value to indicate the precision of the estimate (MacCallum et al., 1996). A 90% confidence interval with an upper bound below 0.08 indicates a good fit to the data.

Table 1

Correlation of demographics, disengaged parenting, child abuse, and modified Trauma Symptom Inventory –2 total score (N = 640).

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-------------------------------|---------|--------|--------|--------|--------|--------|-------|--------|---|
| 1. Modified TSI-2 total score | – | | | | | | | | |
| 2. Gender | –0.10** | – | | | | | | | |
| 3. Age | 0.02 | 0.05 | – | | | | | | |
| 4. Disengaged parenting | 0.49** | –0.02 | 0.16** | – | | | | | |
| 5. Psychological abuse | 0.41** | 0.05 | 0.06 | 0.51** | – | | | | |
| 6. Physical abuse | 0.26** | 0.08 | 0.15** | 0.34** | 0.51** | – | | | |
| 7. Sexual abuse | 0.26** | –0.12* | 0.15** | 0.28** | 0.24** | 0.23** | – | | |
| 8. Anxious attachment | 0.52** | –0.11* | –0.08 | 0.22** | 0.20** | 0.09 | 0.07 | – | |
| 9. Avoidant attachment | 0.33** | 0.03 | –0.11* | 0.26** | 0.21** | 0.06 | .13** | 0.23** | – |

* $p \leq 0.01$; ** $p \leq 0.001$.

In order to examine the mediational role of attachment, we computed direct effects (i.e., path coefficient from DP to symptomatology) as well as indirect effects (i.e., the product of the path coefficients from DP to attachment, and from attachment to symptomatology). The significance of the indirect effects was evaluated using 95% bootstrapped confidence intervals (MacKinnon & Fairchild, 2009). This bias-corrected method is based on a distribution of the product of coefficients, and generates confidence limits for the true value of coefficient for indirect effects. When zero is not in the confidence interval, the indirect effect is considered significant. Finally, we evaluated the proportions of the total effect that were mediated through attachment (indirect effect/total effect). The same strategy was used to test the potential mediational role of sexual and non-sexual child abuse in the relation between DP and symptomatology.

2.4.3. Missing data. Although all 770 participants completed the DPS, the ECR avoidance and anxiety scales were less completely endorsed (10.5% and 13.6% missing values, respectively), as were, to a lesser extent, the child abuse variables (missing values ranging from 0.6% to 1.9%) and TSI summary scales (missing values ranged from 0.6% to 3%), resulting in an overall missing value rate of 16.9%. This proportion is at the low end of what is typical for psychological studies (McKnight, McKnight, Sidani, & Figueredo, 2007; Peng, Harwell, Liou, & Ehman, 2006). In order to assess whether participants with missing responses varied from those who answered all questions, a logistic regression analysis was conducted, with the dependent variable being missing data status and predictors being age, gender, race, and total score on the TSI-2. Results indicated no differences between those who did not complete the survey versus those who did ($\chi^2[9] = 6.69, p = 0.67$), nor any univariate differences on these variables. Accordingly, in order to avoid the unnecessary use of estimated data points, and given the significant sample size in either instance, all results presented below involved the casewise deletion approach and a resultant N of 640, with the exception of the factor and psychometric analyses of DPS items, which employed all 770 cases.

2.4.4. Experiment-wise error rate. Because of the moderate number of statistical tests performed in this study, and thus the risk of an inflated experiment-wise error rate, a minimal p value of 0.01 was required for statistical significance.

3. Results

3.1. Child abuse and disengaged parenting

One hundred fifty-five (24.2%) participants reported childhood physical abuse in this study, and 130 (21.3%) reported sexual abuse, with the most common forms of CSA being unwanted sexual contact without penetration (8.3% of all participants) and the least common being oral, vaginal, or anal penetration (5.0% of participants). Among sexual abuse survivors, 33 participants (21.3%) reported at least one instance of intrafamilial sexual abuse. The mean score for psychological abuse was 26.31 ($SD = 22.18$) on a scale from 0 to 120, and the mean score for DP was 15.80 ($SD = 7.39$) on a scale from 10 to 50.

3.2. Psychometrics of the disengaged parenting scale

Principle components (PC) and principle factors (PF) analyses of DPS items both indicated that this scale was unidimensional by Kaiser's (1960) criterion and Cattell's (1966) scree test, with only one PC eigenvalue (6.04) greater than 1.0, accounting for 60.39% of the item variance. Other indices of homogeneity were also in the optimal range (Clark & Watson, 1995; Nunnally, 1978; Robins, Fraley, & Krueger, 2009): the mean item intercorrelation and corrected item-total correlation were 0.56 and 0.72, respectively; the lowest item intercorrelation was 0.42; and internal consistency (α) was 0.92.

3.3. Simple correlations

As presented in Table 1, univariate correlation analysis revealed significant ($p \leq 0.001$) associations between DP, the various forms of child abuse, and the modified total TSI-2 score. As well, DPS scores and all forms of child abuse were interrelated,

Table 2

Bootstrapped step-wise multiple regression analysis of the modified TSI-2 total score as a function of demographics, child abuse, disengaged parenting, and insecure attachment (N = 640).

| Step | Step-wise results | | | | | | | | |
|------|-------------------|-------|-------|------|--------|--------|---------|---------|-----------------------|
| | Gender | Age | CSA | CPA | CPM | DPS | ATT-AV | ATT-ANX | Adj. R ² Δ |
| | β | β | β | β | β | β | β | | |
| 1 | −0.11** | −0.02 | 0.15* | 0.04 | 0.35** | – | – | – | 0.21*** |
| 2 | −0.10* | −0.06 | 0.10 | 0.04 | 0.19** | 0.36** | – | – | 0.09*** |
| 3 | 0.06 | 0.00 | 0.08 | 0.06 | 0.13* | 0.25** | 0.15*** | 0.37*** | 0.16*** |

* $p \leq 0.01$, ** $p \leq 0.005$, *** $p \leq 0.001$ bootstrap corrected

Adj R² Δ = Adjusted R change; CSA = Childhood sexual abuse; CPA = Childhood physical abuse; CPM = Child Psychological Maltreatment; DPS = Disengaged Parenting Scale

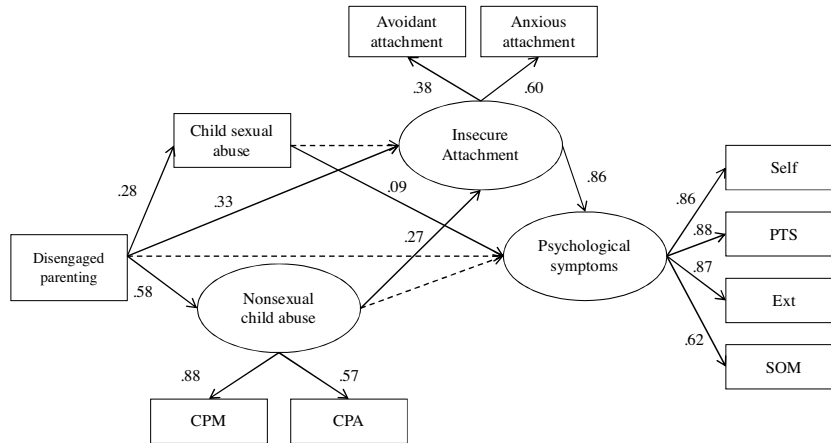


Fig. 1. Structural equation model of disengaged parenting, child abuse, insecure attachment, and psychological symptomatology, with nonsignificant paths in dashed lines. Self = TSI-2 Self-Disturbances factor without Insecure Attachment scale; PTSD = TSI-2 Posttraumatic Stress factor; Ext = TSI-2 Externalization factor; SOM = TSI-2 Somatization factor. All paths significant at $p < 0.01$.

with the highest correlation occurring between physical and psychological abuse. Anxious and avoidant attachment also were related to the modified TSI-2 total score.

3.4. Predicting psychological symptomatology

Bootstrapped stepwise multiple regression analysis of demographics, DP, child maltreatment, and attachment on symptomatology was significant (adjusted $R^2 = 0.45$, $F(8, 631) = 66.76$, $p < 0.001$). As indicated in Table 2, the modified TSI-2 scale was associated with female gender and both psychological and sexual abuse, but not physical abuse, at Step 1, and with gender, psychological abuse, and disengaged parenting at Step 2. Step 2 results indicated that the DPS score had significant incremental validity relative to all forms of child abuse, and was associated with a β coefficient that was almost twice the magnitude of the next most powerful predictor of symptomatology, psychological abuse. At Step 3, DP was especially related to modified TSI-2 total scores, followed by psychological abuse and anxious and avoidant attachment.

3.5. Structural equation modeling

SEM indicated a significant direct association between DP and psychological symptoms ($\beta = 0.51$, $p < 0.001$) prior to entering other variables into the model. The mediation model demonstrated a good fit to the data ($\chi^2(28) = 93.15$, $p < 0.001$, Ratio $\chi^2/df = 3.33$, CFI = 0.97; RMSEA = 0.06 [90% CI = 0.05, 0.07]). See Fig. 1 for the final SEM; dashed lines reflect estimated paths that were non-significant and therefore removed, path and fit values were statistically equivalent to the original fit; $\chi^2(31) = 95.11$, $p < 0.001$, Ratio $\chi^2/df = 3.07$, CFI = 0.97; RMSEA = 0.06 [90% CI = 0.05, 0.07]. Results confirmed that DP was related to sexual and nonsexual child abuse, and, along with nonsexual abuse, to greater insecure attachment. Paths from sexual abuse and insecure attachment to psychological symptoms were also significant.

The link between DP and psychological symptomatology was explained by three significant indirect effects. First, sexual abuse acted as mediator ($b = 0.03$, 95% bootstrap C.I. = 0.01, 0.07), explaining 6% of the effect of DP on symptomatology. Second, attachment also was a mediator ($b = 0.33$, 95% bootstrap C.I. = 0.29, 0.64), explaining 65% of the total effect of DP on symptomatology. Third, a sequential mediation was found; the indirect effect through non-sexual child abuse and attachment, respectively, was significant ($b = 0.15$, 95% bootstrap C.I. = 0.13, 0.36), explaining 29% of the effect of DP on symptomatology.

This integrative model explained 8% of the variance in sexual abuse, 34% in nonsexual abuse, 26% in attachment, and 87% in psychological symptoms.

4. Discussion

The current results suggest that although childhood sexual, physical, and psychological abuse are each individually associated with later psychological symptoms, DP is a considerably more powerful predictor at both univariate and multivariate levels. In addition, the SEM results suggest that DP is a risk factor for both sexual and nonsexual child abuse, and that the path from DP to symptomatology is fully mediated by insecure attachment.

The greater predictive power of disengaged parenting relative to child abuse is, at first appraisal, somewhat surprising: the items of the DPS, such as “Would have a blank look on his or her face,” “Seemed distracted a lot of the time,” or “Didn’t pay any attention to me” seem considerably less traumagenic than intentional acts of childhood sexual victimization or physical abuse. Yet, it is likely that such items tap what is variously referred to as psychologically unavailable caretaking (Erickson, Egeland, & Pianta, 1989) or denying emotional responsiveness (Hart & Brassard, 1991), which has been repeatedly associated with later psychosocial difficulties (Cassidy & Shaver, 2010). They also agree with a small literature suggesting that being raised by a dissociated parent can have significant longterm consequences, including dysregulated attachment (e.g., Barach, 1991; Hesse & Main, 2006). As noted by Solomon and George (1999) in the context of disorganized attachment, and further expanded by Ford and Courtois (2013) to insecure attachment in general, it may be that parental “abdication” of caregiving (e.g., disengagement) may be more likely to lead to problematic attachment, and thus greater symptomatology, than frightening (i.e., abusive) parental behavior. It should be emphasized, however, that these data do not negate the long-established relationship between child abuse (perhaps especially sexual maltreatment) and later psychosocial difficulties; rather, they suggest that DP and related phenomena can be even more deleterious, in part because of their link to child maltreatment and anxious attachment, and perhaps because they are toxic components of other, more direct forms of child maltreatment such as physical or sexual abuse.

The significant path from DP to both sexual and nonsexual child abuse found in the SEM suggests that parents who are disengaged or dissociated around their children are more likely to engage in abusive behaviors, or fail to protect them from abusive others, as suggested by several studies (e.g., Enns et al., 2002; Gao, Raine, Chan, Venables, & Mednick, 2010). Further, several studies indicate that individuals with childhood abuse histories often report poor parental bonding (e.g., Byrne, Velamori, Cernovsky, Cortese, & Loszty, 1990; Craissati, McClurg, & Browne, 2002; Gao et al., 2010), although the directionality of that relationship has not been established. It is possible that disengaged parents are not as emotionally connected or bonded to their children, and thus may have fewer compunctions against abusing them or not protecting them from others (Rikhye et al., 2008). DP also may be a marker for significant parental child abuse history or unresolved trauma, psychopathology, or substance use, all of which are associated with potentially abusive or nonprotective behavior (Chaffin, Kelleher, & Hollenberg, 1996; Dubowitz, Kim, Black, Weisbart, Semiatin, & Magder, 2011; IOM (Institute of Medicine) and NRC (National Research Council), 2014; Sohye, Fonagy, Allen, & Strathearn, 2014). In turn, both DP and nonsexual child abuse were associated with insecure attachment, which was then related to symptomatology. These data suggest that DP may have direct and indirect effects on later attachment status, and indirect effects on symptomatology. This multi-pathway model may explain, at least in part, the relatively substantial predictive power of DP in the present study.

These SEM findings partially support our hypothesis that child abuse would have direct effects on symptomatology. In this regard, nonsexual child abuse was not directly associated with symptomatology, but rather exerted its effects indirectly through attachment disturbance. Sexual abuse, on the other hand, had a direct path to symptomatology, but not to attachment. This difference between sexual and nonsexual abuse may relate to the fact that only 21% of sexual abuse survivors were victimized by parents or family members in the present study, in contrast to psychological or physical abuse which was defined by the PMR as intrafamilial. In this context, physical and psychological maltreatment might have stronger impacts on the child’s attachment to his or her caretakers, whereas sexual abuse, which was notably less intrafamilial, might have fewer immediate attachment-related effects. Future research is indicated in this area to examine the differential relationship between intrafamilial and extrafamilial sexual abuse on attachment and subsequent symptomatology, including an additional possibility that either form of sexual abuse is so directly dysregulating that it leads to symptomatology above and beyond any effects on attachment.

Because DP was measured as a continuous variable in the present study, and no specific definitions of abusive DP are currently encoded in law, it is unclear how much caretaker disengagement is required before it should be deemed maltreatment or neglect. This is also a problem with continuous measures of psychological abuse, which do not have clear cut-off points for dichotomous designations of psychological maltreatment (Briere, 1992). As a result, some lower intensity DP might be better described as a problematic parenting style, as opposed to child maltreatment, per se. Future research is indicated to determine at what severity DP – as well as child psychological abuse – must occur before either meets sociocultural definitions of unacceptability, and/or result in significant psychological disturbance.

Overall, the current findings are concordant with the attachment literature, indicating that disengaged, emotionally unresponsive parenting – alone and in addition to child abuse – may negatively affect the parent-child attachment relationship and have significant psychological impacts on the child (Erickson et al., 1989; Main & Goldwyn, 1984; see also Cassidy & Shaver, 2010). Such disengaged caretaking effects appear to persist into adulthood (Egeland, 1997; McCord, 1983), although few studies of adults discriminate this group from those exposed to childhood psychological abuse or neglect in general. This

is unfortunate, since, as originally noted by [Ainsworth \(1969\)](#), there appears to be a significant difference between parental rejection or other active behaviors and parental unavailability or disengagement, per se.

Notably, although stepwise multiple regression analysis indicated that disengaged parenting continued to predict symptomatology even after controlling for child abuse and insecure attachment, SEM indicated that the path from disengaged parenting to symptoms was fully mediated by insecure attachment. In this circumstance, SEM is likely the more sensitive methodology, since its use of latent factors corrects for error associated with the measured variables used in multiple regression, and models the relationships among multiple independent and dependent variables simultaneously ([Cheung, 2008](#)). Nevertheless, future research may be indicated to further probe the possibility of an independent relationship between disengaged parenting and symptomatology, beyond any covariance with child abuse or attachment style variables, whether measured or latent.

4.1. Limitations

Interpretation of the present findings should take into account certain limitations. The results presented here were based on a cross-sectional methodology, and cannot be considered proof of causality. In this regard, although potentially helpful in testing the fit of specific hypotheses to the actual data, SEM cannot establish cause and effect in the absence of longitudinal data or a true experimental design. In addition, this study was based on retrospective self-reports that may have introduced biases or distortions in participants' recall of child abuse and parental disengagement, as well as their proclivity to under- or over-report psychological symptoms. The use of anonymously-acquired data from participants may have reduced secondary gain for reporting bias, but cannot rule it out entirely. In addition, this study consisted solely of university students, and thus further research is indicated to determine the generalizability of the present findings to other groups. A final limitation is the use of [Leserman et al. \(1995\)](#) definition of childhood sexual abuse, which refers to "unwanted" sexual contact. Although these authors intentionally employed this descriptor to include close-in-age non-consensual experiences, this definition does not include events that meet legal definitions of childhood sexual abuse even if the victim defined them as consensual.

4.2. Implications

The results of this study may have significant implications for child maltreatment research. The relationship of DP to child abuse, insecure attachment, and, indirectly, to symptomatology suggests that future researchers include DP when examining child abuse effects. This recommendation may be seen as an extension of earlier suggestions that physical and sexual abuse research also include psychological abuse (e.g., [Hart, Germain, & Brassard, 1987](#)), now expanded to include parental disregard or disengagement. Disengaged parenting, which falls under the rubric of acts of omission, as opposed to acts of commission such as child abuse, emphasizes the clinical truism that it is not just what is done to the child, but also what is not done for him or her.

Importantly, the DPS scale introduced in this study relates to a specific type of omission, that of parental unawareness, distraction, lack of attention, and, by implication, dissociation. As noted earlier, items of this scale make no reference to intentional acts such as ignoring, dismissing, or rejecting, and thus likely tap a specific subcomponent of psychological neglect, perhaps one that is more likely to involve parental psychological dysfunction, such as serious mental disturbance, unresolved attachment or trauma issues, or substance abuse. As a result, researchers may choose to include not only a caretaker disengagement measure in their research, but also assessments of other forms of child psychological neglect and caretaker dysfunction.

These data also potentially bear on attachment research. To the extent that these cross-sectional findings can be generalized, DP appears to operate as an antecedent to insecure attachment. Although research with adults complicates the study of early caretaking effects on attachment, it does offer information on how such phenomena present later in life. For this reason, future research might examine the specific impacts of different forms of abuse and neglect on attachment style, with emphasis, based on the current findings, on the specific types of caretaker omission that may contribute to adult attachment insecurity.

The clinical implications of the present study reside in the possibility of independent parental disengagement effects among those presenting with problematic childhoods. Although many clinicians appropriately evaluate the possibility of child abuse effects when working with symptomatic children and adults, these efforts may be further assisted by taking caretaker psychological unavailability into account. In fact, the findings of this study suggest that some of what may appear to be straightforward child abuse effects in a given client may represent the result of a combination of parental disengagement and intentional child maltreatment, or even, in some instances, primarily the former.

Because the hypothesized effects of parental disengagement and nonsexual child abuse found here were mediated by attachment insecurity, it also may prove helpful to attend to attachment-related phenomena when working with children (or adults) who were maltreated by caretakers. This may mean assisting clients in processing and resolving the effects of parental disengagement along with any direct impacts of abuse. Outcomes associated with caretaker psychological unavailability may include not only classical psychological symptoms, but also rejection sensitivity, difficulties in forming and sustaining intimate relationships, and distorted schema about self and others ([Fraleigh & Shaver, 2000](#); [Rholes & Simpson, 2004](#)). As a

result, at least for some individuals, abuse-focused therapy may be most efficacious to the extent that it addresses not only posttraumatic stress, negative mood, and cognitive distortions, but also relational and attachment issues.

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Appendix A.

Disengaged Parenting Scale (DPS)

Please circle the number that best describes how at least one of your parents (or other adults who were in charge of you) were with you when you were under age 12.

| | Item | Never | | | | Very often |
|-----|--|-------|---|---|---|------------|
| 1. | Seemed to be in his or her own world. | 1 | 2 | 3 | 4 | 5 |
| 2. | Didn't seem to notice how I was doing a lot of the time. | 1 | 2 | 3 | 4 | 5 |
| 3. | Seemed distracted a lot of the time. | 1 | 2 | 3 | 4 | 5 |
| 4. | Would have a blank look on his or her face. | 1 | 2 | 3 | 4 | 5 |
| 5. | Didn't pay any attention to me. | 1 | 2 | 3 | 4 | 5 |
| 6. | Seemed to be far away in his or her mind. | 1 | 2 | 3 | 4 | 5 |
| 7. | Didn't notice when I was hurt or upset. | 1 | 2 | 3 | 4 | 5 |
| 8. | Sometimes seemed like he or she didn't notice I was there. | 1 | 2 | 3 | 4 | 5 |
| 9. | Wasn't really aware of what I was feeling. | 1 | 2 | 3 | 4 | 5 |
| 10. | Didn't react when I said or did things. | 1 | 2 | 3 | 4 | 5 |