

Examining Correlates of Intrusive Parenting

Ekene O. Azuka

Mentor: Kathryn L. Humphreys, Ph.D., Ed.M.

Stress and Early Adversity Lab

Vanderbilt University

PSY-PC 3981 Spring 2020

**Abstract**

Intrusive parenting behavior is associated with a variety of poor child outcomes. Given this, it is important to understand predictors of negative parenting behavior so that we might identify parents who are at risk of exhibiting intrusive parenting behaviors. Current literature regarding intrusive parenting rarely investigates predictors of or pathways to the presentation of this particular form of parenting behavior. The current study aims to address this gap by examining potential predictors of intrusive parenting behavior: childhood maltreatment history and empathy toward one's child. Further, we investigated parental empathy as a possible mediator in the relation between childhood maltreatment history and intrusive parenting behaviors. We found that there was no association between childhood maltreatment severity and levels of intrusiveness; there was no association between childhood maltreatment severity own-child empathy; there was no association between own-child empathy and levels of intrusiveness.

Parenting behaviors are often broadly categorized as either positive (e.g., sensitive, and responsive, animated, stimulating cognitive development) or negative (e.g., intrusive, disapproving, hostile) (Barnett et al., 2008). Negative parenting behaviors, sometimes referred to as harsh parenting and often characterized by physical or psychological aggression, are associated with poorer outcomes for children, including attention difficulties; aggressive behaviors; and anxious, depressed, and withdrawn behaviors (Brakenhoff et al., 2018; Wolford et al., 2019). Intrusive behaviors, a specific form of negative parenting behavior, is associated with a multitude of poor outcomes for children including externalizing behavior issues and problems with mental health (Belsky & Keith, 1996; Gershoff, 2002) Intrusive parenting encompasses actions performed by the parent that are not centered on the thoughts, desires, wishes, and boundaries of the child (Gomez et al., 2018) and exerts parental control that hinders the proper development of the child's sense of autonomy (Ainsworth et al., 1978) Intrusiveness in the context of relationships between a mother and their infant or toddler is often physical and adult centered. It can include invading a child's personal space, physically impeding a child from, or directing them to engage in a certain activity, and helping with tasks (for example, getting dressed) that a child is developmentally equipped to perform independently.

Identifying and addressing intrusive behavior can be challenging. It is possible that intrusive behavior can be result of a parent attempting to engage in a positive interaction with their young child yet failing to realize the intrusive nature of their actions. For example, a caregiver may try to show affection to their baby by kissing, hugging, or tickling their child, but they may not notice or not respond to their infant's signals that these actions are overwhelming (e.g., looking away or becoming upset). Caregivers who engage in intrusive parenting are often focused on their own goals rather than interacting in a child-centered

manner. Consequently, the child's cues and desires for autonomy are either not detected or acknowledged by the adult caregiver (Ainsworth et al., 1979; Ispa et al., 2004)

A parents' own history of childhood maltreatment has been linked with intrusive parenting behavior. Maternal childhood maltreatment history has been shown to be related to general parenting competence as well as parental characteristics that are closely related to intrusiveness, such as adult aggression and depression (Badr et al., 2018; Bailey et al., 2012; Buist, 1998; Chen et al., 2012). To better understand the link between intrusiveness and maternal childhood maltreatment history, it would be useful to explore whether there is a specific pathway by which childhood maltreatment leads to intrusive parenting behaviors. Empathy, the ability to be sensitive to and express a compassionate understanding of someone else's emotional experience (Davis, 1983) has been associated with childhood maltreatment such that individuals who experience childhood maltreatment tend to exhibit lower levels of empathy (Barahal et al., 1981; Burack et al., 2006). Given this, one goal of the current project is to examine whether empathy, specifically empathy for one's own child, might mediate or explain the association between childhood maltreatment history and intrusive parenting behavior.

### ***Outcomes of intrusive parenting***

Intrusive parenting has been associated with negative child outcomes that span across many areas of a child's development. Caregivers who engage in intrusive parenting direct the focus of a majority of the interactions that they have with their child, which has implications for a child's ability to engage in self-directed aspects of attention and focus, namely ego-resiliency and effortful control (Taylor et al., 2013). Furthermore, interactions with intrusive caregivers may lead to children developing a weaker sense of social autonomy, which has been shown to have an effect on a child's ability to establish positive

relationships in social situations with their peers (Clark & Ladd, 2000; Ladd & Ladd, 1998). Intrusive parenting has also been associated with the development of psychopathology, for example, higher levels of observed intrusive parenting in mothers was predictive of teacher-reported internalizing problems in their children, such as being withdrawn or exhibiting anxiety/depression symptoms (Wagner et al., 2018) Intrusive parenting also seems to play a role in academic achievement, for instance, 6-month-old infants of mothers who were observed to engage in high levels intrusiveness showed lower academic achievement by the time they reached early elementary school (Egeland et al., 1993). Without intervention, expressions of intrusiveness in the presence of stressors can increase overtime. This increase may exacerbate the detrimental effects of experiencing intrusive parenting, resulting in lower levels of their child's expressive communication, intellectual functioning, and inhibitory control (Clincy & Mills-Koonce, 2013).

Children of parents who exhibit intrusive parenting behaviors have several undesirable outcomes. Thus, intrusiveness is an important aspect of negative parenting for which to understand the etiology. Given that intrusive parenting behaviors have implications for many areas of a child's development, it is imperative that we further investigate this construct.

### ***Childhood maltreatment as a predictor of intrusiveness***

Childhood maltreatment has been linked to later parental characteristics, such as psychological disorder symptomology (Buist, 1998) and personal perception of parental competence (Bailey et al., 2012). Of particular relevance to the current study, childhood maltreatment history has been associated with parenting characteristics related to intrusiveness. For example, experiences of childhood maltreatment have been correlated

with adult aggression (Chen et al., 2012) and maternal depression (Badr et al., 2018), both of which put parents at risk for exhibiting more physically intrusive behaviors.

The experience of maltreatment in one's childhood has also been associated with increased intrusive parenting behaviors. Specifically, in a study that assessed parenting behavior during an observed free play session when children were 60 months old, the experience of sexual abuse in one's own childhood was associated with greater levels of intrusive parenting behaviors (Zvara et al., 2015). In addition, mothers who reported higher levels of maltreatment in childhood had significantly higher observed intrusive interactions during a 10-minute recorded interaction with their 5-month-old infants than those with no history of childhood maltreatment (Bailey et al., 2012).

### ***Empathy as a potential mediator***

One explanation for why mothers who have experienced childhood maltreatment engage in intrusive behaviors is based on the understanding of the effects that childhood maltreatment may have on a person's empathy. Research connecting empathy and childhood maltreatment focuses on dispositional empathy, or the level of empathy that one feels in general, rather than empathy a parent feels towards their own child. Dispositional empathy has been shown to be related to parents' empathy for their own child (Salo et al., 2020), although we suspect the associations between parent empathy and parenting behavior would be more strongly linked to own-child empathy relative to dispositional empathy.

Current literature suggests that children who are maltreated are at risk of developing a diminished ability to engage in dimensions of empathy (Barahal et al., 1981; Burack et al., 2006). This reduced capacity may be due to the notion that the interactions maltreated children experience with the parents who maltreated them fail to provide the resources

needed for emotional development, possibly leading to these children acquiring an understanding of parent–child relationships that are dominated with negativity and insensitivity, rather than what one might expect from a typical parent–child relationship (Stacks et al., 2014). When these children later become parents themselves, they may have reduced abilities or tendencies to reflect upon their own child’s feelings, desires, and intentions (Rosenblum et al., 2008). The capacity to reflect in these ways is a key component in a parent’s sensitivity and appropriate responsiveness to their child’s cues for distress (Fonagy et al., 1991; Slade, 2005). Parents with maltreatment history may have, on average, less awareness or capacity to reflect upon their child’s thoughts or desires, which, in turn, may interfere with sensitive caregiving in a manner that is adult-centered and intrusive.

### ***The current study***

The motivation behind this study is based on the understanding that (i) intrusive parenting behaviors are associated with poor outcomes of the children who experience them, (ii) both childhood maltreatment history and empathy have been associated with intrusive parenting behaviors, and (iii) there is a gap in the literature that relates childhood maltreatment to intrusive parenting and investigates empathy as a mediator. A focused investigation of intrusiveness and its relation to childhood maltreatment and empathy might enable us to identify parents who are at risk of exhibiting this particular parenting behavior. In turn, we may gain clarity on how to best address intrusive parenting behaviors and work to reduce the likelihood of their expression. The goal of the current study is thus to examine whether empathy for one’s own child is a mediator of the association between childhood maltreatment history and intrusive parenting behavior. We will do so specifically by asking the following questions:

Question 1: What is the association between maternal childhood maltreatment history and intrusiveness?

Question 2: What is the association between maternal childhood maltreatment history and own-child empathy?

Question 3: What is the association between maternal own-child empathy and intrusiveness?

Question 4: Does own-child empathy mediate the association between maternal childhood maltreatment history and intrusiveness?

We expected that childhood maltreatment history will be a positive predictor of intrusiveness; such that greater levels of maltreatment will be associated with higher levels of intrusiveness. We expected that childhood maltreatment severity will be negatively correlated with levels of empathy; such that greater maltreatment severity will be associated with lower levels of empathy. We expected that own-child empathy will be negatively correlated with levels of intrusiveness; such that greater empathy will be associated with lower levels of intrusiveness. We expected that level of own-child empathy will mediate the relation between level of childhood maltreatment and level of intrusiveness; such that when accounting for own-child empathy, the relation between childhood maltreatment history and intrusiveness will be non-significant.

### ***Methods***

#### ***Participants***

Participants were mother–infant dyads who were recruited to take part in a multi-site, longitudinal study on infants' early experiences. Data collection took place at Stanford University, in which women were recruited either in pregnancy or when their child was age 6



months. To be eligible for participation, mothers had to be fluent in English, pregnant, and have no immediate plans to move from the vicinity of the study. Exclusion criteria included having bipolar disorder or psychosis, dyslexia, reading or visual processing problems, severe complications during infant delivery, premature delivery, infant injury or head trauma, and severe medical conditions. Mothers provided written informed consent on behalf of themselves and their child.

Out of the 81 dyads included in the analyses, 41 of the infants were female. Most mothers had a bachelor's or graduate degree ( $n = 68$ ), 2 mothers had an associate degree, 8 had some college, 1 had a high school diploma or below, and 2 went to trade/technical school. Forty-seven mothers self-identified as White, 3 as Black/African American, 22 as Asian/Asian American, 2 as Native Hawaiian or Pacific Islander, and 7 another race, and 8 participants identified as Latinx/Hispanic. Infants were on average 6.10 months old (Range = 5.30–7.27;  $SD = .35$ ). Mothers were on average 32.73 years old (Range = 21.26-44.44;  $SD = 4.60$ ) at the time of the six-month assessment. Seventy-four mothers were married or in a domestic partnership, and 7 mothers were single or never married.

### ***Procedure***

During the pregnancy session, participants completed a self-report questionnaire about their experiences of childhood maltreatment. During the 6-month timepoint, participants completed a self-report measure of own-child empathy and participated in a 10-minute video-recorded free play session with their child. A portion of the sample did not take part in a pregnancy session, and thus completed the childhood maltreatment questionnaire at the 6-month timepoint.

**Measures**

**Childhood Maltreatment.** Experiences of childhood maltreatment were reported using the Childhood Trauma Questionnaire (CTQ; Bernstein et al., 1994), which uses five subscales: emotional abuse, physical abuse, sexual abuse, emotional neglect, and physical neglect, to measure abuse and neglect in childhood. The CTQ has been shown to have both test-retest reliability and internal consistency (Bernstein et al., 1994). The 25-question short form version of the CTQ was given in our study. Items on this assessment are mainly presented in objective terms (“When I was growing up, I had to wear dirty clothes” or “People in my family hit me so hard that it left me with bruises or marks”), but other items are more subjective (“When I was growing up, I felt loved” or “People in my family looked out for each other”). Items from this measure are rated on a 5-point Likert-type scale, with response options ranging from 1 (never true) to 5 (very often true). Primary analysis of the data used only mothers’ total score on the CTQ, while secondary, exploratory analyses included the use of each subscale.

**Maternal Own-Child Empathy.** Maternal empathy towards her own child was assessed using the Parental Empathy Measure (PEM; Stern et al., 2014). The PEM is a self-report questionnaire which assesses components of empathy corresponding to two subscales: cognitive empathy (e.g., I can tell when my child is happy about something) and affective empathy (e.g., My child’s emotions affect how I feel). Mothers rated their agreement with each of 25 statements on a Likert-type scale from 1 (not at all true) to 5 (very true). The numeric value for each response were summed to derive totals for each subscale, and a total empathy score. Primary analysis of the data used only mothers’ total score on the PEM, while secondary, exploratory analyses included the use of each subscale.

***Intrusiveness.*** Intrusiveness was assessed by coding parent behavior during the 10-minute free play interaction with their infant. During this interaction parents were instructed to play with their child as they normally would at home and were provided with an assortment of age-appropriate toys. The free play interaction was videorecorded, and recordings were divided into 30 second intervals. Trained coders rated mothers' behavior during each 30 second interval according to the Parent–Child Interaction Rating Scales-Infant Adaptation (Bosquet Enlow et al., 2014) using a Likert-type scale ranging from 1 (*very low*) to 7 (*very high*). The last two minutes of the free play followed a brief intervention that is outside of the scope of the current study, therefore coding of only the first 8 minutes is considered for the present analyses. An overall score of intrusiveness was calculated by taking the mean rating of intrusiveness from each 30 second interval over the 8 minutes of free play. Specific markers of intrusive behavior included failing to modulate adult-centered behavior; offering a continuous barrage of physical or verbal interactions, toys, directions, or suggestions; not allowing the child to influence the pace or focus of play; and excessively intruding on child's personal space, among others.

### ***Data Analysis and Specific Hypotheses***

Descriptive statistics will be used to assess the characteristics of our sample population. Pearson bivariate correlations will be calculated to examine associations between the variables of interest for the current study, specifically the association between childhood maltreatment severity and intrusive parenting, the association between childhood maltreatment and own-child empathy, and the association between own-child empathy and intrusiveness. To examine whether own-child empathy mediates the relation between childhood maltreatment and intrusiveness, we conducted a mediation model using PROCESS (Hayes, 2017) in SPSS (IBM, 2015). PROCESS uses a regression-based

approach with bootstrapping to calculate beta coefficients that are robust against Type I errors. Specifically, we used PROCESS Model 4, which tests the indirect effect of a predictor variable on an outcome variable via a mediator variable.

### **Results**

Descriptive statistics of each variable can be seen in **Table 1**.

#### ***Association between maternal childhood maltreatment history and intrusiveness***

Our first goal was to examine the association between maternal childhood maltreatment history and maternal intrusiveness. We hypothesized that greater levels of maltreatment would be associated with higher levels of intrusiveness. As shown in **Table 1**, results of the Pearson correlation indicated that there was no significant association between higher levels of childhood maltreatment in mothers and higher levels of intrusiveness ( $r(80) = -.023, p = .839$ ).

#### ***Relations between maternal childhood maltreatment history and own-child empathy***

We next examined the association between maternal childhood maltreatment history and maternal own-child empathy. We hypothesized that level of childhood maltreatment would be negatively correlated with levels of empathy, such that greater maltreatment severity would be associated with lower levels of empathy. As shown in **Table 1**, results of the Pearson correlation indicated that there was no significant association between higher levels of childhood maltreatment in mothers and lower levels of own-child empathy ( $r(80) = -.064, p = .572$ ).

#### ***Relations between own-child empathy and maternal intrusiveness***

We then examined the association between maternal own-child empathy and maternal intrusiveness. We hypothesized that levels of empathy would be negatively correlated with levels of intrusiveness, such that greater levels of own child empathy would

be associated with lower levels of intrusiveness. As shown in **Table 1**, results of the Pearson correlation indicated that there was no significant association between higher levels of own-child empathy in mothers and lower levels of intrusiveness ( $r(80) = -.025$ ,  $p = .826$ ).

**Table 1. Correlation matrix and descriptive statistics of primary analysis**

	CTQ	PEM	Intrusiveness
CTQ	1	.064	-.023
PEM		1	-.025
Intrusiveness			1
Mean (SD)	12.15 (18.94)	112.32 (7.78)	2.41 (1.12)

*Note.*  $N = 81$ . CTQ = Childhood Trauma Questionnaire. PEM = Parental Empathy Measure.

*All  $p$  values > .572*

### ***Exploratory analyses using the subscales of the CTQ and the PEM***

We repeated our Pearson bivariate correlations using subscales of the CTQ and the PEM as exploratory analyses of our data. We wanted to investigate if stronger correlations between each of our variables may arise depending on the type of childhood maltreatment that mothers experienced and the type of empathy that mothers possessed. As shown in **Table 2**, the results of these analyses yielded insignificant results (all  $p$  values > .414).

**Table 2. Correlations between intrusiveness and subscales, including descriptive statistics of exploratory analysis**

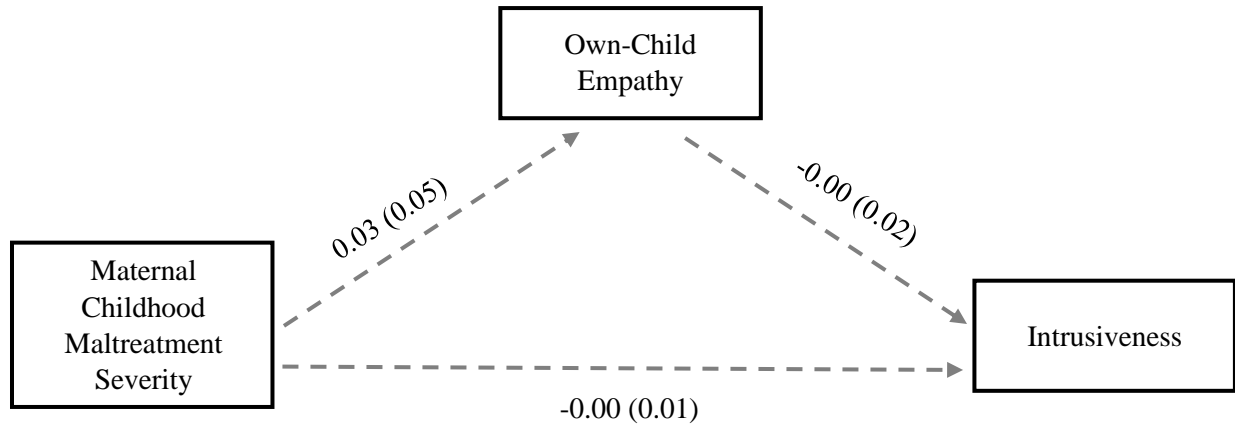
	CTQ EA	CTQ PA	CTQ SA	CTQ EN	CTQ PN	PEM Cog	PEM Aff
Intrusiveness	.022	.006	-.091	-.007	-.052	-.081	.052
Mean	4.11	1.74	1.40	3.85	1.10	64.024	48.37
(SD)	(5.09)	(4.28)	(4.27)	(5.37)	(2.71)	(5.12)	(4.26)

*Note.*  $N = 81$ . CTQ = Childhood Trauma Questionnaire. EA = Emotional Abuse. PA = Physical Abuse. SA = Sexual Assault. EN = Emotional Neglect. PN = Physical Neglect. PEM = Parental Empathy Measure. Cog = Cognitive. Aff = Affective.

*All  $p$  values > .414*

### ***Examining own-child empathy as a mediator***

Our final goal was to explore whether the relation between maternal childhood maltreatment history and intrusiveness would be mediated by own-child empathy. Despite not seeing significant results in the Pearson bivariate correlation between maternal childhood maltreatment history and intrusiveness, maternal childhood maltreatment history and own-child empathy, nor own-child empathy and intrusiveness, we executed our plan to investigate the proposed mediation, as mentioned in our planned analysis section. Mother's empathy for their own child did not mediate the relationship between childhood maltreatment history and intrusiveness,  $B = -0.000$ ,  $SE = 0.001$ , 95% CI  $[-0.002, 0.003]$ ; see **Figure 1**. Specifically, childhood maltreatment history was not associated with own-child empathy, which was not associated with intrusiveness.



*Figure 1.* Mediation model predicting positive parenting. Reported relations are non-standardized betas with standard errors in parentheses. Dotted gray lines indicate non-significant relations.

### **Discussion**

In the present study, we investigated mother's childhood maltreatment severity, empathy towards her child, and levels of intrusiveness in interactions with her 6-month-old infant in a sample of 81 mother–infant dyads. The current study adds to the literature by investigating the relations between maternal childhood maltreatment history, maternal own-child empathy, and maternal intrusiveness. We were particularly interested in whether level of childhood maltreatment history in mothers is related their level of intrusiveness, and whether the relation between the two variables was mediated by mother's level of own-child empathy. In examining these relations, we hoped to better understand the mechanism by which childhood maltreatment history contributes to the presentation of more negative parenting behaviors, namely, intrusiveness. We began by asking 4 main research questions: (1) what is the association between maternal childhood maltreatment history and intrusiveness? (2) what is the association between maternal childhood maltreatment history and own-child empathy? (3) what is the association between own-child empathy and

intrusiveness? and (4) does own-child empathy mediate the association between maternal childhood maltreatment history and intrusiveness?

Contrary to expectations, we found that mothers in our sample who had higher levels of childhood maltreatment did not, on average, have higher levels of intrusive behavior. Furthermore, we found that mothers in our sample who had higher levels of childhood maltreatment history did not, on average, have lower levels of empathy toward their child. Additionally, we found that mothers who had higher levels of own-child empathy did not, on average, have lower levels of intrusiveness. Exploratory analyses were conducted substituting various subscales from the CTQ and PEM, also yielding insignificant results.

We were surprised to find no correlation between childhood maltreatment history and intrusiveness due to the inconsistency between these results and findings in the current literature. Existing literature is suggestive of an association between childhood maltreatment history and intrusiveness (Bailey et al., 2012; Zvara et al., 2015) There are numerous reasons that explain our lack of replication with prior studies, including age of the sample, assessment of maltreatment, and limited variability in our data, likely due to the sample strategies in which a convenience sample of volunteers rather than families recruited due to higher clinical concern. For example, for the CTQ, the possible scores were 0-125. Eighty percent of participants scored below 20, and 60% of these scored below 5. For intrusiveness, the possible scores were 1-7, and 80% of participants scored from 1-3. For the PEM, possible scores were 25-125, and 80% of participants scored from 105-125. To properly determine the relation between each variable, we need data that reflects a variety of scores on each of these variables.

Another factor that may have contributed to the insignificance of our results was the context in which intrusiveness was measured. We conducted a 10-minute "free play" in a



campus-based lab setting. Often, studies that use a free play to determine level of intrusiveness have conducted the session in a home setting (Clincy & Mills-Koonce, 2013; Wagner et al., 2018), presumably to capture a result that is more reflective of how mothers would act naturally. Additionally, to measure childhood maltreatment, our study used a version of the CTQ. Past studies that have measured level of childhood maltreatment often used a combination of different self-report questionnaires as well as interviews to measure this variable (Wekerle et al., 2001), which may give a more thorough and accurate reflection of the acuteness and extent of maltreatment experiences.

The results of our Pearson correlation assessing the association between level of childhood maltreatment history and level of own-child empathy also yielded null results. These results were inconsistent with previous literature that suggest a relation between these variables (Barahal et al., 1981; Burack et al., 2006)). Similar, to childhood maltreatment history and intrusiveness, own-child empathy has been assessed differently than how we chose to assess this construct in our study. Previous studies have used multiple measures of empathy, including self-report questionnaires in conjunction with interviews to assess empathy (Stern et al., 2015), which may have generated a stronger sense of level of own-child empathy.

Additionally, while the items on the PEM seem to reflect the identification and surface level understanding of a child's emotions, it does not necessarily reflect the deep connection to this emotional information. Our hypothesis of the relation between childhood maltreatment history and own-child empathy was based on the understanding that childhood maltreatment may have an effect not only on a parent's ability to identify a child's emotions, but also reflect on their child's wishes, desires, and goals (Rosenblum et al., 2008). Own-child empathy, as we understand it, goes beyond the surface level

understanding of a child's emotions. It includes the reflection of the child's personal autonomous needs and appropriate responsiveness to this knowledge. The items on the PEM include statements such as "I can tell when my child is upset about something" and "When my child is upset, I can understand why". There are several possible interpretations of this language, and each is representative of different levels of emotional understanding. For example, a mother may take away a child's toy and understand that the reason for the child's emotional reaction was the removal of the toy. This is different from a mother recognizing that the reason the child is upset has to do with the importance the child placed on the item, and the mother may reflect on how she may feel if someone were to remove something that she deemed to be important. Thus, the mother asserts understanding. Both of these situations are captured within the language of these items on the PEM. Own-child empathy requires a deeper emotional understanding of what a child is going through and how it may affect them than the PEM may be able to capture.

Our last bivariate correlation between own-child empathy and intrusiveness yielded no significant results. Our results showed no association between level of own-child empathy and level of intrusiveness. As stated previously, the measures that we used in our study were different than those used in previous studies of these variables, and these measures may not have captured our understanding of each construct. Use of measures that better reflect our variables may have allowed us to find an association. Lastly, the sample size for our study was somewhat small. We had 81 participants, while previous studies that have measured similar constructs are typically larger.

Although our study yielded no statistically significant associations, the possibility that the relation between childhood maltreatment history and intrusiveness is mediated by own-child empathy remains. Future studies may investigate this relation by modifying the method of

measuring each variable. As stated previously, using a multitude of measures to examine childhood maltreatment history may provide a more accurate picture of level of childhood maltreatment. In addition, conducting a free play session in a home setting may be more reflective of parents' natural interactions with their child. Furthermore, the items on the PEM reflect the identification and emotional understanding aspects of empathy, but do not capture the application of this emotional information. A measure or a composite of multiple measures may have been better to determine the level of empathy, as we understood it, that the mothers in our study had towards their own child. Lastly, acquiring a larger sample from a more diverse population may serve to more properly investigate these relations. These changes may serve to better investigate the relation between childhood maltreatment history and intrusiveness as mediated by own-child empathy.

Further investigations of the relation between childhood maltreatment history and intrusiveness may explore other possible mediators of this relation. Depression, which has been linked with childhood maltreatment history (Badr et al., 2018) and intrusiveness (Azaka & Raeder, 2013), may better explain the relation between childhood maltreatment and intrusiveness due to its documented effect on parenting behaviors. Expressive communication, which has been linked to intrusive parenting (Clincy & Mills-Koonce, 2013) may also explain this relationship, as limited expressive communication could plausibly result in physical expressions of one's will, causing them to physically intrude upon their child. Research may also investigate whether the relation between these variables changes over time and if so, why this change occurs. One may wonder if the pathway that childhood maltreatment history takes to intrusiveness can be moderated; such that reducing levels of a mediating variable will result in a reduction of intrusiveness over time.

**Conclusions**

Due to the poor child outcomes associated with intrusive parenting, it is important to examine this construct and investigate maternal characteristics that may correlate with it. Childhood maltreatment history has been shown to be related to both own-child empathy and intrusiveness. We postulated that the mechanism by which childhood maltreatment history is associated with intrusiveness is own-child empathy. In order to investigate this relation, we ran a series of Pearson bivariate correlations as well as conducted a PROCESS mediation model. We found no significant correlation between childhood maltreatment history and intrusiveness; childhood maltreatment history and own-child empathy; and own-child empathy and intrusiveness. The results PROCESS mediation model also yielded no significant results. Although our study did not find significant results, the possibility for a relation between these variables exists, as suggested by previous literature. Future investigations into the relation between childhood maltreatment history and intrusiveness should use multiple measures of each variable in order to get a more complete picture of each construct. Additionally, future research may investigate other mechanisms by which childhood maltreatment is related to intrusiveness.

**Acknowledgements**

The current study utilizes data from a study conducted at Stanford University led by Kathryn L. Humphreys, Lucy S. King, and Ian H. Gotlib. This research was funded by the National Institute for Child Health and Human Development, the National Institute for Mental Health, the National Science Foundation graduate research fellowship, the Brain and Behavior Research Foundation, the Klingenstein Third Generation Foundation Fellowship, and the Jacobs Foundation Early Career Research Fellowship.

### References

- Ainsworth, Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment*. Hillsdale, NJ: Erlbaum.
- Ainsworth, M. D. S., Rosenblatt, J. S., Hinde, B. A., Beer, C., & Busnel, M. (1979). *Advances in the Study of Behavior*.
- Azaka, S., & Raeder, S. (2013). Trajectories of parenting behavior and maternal depression. *Infant Behavior & Development*, 36(3), 391–402. <https://doi.org/http://dx.doi.org/10.1016/j.infbeh.2013.03.004>
- Badr, H. E., Naser, J., Al-Zaabi, A., Al-Saeedi, A., Al-Munefi, K., Al-Houli, S., & Al-Rashidi, D. (2018). Childhood maltreatment: A predictor of mental health problems among adolescents and young adults. *Child Abuse and Neglect*, 80(March), 161–171. <https://doi.org/10.1016/j.chiabu.2018.03.011>
- Bailey, H. N., DeOliveira, C. A., Wolfe, V. V., Evans, E. M., & Hartwick, C. (2012). The impact of childhood maltreatment history on parenting: A comparison of maltreatment types and assessment methods. *Child Abuse & Neglect*, 36(3), 236–246. <https://doi.org/http://dx.doi.org/10.1016/j.chiabu.2011.11.005>
- Barahal, R. M., Waterman, J., & Martin, H. P. (1981). The social cognitive development of abused children. *Journal of Consulting and Clinical Psychology*, 49(4), 508.
- Barnett, M. A., Deng, M., Mills-Koonce, W. R., Willoughby, M., & Cox, M. (2008). Interdependence of parenting of mothers and fathers of infants. *Journal of Family Psychology*, 22(4), 561–573. <https://doi.org/http://dx.doi.org/10.1037/0893-3200.22.3.561>
- Belsky, J., Putnam, S., & Crnic, K. (1996). Coparenting, parenting, and early emotional development. In *Understanding how family-level dynamics affect children's development*: (p. 45). Jossey-Bass. <https://doi.org/info:doi/>
- Bernstein, D. P., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K., Sapareto, E., & Ruggiero, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *The American Journal of Psychiatry*, 151(8), 1132–1136. <https://doi.org/http://dx.doi.org/10.1176/ajp.151.8.1132>
- Bosquet Enlow, M., Carter, A., Hails, K., King, L., & Cabrera, I. (2014). *Parent-child interaction rating scales – infant adaptation manual*.
- Brakenhoff, B., Wu, Q., & Slesnick, N. (2018). Substance using Mothers Experiencing Suicidal Thoughts: Impact of Parenting Behaviors on Child Behavior Problems. *Journal of Child and Family Studies*, 27(2), 629–638. <https://doi.org/10.1007/s10826-017-0897-z>
- Buist, A. (1998). Childhood abuse, postpartum depression and parenting difficulties: A literature review of associations. *Australian and New Zealand Journal of Psychiatry*, 32(3), 370–378. <https://doi.org/http://dx.doi.org/10.3109/00048679809065529>

- Burack, J., Flanagan, T., Peled, T., Sutton, H., Zygmuntowicz, C., & Manly, J. T. (2006). Social perspective-taking skills in maltreated children and adolescents. *Developmental Psychology, 42*(2), 207–217.
- Chen, P., Coccaro, E. F., Lee, R., & Jacobson, K. C. (2012). Moderating effects of childhood maltreatment on associations between social information processing and adult aggression. *Psychological Medicine, 42*(6), 1293–1304. <https://doi.org/10.1017/S0033291711002212>
- Clark, K. E., & Ladd, G. W. (2000). Connectedness and autonomy support in parent-child relationships: links to children's socioemotional orientation and peer relationships. *Developmental Psychology, 36*(4), 485–498. <https://doi.org/10.1037/0012-1649.36.4.485>
- Clincy, A. R., & Mills-Koonce, W. R. (2013). Trajectories of intrusive parenting during infancy and toddlerhood as predictors of rural, low-income African American boys' school-related outcomes. *American Journal of Orthopsychiatry, 83*(2 PART 3), 194–206. <https://doi.org/10.1111/ajop.12028>
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology, 44*(1), 113–126. <https://doi.org/10.1037/0022-3514.44.1.113>
- Egeland Robert; O'Brien, Maureen A., B., Egeland, B., Pianta, R., & O'Brien, M. A. (1993). Maternal intrusiveness in infancy and child maladaptation in early school years. In *Development and psychopathology*. (Vol. 5, Issue 3, pp. 359–370). Cambridge University Press. <https://doi.org/10.1017/S0954579400004466>
- Fonagy, P., Steele, M., Steele, H., Moran, G. S., & Higgitt, A. C. (1991). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal, 12*(3), 201–218.
- Gershoff, E. T. (2002). Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological Bulletin, 128*(4), 539–579. <https://doi.org/10.1037/0033-2909.128.4.539>
- Gomez, J. A., Carter, A. S., Forbes, D., & Gray, S. A. O. (2018). Parental insightfulness and parenting behavior: A two-dimensional analysis of parent contributions to child cognitive outcomes. *Attachment & Human Development, 20*(3), 255–271. <https://doi.org/http://dx.doi.org/10.1080/14616734.2018.1446734>
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- IBM. (2015). *IBM Corp. Released 2015. IBM SPSS Statistics for Windows, Version 23.0. Armonk, NY: IBM Corp.*
- Ispa, J. M., Fine, M. A., Halgunseth, L. C., Harper, S., Robinson, J. A., Boyce, L., Brooks-Gunn, J., & Brady-Smith, C. (2004). Maternal intrusiveness, maternal warmth, and

- mother-toddler relationship outcomes: Variations across low-income ethnic and acculturation groups. *Child Development*, 75(6), 1613–1631.  
<https://doi.org/10.1111/j.1467-8624.2004.00806.x>
- Ladd, G. W., & Ladd, B. K. (1998). Parenting behaviors and parent-child relationships: correlates of peer victimization in kindergarten? *Developmental Psychology*, 34(6), 1450–1458. <https://doi.org/10.1037/0012-1649.34.6.1450>
- Rosenblum, K. L., McDonough, S. C., Sameroff, A. J., & Muzik, M. (2008). Reflection in thought and action: Maternal parenting reflectivity predicts mind-minded comments and interactive behavior. *Infant Mental Health Journal*, 29(4), 362–376.  
<https://doi.org/10.1002/imhj.20184>
- Salo, V. C., Schunck, S. J., & Humphreys, K. L. (2020). Depressive symptoms in parents are associated with reduced empathy toward their young children. *PLoS One*, 15(3).  
<https://doi.org/http://dx.doi.org/10.1371/journal.pone.0230636>
- Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development*, 7(3), 269–281.
- Stacks, A. M., Muzik, M., Wong, K., Beeghly, M., Huth-Bocks, A., Irwin, J. L., & Rosenblum, K. L. (2014). Maternal reflective functioning among mothers with childhood maltreatment histories: links to sensitive parenting and infant attachment security. In *Attachment & human development* (Vol. 16, Issue 5, pp. 515–533).  
<https://doi.org/10.1080/14616734.2014.935452>
- Stern, J. A., Borelli, J. L., & Smiley, P. A. (2015). Assessing parental empathy: a role for empathy in child attachment. *Attachment and Human Development*, 17(1), 1–22.  
<https://doi.org/10.1080/14616734.2014.969749>
- Stern, J., Borelli, J., & Smiley, P. (2014). Assessing parental empathy: A role for empathy in child attachment. *Attachment & Human Development*, 2014.  
<https://doi.org/10.1080/14616734.2014.969749>
- Taylor, Z. E., Eisenberg, N., Spinrad, T. L., & Widaman, K. F. (2013). Longitudinal relations of intrusive parenting and effortful control to ego-resiliency during early childhood. *Child Development*, 84(4), 1145–1151. <https://doi.org/10.1111/cdev.12054>
- Wagner, N. J., Gueron-Sela, N., Bedford, R., & Propper, C. (2018). Maternal attributions of infant behavior and parenting in toddlerhood predict teacher-rated internalizing problems in childhood. *Journal of Clinical Child and Adolescent Psychology*, 47(Suppl 1), S569–S577. <https://doi.org/http://dx.doi.org/10.1080/15374416.2018.1477050>
- Wekerle, C., Wolfe, D. A., Hawkins, D. L., Pittman, A. L., Glickman, A., & Lovald, B. E. (2001). Childhood maltreatment, posttraumatic stress symptomatology, and adolescent dating violence: Considering the value of adolescent perceptions of abuse and a trauma mediational model. *Development and Psychopathology*, 13(4), 847–871.  
<https://doi.org/10.1017/s0954579401004060>



- Wolford, S. N., Cooper, A. N., & McWey, L. M. (2019). Maternal depression, maltreatment history, and child outcomes: The role of harsh parenting. *American Journal of Orthopsychiatry*, *89*(2), 181–191. <https://doi.org/http://dx.doi.org/10.1037/ort0000365>
- Zvara, B. J., Mills-Koonce, W. R., Appleyard Carmody, K., & Cox, M. (2015). Childhood sexual trauma and subsequent parenting beliefs and behaviors. *Child Abuse & Neglect*, *44*, 87–97. <https://doi.org/http://dx.doi.org/10.1016/j.chiabu.2015.01.012>