

Pathways from childhood maltreatment to unsupportive emotion socialization: Implications for children's emotional inhibition

Abstract

Purpose: Adults who have experienced child maltreatment report problems with emotion regulation (ER) and parenting difficulties, which have been associated with maladaptation in the next generation. However, parental emotion socialization is understudied in survivors of child maltreatment. The aim of the present study was to examine whether childhood polyvictimization would influence parental ER skills and parents' use of unsupportive contingencies in response to anger, sadness, and anxiety. A secondary aim was to determine whether these variables would predict children's emotional inhibition. **Methods:** Parents ($n = 175$) of children between the ages of 8 and 12 participated in an online study. Participants completed self-report measures assessing their child maltreatment history; their regulation and socialization of anger, sadness, and anxiety; and a measure of their child's emotional inhibition. **Results:** A sequential mediation model revealed that childhood polyvictimization predicted lower levels of parental ER skills, which in turn, increased the likelihood of parents reporting unsupportive contingencies. Further, parents' use of unsupportive contingencies predicted higher levels of emotional inhibition in children. **Conclusions:** The present study provides evidence to support the relationship between a history of child maltreatment, parents' use of unsupportive contingencies, and emotional inhibition in the next generation. Practitioners working with parents who have been maltreated should focus on enhancing parental ER in order to help parents scaffold healthy emotional development in their children.

Key words: Child Maltreatment; Polyvictimization; Emotion Regulation; Parental Emotion Socialization.

The acquisition of emotion regulation (ER) skills is a key developmental task in childhood that is facilitated through interactions with primary caregivers, laying the foundation for psychosocial adaptation (Eisenberg & Morris, 2002). Although child maltreatment continues to disrupt emotional functioning in adulthood and contributes to unsupportive parenting behaviours (e.g., DeOliveira, Bailey, Moran, & Pederson, 2004; McCullough, Han, Morelen, & Shaffer, 2015) few studies have examined how a parental history of child maltreatment impacts emotion socialization and the emotional functioning of children.

Child Maltreatment, Polyvictimization, and Emotion Regulation in Adulthood

Approximately 32% of Canadian adults report experiencing physical and/or sexual abuse as a child (Afifi et al., 2014) and evidence suggests that neglect and emotional abuse are pervasive as well (Chamberland, Fallon, Black & Trocmé, 2011; Trocmé, Tourigny, MacLaurin, & Fallon, 2003). Child maltreatment is thought to interfere with the development of ER by disrupting attachment relationships with caregivers, which in turn, interferes with the child's ability to acquire skills needed for self-regulation (Cloitre, Cohen, & Koenen, 2011). Indeed, ER difficulties are well documented among children who have experienced maltreatment (e.g., Kim-Spoon, Cicchetti, & Rogosch, 2013; Langevin, Hébert & Cossette, 2015) and these difficulties can persist into adulthood. For example, adult survivors of child maltreatment exhibit deficits in emotional processing (Young & Widom, 2014) and higher levels of emotion dysregulation (Burns, Jackson & Harding, 2010) compared to their non-abused counterparts. Different forms of child maltreatment tend to co-occur (Afifi et al., 2015) and a limitation of previous literature is the tendency to look at specific types of victimization in isolation (Turner, Finklehor, & Omrod, 2010; Turner, Shattuck, Finkelhor, & Hamby 2016), rather than examining the cumulative effects of different types of child maltreatment.

The cumulative effects of various types of adverse childhood experiences are well-documented and include elevated rates of mental health problems and interpersonal difficulties in adulthood (Hughes et al., 2017; Poole, Dobson, & Pusch, 2018). Furthermore, the relationship between cumulative childhood adversities and negative psychosocial outcomes appears to be mediated by emotion dysregulation (Abravanel & Sinha, 2015; Poole et al., 2018). With respect to child maltreatment more specifically, evidence suggests that adults who have experienced multiple forms of victimization in childhood experience higher levels of ER difficulties and interpersonal problems (Barnes, Howell, & Miller-Graff, 2016; Cloitre et al., 2009). Thus, polyvictimization in childhood appears to have long-lasting negative ramifications for ER and interpersonal functioning, making it an important area for further investigation.

Emotion Regulation and Parenting after Child Maltreatment

In the context of parenting, ER is a demanding interpersonal process wherein parents are required to regulate their own emotions, while simultaneously providing support to a dysregulated child (Rutherford, Wallace, Laurent, & Mayes, 2015). It has been shown that negative affect and difficulties regulating emotions such as anger increase the risk for abusive parenting, particularly among mothers with a history of child maltreatment (Smith, Cross, Winkler, Jovancovic, & Bradley, 2014). However, given that the majority of parents who have been maltreated do not go on to abuse their own children (Schelbe & Geiger, 2017), it is important to focus on the intergenerational transmission of maladaptive parenting more broadly by studying determinants of parenting behaviours (Belsky & Jaffee, 2006). For example, McCullough and colleagues (2014; 2015) found that mothers who reported higher levels of maltreatment in their own childhoods were more likely to engage in negative parenting practices characterized by psychological control, hostility, and unavailability, particularly when they

reported or displayed higher levels of emotion dysregulation. Mothers in the negative parenting group also displayed higher levels of anger relative to the at-risk and positive parenting groups (McCullough, Harding, Shaffer, Han, & Bright, 2014). Therefore, parents who struggle to regulate their emotions as a consequence of their own child maltreatment histories may be more likely to engage in unsupportive parenting behaviours, which in turn, could compromise children's emotional development (Plant, Pawlby, Pariante, & Jones, 2018).

Parental Emotion Socialization and the Role of Parental Emotion Regulation

One set of parenting behaviours that is particularly important for children's developing ER is parental emotion socialization (ES). The *Tripartite Model* proposes that children's ER skills are influenced by three types of ES: a) observation and modelling, b) parenting practices and behaviours, and c) the emotional climate of the family (Morris, Silk, Steinberg, Myers, & Robinson, 2007). Of these three types of socialization, the behaviours that parents engage in when children express their emotions may be especially influential since parents' contingent responses represent a more direct method of socialization wherein children are provided with explicit feedback after expressing their feelings (Eisenberg, Cumberland, & Spinrad, 1998; Thompson & Meyer, 2007). Morris and colleagues (2007) also proposed that parental characteristics – including parents' ER skills – may exert indirect influences on children's ER through parental ES practices. In support of this notion, mothers who experienced ER difficulties were more likely to respond to their children's distress with unsupportive contingencies (i.e., punitive or minimizing responses), which in turn, predicted emotional difficulties in their children (Briscoe, Stack, & Serbin, 2019; Morelen, Shaffer, & Suveg, 2016). We would expect that parents with a history of child maltreatment would be more likely to experience ER difficulties that would compromise their ability to engage in appropriate contingent responses

(DeOliveira et al., 2004). However, this type of parental ES is understudied among survivors of child maltreatment. One exception is Rea and Shaffer (2016), who found that a maternal history of child maltreatment was negatively associated with the use of supportive contingencies, though the authors found no evidence for a relationship between child maltreatment and reports of unsupportive contingencies. In a more recent study, a history of child maltreatment in conjunction with revictimization in adulthood was positively associated with maternal ER difficulties, which predicted maternal distress responses to adolescents' negative affect and higher negative emotionality in adolescents (Martin, Kim, & Freyd, 2018).

Implications for Emotional Inhibition

In addition to influencing ER in childhood and adolescence, parents' contingent responses may also contribute to the development of an emotion regulatory style that is carried forward into adulthood (Eisenberg et al., 1998; DeOliveira et al., 2004). Individuals with an adaptive regulatory style have access to a wide repertoire of ER strategies and are able to implement these strategies in a flexible and appropriate way depending on the situation (Bonnanno & Burton, 2013). In contrast, regulatory styles may be maladaptive when they are characterized by over-reliance on a single strategy. According to Gross and John (2003), individuals who chronically suppress or inhibit their emotions report more negative emotionality and interpersonal problems than those who do not use this strategy habitually. A greater reliance on suppression has also been associated with trauma-related psychopathology (Moore, Zoellner, & Mollenholt, 2008) as well as major depressive disorder and social anxiety (D'Avanzato, Joormann, Siemer, & Gotlib, 2013). Given the relationship between chronic emotional inhibition and poor psychosocial outcomes, it is important to identify factors that might contribute to the development of an inhibited emotional regulatory style in children. Parents' unsupportive

contingencies may be one such factor, since these types of reactions send the message that negative feelings are unacceptable, which could lead children to inhibit the expression of negative emotions in the future (Gottman, Katz, & Hooven, 1996, O'Neal & Magai, 2005). In support of this notion, parents' use of unsupportive contingencies has been associated with greater reliance on suppression in children (Gunzenhauser, Fäsche, Friedlmeier, & von Suchodoletz, 2014). Parallel findings have also reported in adult samples in that the tendency to suppress or inhibit one's emotions has been shown to mediate the relationship between recollections of unsupportive ES in childhood and negative outcomes including anxiety and depression (Cabecinha-Alati, O'Hara, Kennedy, & Montreuil, 2019; Krause, Mendelson, & Lynch, 2003). Taken together, these results demonstrate the detrimental influence of unsupportive ES on ER and suggest that learning to suppress emotions at a young age may contribute to the development of an inhibited emotional regulatory style that impairs psychological functioning.

The Present Study

The goal of the present study was to examine how a history of polyvictimization in childhood would influence parental ER and ES and to ascertain whether parental ER and ES would mediate the relationship between parental polyvictimization and children's emotional inhibition. Since middle childhood is a critical period for the development of ER (Eisenberg & Morris, 2002), the present study focused on parents of children between age 8 and 12. Further, evidence suggests that ER develops in an emotion-specific manner (Zimmermann & Iwanski, 2014) and that regulatory skills (Ebert, Christ & Berking, 2013) and ES practices (O'Neal & Magai, 2005) may differ depending on the emotion involved. However, a limitation of existing literature is the tendency to focus on the regulation and socialization of negative emotions more

broadly, rather than examining discrete emotions. As such, the present study focused on the regulation and socialization of anger, sadness, and anxiety. These emotions were selected since unsupportive ES in response to these emotions, and subsequent difficulties with regulating them, have been associated with internalizing difficulties in children (Han & Shaffer, 2013; Hurrell, Hudson, & Schniering, 2015). Although child maltreatment has also been associated with ER difficulties and internalizing problems (e.g., Kim-Spoon et al., 2013), specific emotions may be differentially affected. For example, emotion recognition studies show that individuals who have experienced child maltreatment exhibit greater sensitivity to fear and anger compared to non-maltreated controls, and evidence suggests that this bias is specific to anger and fear rather than happy, sad, or neutral faces (Masten et al., 2008; Gibb, Schofield, & Coles, 2009). Consequently, a history of child maltreatment might impact ER and ES differently depending on the type of emotion involved.

It is hypothesized that a parental history of polyvictimization will be associated with lower levels of ER skills and higher levels of unsupportive contingencies, but that these effects will be more pronounced for anger and anxiety. Moreover, parental ER difficulties and parents' use of unsupportive contingencies are expected to mediate the relationship between a parental history of polyvictimization and children's emotional inhibition across the three discrete emotions.

Methods

Participants

A total of 210 parents, recruited mostly through social media, took part in the present study. The majority of participants were recruited through advertisements posted on Facebook groups (e.g., community groups consisting of parents who resided in local neighbourhoods,

parent-to-parent buy and sell groups). A minority of participants (17.2%) were recruited through advertisements posted at community events or locations (e.g. libraries) in a metropolitan city in Canada. Participants were excluded if they reported that they were a primary caregiver other than the mother or father (1 participant), if they resided outside of Canada (7 participants), if they failed to specify that their child did not have a developmental disorder (1 participant), or if they displayed a pattern of careless responding (25 participants). The final sample included 175 participants (156 mothers, 19 fathers) between 26 and 55 years old ($M = 38.51$, $SD = 5.00$). Parent demographic variables are displayed in Table 1. With respect to child demographics, 50.9% of participants identified their child as a boy, 48.0% identified their child as a girl, and two parents specified their child's gender as "other". Lastly, the average age of the children was 9.53 years old ($SD = 1.28$).

[INSERT TABLE 1 HERE]

Measures

Parental history of child maltreatment. Three subscales from the Early Trauma Inventory Self Report – Short Form (ETI-SR-SF; Bremner, Bolus, & Mayer, 2007) were used to assess participants' experiences of physical abuse (five items), sexual abuse (six items), and emotional maltreatment (five items) in childhood. The long form of the ETI has shown good inter-rater ($r = 0.99$) and test-retest ($r = 0.91$) reliability and evidence suggests that the self-report version is a valid instrument for the measurement of childhood trauma, with internal consistencies ranging from 0.78 to 0.90 (Bremner et al., 2007). The short form has shown comparable internal consistencies for the individual subscales (0.70-0.87) and similar to the long form, is able to distinguish between patients with known trauma histories and comparison subjects (Bremner et al., 2007). Additionally, five questions from the ISPCAN Child Abuse

Screening Tool – Retrospective Version (ICAST-R; Dunne et al., 2009) were used to assess neglect. Participants were asked to indicate whether they had experienced specific acts of abuse or neglect prior to the age of 18, using a dichotomous (*Yes/No*) response format. For example, “Were you ever slapped in the face with an open hand?”. Questions pertaining to physical abuse, emotional maltreatment, and neglect were specific to perpetration by a parent or caregiver, while questions pertaining to sexual abuse did not specify the relationship to the perpetrator. In the present study, internal consistencies were $\alpha = .78$, $\alpha = .74$, $\alpha = .81$, and $\alpha = .80$ for the Physical Abuse, Sexual Abuse, Emotional Maltreatment, and Neglect subscales respectively. Similar to previous studies (e.g., Edwards, Micek, Mottarella, & Wupperman, 2017) the present study used a composite score for polyvictimization which was computed by creating a dichotomous score for each type of maltreatment, and then summing the four scores to produce the total number of maltreatment types endorsed ranging from 0 (none) to 4 (all four types).

Parental emotion socialization. The Emotions as a Child Scale (EAC; Magai & O’Neal, 1997) was administered to measure parental ES in response to anger, sadness, and fear/anxiety (15 items for each emotion). Participants were asked to think about a time that their child felt each emotion during the past month and to rate how frequently they responded in the particular way specified. For example, “When my child was angry/sad/fearful, I told him/her to cheer up”. Responses were recorded on a 5-point Likert-type scale (1 = *Never*, 5 = *Very Often*). The EAC consists of five subscales including Neglect (dismissing the child’s emotions), Punish (negative consequences in response to the child’s emotional displays), Magnify (matching or exceeding the child’s emotional display), Override (distracting the child or instructing them to change their emotions), and Reward (validating, or problem-solving responses). Similar to the procedure adopted by Kehoe, Havighurst, and Harley (2014), the present study computed composite scores

to measure parents' use of unsupportive ES by reverse-scoring items on the Reward subscales so that higher scores reflected lower levels of support for anger, sadness, and fear/anxiety. The five subscales were then averaged to create a measure of unsupportive contingencies in response to each discrete emotion (higher scores reflected more unsupportive contingencies). The scores showed good internal consistency for Anger ($\alpha = .87$), Sadness ($\alpha = .89$), and Anxiety ($\alpha = .92$).

Parental emotion regulation. The Emotion Regulation Skills Questionnaire – Emotion-Specific Version (ERSQ-ES; Ebert, Christ, & Berking, 2013) was used to assess parental ER by measuring ten adaptive ER skills for anger, sadness, and anxiety (12 items for each emotion). Typically, items refer to emotions that occurred during the last week, however the present study asked participants to answer questions about their emotions over the last month in order to match the time frame specified in the EAC. For example, “In the last month, I was aware of why I was anxious”. Responses were recorded on a 5-point Likert-type scale (0 = *Not at all*, 4 = *Almost always*). Total scores for the regulation of Anger, Sadness, and Anxiety were computed based on scoring information obtained from the authors. The present study showed good reliability for the Anger ($\alpha = .86$), Sadness ($\alpha = .89$), and Anxiety ($\alpha = .87$) Regulation subscales.

Child emotion regulation. The Children's Emotion Management Scale – Parent Versions (CAMS-P, CSMS-P, and CWMS-P; Cassano, Perry-Parrish, & Zeman, 2007; Zeman, Shipman, & Penza-Clyve, 2001) asked parents to report on their child's ER abilities for anger (11 items), sadness (12 items), and worry (10 items). Participants were asked to select the response that described their child's behaviour on a 3-point Likert-type scale (1 = *Hardly ever*, 3 = *Often*). The present study focused on the emotional inhibition subscales, which consisted of 12 items (4 items for each emotion). For example, “My child hides his/her anger/sadness/worried feelings”. Internal consistencies were ($\alpha = .81$), ($\alpha = .84$), and ($\alpha = .75$), for Anger, Sadness, and

Worry Inhibition respectively.

Procedure

All measures were compiled to form a single online survey, which was hosted on LimeSurvey (Limesurvey GmbH./LimeSurvey: An Open Source survey tool/LimeSurvey GmbH, Hamburg, Germany. <http://www.limesurvey.org>). After participants provided their consent they were directed to the questionnaires, which took approximately 30 minutes. Upon completing the survey, participants provided their e-mail address in order to receive compensation, which consisted of an e-gift card valued at five dollars. The present study obtained ethical approval from the Research Ethics Board at McGill University located in Montreal, Quebec (REB File # 193-0917).

Results

Preliminary Analyses

Data screening. A total of 25 careless responders were excluded from the present study based on the following criteria. First, a self-report indicator of careless responding (adapted from Meade & Craig, 2012) was used to exclude six participants who reported that their data was not suitable for use in our analyses. The remaining 19 participants were excluded based on their responses to four directed questions that were randomly distributed throughout the survey. Participants were excluded automatically if they failed to follow the instructions for two or more of the directed questions. Additionally, participants who completed the survey in less than half the average time (Maniaci & Rogge, 2014) were excluded if they also answered one of the directed question incorrectly. Subsequently, all variables were tested to ensure no assumptions were violated. Assumptions of normality, linearity, homoscedasticity, and the absence of

multicollinearity were met for each regression analysis and no multivariate outliers were identified using the Mahalanobis distance test.

Victimization characteristics. Descriptive analyses revealed that 12.6% of the sample reported never having experienced any type of maltreatment, while 18.9% of the sample reported at least one type of abuse or neglect in childhood. For those who were polyvictimized, 18.9% of the sample endorsed two types of maltreatment, 22.3% endorsed three types, and 27.4% endorsed having experienced all four types of maltreatment. The total number of abusive or neglectful acts that participants experienced ranged from 0 to 21 ($M = 6.29$, $SD = 5.35$). Victimization rates for each subtype of maltreatment are found in Table 2.

[INSERT TABLE 2 HERE]

Correlations and Covariates. Correlations for all variables are displayed in Table 3. Given the very high correlations among parental ER skills and parents' unsupportive contingencies for anger, sadness, and anxiety, a composite score was computed for parental ER skills, parents' unsupportive contingencies, and children's emotional inhibition by averaging the scores across all three emotions. A series of t-tests (see Table 4) were conducted to examine the influence of parent gender, child gender, and other demographic variables (i.e., family income, parent ethnicity, and parental education) on the variables of interest (i.e., parental ER and ES). Income, ethnicity, and education were dichotomized prior to conducting the t-tests. A Bonferroni correction was applied in order to control for potential Type I error resulting from multiple comparisons ($\alpha = .05/9 = .0056$). Results indicated that mothers reported higher levels of ER skills ($t(172) = 5.13$, $p < 0.001$) and lower levels of unsupportive contingencies ($t(173) = -6.31$, $p < 0.001$) compared to fathers. Additionally, parents who reported greater levels of income reported higher ER skills ($t(165) = -5.41$, $p < 0.001$) and lower levels of unsupportive contingencies

($t(166)=3.26, p=0.001$). As such, these variables were used as covariates. Lastly, given that parental age was significantly correlated with parents' ER and unsupportive contingencies, this variable was controlled for in subsequent analyses.

[INSERT TABLES 3 AND 4 HERE]

Serial Mediation Analysis

A serial mediation analysis was conducted using ordinary least squares regression to test the effects of parent polyvictimization history on children's emotional inhibition through two sequential mediators – parental ER and parents' unsupportive contingencies. The analysis was conducted on SPSS version 24 using PROCESS macro version 3.3 (Hayes, 2013). Indirect effects were assessed using bias-corrected bootstrap confidence intervals (5,000 iterations). Additionally, eight participants who were missing data on covariates were excluded from the analysis.

The mediation analysis revealed that both parental ER and ES significantly mediated the effects of parents' polyvictimization history on children's emotional inhibition (see Figure 1). More specifically, experiencing more types of child maltreatment was associated with lower parental ER skills, which predicted higher levels of unsupportive contingencies. Further, parents' use of unsupportive contingencies was positively associated with emotional inhibition in children. The indirect effect of parental polyvictimization on children's emotional inhibition was significant through both sequential mediators: $\alpha_1 d_2 b_2 = .03$, 95% CI [.002, .067], and the overall model accounted for 35.55% of the variance in children's emotional inhibition. Initially, the total effect of parental polyvictimization on children's emotional inhibition was significant when controlling for the three covariates ($c = .56, p < .001$) and after the serial mediation analysis was conducted, the direct effect was reduced ($c' = .25, p = .027$). Interestingly, parental

polyvictimization also had a direct effect on parents' use of unsupportive contingencies and the indirect effect of parental polyvictimization on children's emotional inhibition was significant through this single mediator as well, $\alpha_2b_2 = .29$, 95% CI [.153, .475]. Examination of the contrasts revealed that the indirect effect through unsupportive ES was significantly larger than the indirect effect produced through parental ER and ES in sequence, 95% CI [.122, .442].

[INSERT FIGURE 1 HERE]

Discussion

To prevent the development of an inhibited emotional regulatory style and ensure optimal emotional development in children, it is crucial to identify factors that could contribute to parents' use of unsupportive ES practices. Findings of the present study suggest that a parental history of polyvictimization and difficulties with ER may increase the likelihood of parents using unsupportive contingencies, and in turn, increase children's reliance on emotional inhibition.

Outcome of Examining Discrete Emotions

Firstly, it was expected that a parental history of polyvictimization would be associated with lower levels of ER skills for anger, sadness, and anxiety, as well as higher levels of unsupportive contingencies in response to these emotions. It was also hypothesized that these effects would be more pronounced for anger and anxiety. This hypothesis was partially supported since higher levels of polyvictimization were associated with lower levels of parental ER skills for anger, sadness, and anxiety in bivariate correlations. These results are consistent with studies that have found relationships between child maltreatment and affective disturbances in adulthood including higher levels of anger personality traits (Berthelot, Godbout, Goulet, Bergeron & Boucher, 2014), depression (Hopfinger, Berking, Bockting, & Ebert, 2016), and anxiety (Buist, Gotman, & Yonkers, 2011). The correlations also showed positive associations

between parental polyvictimization and parents' use of unsupportive contingencies for anger, sadness, and anxiety such that parents who endorsed more types of maltreatment in childhood reported using more unsupportive contingencies in response to these emotions. However, parental ER skills and ES practices were highly correlated across all three emotions, which prevented us from performing separate analyses for each discrete emotion.

Although this finding appears to contradict previous studies that have emphasized emotion-specific differences in ER and ES (e.g., O'Neal & Magai, 2005; Zimmerman & Iwanski, 2014), other studies have supported the idea that the ability to regulate one type of emotion extends to other types of emotions (e.g., Mikolajczak, Nelis, Hansenne, & Quoidbach, 2008). Furthermore, there is evidence to suggest that discrepancies in emotion-specific ER may be more apparent amongst populations with psychopathologies such as depression and psychosis (see Lincoln, Hartmann, & Köther Moritz, 2015). Given that our analyses were performed using a community sample rather than a clinical sample, this may have precluded us from detecting differences in emotion-specific ER skills. With respect to similarities across parents' unsupportive contingencies, it is possible that the high correlations among these variables emerged due to our use of a retrospective self-report measure. Despite being prompted to think about how they responded to a specific emotion, parents may have had difficulty recalling an event wherein their child experienced that particular emotion or had trouble recalling their own behaviour during that event, leading them to report more general response tendencies. Additionally, the phrasing of the response options on the EAC was consistent across the three discrete emotions, which could have resulted in similar patterns of responding. Experimental or observational measures would likely be more amenable to capturing nuances in parents'

emotion-specific ES practices and as such, future studies examining discrete emotions should utilize these methods to supplement self-report measures.

The Effect of Parents' Polyvictimization History on Parent and Child Outcomes

Although we could not conduct separate analyses for each discrete emotion, the present study did provide support for the hypothesis that parental ER difficulties and parents' use of unsupportive contingencies would mediate the relationship between a parental history of polyvictimization and children's emotional inhibition. When controlling for parents' age, gender, and income, higher levels of polyvictimization in childhood predicted lower levels of parental ER skills, which in turn, predicted parents' use of unsupportive contingencies in response to their child's negative emotions. These findings coincide with studies that have identified parental emotion dysregulation as a predictor of unsupportive ES (Briscoe et al., 2019; Morelen et al., 2016), and provide further support for interventions that aim to improve parental ER skills as a means of fostering supportive parenting behaviours (e.g., Havighurst, Wilson, Harley, Prior & Kehoe, 2010; Kehoe, Havighurst & Harley, 2014). The present study also found that a parental history of polyvictimization had a direct effect on parents' use of unsupportive contingencies. Research on ES in maltreating families has shown that maltreating parents are more likely to invalidate their children's negative emotions (Shipman et al., 2007) or respond to them in a neglectful or punitive manner (Shipman, Edwards, Brown, Swisher, & Jennings, 2005). As such, children who are raised in maltreating environments are more likely to have parental models who engage in unsupportive ES practices and may replicate the behaviours that they observed in their family of origin with their own children (McCullough et al., 2014). Thus, the relationship between parental polyvictimization and unsupportive contingencies could be a reflection of social learning. Finally, consistent with theoretical and empirical evidence (Gottman et al., 1996; Gunzenhauser et al., 2014), the present study showed that parents' use of unsupportive contingencies predicted higher levels of

emotional inhibition in children. Taken together, our results suggest that a history of childhood polyvictimization may contribute to deficits in parental ER skills and parents' use of unsupportive contingencies, thereby increasing the risk of children developing an inhibited regulatory style.

Strengths, Limitations, and Clinical Implications

Although prior research (Martin et al., 2018) established a link between parents' child maltreatment history, parental ER, and parental distress reactions, the relationship between parents' child maltreatment history and other unsupportive contingencies, such as punitive or minimizing responses had yet to be examined. One exception was Rea and Shaffer (2016), however their study did not find a relationship between a maternal history of child maltreatment and the use of unsupportive contingencies when specific types of maltreatment were examined in isolation. As such, this is the first study to demonstrate that a parental history of child maltreatment, and polyvictimization in particular, has an adverse effect on parental ER and puts parents at risk for engaging in unsupportive ES practices. Practitioners who wish to promote healthy emotional development in children should work with parents who have been maltreated in order to enhance their ER skills, as this may be one way to reduce parents' use of unsupportive contingencies.

Despite these novel findings, the results presented here should be considered in light of several limitations. First, despite the high prevalence of revictimization amongst survivors of child maltreatment (e.g., Desai, Arias, Thompson & Basile, 2002), the present study did not control for traumas that occurred in adulthood. Consequently, we cannot rule out the possibility that the effects that are attributed to childhood polyvictimization in the present study may also be a consequence of the cumulative impact of traumas that occurred later in life. With respect to methodological limitations, it is possible that the high rates of polyvictimization reported in the

present sample were a reflection of the dichotomous response format of the child maltreatment measures, since this method of assessment may be overly inclusive (Berthelot et al., 2014). Additionally, the single-informant design of the present study may have over-estimated the associations between parent and child variables since these were both assessed by the parent. A study by Hourigan and colleagues (2011) revealed significant discrepancies in the inhibition subscales of the CEMS depending on whether the parent or child version was used. However, in their study, children reported more frequent use of inhibition across all three emotions compared to parents (Hourigan, Goodman, & Southam-Gerow, 2011). As such, child inhibition may actually have been under-estimated. Another significant limitation that should be considered is our use of a cross-sectional design. Similar to the cross-sectional study by Morelen and colleagues (2016), the present study assumed a mediational order (i.e., parental ER influencing parents' use of unsupportive contingencies, which then influences children's emotional inhibition). However, child characteristics such as temperament and emotional reactivity (Morris et al., 2007) may also influence parental ES. We cannot rule out the possibility that children who are more dysregulated or inhibited may evoke more unsupportive reactions from their parents (Morelen & Suveg, 2012). Consequently, the results of the present study should be interpreted with caution. Lastly, the over-representation of mothers and married parents as well as the limited ethnic diversity of the present sample limits the extent to which these findings can be generalized. Future research would benefit from recruiting more representative samples, and particularly more fathers, since this would allow for a more comprehensive picture of how child maltreatment impacts parental ER, ES, and children's emotional functioning.

Notwithstanding these limitations, the present study has important clinical implications. First, enhancing our understanding of determinants of parenting behaviours, such as child

maltreatment history and parental ER skills, can facilitate the development of interventions that disrupt the intergenerational transmission of emotion dysregulation (DiLillo & Damashek, 2003; McCullough et al., 2014; 2015). Therapeutic interventions that aim to foster secure parent-child relationships and minimize disruptive behaviours in children already target parental ER skills (e.g. Parent-Child Interaction Therapy; McNeil & Hembree-Kigin, 2010; Zimmer-Gembeck et al., 2019). Similarly, parenting programs with the goal of improving parental ES practices (e.g., Havighurst et al., 2010; Kehoe et al., 2014) focus on enhancing parents' emotional awareness and ER abilities. Given that parental emotion dysregulation can contribute to unsupportive ES practices that have the potential to undermine children's emotional development (Briscoe et al., 2019; Crespo et al., 2017), parents with a history of child maltreatment should be routinely assessed for ER difficulties and receive access to therapies and trauma-informed parenting programs that teach adaptive ER skills (Plant et al., 2018; Rosenblum et al., 2017), which in turn, will empower them to scaffold healthy emotional development in their children.

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Tables and Figures

Table 1

Demographic Variables

| Variables | | <i>n</i> /(%) |
|-----------------------|---------------------------|---------------|
| Relationship to Child | Mother | 156 (89.1) |
| | Father | 19 (10.9) |
| Ethnicity | Caucasian/European | 151 (86.3) |
| | Asian | 9 (5.1) |
| | Mixed | 5 (2.9) |
| | Hispanic/Latino | 3 (1.7) |
| | Black | 2 (1.1) |
| | Middle Eastern | 2 (1.1) |
| | Other | 2 (1.1) |
| | Missing Data | 1 (0.6) |
| Education | Some High School | 2 (1.1) |
| | Completed High School | 7 (4) |
| | College or CEGEP | 25 (14.3) |
| | Some University | 31 (17.7) |
| | Undergraduate Certificate | 1 (0.6) |
| | Bachelor's Degree | 59 (33.7) |
| | Master's Degree | 43 (24.6) |
| | PhD or MD | 7 (4) |
| Marital Status | Married | 145 (82.9) |
| | Divorced | 3 (1.7) |
| | Divorced With New Partner | 10 (5.7) |
| | Separated | 9 (5.1) |
| | Widowed | 1 (0.6) |
| | Never Married | 7 (4) |
| Family Income | Less than \$39, 000 | 13 (7.4) |
| | \$40, 000 to \$49, 000 | 2 (1.1) |
| | \$ 50, 000 to \$59, 000 | 28 (16) |
| | \$60, 000 to \$69, 000 | 29 (16.6) |
| | \$70, 000 to \$100, 000 | 33 (18.9) |
| | Greater than \$100, 000 | 63 (36) |
| | Missing Data | 7 (4) |

Table 2

Victimization Rates by Maltreatment Type

| Variables | | <i>n</i> /(%) |
|------------------------|-------------------|---------------|
| Physical Abuse | At Least One Form | 113 (64.6) |
| | None | 61 (34.9) |
| | Missing Data | 1 (0.6) |
| Emotional Maltreatment | At Least One Form | 118 (67.4) |
| | None | 54 (30.9) |
| | Missing Data | 3 (1.7) |
| Sexual Abuse | At Least One Form | 93 (53.1) |
| | None | 80 (45.7) |
| | Missing Data | 2 (1.1) |
| Neglect | At Least One Form | 84 (48) |
| | None | 91 (52) |
| | Missing Data | 0 (0) |

Table 3
Means, Standard Deviations, and Correlations for Continuous Variables

| | 1) Parental Polyvictimization | 2) Parent ERS for Anger | 3) Parent ERS for Sadness | 4) Parent ERS for Anxiety | 5) Parents' UC for Anger | 6) Parents' UC for Sadness | 7) Parents' UC for Anxiety | 8) Child Anger Inhibition | 9) Child Sadness Inhibition | 10) Child Worry Inhibition | 11) Parent Age |
|----|-------------------------------|-------------------------|---------------------------|---------------------------|--------------------------|----------------------------|----------------------------|---------------------------|-----------------------------|----------------------------|----------------|
| 1 | 2.33(1.38) | -0.385** | -0.346** | -0.348** | 0.472** | 0.523** | 0.541** | 0.365** | 0.406** | 0.295** | -0.255** |
| 2 | | 2.63(0.64) | 0.742** | 0.752** | -0.492** | -0.489** | -0.447** | -0.209** | -0.224** | -0.282** | 0.155* |
| 3 | | | 2.68(0.70) | 0.737** | -0.433** | -0.490** | -0.438** | -0.246** | -0.166* | -0.198** | 0.275** |
| 4 | | | | 2.59(0.67) | -0.343** | -0.436** | -0.357** | -0.211** | -0.213** | -0.171* | 0.295** |
| 5 | | | | | 35.17(9.48) | 0.837** | 0.824** | 0.405** | 0.460** | 0.346** | -0.159* |
| 6 | | | | | | 33.86(10.05) | 0.914** | 0.587** | 0.547** | 0.376** | -0.332** |
| 7 | | | | | | | 31.52(11.24) | 0.570** | 0.512** | 0.308** | -0.283** |
| 8 | | | | | | | | 6.80(2.19) | 0.633** | 0.492** | -0.210** |
| 9 | | | | | | | | | 7.24(2.31) | 0.553** | -0.133 |
| 10 | | | | | | | | | | 6.99(2.03) | -0.112 |
| 11 | | | | | | | | | | | 38.51(4.98) |

Note: * Indicates significance at $p < .05$ level, ** Indicates significance at $p < .01$ level. Means and standard deviations are displayed on the diagonal. ERS = Emotion Regulation Skills. UC = Unsupportive Contingencies.

Table 4
T-tests for Parental Regulation and Socialization by Demographic Variable

| Variables | | <i>t</i> | <i>df</i> | <i>p</i> |
|------------------|--------------------|----------|-----------|----------|
| Parent Gender | Parental ER Skills | 5.13* | 172 | <0.001 |
| | Parents' UC | -6.31* | 173 | <0.001 |
| Income | Parental ER Skills | -5.41* | 165 | <0.001 |
| | Parents' UC | 3.26* | 166 | 0.001 |
| Parent Ethnicity | Parent ER Skills | -0.20 | 171 | 0.84 |
| | Parents' UC | 0.82 | 172 | 0.42 |
| Parent Education | Parental ER Skills | 1.15 | 164 | 0.25 |
| | Parents' UC | -1.87 | 165 | 0.06 |
| Child Gender | Parents' UC | 1.03 | 171 | 0.30 |

Note: * denotes significance, $\alpha = .05/9 = .0056$. ER = Emotion Regulation. UC = Unsupportive Contingencies.

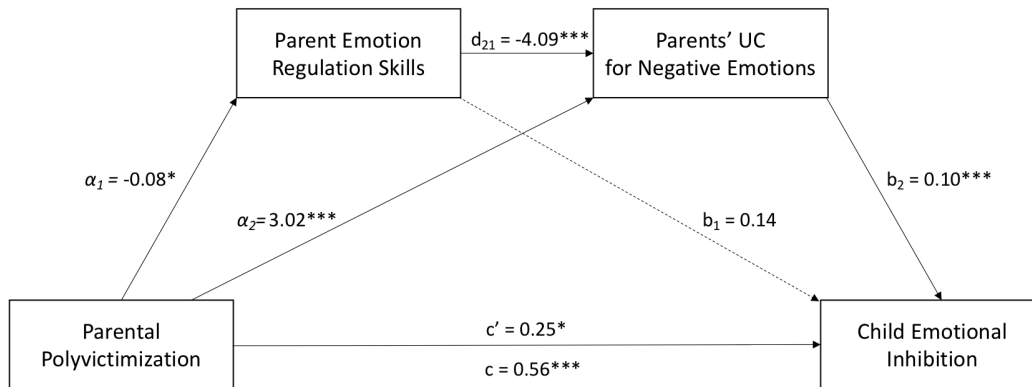


Figure 1. The mediating effects of parental emotion regulation skills and parents' use of unsupportive contingencies (UC) in the relationship between parental polyvictimization history and child emotional inhibition. Notes: $N = 167$. * $p < .05$, ** $p < .01$, *** $p < .001$. All presented effects are unstandardized. Significant paths are denoted with solid lines.