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Emotion Socialization in Ethnically Diverse Families Living in Canada: Values, Temperament, and Emotion Regulation

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Emotion Socialization in Ethnically Diverse Families Living in Canada:

Values, Temperament, and Emotion Regulation

By

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**Emotion Socialization in Ethnically Diverse Families Living in Canada:
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ABSTRACT

Much of what is known about emotion socialization has been based on predominately White, well-educated samples living in the United States. Participants in the present study included an ethnically diverse sample of mothers ($N = 168$) living in Canada with preschool-aged children ranging from 4 to 7 years (86 boys and 82 girls). In this multi-method study, mothers first completed quantitative and qualitative online survey questionnaires (Phase 1) and then 30 mother-child dyads participated in a series of tasks completed in a laboratory setting (Phase 2). The purpose of Phase 1 was to examine relations between mothers' cultural values, temperament, and emotion-related parenting styles (Gottman & DeClaire, 1997). The focus of Phase 2 was to study how mothers' emotion-related parenting styles relate to children's emotion regulation and mother-child discussion about emotions. Over 23% of the Phase 1 mothers were born outside of Canada/U.S., emigrating from 22 different countries located across Asia, Africa, North America, South America, and Europe. Maternal generation status, maternal ethnicity (European and non-European), maternal age, social desirability, and children's gender were all identified as being significantly related to dependent variables. Emotion rejecting, but not emotion coaching, was significantly predicted by maternal values (conservation and self-transcendence), and dyadic temperamental patterns. With social desirability controlled for, emotion coaching, as assessed using a questionnaire format, was not a significant mediator in any models predicting emotion regulation. However, emotion rejecting made significant contributions in all models predicting emotion regulation. Neither emotion coaching nor emotion rejecting was significantly related to children's persistence and frustration scores during an emotion regulation task. Greater children's persistence during the emotion regulation task was significantly associated

with greater mother-child emotion talk during a storytelling task, even after controlling for covariates. Additionally, interactions between maternal generation status, ethnicity, and children's gender on emotion coaching and emotion rejecting were found, as well as links between emotion rejecting, maternal values, temperament, and emotion regulation. Through a qualitative analysis, mothers described the contexts in which they dismissed or disapproved of their children's emotions, which differed at times based on maternal ethnicity and values. For example, when mothers disapproved of their children's emotions because their children's expressions were perceived as disrespectful, it appeared likely that their socialization goals were focused on harmony, family unity, and respect. This study adds to the literature that shows relations among emotion-related parenting, maternal characteristics and values, preschoolers' characteristics, and contextual factors. The results are discussed in light of the domains of socialization approach of Grusec and Davidov (2015).

DEDICATION

This doctoral dissertation is dedicated the loving memory of my dear grandparents.

ACKNOWLEDGEMENTS

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LIST OF ABBREVIATIONS

ATQ-SF	Adult Temperament Questionnaire – Short Form
CBQ-VSF	Children's Behaviour Questionnaire – Very Short Form
ERC	Emotion Regulation Checklist
ERPSST-L	Emotion-Related Parenting Styles Self-Test – Likert
SSVS	Short Schwartz's Value Survey
SDS-17	Social Desirability Scale – 17
TBT	Transparent Box Task
VAI	Vocabulary Acquisition Index
WPPSI-IV	Wechsler Preschool and Primary Scale of Intelligence – Fourth Edition, Canadian

CHAPTER I

Introduction

Overview

To understand emotional processes, we must recognize how biological and cultural background factors intersect (Camras, Schuster, & Fraumeni, 2014). Within the literature, a transactional perspective is often used to describe emotional processes in the family (e.g., Premo & Kiel, 2016). Eisenberg, Cumberland, and Spinrad (1998) formulated a heuristic model of emotion socialization, which included theoretical linear relations between children's characteristics, parent characteristics, cultural factors, contextual factors, emotion-related parenting, and children's outcomes. Parental socialization of emotion has been described as "parenting behaviors that reflect parental beliefs, goals, and values in regard to their children's experience, expression, and modulation of emotion" (Eisenberg, Spinrad, & Cumberland, 1998, p. 317). The socialization of emotion is thought to be a process shaped by parents' characteristics, children's characteristics, cultural background, and contextual factors (Eisenberg, Spinrad, et al., 1998), with each playing a substantial role in the emotional development of children (e.g., Gottman, Katz, & Hooven, 1996). Because the concept of emotion socialization is derived from Western psychological literature, it may not fully capture some culture-specific emotion socialization practices (Camras et al., 2014; Fishman, Raval, Daga, & Raj, 2014; Raval & Martini, 2011). Children experience a broad set of environmental (e.g., cultural values, relationships, and roles) and biological correlates (e.g., temperament) throughout their emotional development (Lewis, 2014). The environmental factors to be addressed in the present study are mothers' values – with a strong emphasis on examining differences by maternal ethnicity and generation status –

while the biological correlates to be assessed are mother-child temperament patterns. The purpose of the present study was to examine the relation between mothers' values, temperament, and emotion-related parenting styles within ethnically diverse families living in Canada, as well as to investigate how these emotion-related parenting styles relate to young children's emotion regulation and emotional expressivity.

The examination of values holds great importance for examining Canada's diverse population. Values derived from a family's cultural background are thought to be a key factor in the emotion socialization process of young children (Eisenberg, Spinrad, et al., 1998). Culture within the family can be expressed through family values, relationships, and roles. Cultural background factors are expected to play a role in the relation between emotion-related parenting practices and children's socio-emotional development. As described by Chen and colleagues (1998), "Culture imparts meaning to the behavior; determines how individuals, including parents and peers, perceive, evaluate, and react to the behavior; and eventually regulates and directs the developmental processes of the behavior" (p. 681).

In addition to values, another factor that is expected to relate to emotion-related parenting practices is temperament. According to Lewis (2014), little is known about how the temperament of parents and their children interact, and how this affects children's emotional development. The study of the temperament-socialization interaction is new, and little is known about the interaction between child and parental temperament, and how this interaction impacts emotional development in children (Lewis, 2014). To help fill this gap in the research, the present study included an examination of the temperament-socialization interaction among an ethnically diverse sample of mothers of preschoolers.

One aim of the present research was to add to the literature on how mothers' characteristics and children's characteristics are related to mother-child interactions that involve emotion socialization practices. As reviewed in the sections to follow, mothers' characteristics include values, emotion socialization practices, the temperament-socialization interaction, ethnicity, generation status, and level of education, while children's characteristics include temperament, age, gender, verbal skills, and emotion regulation.

Mothers' Characteristics

This section includes a review of the following characteristics for mothers: values, emotion socialization practices, temperament, ethnicity, generation status, and level of education.

Mothers' values. Schwartz (2012) described that values motivate behaviour and attitudes. Schwartz and Bilsky (1987) defined values as "concepts or beliefs about desirable end states or behaviors that transcend specific situations, guide selection or evaluation of behaviour or events, and are ordered by relative importance" (p. 878). Values are guiding principles, or standards, that determine what is most desirable when one is interpreting an event (Schwartz, 1992). Values are hierarchically applied to situations based on their importance and are an important aspect of one's personality (Schwartz, 1992). When examining values cross-culturally, comparisons can be made in terms of the interpreted meaning of the values, the importance of the values, and relations between values (Schwartz & Bilsky, 1987). According to Schwartz and Bilsky (1990), values also reflect one's interests (individual or collective) and vary by goal type (instrumental modes of behaviour or terminal end states).

In Schwartz's (1992) theory of basic human values, there are ten values held within cultures and cross-culturally: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security. These values have been described as universal because they are recognized across cultures, and there is a similar pattern of congruity and conflict among values (Schwartz, 2012). Schwartz (2012) conceptualized these ten values in four higher-order values: conservation, openness to change, self-enhancement, and self-transcendence (Schwartz, 1992). Conservation reflects the extent to which one aims to maintain the status quo, resists change, and conforms to societal norms (Schwartz & Boehnke, 2004; Lindeman & Verkasalo, 2005). Conservation includes basic values of tradition, conformity, and security (Schwartz, 1992). Openness to change reflects the motivation to follow one's own beliefs and emotions without feeling the need to preserve the status quo (Schwartz & Boehnke, 2004; Lindeman & Verkasalo, 2005). Openness to change includes values of stimulation and self-direction, as well as hedonism to some extent (Schwartz, 1992). The third higher-order value is self-enhancement, which is the extent to which individuals focus on their individual outcomes and personal interests (Lindeman & Verkasalo, 2005), including basic values of power and achievement (Schwartz, 1992). The last higher-order value is self-transcendence which reflects the degree to which one is concerned with the welfare of others and nature (Schwartz & Boehnke, 2004), and it includes values of universalism and benevolence (Schwartz, 1992). Through the work of Schwartz (1992), these four higher-order values form two bipolar dimensions, as follows: Conservation (versus openness to change) and self-transcendence (versus self-enhancement).

Schwartz's (1992) theory of basic human values has been extensively researched cross-culturally. For example, Schwartz and Huismans (1995) found that values differed

between Greek Orthodox respondents from Greece, Protestants from Netherlands, Jews from Israel, and Roman Catholics from Spain. Across these religious groups studied, greater religiosity was associated with the value of tradition, but not openness to change (Schwartz & Huismans, 1995). In another study, Tafarodi et al.(2012) assessed values across several ethnic groups: European Canadian students, Chinese students living in China, Indian students living in India, and Japanese students living in Japan. For each ethnic group, the researchers compared the mean standardized importance rating for four of the basic values. Overall, Tafarodi et al. (2012) found differences across nationalities in four areas. Canadians rated the importance of security significantly lower than Chinese, Indian, and Japanese participants. Canadians also rated the importance of conformity significantly lower than the other groups. Chinese participants rated hedonism significantly lower than the other groups, while Japanese participants assigned lower ratings to stimulation relative to the other groups (Tafarodi et al., 2012).

Studies on the four higher-order values identified by Schwartz (1992) have been conducted across many disciplines involving issues such as community crime and delinquency (Bilsky & Hermann, 2016). However, no known study to date has examined the higher-order values as predictors of emotion-related parenting. Given that values differ across cultural groups, it is important to consider one's cultural context when looking at the values that shape families (McGoldrick, Giordano, & Garcia-Preto, 2005).

In addition to being socialized by parents, children are also socialized by cultural beliefs and cultural rules (Lewis, 2014). In a variety of cultures around the world, values have been shown to have an impact on emotion socialization in families (Parke & McDowell, 1998). Cultural background is not limited to ethnicity, but incorporates factors such as socio-economic status, religion, migration history, and family dynamics

(McGoldrick et al., 2005). In turn, such factors relate to the ability to associate with other members of a given culture and to maintain cultural traditions within that culture (McGoldrick et al., 2005).

Mothers' style of communicating emotions to children is believed to be a reflection of their values and cultural rules (Lewis, 2014), though more research is needed in this area. Lewis (2014) stated that we do not have enough information about "how cultural values are conveyed by parental practices that, in turn, affect children's ideas and behaviors" (p. 226). As highlighted by Meyer and colleagues (2014), parental values and beliefs about emotions that predict their emotion-related parenting practices and, in turn, children's emotion regulation skills are not well understood. In addition, cultural values can set the stage for how parents develop their own thoughts and feelings about emotions – that is, their meta-emotion philosophies – based on their experiences with their own parents (Eisenberg, Spinrad, et al., 1998).

Mothers' emotion socialization practices. Although mothers' emotion socialization practices are bidirectional and also shaped by their children's characteristics, as described further in a later section (Eisenberg, Spinrad, et al., 1998; Saarni, 1999), this section addresses the mothers' contributions. It is important to note that the emotion socialization process may occur through direct or indirect pathways (Eisenberg, Cumberland, et al., 1998; Eisenberg, Spinrad, et al., 1998). Direct socialization involves the behaviours of the socializer (Eisenberg, Spinrad, et al., 1998); these behaviours reflect the socializer's thoughts and intentions pertaining to emotions, including reactions to children's emotion, emotional expressiveness, and discussions of emotion (Eisenberg, Cumberland, et al., 1998). As one example of the outcomes of direct socialization, Colwell and Hart (2006) found that higher levels of mothers' emotion framing (i.e.,

description of emotion terms depicted in a wordless picture book) and mother-child

relationship quality were associated with higher levels of preschoolers' emotion

understanding (i.e., preschoolers' labelling of emotions in a photograph). Parents'

emotion-related beliefs, behaviours, and skills have been identified as significant

predictors of preschoolers' abilities to recognize emotions (Castro, Halberstadt, Lozada,

& Craig, 2014). Indirect socialization, in contrast, involves exchanges and behaviours

that are not necessarily a direct reflection of the socializer's beliefs and goals related to

emotion (Eisenberg, Spinrad, et al., 1998). Indirect socialization involves any other

interaction – involving children or not (e.g., marital conflict) – that affects children's

emotional experience, expression, understanding, or modulation (Eisenberg, Spinrad, et

al., 1998). To better understand the emotion socialization process, it is helpful to

understand how parents' philosophies about emotions are developed and contribute to

parenting behaviours. Gottman's theory of parental meta-emotion philosophy (Gottman

et al., 1996) is now described.

    Gottman's theory of parental meta-emotion philosophy. Gottman and his

colleagues (1996) defined parental meta-emotion philosophy as "an organized set of

feelings and thoughts about one's own emotions and one's children's emotions" (p. 243).

In meta-emotion theory, all emotions, whether positive or negative, are described as

potentially adaptive (Gottman et al., 1996). *Negative emotions* refer to emotions that are

typically unpleasant (e.g., sadness, anger, and fear), while *positive emotions* refer to

emotions that are typically pleasant (e.g., happiness). In particular, negative emotions are

often difficult for young children to understand and regulate (Laible & Panfile, 2009).

    Katz, Gottman, and Hooven (1996) posited that the exploration of parental meta-

emotion philosophy can aid in understanding the relation between parenting behaviours

and children's physiological regulation and adjustment. After interviewing mothers about their meta-emotion philosophies, Gottman, Katz, and Hooven (1996) created two variables: *awareness* (i.e., one's attention toward emotional experiences) and *coaching* (i.e., being aware of emotions, validating emotions, helping children label emotions, and supporting children as they process negative emotions). Based on patterns of emotional awareness and coaching, Gottman and DeClaire (1997) broadened their work to four emotion-related parenting styles: emotion coaching, laissez-faire, dismissing, and disapproving. The next section begins with a description of these four emotion-related parenting styles as addressed in the literature.

  Emotion-related parenting styles. Emotion coaching parents are high in emotional awareness, acceptance, regulation (Gottman & DeClaire, 1997), and coaching (Gottman et al., 1996) of their children's emotions. For emotion coaching parents, emotion is socialized by emotional display, empathic listening, labelling and validating emotions, offering guidance for emotion regulation, and by teaching problem-solving skills (Gottman & DeClaire, 1997). Emotion coaching parents also feel comfortable with their own emotions and support their children, through positive parenting, in their exploration and expression of emotions (Gottman, Katz, & Hooven, 1997). Mothers' emotion-related parenting styles are often examined through self-report questionnaires. One problem with face-valid self-report questionnaires is their susceptibility to social desirability, whereby a participant's response styles reflect an attempt to portray oneself favourably. Socially desirable responding has been defined as "presenting oneself as having characteristics appreciated by others" (Blake, Valdiserri, Neuendorf, & Nemeth 2006, p. 1626). In a study by Hakim-Larson, Parker, Lee, Goodwin, and Voelker, (2006),

greater social desirability was associated with less negative self-expressiveness reported by parents.

Outcomes for emotion coaching have been largely positive. Emotion coaching has been found to be associated with parents' positive expressiveness and expressive encouragement, even after controlling for parents' social desirability and parents' gender (Hakim-Larson et al., 2006). According to Gottman and colleagues (1996), outcomes for emotion-coached children are adaptive in that they experience less stress and illness, have better self-regulation skills, higher levels of academic achievement, and more positive relationships with peers. Whereas emotion coaching mothers are typically high in both emotional awareness and acceptance, mothers with a laissez-faire meta-emotion philosophy are typically high in emotional awareness and acceptance but low in emotion regulation, guidance, and coaching of their children's emotions (Gottman & DeClaire, 1997). Laissez-faire parents rarely set limits on behaviour and are unlikely to teach children how to solve socio-emotional problems. According to Gottman and DeClaire (1997), children of laissez-faire parents struggle to regulate their emotions, have trouble concentrating, and experience social difficulties.

As reviewed below, a number of outcomes have been identified for dismissing and disapproving styles. Parents who are dismissing of emotion believe that negative emotions are harmful and would much rather avoid addressing negative emotions at all (Gottman et al., 1996). Such parents are typically low in emotional awareness, acceptance, coaching, and regulation (Gottman & DeClaire, 1997). After controlling for social desirability and parents' gender, parents' dismissing style was associated with greater parental self-reported distress, use of punishment, and emotion-minimization; greater dismissing was related to lower levels of expressive encouragement (Hakim-

Larson et al., 2006). Children of emotion dismissing parents may face difficulty in

solving socio-emotional problems and may learn that emotions such as sadness, anger,

and fear are wrong to experience and express, leading to a difficulty with emotion

regulation (Gottman & DeClaire, 1997). In contrast to a dismissing style, parents who are

disapproving of emotion tend to respond to children's emotional expression with criticism

and punishment. Parents using this style are typically low in emotional awareness,

acceptance, regulation, and coaching (Gottman & DeClaire, 1997). Children of parents

who use a disapproving style may be less emotionally and socially competent (Gottman

& DeClaire, 1997) and tend to have elevated anxiety and poor emotion regulation

(Hurrell, Hudson, & Shniering, 2015; Lagacé-Séguin & Coplan, 2005). Finally, in a

sample of 111 children (ages 7 to 12 years) primarily with disruptive behaviour disorders,

greater symptoms of disruptive behaviour and callous-unemotional traits were associated

with lower maternal acceptance of children's emotions and greater confusion and

annoyance related to anger and sadness in mothers (Pasalich et al., 2014). As another part

of this study with a sample of 59 boys, ages 3 to 9, Pasalich et al. (2014) found that

mothers of children high in callous-unemotional traits were more likely than mothers of

children low in callous-unemotional traits to dismiss children's verbal expression of

emotion during a reminiscing task.

Studies on mothers' emotion-related parenting styles and children's outcomes

have primarily included samples of European American families. Diverse parenting

styles across various ethnic groups have been found to relate to adaptive socio-emotional

outcomes for children. For instance, Raval, Raval, and Deo (2014) conducted a study on

mothers' emotion socialization, children's emotion regulation, and children's functioning

with a sample of 110 mothers and their children (Grade 7) living in India. One finding

was that Indian mothers' explanation-oriented supportive behaviour was associated with adaptive outcomes in children; this was an outcome that had not yet been identified in prior research, which was largely based on White American families (Raval, Raval, & Deo, 2014).

Mothers are essential socializers of emotional and social competence in the lives of their children. Parents' responses to emotions are based on their own traits, the nature of the situation, and traits of the child (Hakim-Larson, Dunham, Vellet, Murdaca, & Levenbach, 1999). In the following section, mothers' temperament will be examined as an individual difference that is important to consider in the emotion socialization process.

Mothers' temperament. Rothbart, Ahadi, and Evans (2000) identified a four-factor structure of adult temperament, including extraversion/surgency, negative affectivity, effortful control, and orienting sensitivity. The components of extraversion/surgency include sociability, positive affect, and high intensity pleasure. For simplicity, this extraversion/surgency factor will be referred to as extraversion throughout this study. The components of negative affectivity include fear, sadness, discomfort, and frustration. Effortful control has components of attentional control (i.e., capacity to focus and shift attention), inhibitory control (i.e., capacity to inhibit inappropriate responses), and activation control (i.e., capacity to perform an action even with a tendency to avoid the action). Lastly, orienting sensitivity includes neutral perceptual sensitivity (i.e., detecting subtle stimuli in self or environment), affective perceptual sensitivity (i.e., associating emotional content with stimuli), and associative sensitivity (i.e., "spontaneous cognitive content that is not related to standard associations with the environment"; Evans & Rothbart, 2009, p. 569). Linkages between mothers' temperament and that of their children will be described.

Mothers' ethnicity. Families' values differ greatly by ethnic groups, shaping how emotions are communicated to children. Mesquita, De Leersnyder, and Boiger (2016) highlighted how emotions that are consistent with the values of a particular culture are most prevalent and expressed most strongly. In fact, based on cross-cultural studies, Mesquita and colleagues (2016) reported that the immigrants' appraisals of certain emotions become more similar to the members of the host culture over time after they have had more frequent contact with members of the majority culture. Western values, for example, tend to emphasize individuation, autonomy, independence, and self-sufficiency within a family (Lee & Mock, 2005a). While ethnic groups differ in some traditions and core values, it has been noted in the literature that between- and within-culture differences may be present in cultural values and associated emotion socialization processes (Raval, Raval, Salvina, Wilson, & Writer 2013). Directly studying cultural values adhered to by individual mothers may show greater variation as compared to looking at values based solely on country of origin. As described below, research findings indicate that there are a variety of perspectives on family roles, intergenerational relationships, value transmission, and emotion socialization present in other cultures.

According to Statistics Canada (2010), the proportion of observed and projected foreign-born population by continent of birth in Canada is as follows: Asia (40.9% in 2006; projected to 55.4% by 2031), Europe (36.8% in 2006; projected to 20.5% in 2031), Africa (6.0% in 2006; projected to 9.5% in 2031), and Americas 15.3% in 2006; 13.9% in 2031). Statistics Canada (2010) also projected that Arab and West Asian groups will have grown the fastest by the year 2031. The following sections contain descriptions of values among Eastern Asian, Middle Eastern, South Asian, and African families.

Eastern Asia includes China, Japan, Mongolia, North Korea, South Korea, and Taiwan. Among East Asian families, cultural metaphors, Eastern philosophical teachings, family stories, and genealogy records are often shared (Lee & Mock, 2005a). For traditional Chinese families, emotional expression is discouraged if doing so might negatively impact the family unit (Lee & Mock, 2005b). Japanese families tend to teach children social values and expectations, such as obedience to parents (Shibusawa, 2005). Interdependence is valued in Japanese culture, while boasting one's personal achievements may be seen as offensive (Shibusawa, 2005). When faced with hardships, people of Japanese origin tend to cope by suppressing their feelings and desires; emphasis is placed on nonverbal communication and what is not spoken, rather than what is spoken; and emotions are kept private (e.g., parents display little affection toward each other and toward their children; Shibusawa, 2005). Among families of Korean origin, parents emphasize their role in supporting and guiding their children, while the children must show obedience and respect toward their parents (Kim & Ryu, 2005). Like Japanese children, Korean children are encouraged to be humble with respect to their achievements (Kim & Ryu, 2005). Koreans place importance on controlling emotions, which are to be expressed only to immediate family members; in the presence of others, Koreans reserve displays of affect (Kim & Ryu, 2005). When interacting with others, Koreans examine the human qualities in others, known as *jeong*, in which one expresses care for the comfort and well-being of others (Kim & Ryu, 2005).

Families of Middle Eastern origin (e.g., from Lebanon and Syria) place great value on the family unit and education (Haboush & Barakat, 2014). Family honour and respect are highly valued in Middle Eastern families, as is being generous and hospitable to others (Abudabbeh, 2005). Within a collective and extended Arab family, behaviour of

the family members is seen to reflect on concepts of family honour and shame (Beitin &

Aprahamian, 2014). Preserving honour also has been linked to the display rule of

discouraging public display of emotions among families from Lebanon and Syria, as

family members who are overly expressive may become involved in conflict (Haboush,

2005). In some traditional Arab homes, open and direct communication is often

considered to be disrespectful, and children may not speak negatively about their parents

(Abudabbeh, 2005). That being said, overt expressions of emotion are common within

the home. For example, Beitin and Aprahamian (2014) described that within the Arab

culture, there is a value in building deep emotional parent-child bonds whereby

interactions "communicate to the child that he/she is an extension of the parent" (p. 72).

Nonetheless, many Arab Americans experience distress related to discrimination which

may be associated with values in the support network (Beitin & Aprahamian, 2014).

Among Middle Eastern families, maintaining collectivistic values of family pride,

harmony, and honour is important, while family shame and devaluation tend to cause

significant distress (Dwairy, 2009).

South Asian families from countries such as India, Pakistan, and Afghanistan tend

to emphasize gender norms throughout the life course (Almeida, 2005). Instead of

emphasizing autonomy, as is done in Western cultures, families from India tend to

minimize the need for children's independence and autonomy (Almeida, 2005). In their

cross-and within-culture comparison of Indian and U.S. groups of mothers of children

ages 6 to 9 years, Raval et al. (2013) examined supportive parent behaviours and non-

supportive parent behaviours as defined by Eisenberg, Cumberland, and Spinrad (1998).

Raval and colleagues (2013) found that mothers from India were more likely than U.S.

mothers to respond to children's emotions by providing explanations as part of a

problem-focused response. As compared to mothers from India, mothers from the U.S. tended to discuss solutions as part of a problem-focused response and were more likely to report behaviourally-oriented punitive responses (i.e., time-out and removal of privileges) in response to their children's anger (Raval et al., 2013). An examination of the specific emotional and behavioural responses revealed that Indian mothers' socialization goal was to discourage anger and sadness in their children in order to maintain family harmony; in contrast, U.S. mothers helped children resolve the situation causing those negative emotions so that they can work to accomplish their individual goals (Raval et al., 2013). Likewise, the collective family identity and harmonious living (e.g., hospitality) are also highly valued in Pakistani families. Pakistani families tend to be large, patrilineal, and hierarchical, and the households tend to be intergenerational (Nath, 2005).

In examining the values held in families of African origin, it is important to acknowledge socio-political factors including the deep loss of culture that has occurred as a result of enslavement, colonization, war, and racial discrimination (Kamya, 2005). African immigrants are often expected to support relatives and community members from their country of origin. Among African immigrant families, it is often believed that values are learned through proverbs and storytelling, which are then shared with future generations (Kamya, 2005). In addition, traditional religious beliefs tend to incorporate both the natural and spiritual worlds (Kamya, 2005). People of African origin have also immigrated to the Caribbean. Cuba is the largest island in the Caribbean and is a socialist country that has a complex socio-political history with the United States (Bernal & Shapiro, 2005). Family bonds related to loyalty, unity, and respect are of significant importance, and Cubans also place an emphasis on including humour in their interactions. Many Cubans living in the U.S. have experienced dislocation, grief, family tension

related to socio-political factors, and in some cases have experienced extensive

assimilation (Bernal & Shapiro, 2005). Lewis (2014) stated that recently, there has been

greater attention to the research area of socialization processes in a cultural framework,

making it important to consider the underlying cultural themes present (Harkins, 1992;

McAdams, 2006). As described next, cultural considerations in mothers vary by their

generation status.

       Mothers' generation status. Of interest in the present study are the values held

by Canada/U.S.-born mothers in comparison to first generation mothers. Though

acculturation strategies were not examined in the present study, differences in emotion-

related parenting were examined between Canada/U.S.-born mothers and first generation

Canadian mothers. Karkhanis and Winsler (2016) stated that to understand emotion

socialization among ethnically diverse cultural groups, it will be important for future

research to examine immigrants' generation status. Those who have immigrated need to

negotiate experiences from their heritage and host cultures (Berry, 2005). Acculturation

is the process in which immigrants maintain their cultural identity while also interacting

with and adapting to the host culture (Berry, 1997; Almeida, 2005). Berry (1997)

described four strategies of acculturation: integration (i.e., one's acceptance of the values

and norms of both the heritage and host cultures), assimilation (i.e., one's acceptance of

host culture's values and attitudes, but little maintenance of one's identity with the

heritage culture), separation (i.e., one's acceptance of the heritage culture's values and

norms, but little identification with the host culture), and marginalization (i.e., one's

difficulty accepting the norms and values of either the host or heritage cultures). Yoon

and colleagues (2013) examined the outcomes of these four acculturation strategies

through a meta-analysis of the research literature. They found that the integrated strategy

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was associated with the most positive mental health benefits (Yoon et al., 2013). First-generation immigrants tend to hold a strong sense of cultural and religious identities from their country of origin. Cultural maintenance, which is the maintenance of cultural traditions, may be a goal for first generation immigrants (Berry, 2001). First-generation immigrants altogether constitute 22% of the total Canadian population (Statistics Canada, 2011). For those who are second generation and beyond, the process of enculturation may be of great priority. Through enculturation, a form of ethnic identity socialization, individuals may strive to learn about their family's cultural traditions, values, and norms (Kim & Park, 2008). The group of second-generation Canadians (i.e., children of immigrants; children with at least one parent born outside of Canada) is also a rapidly growing. Lastly, third generation refers to those who are born in Canada, with both parents also born in Canada. Another important demographic variable for mothers is their level of education, which is described next.

Mothers' level of education. One problem with much of the past literature on emotion socialization is that samples tend to be homogenous in terms of parents' level of education (i.e., predominately college and university-educated mothers), which limits the generalizability of the findings. Mothers' education is sometimes reported as an indicator of socio-economic status in the literature on emotion socialization, but is not analyzed further. There is a limited number of studies in emotion socialization literature in which mothers' education was explicitly examined as a covariate, especially among ethnically diverse samples. Among the studies available, mothers' level of education was not always linked to key study variables. Laukkanen, Ojansuu, Tolvanen, Alatupa, and Aunola (2014) examined psychological well-being (i.e., depression symptoms and self-esteem), children's temperament, and child-rearing practices among mothers of 152

Grade 1 Finnish children. They found that greater maternal education was related to greater maternal well-being. However, maternal well-being mediated the relation between children's low positivity and activity with maternal psychological control, even after controlling for select demographic variables (Laukkanen et al., 2014). As an example of a study in which maternal education did not significantly contribute to key variables in the emotion socialization literature, Morris and colleagues (2011) recruited a sample of 153 mothers and their children ages 4 to 9 years. The mothers in their sample varied in their educational attainment from high school to college completion. Maternal education was neither related to children's overt displays of anger and sadness nor maternal emotion regulation strategy (i.e., attempts to assist children in their emotion regulation; Morris et al., 2011). Thus, further work here is needed to determine the extent to which the level of education among ethnically diverse mothers contributes to emotion socialization factors. The following section includes a review of some characteristics of children that are relevant to the emotion socialization process.

Children's Characteristics

This section includes a review of the following characteristics for children: temperament, age, gender, verbal skills, and emotion regulation.

 Children's temperament. Lewis (2014) described temperament as innate individual differences in a biological process, enduring throughout early and later emotional development. Temperament is thought to be related to genetic, neural, and behavioural factors (Bates, Goodnight, & Fite, 2008; Saudino & Micalizzi, 2015).

Current measures of temperament have been found to show stability over time (Bates et al., 2008). However, Rothbart (2007) has posited that temperament can actually change over time based on changes in the central nervous system structures and

trajectories of temperament brought forth from one's social experiences. Rothbart (2007) considered the study of temperament to be the key to understanding development. In fact, Rothbart and Ahadi (1994) proposed a "temperamental perspective on personality development" (p. 55), whereby the relation between temperament and personality is dynamic and interactive (Rothbart, Ahadi, & Hershey, 1994). Evans and Rothbart (2007) explained that personality, unlike temperament, includes cognitions, beliefs, and values. According to Rothbart and Ahadi (1994), temperament incorporates aspects of physiology and social interaction and, therefore, follows a developmental course that has "important implications for personality development" (p. 57). In addition, temperament potentially serves as a risk or protective factor of psychopathology. Katz et al. (2012) highlighted that there is a need for more studies on the relation between parental meta-emotion philosophy and children's temperament characteristics.

Consistent with the adult model of temperament, which was previously described, the model of temperament for children described here follows Rothbart and colleagues' conceptualization. In the work of Rothbart, Ahadi, and Hershey (1994), three main temperament factors have been identified for children: surgency (extraversion), negative affectivity, and effortful control. As described below, these three temperament factors in children are related to social development (Rothbart, Ahadi, & Hershey, 1994) and also show convergence with the factors from the Big Five/Five Factor personality model (i.e., extraversion, agreeableness, conscientiousness, neuroticism, and openness).

Extraversion involves traits of activity, shyness (when low in extraversion), high-intensity pleasure, smiling and laughter, impulsivity, and positive anticipation. According to Rothbart (2007), the extraversion temperament factor corresponds to the Big Five personality factor of extraversion. Bridgett and colleagues (2013) indicated that the

surgency scale has been commonly referred to as extraversion, extraversion/surgency, positive affect, and positive emotionality in the literature. As noted earlier, for simplicity and to be consistent with the terminology used for the Adult Temperament Questionnaire – Short Form (ATQ-SF; Evans & Rothbart, 2007), the surgency factor will be referred to as extraversion throughout the remainder of this study. Maternal elaboration (i.e., the tendency to ask open-ended, detailed questions in a narrative in order to add new information) has been found to differ based on mothers' perceptions of their children's extraversion or sociability (Lewis, 1999). For instance, Lewis (1999) examined relations between temperament ratings of children, ages 3 to 5 years, and mothers' conversational style during a reminiscing task. Mothers' conversational style included elaborations (i.e., the addition of new information), repetitions (i.e., the repeating of content already stated without adding new information), and evaluations (i.e., the confirmation or negation of a child's comment). Lewis (1999) found that the more sociable the child was, the less mothers used repetitions and evaluations. It was possible that mothers who perceived their children as sociable and outgoing had less need to use repetitions and evaluations to keep them engaged in the task. Thus, it appears the conversational style between mothers and their preschool-age children may differ based on child temperament ratings.

Negative affectivity includes frustration, fear, discomfort, sadness, and soothability. Negative affectivity in children may reduce their ability to successfully process their mothers' elaborative discussion about emotion; likewise, mothers may provide less complex narratives when their children are displaying negative affectivity (Laible & Panfield, 2009). Negative affectivity corresponds to the neuroticism Big Five personality factor (Rothbart, 2007). Mothers' perceptions of greater negative affectivity and lower extraversion in their children has been associated with discussion about

negative emotions during a reminiscing task, suggesting that children's temperament may be associated with emotional content in co-constructed narratives (Laible, 2004).

Effortful control may also be an indicator of one's ability to modulate emotions (Bates et al., 2008), and may be particularly important in inhibiting fearful, impulsive, and aggressive responses (Derryberry & Rothbart, 1997). Greater effortful control, a form of response inhibition, may show linkages to other areas of development. As compared to children who have difficulty inhibiting behaviour, children with greater response inhibition tend to be less aggressive, less noncompliant, and more prosocial (Bates et al., 2008; Laible, 2004). Effortful control was described by Rothbart (2007) as a self-regulation process related to "children's ability to choose a course of action under conditions of conflict, to plan for the future, and detect errors" (p. 207). Effortful control addresses areas of attention control, inhibitory control, perceptual sensitivity, and low-intensity pleasure, and corresponds to the Big Five conscientiousness factor (Rothbart, 2007).

Additionally, cross-cultural differences in temperament have been found, suggesting variability in outcomes depending on values and childhood experiences (Rothbart, 2007). For example, Ahadi, Rothbart, and Ye (1993) found that greater effortful control was related to lower extraversion in a sample of Chinese children; this pattern was not found in a sample of children from the United States. They also found a negative correlation between effortful control and negative affectivity among children from the United States; this pattern was also not found in children from China (Ahadi, Rothbart, & Ye, 1993).

Links between children's temperament and emotion regulation have been identified in the literature (e.g., Bates et al., 2008). For example, Roben, Cole, and

Armstrong (2013) found that higher levels of parent-reported effortful control in children ages 18 to 48 months and language skills was associated with greater attention control during a wait task. In summary, mothers' perceptions of their children's temperament and emotion regulation likely relate to their emotion socialization practices.

Links between mothers' temperament, parenting behaviours, and children's temperament. Socialization and temperament, along with other biological factors, are thought to correlate, making it essential to study both temperament and socialization, and the interaction between the two. Temperament has been thought to address genetic factors and their corresponding innate, unlearned dispositions; however, these dispositions may be altered by the nature of the parent-child interaction, interacting with socialization and affecting children's emotional development (Lewis, 2014; Katz, Maliken, & Stettler, 2012). Mothers may adjust their interactions based on their perceptions of their children's temperament (Eisenberg, 1996). Literature on the temperament-socialization interaction is now provided.

Bridgett, Laake, Gartstein, and Dorn (2013) found that mothers' positive affect and effortful control predicted greater positive emotionality (i.e., smiling and laughter) in infants. Mothers' positive affect and effortful control have been found to significantly predict lower negative parenting scores (i.e., laxness, over-reactivity, and verbosity; Bridgett et al., 2013). Further, Lipscomb and colleagues (2012) reported an interaction between biological mothers' negative affectivity and over-reactive parenting in adoptive mothers' responding to their toddlers' negative emotionality. Likewise, mothers of children who are rated as being low in positivity have been found to show less affection (Laukkanen et al., 2014). They also found that mothers' lower well-being mediated the relation between mothers' evaluations of their children's negative emotionality and

mothers' subsequent use of psychological control (Laukkanen et al., 2014). They highlighted the importance of mothers being able to understand their children's temperament and learn ways to foster an adaptive parent-child interaction (Laukkanen et al., 2014).

Laible (2004) conducted a study with 51 mothers and their preschool-age children (3 to 5 years; 77% Caucasian and 23% African American) to examine children's temperament (as measured by the Children's Behavior Questionnaire-Short Form; Rothbart, 1988), elaboration during a mother-child reminiscing task, discussion of negative emotion during a storybook reading task, and a behavioural outcome measure for regulation. Maternal elaboration was defined by Laible (2004) as mothers' use of rich and open-ended questions during discussion with their children, and has been identified as a predictor of adaptive socio-emotional outcomes in children. In contrast, mothers who are repetitive/pragmatic tend to ask closed-ended questions and do not provide rich contextual information in the discussion (Laible, 2004). Laible (2004) found that higher ratings of children's effortful control and extraversion predicted lower discussion of negative emotion during a reminiscing task. In contrast, higher ratings of negative reactivity predicted greater discussion of negative emotion during the reminiscing task. Both effortful control and negative reactivity predicted greater maternal elaboration during the reminiscing task. Though this finding may seem counterintuitive, Laible (2004) explained that children who are perceived as scoring high in effortful control may use self-regulation more effectively and may not need as much emotion-related discussion as children high in negative reactivity. Laible (2004) also posited that elaboration during a reminiscing task may occur more often when children have better self-regulation and attention abilities. Taken together, mothers may be less elaborative

with children who have too high of an activity level as a result of their highly extraverted

temperament (Laible, 2004). Greater maternal elaboration during the reminiscing task

was also associated with higher levels of children's emotional understanding. Greater

maternal elaboration and children's age during the storybook task were associated with

higher levels of children's behavioural regulation during a resistance-to-temptation task

(Laible, 2004).

Komsi et al. (2008) examined the stability in parents' personality and the

temperament of their children ages 6 months to 5.5 years. They found that parents'

personality traits were associated with their perceptions of their children's temperament

over time. Specifically, there was a positive association between parental extraversion

and parents' ratings of their children's effortful control. In contrast, greater neuroticism

in parents was associated with greater ratings of their children's negative affectivity

(Komsi et al., 2008).

As described by Rettew, Stanger, McKee, Doyle, and Hudziak (2006), much of

the literature on parent and child temperament factors as predictors of children's

outcomes has involved linear models as opposed to interactional models (e.g., goodness-

of-fit). Rettew and colleagues (2006) demonstrated that parent-child temperament

interactions significantly and uniquely predicted child psychopathology factors, even after

controlling for each dimension independently. Their findings highlighted how it can be

overly simplistic to examine linear relations between temperament traits and outcomes.

For instance, while child negative affectivity may be associated with adverse socio-

emotional outcomes, the combination of child and maternal negative affectivity may

amplify these adverse socio-emotional outcomes. To take it further, it would be of added

benefit to incorporate other mother-child temperament dimensions into the same model

instead of examining each temperament trait separately. According to Rettew and colleagues (2006), the parent-child context is important when looking at temperament dimensions, and further research is needed on ethnically diverse families.

Thus, in addition to values, temperament was a key focus in the present study. While temperament is one type of individual difference that is important for mothers and their children, there are other maternal and children's characteristics that are important to consider. Mothers' emotion-related parenting styles are likely based on a number of factors, such as mothers' perceptions of their children's individual differences related to their age, sex, and temperament (e.g., Halberstadt, 1998).

Children's age. The age range selected for children included in the present study is based on major developmental shifts. The age range of 4 to 7 years includes children in kindergarten (ages 4 and 5 years) and elementary school (ages 6 and 7). This particular age range was targeted as it is a period of major developmental changes in terms of children's emotional development and contributions in narrative conversations. Around 27 months, autobiographical narratives (i.e., personally meaningful memories about events that occurred to oneself) may include basic commentary (Favez, 2011). Preschoolers experience a rapid shift in the ability to encode and organize information (Fivush, 2009). Children begin to start introducing and forming their own narratives independently by the end of the third year (Favez, 2011; Adler & McAdams, 2007). As children progress through the preschool years, the narratives become more complex and children tell stories with plots and descriptors of characters with direct references to emotions (Favez, 2011). Narratives express children's understanding of social relationships; for example, autobiographical narratives are a natural way to examine factors related to emotion regulation (Favez, 2011). Younger children may have a

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simplistic view of emotions as being "good" or "bad", as a pleasing or displeasing experience; as children develop, these categories become more refined (Lewis, 2014). Over the period of ages 5 to 12 years, narratives have been found to become more elaborative, even after controlling for the length of the narrative (Ukrainetz et al., 2005). Beginning around adolescence and young adulthood, narratives coalesce into one's life story as a reflection of one's narrative identity (Adler & McAdams, 2007).

Mothers may adjust their interactions with their children based on how they perceive their children's age-related tendencies in dealing with emotions (Fabes et al., 1994). To demonstrate this bidirectional process, Fabes et al. (1994) assessed emotional, physiological, and prosocial interpersonal reactivity between parent-child dyads during a storytelling task. They found that mothers of the kindergartners (age range 68 to 82 months) were more likely than mothers of second-grade children (age range 89 to 108 months) to attempt to induce a positive mood in the children in order to minimize their unpleasant responses. Because these younger children are often thought to have emotional skills that are less advanced compared to the older children, children's age was associated with parenting behaviours, especially when mothers of young children believed that children would likely become emotionally aroused in the storytelling task. Additionally, this finding by Fabes et al. (1994) suggested that parental attitudes and beliefs do play a role in a parent's shaping and reactivity to the emotional experiences of children. Such maternal reactions are likely related to their own temperament and that of their children, as was previously discussed.

Children's gender. Gender differences in children may play a role in both the emotion socialization process and in narrative elaboration. When it comes to emotion-related parenting styles, children's gender has played a role in some contexts.

Cunningham, Kliewer, and Garner (2009) examined emotion socialization processes and children's outcomes in a sample of African American families with school-aged boys and girls. Though maternal meta-emotion philosophy was associated with emotional understanding for boys and girls, some components of emotional understanding differed based on children's gender. Emotional understanding was a mediator between maternal emotion socialization and the internalizing behaviour of boys. For girls, emotional understanding was a mediator between maternal emotion socialization and social skills. Additionally, they found that emotion regulation mediated the relation between emotion socialization and boys', but not girls', psychosocial adjustment (i.e., grades, internalizing and externalizing behaviour, and social skills). Walling, Mills, and Freeman (2007) found that fathers' disapproval of negative emotions in their daughters, but not their sons, predicted fathers' use of guilt/shame induction, which is a form of psychological control. In addition, Walling et al. (2007) found that greater parental sensitivity to hurtful messages and disapproval of negative emotions was related to an increased use of psychological control (i.e., parental intrusion and manipulation of their children's feelings, thoughts, and perspectives on the parent-child relationship). Also, Premo and Kiel (2014) examined toddlers' ($N = 106$) gender as a moderator between toddlers' emotion regulatory behaviour (i.e., attention-regulation, self-soothing, and caregiver-focused behaviours) and maternal socialization of emotion (i.e., supportive responses and non-supportive responses). They found that boys', but not girls', lower-level of caregiver-focused regulation (i.e., seeking comfort from their caregivers) during low-distress contexts at 24 months was associated with greater non-supportive emotion socialization at 36 months (Premo & Kiel, 2014). Premo and Kiel (2014) described that there appeared to be a transactional relation between children's characteristics and

parental socialization, as parents may also have a goal of teaching toddlers more independent behavioural strategies so they rely less on caregivers.

In terms of elaboration, mothers tend to be more elaborative with their daughters as compared to their sons (e.g., Fivush, Haden, & Reese, 2006). Zaman and Fivush (2013) examined gender differences during reminiscing tasks between 42 American mothers and their 4-year-old children. Dyads were invited to talk about a happy event, a sad event, a parent-child conflict, or the child's conflict with a peer. In contrast to the previous findings noted, they found very few gender differences in terms of elaboration. During a discussion about a parent-child conflict, parents were rated as more engaged with their sons as compared to their daughters; however, during a discussion about a special outing, parents were more engaged with their daughters as compared to their sons (Zaman & Fivush, 2013). It is therefore plausible that emotion-related parenting styles and narrative construction may be related to gender role socialization. In understanding children's narrative skills, it is important to question if narratives simply measure verbal ability, or if these are separate constructs. The next section reviews literature on children's verbal skills.

Children's verbal skills. Do narratives simply measure verbal ability or is there something beyond verbal intelligence that incorporates emotional skills? In narrative research, it is useful to determine the extent to which verbal skills account for the variance in narrative scores. Children become more verbally expressive as their language skills increase (Fivush, 2009). Some findings in the literature have suggested that elaboration is not simply a measure of verbosity; however, greater maternal elaboration has been linked to higher levels of children's linguistic skills (e.g., Fivush, Haden, & Reese, 2006). Favez (2011) measured language level through (a) children's vocabulary

skills as measured by the Wechsler Preschool and Primary Scale of Intelligence – Third

Edition (WPPSI-III) verbal items and (b) children's grammar, as measured by their mean

length of utterance (Bates, Bretherton & Snyder, 1988). However, Favez (2011) did not

find a relation between the verbal skills and narrative elaboration of 46 children ages 3

years 6 months to 5 years 1 month. As opposed to having advanced verbal skills, Favez

(2011) posited that children who develop an exhaustive and elaborate narrative instead

have been provided with opportunities to regulate and understand emotions related to the

experience. Though research on the relation between elaboration and children's verbal

skills is not conclusive at this time, the examination of verbal skills within the context of

storytelling narratives may be an important contribution to the literature.

To better understand children's individual characteristics within the emotion

socialization process, the following section is a review of literature on emotion-related

parenting practices and children's emotion regulation.

Children's emotion regulation. Examining parents' responses to their children's

negative emotions provides insight into parents' attitudes toward emotion and their style

of communicating emotions to their children during potentially stressful situations

(Gottman et al., 1996). It is through families' adaptations to stress and the resulting

transitions that emotional experiences are interpreted and meaning is made (Fiese &

Sameroff, 1999). In turn, children learn about emotions and how to regulate their own

negative emotions and how to cope in the future (Laible & Panfile, 2009).

Emotion regulation involves the control over several systems, including arousal,

expressions (e.g., facial and behavioural), motivation, goals (e.g., interpersonal and

intrapersonal goals), and appraisals (Adrian, Zeman, & Veits, 2011). Thompson (1994)

defined emotion regulation as "the extrinsic and intrinsic processes responsible for

monitoring, evaluating, and modifying emotional reactions, especially their intensive and

temporal feature, to accomplish one's goals" (p. 27-28). The four most common ways of

measuring emotion regulation are self-report, informant report, observational, and physio-

biological measures (Adrian et al., 2011). Emotion regulation may be evaluated through

"central and peripheral nervous system processes, sociocultural influences, and biological

and behavioural contexts" (Adrian et al., 2011, p. 172). It is important to note that many

of these methods can be used in conjunction with each other. For developmental

research, observational methods can provide the added benefit of assessing gestures,

vocal tone, and facial expressions (Adrian et al., 2011).

Emotion understanding skills develop around the preschool years and have been

associated with the ability to regulate emotions and control emotional expressivity (Laible

& Panfile, 2009). Interest in examining the link between parental meta-emotion

philosophy and children's emotion regulation skills has been growing in the literature.

With a better understanding of emotions, children are better able to recognize and

regulate their emotional states. A bidirectional process is also plausible, in that parents

are more successful in using an emotion coaching style when their children are more

effective in emotional self-regulation (Katz, Maliken, & Stettler, 2012). Meyer and

colleagues (2014) examined whether mothers' emotion socialization strategies would

mediate the relation between maternal beliefs about emotions and children's emotion

regulation skills as reported by mothers. They looked at various self-regulatory

approaches in children, including problem-focused strategies (e.g., attempts to help the

child solve the problem that caused the negative emotion) and emotion-focused strategies

(e.g., soothing the child). Their sample ($N = 73$) included White, Hispanic or Latina,

Asian American or Pacific Islander, and African American mothers of children ages 4 to

5 years. They found that problem- and emotion-focused parental socialization mediated the relation between parents' beliefs in the importance of attention toward emotions and their children's use of emotion- and problem-focused self-regulation (Meyer et al., 2014).

The following section includes a review of the literature regarding mother-child interaction variables to bridge a connection between mothers' and children's individual characteristics.

Mother-Child Interaction

This section includes a review of literature on mother-child co-constructed narratives, storytelling, and the sharing of wordless picture books.

Co-constructed narratives. There are many ways in which parent-child conversations about emotions take place during the emotion socialization process. Storytelling, family narratives, reminiscing, and discussion about everyday events are examples of opportunities for emotion talk. This section introduces the research on co-constructed narratives as it pertains to the emotion socialization process.

Among parent-child dyads, the process of co-constructing narratives involves sharing meaning about relationships which reflects one's perspectives as well as the family's relational world (Fiese & Sameroff, 1999). The co-construction of narratives has been thought of as a way in which children further develop their narrative skills (Fiese & Sameroff, 1999; Harkins, Koch, & Michel, 1994). A co-constructed narrative can be examined at a proximal level (i.e., the social relationship or narrative conversation between speakers) or with reference to distal (i.e., cultural) factors (Favez, 2011). Through co-constructed narratives, meaning can be made about emotionally salient events. An examination of these narratives can reveal how successfully emotional experiences are processed among parent-child dyads (Oppenheim, 2006).

Narratives are universal, found cross-culturally (Haden & Hoffman, 2013), and are a reflection of one's cultural standards (e.g., Harkins, Koch, & Michel, 1994; Harkins, 1992). According to Goldenberg and Goldenberg (2013), families' narratives are shaped by their background. A family narrative may address connections between generations, a family's sense of being unique, how the family members express their emotions, the roles of individual family members, and the family's ethnic heritage, rituals, and social class (Goldenberg & Goldenberg, 2013). This narrative is then passed on to future generations and can impact the family's functioning. Fiese and Spagnola (2005) stated that family narratives are valuable because they indicate how families experience the world, interact with each other, and experience their relationships. When reflecting on a personal event, the interpretative framework is set, providing an indication of how the family has experienced hardships and resiliency; this leads to the formation of concepts of oneself and others (Oppenheim, 2006). Life stories are temporally extended, including salient elements of past events, the present, and the future (Adler & McAdams, 2007). When examining past events, it is important to consider the relation between memory and emotional arousal, as the degree of emotionality can either improve or interfere with the memory of an event (Alexander & O'Hara, 2009). Taken together, family narratives present an in-depth examination of the family through a meaning-making process related to adaptation.

Narrative conversations have been found to differ by developmental stages and emotional understanding in children. Adults bring up most of the content in narrative conversations up until children's second year. By age 3.5 years, narratives are still introduced and led by adults, but children make some contributions with some prompting. Finally, by age 4, children begin introducing and leading narratives (Favez, 2011).

Narrative conversations and the development of social cognitive understanding in children have been linked through five processes (Thompson, 2006): (1) words refer to abstract phenomena; (2) children's attention is directed to important parts of an event that explain why events occurred; (3) children learn to differentiate between psychological states such as the story vs. meta-comments; (4) children learn to consider multiple perspectives during a conflict; and (5) children learn to better understand their culture and examine their social worlds. Further, children of highly elaborative mothers tend to share longer, more descriptive narratives (Schick & Melzi, 2010). Thus, in the literature, narrative styles have been significantly associated with children's outcomes and the development of social skills in a number of ways.

Parent-child conversations shape the way we experience ourselves and our social world (Oppenheim, 2006). Examining the conversational styles between mothers and their children can provide insight into processes related to narratives and factors associated with emotion regulation (Favez, 2011). Emotion regulation has been associated with coherence and emotionality in co-constructed narratives. Oppenheim, Nir, Warren, and Emde (1997) examined children's emotion regulation, mother-child co-constructed narratives about a separation and reunion, and behaviour ratings in a sample of 51 European American mother-child dyads at ages 4.5 and 5.5 years. Emotional coherence reflected the extent to which children addressed emotional themes, both positive and negative, and coherently organized these themes in a narrative (Oppenheim et al., 1997). They found that children who were rated highly on emotional coherence during a co-constructed narrative were also high in emotional coherence on an independent narrative task. As compared to children with lower emotional coherence, those with higher emotional coherence produced more prosocial themes and fewer

aggressive themes at ages 4.5 and 5.5 years, and at both time points their mothers rated them as having fewer behaviour problems (Oppenheim et al., 1997). The authors concluded that emotional coherence was a reflection of the children's abilities to regulate difficult and negative emotions with their mother and during an independent task. Thus, findings from these past studies have supported the relations between children's narrative development and emotion regulation.

Favez (2011) also found that maternal narrative styles are stable over time and differences in maternal style is related to children's narratives. He identified three categories of maternal cooperation: *active omission* (high in clarification and insistence; low in elaboration and emotionality), *emotional facilitation* (moderately high in insistence and clarification; high in elaboration and emotionality), and *disengagement* (low in all dimensions). As compared to children of mothers who used an active omission or disengagement style, children of mothers with an emotional facilitation style mentioned the story's high point more often, produced more exhaustive narratives (i.e., narratives mention a higher number of different episodes of the scenario), and could chronologically rearrange pictures representing a story's events more accurately (Favez, 2011). Cultural differences in maternal questioning styles during narratives have been found in the literature. For example, European American mothers tend to produce lengthy, descriptive, and highly-elaborative narratives with their children; this style is thought to be present because European American mothers tend to value individualism and therefore promote more talk about the self (Melzi, Schick, & Kennedy, 2011). In contrast, East Asian mothers tend to place less value on detailed talk about the self (Schick & Melzi, 2010). As such, East Asian mothers have been found to facilitate less elaborative discourse with their children and ask more fact-based questions (Melzi et al., 2011).

While cultural differences in narratives remain to be explored further, some research has already been conducted on the storytelling process between mothers and their preschool children as described further below.

      Storytelling. To begin this section, it is important to acknowledge the subtle differences between the terms *story* and *narrative.* A story typically refers to structural content and organization, while a narrative involves the function or process of meaning-making regarding an event or experience (Fiese & Spagnola, 2005). Stories are thought to have structural organization (i.e., setting, goal, obstacle, etc.), a referential element (i.e., temporal order), and an evaluative element (i.e., the associated meaning, relationships, and values; Harkins, Koch, & Michel, 1994; Harkins & Ray, 2004**).** Therefore, there are different aspects to the storytelling experience that are important to consider.

      As part of a family's routine, storytelling creates the opportunity for family members to connect and share meaning and understanding (Taylor, Fisackerly, Mauren, & Taylor, 2013). Stories, such as fairy tales, may be told to children; parents may tell children stories about recent events; and stories may also be constructed to share meaning (Favez, 2011). According to Taylor and colleagues (2013), family stories may serve a purpose by helping other family members better understand their own identity. Taylor et al. (2013) emphasized that a family's story may reflect the family's important values and beliefs through moral messages, courtship stories, traumatic events, and creation/birth stories. When one reflects on a personal event, the interpretative framework is set. This framework can indicate how families experience hardships and resilience. According to Adler and McAdams (2007), the social contexts within one's culture is a pathway for the themes present in an individual's life story. Life stories highlight the meaning behind

how someone has developed and changed over time (Adler & Mc Adams, 2006) and incorporates knowledge formed by cultural and social values (Favez, 2011).

The examination of storytelling can also highlight the transmission of values. Miller, Wiley, Fung, and Liang (1997) examined storytelling content that took place at the homes of Chinese and European American parents and their 2-year-old children. Families were invited to talk about any topic of their choice. Miller et al. (1997) found that between these two groups, Chinese families focused on morals, social norms, and their children's past behavioural transgressions during the interaction. The authors posited that the Chinese narratives may have had such a focus because they are childrearing in the Confucian tradition, through which parents see shame as a virtue and value teaching, discipline, and social rules (Miller et al., 1997). European American mothers, in contrast, focused on entertainment and affirmation, and were less likely to discuss their children's past behavioural transgressions, possibly because European American mothers often manage children's behaviours as soon as they occur (Miller et al., 1997).

Sharing wordless picture books. Storytelling through the sharing of wordless picture books is another way to examine emotion talk and values through co-constructed stories. Mothers' emotion socialization can be indicated by their empathic comments, prompting for children to discuss emotions, or the teaching of rules of coping (Favez, 2011). Children's participation in mother-child talk assists in children's development of emotional understanding (Tenenbaum, Alfieri, Brooks, & Dunne, 2008), and maternal elaboration has been linked to children's cognitive, social, and linguistic development (Melzi et al., 2011).

Harkins and Ray (2004) conducted an exploratory cross-cultural study to examine storytelling among 34 mother-child dyads from East India and 36 from the United States. Mothers and their 4- to 5-year-old children constructed a story using a wordless picture book, *Frog, Where Are You*? (Mayer, 1969). In the story, a boy and his dog search for his pet frog. It is later revealed that the frog left so it could be with its frog family; the story resolution is that a baby frog from the family ends up leaving to go with the boy and his dog. The authors coded for the cultural theme of the storytelling narratives based on a section of the story in which a boy and several other characters (i.e., the "family") search for a missing frog and experience a resolution. The two cultural themes included evaluative themes of individualism (i.e., individual fulfillment of goals) and collectivism (i.e., family-focused evaluative comments; Harkins & Ray, 2004). Phrases spoken by mothers from East India contained a greater proportion of evaluative comments (i.e., the provision of meaning by referring to the relationships between story characters, objects, and events) and their children asked more questions as compared to dyads from the United States. Their findings suggested that though Indian mothers' story length was longer than that of mothers from the U.S., stories were longer for children in the U.S. as compared to children in India. This indicates that U.S. children were provided with more opportunities to become verbally involved in the narratives. Differential themes were present in mothers' resolution of the story. Harkins and Ray (2004) found that mothers from the U.S. emphasized personal goals (individualistic) of the boy finding his little frog. In contrast, mothers from India emphasized the boy's personal goal and the emotional responses from the remaining members of the group (collectivistic), in response to losing and finding the little frog.

In another study using a wordless picture book, Shulova-Piryatinsky and Harkins (2009) compared narratives constructed during the sharing of the *Frog, Where Are You*? (Mayer, 1969) book. In their study, narratives were constructed by Jewish mothers and their children ages 3 to 5 years from five Jewish cultural groups: native speakers of Russian in Israel, U.S., and Ukraine; native speakers of English in the U.S.; and native speakers of Hebrew in Israel. All participants narrated the story in their native language. Narratives were then transcribed and translated. Multiple variables were coded, including mean proportion of phrases, mean proportion and type of emotion words, and mean proportion and type of questions. They found that English-speaking mothers from the U.S. tended to prompt children's participation in the storytelling through questioning and tended to have more phrases than Russian-speaking mothers. However, Russian-speaking mothers tended to have a greater proportion of emotion words than English-speaking American mothers (Shulova-Piryatinsky & Harkins, 2009). A qualitative analysis of themes of loss also was conducted by examining narrators' perceptions of the story's resolution regarding the baby frog's departure from home. Shulova-Piryatinsky and Harkins (2009) examined narrators' descriptions regarding which character was the decision-maker in a part of the story in which the frog gets taken home. As compared to Israelis and English-speaking mothers from the U.S., Russian-speaking immigrants in Israel and the U.S. were more likely to say that the frog family gave permission to the boy to take the frog home. Additionally, they found that immigrant groups were more likely to negatively describe the frog's departure (i.e., in terms of abandonment) than English-speaking American mothers or Israelis. In fact, many of the immigrant narrators described the departure from one's family as an "agonizing" experience. Shulova-Piryatinsky and Harkins (2009) concluded that "Mother-child narratives provide a

window in our effort to understand and assist in resolving immigrant family conflicts" (p. 350) and provide a vehicle for the understanding of values transmitted to children during the narrative process.

Melzi et al. (2011) examined narratives through two different types of tasks: a reminiscing task and the sharing of the wordless picture book, *Frog, Where Are You?* (Mayer, 1969), between mothers and their preschool children, ages 3 to 5 years. Their sample included 32 Spanish-speaking dyads from Peru and 32 English-speaking dyads from Boston and New York City. Peruvian mothers, who often focus on social relations when interacting with their preschool children, tended to be the "storytellers" (i.e., those who took a role as a sole narrator) of the storytelling task but were "narrative elicitors" (i.e., those who took a role as a supportive audience member) during the reminiscing task; this highlights that the Peruvian mothers shifted their styles based on the context of the interaction. In contrast, European mothers tended be "narrative constructors" (i.e., those who were co-narrators or "story builders", both requesting and providing elaboration) during both tasks (Melzi et al., 2011). Overall, there is a lot of literature to support the use of wordless picture books among ethnically diverse families to elicit mother-child emotion talk and perhaps culturally-grounded emotion-related parenting practices.

Rationale for the Present Study

Values and temperament are thought to be key factors in the emotion socialization process, but these links have not yet been comprehensively examined in ethnically diverse families. Though researchers have suggested that cultural values are associated with parental socialization beliefs and behaviours (e.g., Chen, Fu, & Zhao, 2015), a review of the literature indicates that this relation has not yet been examined among a Canadian sample including immigrant mothers. Nonetheless, there are a number of

studies in which values and emotion socialization were examined in immigrants living in the U.S. Fishman and colleagues (2014) conducted a study using the Meta-Emotion Interview (Katz & Gottman, 1986) to examine emotion socialization among Indian immigrants in the U.S. Mothers in their study highlighted that "negative emotions were inevitable and the most practical response was to move on with one's life" (Fishman et al., 2014, p. 884). In literature on emotion-related parenting, which is largely based on European American families, the approach described might be considered an emotion dismissing approach as opposed to a philosophy that maintains interpersonal harmony and continuing on with life when negative emotions are experienced. Overall, Fishman et al. (2014) found that meta-emotion philosophies differed for first-generation Indian immigrant mothers in the U.S. as compared to what has been found in previous work with European American mothers. Thus, the recent work by Fishman and colleagues has called into question whether there are culture-specific values within the emotion socialization process that have not been fully explored.

Examining emotion socialization among mothers living in Canada presented the opportunity to examine the unique contributions of individual factors and contextual factors. In the current study, participants differed based on their ethnicity, generation status, and individual differences (e.g., temperament). The present study adds to the literature by examining emotion socialization among ethnically diverse mothers of preschoolers living in Canada.

As previously noted, emotion socialization plays a critical role in the social and emotional development of children. Outcomes include children's emotion regulation and mother-child emotion talk during a storytelling task. In the present study, emotion regulation was measured through multiple modalities, as recommended by Adrian and

colleagues (2011). That is, in addition to maternal report, children's behaviour was assessed during a persistence and frustration task.

Temperament factors (i.e., extraversion, negative affectivity, and effortful control; Rothbart, Ahadi, & Hershey, 1994) have been thought to play a role in parent-child discussions and emotion-related parenting practices (Oppenheim, 2006). In the present study, mothers' and children's temperaments were examined together as dyadic patterns as a possible predictor of emotion-related parenting styles. That is, mother-child temperament variables were examined in conjunction to produce clusters, or patterns. Temperament is an example of an individual biological factor that is theoretically linked to children's development of emotion regulation (Bates et al., 2008). Mother-child dyadic temperamental patterns show not only the interactive nature of temperamental styles, but also the degree to which mothers' and children's temperament is congruent or matched (Rettew et al., 2006). Thus, one goal of the current study was to identify dyadic temperamental patterns so that mothers' and children's temperament could be examined jointly. The examination of emotion-related parenting styles may provide information about the association between temperament and children's emotion regulation.

According to Eisenberg and colleagues (2001) there is a need to examine the relation between mother-child emotional expressivity (as measured during a storytelling task) and children's emotion regulation. The examination of receptive and expressive English language verbal skills in the present study is of great importance because the children in the study may be bilingual. Children who are learning English as an additional language may have different receptive and expressive verbal skills than those who are native English speakers (Gibson, Oller, Jarmulowicz, & Ethington, 2012).

Verbal skills may be a control variable in examining emotion language during the storytelling task.

Researchers have recommended that input from qualitative methodology would help explain *how* temperament, parenting styles, and values operate in emotion socialization (e.g., Karkhanis & Winsler, 2016). The purpose of the qualitative methodology in the current study was to collect mothers' perspectives about aspects of emotion socialization, values, and temperament that may not have been captured in the quantitative questionnaires. Further, these qualitative questions presented mothers with the opportunity to reflect on their own cultural background, emotion-related parenting, and their children's characteristics. The six primary quantitative research questions and their hypotheses are described next along with four qualitative research questions.

Research Questions and Hypotheses

Research question 1: Do values predict emotion-related parenting practices? An objective of the present study was to examine if mothers' values of conservation and self-transcendence (Lindeman & Verkasalo, 2005) predict emotion coaching and emotion rejecting scores (Gottman & DeClaire, 1997, Hakim-Larson et al., 2006). When mothers score lower in conservation, they are more motivated to follow their own beliefs and emotions without feeling the need to preserve the status quo. When mothers are flexible in their parenting and open to change, an emotion coaching style may be adopted to allow children's perspectives to be heard and respected. Self-transcendence involves a concern for the welfare of others as opposed to the welfare of the individual self (i.e., self-enhancement). Those who score low in self-transcendence instead value self-enhancement, indicating that they prioritize their own personal interests over concern for the welfare of others. In terms of emotion-related parenting, mothers who value self-

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transcendence (as opposed to self-enhancement) are likely concerned about their children's emotional well-being and may, therefore, coach their children's emotions.

Hypothesis 1a. Lower maternal conservation and greater self-transcendence are each expected to predict greater emotion coaching.

Hypothesis 1b. Greater conservation and lower self-transcendence are each expected to predict higher scores on emotion rejecting.

Research question 2: Do mother-child temperament patterns predict emotion-related parenting practices? As previously described, literature on temperament variables (Rothbart, Ahadi, & Evans, 2000) indicates that extraversion, effortful control, and orienting sensitivity are associated with many adaptive outcomes for mothers and children, while negative affectivity has been associated with maladaptive outcomes. The hypotheses for research question 2 involve several ways in which mother-child temperament patterns may predict maternal emotion-related parenting styles.

Hypothesis 2a. Temperament patterns that are high in extraversion, high in effortful control, and low in negative affectivity will predict higher emotion coaching scores.

Hypothesis 2b. Temperament patterns that are low in extraversion, low in effortful control, and high in negative affectivity will predict higher emotion rejecting scores.

Research question 3: Do emotion-related parenting styles mediate the relation between values and children's emotion regulation? Children of parents who adopt an emotion coaching parenting style tend to develop strong emotion regulation and social skills (Gottman & DeClaire, 1997). Based on the model of emotion socialization by Eisenberg, Cumberland, et al. (1998), it was expected that the relation between

mothers' values and children's emotion regulation (Shields & Cicchetti, 1995) will be mediated by emotion-related parenting practices. A parallel mediation model (Hayes, 2013) will be used so that the effects of emotion-related parenting practices of emotion coaching and emotion rejection can be examined within the same model. Research question 3 is linked to research question 1.

Hypothesis 3a. It is expected that emotion coaching and emotion rejecting parenting styles will mediate the relation between mothers' conservation values and children's emotion regulation. Specifically, it is expected that lower conservation will predict greater emotion coaching, which, in turn, predict greater emotion regulation in children. Also, is expected that greater conservation will predict greater emotion rejecting, which, in turn, predict lower emotion regulation in children.

Hypothesis 3b. It is expected that emotion coaching and emotion rejecting parenting styles will mediate the relation between mothers' self-transcendence values and children's emotion regulation. Specifically, it is expected that greater self-transcendence will predict greater emotion coaching, which, in turn, will predict greater emotion regulation in children. Also, it is expected that lower self-transcendence will predict greater emotion rejecting, which, in turn, will predict lower levels of emotion regulation.

Research question 4: Do emotion-related parenting styles mediate the relation between mother-child temperament patterns and children's emotion regulation?

In Eisenberg, Cumberland, and Spinrad's (1998) model, it was highlighted that children's temperamental characteristics may elicit parental behaviours. Emotion socialization encompasses "parental beliefs, goals, and values related to emotional experience, expression, and regulation" (Eisenberg, Spinrad, et al., 1998). Theoretically,

it appears plausible that emotion-related parenting will mediate the relation between temperament and children's emotion regulation. As was done in the testing of Hypothesis 3, emotion coaching and rejecting will be examined in a parallel mediation model. Research question 4 is linked to research question 2.

Hypothesis 4. The relation between mother-child temperament patterns and children's emotion regulation will be mediated by emotion coaching, such that higher levels of adaptive mother-child temperament patterns (i.e., high in extraversion and effortful control, but low in negative affectivity) will predict greater emotion coaching, which will predict higher emotion regulation scores.

The relation between mother-child temperament patterns and children's emotion regulation will be mediated by emotion rejecting, such that higher levels of maladaptive mother-child temperament patterns (i.e., low in extraversion and effortful control, but high in negative affectivity) will predict greater emotion rejecting, which will predict lower emotion regulation scores.

Research question 5: Is there an association between emotion-related parenting and mother-child emotion talk? As previously described, wordless picture book storytelling tasks have been used by researchers to examine the emotion socialization that occurs during mother-child emotion talk. Though a variety of constructs can be examined through this method, many researchers have been examining emotion talk as the proportions of segments of spoken language that contain emotion words (e.g., Paterson et al., 2012; Shulova-Piryatinsky & Harkins, 2009).

Hypothesis 5a. It is expected that emotion coaching scores will be related to a greater proportion of segments containing mother-child emotion talk during a story task.

Hypothesis 5b. It is expected that emotion rejecting scores will be related to a lower proportion of segments containing mother-child emotion talk during a story task.

Research question 6: Is there an association between emotion-related parenting and children's persistence and frustration? The purpose of this research question was to investigate associations between emotion-related parenting styles and children's persistence and frustration during an observation-based emotion regulation task (Transparent Box Task; Goldsmith & Rothbart, 1996). Frustration and persistence address processes of reactivity and control and are thought of as components of emotion regulation (Dennis, 2006). This research question was designed to investigate the extent to which emotion-related parenting is associated with children's behavioural responses (i.e., frustration and persistence) during a task that induces mild frustration.

Hypothesis 6a. It is expected that maternal emotion coaching scores will be related to greater persistence and lower frustration among children during the emotion regulation task.

Hypothesis 6b. It is expected that maternal emotion rejecting scores will be associated with lower persistence and greater frustration for children during the emotion regulation task.

Qualitative research question 1: How are mothers' values related to their emotion-related parenting practices?

This question was formulated to better understand the extent to which mothers believe their cultural values are associated with their emotion-related parenting practices. In their responses, mothers may also comment about aspects of their own culture that are encompassed in their way of responding to their children's emotional experiences.

Qualitative research question 2: How are mothers conceptualizing their children's temperament as compared to same-age peers?

The purpose of this question was to examine mothers' own descriptions of their children's temperament that may not be captured in the temperament questionnaire. Responses may help better characterize the sample in terms of children's characteristics that go beyond the temperament dimensions in the quantitative questionnaire.

Qualitative research question 3: How are children's temperaments related to their mothers' emotion-related parenting practices?

The coding of mothers' responses to this question may help delineate the specific ways in which children's temperament may be associated with mothers' emotion-related parenting. It has been thought that mothers modify how they approach their children's emotions based on their beliefs about their children's temperament (Eisenberg, 1996). This research question was designed to elucidate the extent to which mothers' perceptions of their children's temperaments play a role in their emotion-related parenting.

Qualitative research question 4: How are mothers' emotion-related parenting practices related to children's socio-emotional development?

This research question was designed to provide mothers with the opportunity to describe their reflections on how their emotion-related parenting relates to their children's outcomes. The question allows mothers to comment on their children's social and emotional skills. Mothers may also comment if their emotion-related parenting practices are associated with adverse children's outcomes, or possibly any additional factors in the emotion socialization process that may be impacting their children's socio-emotional development.

CHAPTER II

Method

Prior to collecting data, the study sample size was selected on the basis of conducting regression analyses that assume a medium-sized relation between independent and dependent variables, $\alpha = .05$, $\beta = .20$. Tabachnick and Fidell (2013) stated that a simple formula is $N > 50 + 8m$ (m = number of independent variables). Given that it was estimated that the analyses would include six independent variables and a maximum of six covariates, each regression would require approximately 146 participants. G*Power 3.1.9.2 computed an a priori power analysis for a multiple regression given a medium effect size, $\alpha = .05$, with a maximum of six total predictors, and six covariates. The recommended minimum sample size of 146 was confirmed by G*Power. As stated in Field (2013), a sample size of 160 is sufficient if a medium effect is expected in a study with up to 20 predictors. Therefore, the present study with $N = 168$ mothers met the sample size recommendation for regression analyses. Survey measures were first tested in a pilot study ($N = 27$). There were two phases in the present study: Phase 1 consisted of the online self-report questionnaires completed by mothers, while Phase 2 involved several mother-child tasks that took place at a laboratory. An a priori power analysis for Phase 2 correlational analyses was conducted via G*Power 3.1.9.2. With a medium effect size, $\alpha = .05$, G*Power recommended a minimum Phase 2 sample size of 42 participants. Study participants and measures are now described.

Phase 1 Participants

To be included in the present study, participants had to be the mother of a child between the ages of 4 and 7 years, be presently living in Canada, and had to be able to read, understand, and speak English. In total, 205 mothers responded to the study

advertisement by e-mail and were provided with the survey link. A total of 171 mothers

met the study inclusion criteria and completed the online Phase 1 survey. However, due

to a technical error in the survey software (Fluid Surveys), three of the 171 participants

were not presented with study questionnaires beyond the demographics questionnaires,

and they were removed from the study sample. Figure 1 shows a flowchart of the

participants through the pilot study and the two main phases of the study. Frequencies

related to attrition were also reported.

The final study sample included 168 mothers living in Canada with at least one

child between 4 to 7 years of age. Mothers were recruited from communities across

Canada ($n = 144$), as well as a Psychology Department participant pool ($n = 24$). The

participant pool is comprised of undergraduate students at a mid-size university in

southwestern Ontario who elected to participate in studies. Maternal age ranged from 21

to 49 years ($M = 33.54$ years, $SD = 5.51$). Refer to Table 1 for a demographic

characteristics of Phase 1 and 2 participants. Demographic characteristics for Phase 1 and

2 participants demonstrated that the proportions across most variables appear to be similar

regardless of which phase the mother participated in. In the demographics questionnaire,

mothers were asked to select the ethnic category that best describes them, type a

description of their self-identified ethnic background or heritage culture, and state the

name of their country of origin. Information from these three questions were compared,

and no inconsistencies in mothers' responses were identified. All mothers who reported a

Caucasian ethnicity also reported a European heritage and were not visible minorities.

Additionally, all mothers who reported a mixed/biracial ethnicity reported heritage from

regions outside of Europe. Mothers in the present study reported being from a variety of

Pilot Study ($N = 27$)

205 mothers responded to the study advertisement, requested to participate, and were provided with the survey link

171 mothers completed the study

34 mothers received the study link did not complete the study

3 were removed from analyses, as they experienced a technical error and were not presented with questionnaires beyond demographics

10 began the study but did not finish

24 never opened the survey link

PHASE 1: 168 mothers completed the entire survey (143 from community, 25 from participant pool)

PHASE 2: Of the 168 Phase 1 mothers, 30 mother-child dyads completed Phase 2

Figure 1. Flow of participants in the study

Table 1

Demographic Characteristics of Study Participants

Characteristic	N(%)	
	Phase 1 (*N* = 168)	Phase 2 (*N* = 30)
Marital status		
Single or in a relationship but not living together	19(11.3)	4(13.3)
Married	123(73.2)	21(70.0)
Living together/common-law	18(10.7)	2(6.7)
Separated	4(2.4)	1(3.3)
Divorced	3(1.8)	2(6.7)
Widowed	1(.6)	0(0)
Maternal ethnicity		
Aboriginal (First Nations, Métis, or Inuit)	3(1.8)	2(6.7)
Arab (e.g., Lebanese, Palestinian, Egyptian, Iraqi, etc.)	9(5.4)	4(13.3)
African	4(2.4)	0(0)
Caribbean	3(1.8)	2(6.7)
Caucasian	114(67.9)	16(53.3)
Chinese	7(4.2)	2(6.7)
Filipino	2(1.2)	0(0)
Korean	0(0)	0(0)
Latin American	2(1.2)	0(0)
Mixed/Biracial	6(3.6)	1(3.3)
South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)	16(9.5)	1(3.3)
Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian, etc.)	2(1.2)	2(6.7)
Maternal birthplace		
Canada/United States	128(76.2)	22(73.3)
Canada	121(72.6)	22(73.3)
United States	7(4.2)	0(0)
Outside Canada/United States	40(23.8)	8(26.7)
Maternal generation status in Canada/United States		
1st generation	32(19.0)	7(23.3)
1.5th generation	8(4.8)	1(3.3)
2nd generation	33(19.6)	7(23.3)
3rd generation and beyond	95(56.5)	15(50.0)
Maternal religion/spirituality		
Anglican	4(2.4)	0(0)
Buddhist	0(0)	0(0)
Christian	45(26.8)	8(26.7)
Greek Orthodox	1(.6)	0(0)
Hindu	1(.6)	1(3.3)
Jewish	1(.6)	0(0)
Muslim	25(14.9)	5(16.7)
Non-religious/atheist	37(22.0)	10(33.3)
Protestant	6(3.6)	0(0)
Roman Catholic	41(24.4)	5(16.7)
Other	1(.6)	0(0)
No response	6(3.6)	1(3.3)

Characteristic	N(%)	
	Phase 1 (N = 168)	Phase 2 (N = 30)
Annual family income		
$10,000 or less	3(1.8)	1(3.3)
$10,001 to $20,000	4(2.4)	1(3.3)
$20,001 to $30,000	20(11.9)	7(23.3)
$30,001 to $40,000	8(4.8)	4(13.3)
$40,001 to $50,000	14(8.3)	4(13.3)
$50,001 to $60,000	13(7.7)	1(3.3)
$60,001 to $70,000	8(4.8)	1(3.3)
$70,001 to $80,000	12(7.1)	2(6.7)
$80,001 to $90,000	19(11.3)	2(6.7)
$90,001 and up	51(30.4)	7(23.3)
No response	16(9.5)	0(0)
Maternal highest level of education		
High school (Grades 9-12)	6(3.6)	0(0)
Some university or college, or CEGEP	25(14.9)	7(23.3)
University/college	101(60.1)	18(60.0)
Graduate school	36(21.4)	5(16.7)
Maternal occupation		
Management (e.g., facility operation, service director, principal)	4(2.4)	1(3.3)
Business, finance, and administrative (e.g., secretary, bookkeeping)	23(13.7)	4(13.3)
Natural and applied sciences and related (e.g., engineer, biologist)	2(1.2)	1(3.3)
Health (e.g., dentist, pharmacist, veterinarian)	16(9.5)	4(13.3)
Social science, education, government, religion (e.g., teacher)	68(40.5)	10(33.3)
Art, culture, recreation, and sport (e.g., librarian, journalist, athlete)	6(3.6)	0(0)
Sales and services (e.g., retail, food service)	11(6.5)	1(3.3)
Student	24(14.3)	7(23.3)
Homemaker/stay-at-home mother	12(7.1)	2(6.7)
Other	2(1.2)	0(0)
Live with target child		
Yes	165(98.2)	30(100.0)
No	3(1.8)	0(0)
Age of target child		
4 years	45(26.8)	10(33.3)
5 years	46(27.4)	6(20.0)
6 years	39(23.2)	11(36.7)
7 years	38(22.6)	3(10.0)
Gender of target child		
Boy	86(51.2)	11(36.7)
Girl	82(48.8)	19(63.3)

Characteristic	N(%)	
	Phase 1 (N = 168)	Phase 2 (N = 30)
Ethnicity of target child		
Aboriginal (First Nations, Métis, or Inuit)	1(.6)	0(0)
Arab (e.g., Lebanese, Palestinian, Egyptian, Iraqi, etc.)	9(5.4)	4(13.3)
African	3(1.8)	0(0)
Caribbean	4(2.4)	0(0)
Caucasian	104(61.9)	15(50.0)
Chinese	3(1.8)	2(6.7)
Filipino	1(.6)	0(0)
Korean	1(.6)	1(3.3)
Mixed/Biracial	23(13.7)	5(16.7)
South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)	15(8.9)	1(3.3)
Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian, etc.)	4(2.4)	2(6.7)
Birthplace of target child		
Canada/United States	161(95.8)	26(86.7)
Canada	159(94.6)	24(80.0)
United States	2(1.2)	2(6.7)
Outside Canada/United States	7(4.2)	4(13.3)
Disabilities of target child		
Anxiety (including selective mutism)	10(6.0)	2(6.7)
Attention-deficit/hyperactivity disorder (ADHD or ADD)	5(3.0)	1(3.3)
Autism spectrum disorder	3(1.8)	1(3.3)
Depression	0(0)	0(0)
Disability of written expression	1(.6)	1(3.3)
Epilepsy	0(0)	0(0)
Intellectual disability	0(0)	0(0)
Math disorder or math disability	0(0)	0(0)
Oppositional defiant disorder	0(0)	0(0)
Reading disability	1(.6)	0(0)
Speech or language delay	14(8.3)	3(10)
Other	4(2.4)	2(6.7)
Birthplace of target child's father		
Canada/United States	125(74.4)	20(66.7)
Canada	122(72.6)	20(66.7)
United States	3(1.8)	0(0)
Outside Canada/United States	41(24.4)	10(33.3)
No response	2(1.2)	0(0)

ethnic groups: Aboriginal, Arab, African, Caribbean, Caucasian, Chinese, Filipino, Latin

American, Mixed/Biracial, South Asian, and Southeast Asian. Sample sizes were

relatively small for the specific ethnic groups, so mothers were coded as either having a

European or non-European ethnicity. In this study, the term *non-European* refers to

mothers who reported being a member of a visible minority group and also reported being

from an ethnic group that was not European. It is important to note a few limitations of

reporting ethnicity in terms of *European* and *non-European* groups: "European" ethnicity

is used as a point of reference; it groups together individuals from all across the world

outside of Europe, making it difficult to specifically identify ethnic differences; and with

dichotomized ethnic groups, between- and within-culture differences are difficult to

interpret. Nonetheless, the term *non-European* was used because in some neighbourhood

or ethnic enclaves, a person may not identify as a minority.

There were 114 mothers (67.9%) who were Caucasian and reported a European

ethnicity, while 54 mothers (32.1%) reported being in a visible minority group with a

non-European ethnicity. Mothers who were born outside of Canada originated from 22

different countries located in five continents: Asia, Africa, North America, South

America, and Europe (see Figure 2). Most mothers reported that they primarily speak

English with their families (87.5%). Cultural practices included preparing traditional

meals (76.8%), singing songs from one's culture (34.5%), holiday celebrations (79.2%),

dancing (16.1%), attending festivals (34.5%), and wearing costumes (19.6%). A portion

of the sample (12.5%) reported that they do not participate in practices associated with

their heritage culture. A variety of religious/spiritual backgrounds were reported by

mothers, with most mothers being Christian, Roman Catholic, non-religious, and Muslim.

Figure 2. Shaded countries represent mothers' birthplaces.

Religious practices endorsed by the mothers included prayer (56%), scripture reading

(25%), diet/fasting (14.3%), and celebrating holidays (70.8%).

To better understand emotion-related parenting practices within Western society,

Canada-born ($n = 121$) and U.S.-born ($n = 7$) mothers were combined into one group.

Though all of the 168 mothers in the full study sample were living in Canada at the time

of the study, mothers' generation status in Canada/U.S. was examined, not mothers'

generation status in Canada alone. Generation status was described using the following

terms: first generation (born outside of Canada/U.S. and immigrated to Canada/U.S. after

the age of 12), 1.5[th] generation (born outside of Canada/U.S. and immigrated to

Canada/U.S. before the age of 12), second generation (born in Canada/U.S. and have at

least one parent who was born outside of Canada/U.S.), and third generation and beyond

(born in Canada/U.S. and parents were born in Canada/U.S.). Of the 168 mothers in the

study, 23.8% were first generation (19% immigrated to Canada/U.S. after the age of 12,

while 4.8% immigrated before the age of 12), 19.6% were second generation, and 56.5%

were 3rd generation and beyond. On average, first generation mothers came to

Canada/U.S. around 20.1 years of age ($SD = 9.20$; range: 2 to 38 years). Among mothers

born outside of Canada/U.S., reasons for immigration were voluntary (77.5%), to evade

war (2.5%), to evade poverty (2.5%), and other reasons (17.5%; e.g., marriage and

moving with family). With respect to citizenship status, 94% were Canadian citizens,

4.8% were landed immigrants, 1.2% had permanent resident status, and 0% were

refugees.

Approximately 81.5% of the mothers in the study reported being

college/university educated, 14.9% reported some college/university education, and 3.6%

reported high school as their highest level of education. Nearly half of the mothers in the

study reported an annual family income of $70,000 or higher. The majority of the mothers (69%) reported having one or two children ($M = 2.22$, $SD = 1.09$; range from 1 to 7). Mothers completed questionnaires regarding one target child who met the study criteria, which included 86 sons and 82 daughters. Children were ages 4 years ($n = 45$; 27 boys, 18 girls), 5 years ($n = 46$; 24 boys, 22 girls), 6 years ($n = 39$; 17 boys, 22 girls), or 7 years ($n = 38$; 18 boys, 20 girls). Most of the target children (95.8%) were born in Canada/United States. English was the first language for most children (94%).

Phase 2 Participants

Of those 168 mothers from Phase 1, 30 mothers participated in Phase 2 with their children (11 boys, 19 girls) ages 4 to 7 years. Phase 2 included families of diverse ethnic backgrounds, including 16 European Canadians and 14 non-European Canadian mothers. Phase 2 mothers ranged from 21 to 46 years of age ($M = 32.03$ years, $SD = 5.89$). Twenty-two of the mothers were born in Canada, while 8 were first generation Canadians. Phase 2 began as soon as mothers were able to schedule an appointment. On average, Phase 2 tasks took place 4.77 months after mothers completed Phase 1 questionnaires. Thus, children's age in months was calculated separately at Phase 1 and Phase 2 time points.

Measures

Refer to Appendix A for the documentation of permission to use and/or adapt the study measures. Mothers were asked to complete the Background Questionnaire and several counterbalanced measures pertaining to mothers and their children.

Phase 1: Online Self-Report Measures Completed by Mothers

Background Questionnaire. The background questionnaire (Appendix B) gathered information about family composition, socioeconomic status, ethnicity, and immigration history.

Emotion-Related Parenting Styles Self-Test – Likert (ERPSST-L; Gottman & DeClaire, 1997, modified by Hakim-Larson et al., 2006). Gottman and DeClaire (1997) wrote a parenting book called Raising an Emotionally Intelligent Child: The Heart of Parenting which introduced four distinct emotion-related parenting styles: emotion coaching, laissez-faire, dismissing, and disapproving. Their book included an 81-item true/false self-report measure in which parents were able to identify their primary emotion-related parenting. This true/false measure (ERPSST-T/F) was converted into a 5-point Likert-type questionnaire known as the ERPSST-L as well as a 20-item short-form Likert-type questionnaire called Emotion-Related Parenting Styles (ERPS; Gottman & DeClaire, 1997, modified by Paterson, Babb, Camodeca, Goodwin, Hakim-Larson, Voelker, & Gragg, 2012). The Meta-Emotion Interview is a widely used structured interview to obtain scores on three dimensions that pertain to the parent (awareness of own emotions, acceptance of own emotions, and regulation of own emotions), as well as four dimensions that pertain to the child (parent's awareness of child's emotions, parent's acceptance of child's emotions, parent's regulation of child's emotions, and parent's coaching of child's emotions). Compared to the Meta-Emotion Interview (Katz & Gottman, 1986), the ERPSST-L is time-efficient, user-friendly to administer, and does not require the significant administration and scoring training necessary for structured interviews.

The ERPSST-L is an 81-item measure of parents' styles of teaching their children about emotions related to sadness and anger (Hakim-Larson et al., 2006). This long-form measure was developed by converting the true/false measure (ERPSST-T/F) into a 5-point Likert-type scale from 1 (*always false*) to 5 (*always true*). Each statement on the ERPSST-L represents one of four parenting styles: Emotion Coaching (23 items), Laissez-faire (10 items), Dismissing (25 items), and Disapproving (23 items). To calculate a mean subscale score, the item responses for each individual scale were summed and then divided by the number of items for that scale. A higher mean subscale score indicates greater endorsement of that emotion-related parenting style.

Psychometric properties of the ERPSST-L were examined by Hakim-Larson and colleagues (2006) using a community sample of 21 mothers and 10 fathers of children ages 3 to 6. They found evidence of adequate to very good internal consistency reliability ($\alpha = .72$ for laissez-faire, .72 for dismissing, .82 for emotion coaching, and .91 for disapproving), showing improvement over the ERPSST-T/F. After controlling for social desirability and parent gender, Hakim-Larson and colleagues (2006) found support for convergent validity of the ERPSST-L with self-report measures of self-expressiveness (positive dominance, positive submissive, negative dominance, and negative submissive; Halberstadt, Cassidy, Stifter, Parke, & Fox, 1995), attitudes toward children's emotional expressiveness (Saarni, 1985), and ability to cope with negative emotions (Fabes, Eisenberg, & Bernzweig, 1990). Scott (2012) tested the construct validity of the ERPSST-L, as well as its short-form version (Paterson et al., 2012) in conjunction with the original Meta-Emotion Interview (Katz & Gottman, 1986). Correlation coefficients between these measures were generally in the expected directions, providing further evidence for the construct validity of the measure (Scott, 2012). With permission from

the publishers, separate daughter and son versions of the ERPSST-L measure were developed for the current study; the versions were the same except for the pronouns used.

In the present study, the internal consistency reliabilities for the ERPSST-L subscales, averaged across daughter and son versions, were as follows: Emotion Coaching was α = .86, Laissez-Faire was α = .59, Dismissing was α = .83, and Disapproving was α = .92. For the purpose of the present study, the Laissez-Faire subscale was omitted due to its weak psychometric properties found in both previous studies (e.g., Scott, 2012) and in the present study. In addition, the Dismissing and Disapproving subscales were collapsed into one subscale known as Emotion Rejecting given that they were found to be highly positively correlated (e.g., $r = .72$; Hakim-Larson et al., 2006), are associated with significantly lower scores on Emotion Coaching (Hakim-Larson et al., 2006), and appear to have significant overlap as constructs. Emotion Rejecting, therefore, can be conceptualized as the dismissing or disapproving of a child's display or experience of negative emotions. In the present study, the Emotion Rejecting scale (48 items) had an internal consistency reliability of α = .93. Therefore, the final two variables of interest used in the current study were Emotion Coaching and Emotion Rejecting.

Adult Temperament Questionnaire – Short Form (ATQ-SF; Evans & Rothbart, 2007). The ATQ-SF is a 77-item, self-report measure of temperament in adults that is on a 7-point Likert-type scale from 1 (*extremely untrue*) to 7 (*extremely true*). The ATQ-SF is the short-form version of the Adult Temperament Questionnaire (ATQ), which was adapted from Derryberry and Rothbart's (1988) Physiological Reactions Questionnaire. The ATQ-SF addresses the same constructs and sub-constructs as the ATQ. Scores are calculated for four higher-order general constructs, also known as the

factor scales: Negative Affectivity, Extraversion (i.e., positive affect), Effortful Control (i.e., response inhibition), and Orienting Sensitivity (i.e., perceptual sensitivity/ awareness).

The main scales or sub-components of the Negative Affectivity factor (26 items) include fear (e.g., "I become easily frightened"), sadness (e.g., "Sometimes minor events cause me to feel intense sadness"), discomfort (e.g., "I find certain scratchy sounds very irritating"), and frustration (e.g., "I find it very annoying when a store does not stock an item that I wish to buy").

The Extraversion factor (17 items) is comprised of the following scales: sociability (e.g., "I like conversations that include several people"), positive affect (e.g., "It doesn't take much to evoke a happy response in me"), and high intensity pleasure (e.g., "I would enjoy watching a laser show with lots of bright, colorful flashing lights").

The Effortful Control factor (19 items) consists of three main scales: attentional control (e.g., "When interrupted or distracted, I usually can easily shift my attention back to whatever I was doing before"), inhibitory control (e.g., "I can easily resist talking out of turn, even when I'm excited and want to express an idea"), and activation control (e.g., "If I think of something that needs to be done, I usually get right to work on it").

The Orienting Sensitivity factor (15 items) is comprised of three scales: orienting sensitivity includes neutral perceptual sensitivity (e.g., "I often notice mild odors and fragrances"), affective perceptual sensitivity (e.g., "I tend to notice emotional aspects of paintings and pictures"), and associative sensitivity (e.g., "I sometimes seem to understand things intuitively").

Evans and Rothbart (2007) administered the ATQ-SF to 258 undergraduate students and reported good internal consistency and convergent validity with the Big

Five/Five-Factor model of personality. In the scoring manual for the ATQ-SF, the authors reported that internal consistency reliabilities were .81 for Negative Affectivity, .78 for Effortful Control, .75 for Extraversion, and .85 for Orienting Sensitivity. They also reported that factors of the ATQ-SF correlated highly with the original ATQ (.93 for Negative Affectivity, .96 for Effortful Control, .91 for Extraversion, and .95 for Orienting Sensitivity). In the present study, internal consistency ratings were found to be $\alpha = .78$, $\alpha = .73$, $\alpha = .74$, and $\alpha = .74$ for the Negative Affectivity, Extraversion, Effortful Control, and Orienting Sensitivity factors, respectively.

Short Schwartz's Value Survey (SSVS; Lindeman & Verkasalo, 2005). Mothers completed the SSVS, which is a 10-item measure of "life-guiding principles" (Lindeman & Verkasalo, 2005). Items were derived from Schwartz's Values Survey (Schwartz, 1992), a 57-item measure that is based on Schwartz and Bilsky's (1987) theory of a universal psychological structure of human values. The SSVS has ten basic values that are rated on a 9-point Likert-type scale from 0 (*opposed to my principles*) to 8 (*of supreme importance*). In the SSVS, the ten basic values (i.e., Power, Achievement, Hedonism, Stimulation, Self-Direction, Universalism, Benevolence, Tradition, Conformity, and Security) are listed and described to clarify their meaning.

According to Verkasalo, "it is very short to measure all 10 values separately. It is meant primarily to measure the two main dimensions" (personal communication, March 11, 2014). Though 10 values can be measured individually, Schwartz explained that the purpose of the SSVS is to measure the two main dimensions. As previously mentioned, Schwartz (1992) described that the two dimensions of the SSVS are conservation (with higher scores indicating greater conservation and lower openness to change) and self-transcendence (with higher scores indicates greater self-transcendence and lower self-

enhancement). Lindeman and Verkasalo (2005) used multidimensional scaling to compute weights and constants that help preserve the relational patterns of the values in order to compute the dimensions. The SSVS dimensions were computed using the following syntax, as recommended by Verkasalo (personal communication, April 18, 2016): Conservation = .20 + (.05 × Power) + (.06 × Achievement) − (.04 × Hedonism) − (.09 × Stimulation) − (.18 × Self-Direction) − (.16 × Universalism) + (.03 × Benevolence) + (.16 × Tradition) + (.18 × Conformity) + (.11 × Security). Self-Transcendence = .10 − (.19 × Power) − (.14 × Achievement) − (.09 × Hedonism) − (.11 × Stimulation) + (.01 × Self-Direction) + (.10 × Universalism) + (.13 × Benevolence) + (.07 × Tradition) + (.06 × Conformity) + (.02 × Security).

A confirmatory factor analysis of the Schwartz's Values Survey supported the presence of the 10 basic values in over 27 countries (Schwartz & Boehnke, 2004). The SSVS has demonstrated good reliability and validity (Lindeman & Verkasalo, 2005). Focusing on the two dimensions, Lindeman and Verkasalo (2005) reported reliability coefficients of .78 for Conservation and .72 for Self-Transcendence. The correlation between the Conservation dimension score of the SSVS and the Conservation dimension of the original long form of the Schwartz's Values Survey was statistically significant (r = .75). Likewise, the Self-Transcendence dimension score of the SSVS correlated significantly (r = .78) with its respective dimension score on the Schwartz's Values Survey (Lindeman & Verkasalo, 2005). The SSVS also showed congruent validity with the original Schwartz's Values Survey (Schwartz, 1992).

According to Verkasalo (personal communication, November 16, 2016), the general reliability coefficient – a method developed by Tarkkonen and Vehkalahti (2005) to compute internal consistency reliability among multivariate scales – is appropriate in

computing internal consistency reliabilities for Conservation and Self-Transcendence.

Based on further discussion with Verkasalo (personal communication, November 16,

2016), the software available online for R Project for Statistical Computing (R Core

Team, 2013) was used to compute these reliabilities based on a factor model using the

weights and constants previously stated. Based on the general reliability coefficient, in

the present study the internal consistency reliability for Conservation was .78, while for

Self-Transcendence it was .73.

Social Desirability Scale – 17 (SDS-17; Stöber, 2001). The English version of

the SDS-17 was administered to control for social desirability. An early version of the

SDS-17 contained 17 items; however, one item ["I have tried illegal drugs (for example,

marijuana, cocaine, etc.)"] was removed from the final version of the SDS-17, as it

correlated poorly with the other items (Stöber, 2001). The final version of the SDS-17

contains 16 true/false items (e.g., "There has been an occasion when I took advantage of

someone else"), including seven reverse-scored items. The scoring of the SDS-17

produces a raw score ranging from 0-16 whereby a higher score indicates greater social

desirability.

Some measures of socially desirable responding have contained items that are not

applicable in some cultures; however, Blake and colleagues (2006) stated that the SDS-17

"contains few obvious referents to cultural institutions and organizations" (p. 1627). The

SDS-17 has good psychometric properties and has been found suitable for use with a

culturally diverse sample of adults, ages 18 to 80 (Stöber, 2001). Based on four studies

using the SDS-17, internal consistency reliability was reported to range from .72 to .75

(Stöber, 1999). Stöber (1999) also found that correlations between the SDS-17 and the

Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) ranged from .67

to .74. Test-retest reliability of the SDS-17 after four weeks was .82 (Stöber, 1999).

Though the SDS-17 has been well-validated in Germany (Stöber, 1999), Blake et al.

(2006) examined the construct validity of the English version of the SDS-17 with a

sample of 800 adults (primarily students) from the United States. Blake and colleagues

(2006) reported that the internal consistency was acceptable and convergent validity was

found with other established measures of socially desirable responding such as the

Marlowe Crowne. Lastly, Tran, Stieger, and Voracek (2012) examined the SDS-17 in a

cross-cultural study with participants from Austria, Canada, and the USA and concluded

that the SDS-17 is suitable measure for use in cross-cultural settings. In the present

study, the internal consistency reliability of the SDS-17 was $\alpha = .75$.

Phase 1: Online Questionnaire Pertaining to Children Completed by Mothers

> **Children's Behavior Questionnaire – Very Short Form** (CBQ-VSF; Putnam &

Rothbart, 2006). The CBQ-VSF is a parent-report measure of children's temperament.

The CBQ-VSF is derived from the Children's Behavior Questionnaire (CBQ; Rothbart,

Ahadi, Hershey, & Fisher, 2001), which is one of the most well-known measures of

temperament in children ages 3 to 7 years (Sleddens et al., 2012), with items selected in

order to assess temperament dimensions based on temperament theory. The CBQ-VSF

consists of 36 items rated on a Likert-type scale from 1 (*extremely untrue of your child*) to

7 (*extremely true of your child*). The CBQ-VSF produces scores on three broad

dimensions/temperament scales with 12 items each: Negative Affectivity (e.g., "Gets

quite frustrated when prevented from doing something s/he wants to do"), Surgency (e.g.,

"Seems always in a big hurry to get from one place to another"), and Effortful Control

(e.g., "Approaches places s/he has been told are dangerous slowly and cautiously"). As

previously mentioned, the Surgency scale will be referred to as Extraversion throughout this study.

Putnam and Rothbart (2006) reported that the CBQ-VSF has adequate internal consistency (.75 for Extraversion, .72 for Negative Affectivity, and .74 for Effortful Control), criterion validity, cross-informant agreement between mother and father reports, and test-retest reliability from 33 to 45 months. Allan, Lonigan, and Wilson (2013) examined the psychometric properties of the CBQ-VSF based on both parent and teacher report. They found support for the convergent and discriminant validity of the Negative Affectivity scale. Sleddens and colleagues (2012) examined CBQ-VSF scores among a sample of White, Hispanic, and African American mothers and fathers. Sleddens et al. (2012) reported "acceptable to outstanding" (p. 212) psychometric properties of the CBQ-VSF, including internal consistency reliabilities of .74 for Negative Affectivity, .78 for Extraversion, and .69 for Effortful Control. In the present study, internal consistency ratings were found to be $\alpha = .77$, $\alpha = .76$, and $\alpha = .77$ for the Negative Affectivity, Extraversion, and Effortful Control factors, respectively.

Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1995). The ERC is a parent-report measure of children's emotion regulation. Each of the 24 items on the ERC are rated on a scale from 1 (*Never*) to 4 (*Always*). Though the ERC was initially developed to assess emotion regulation in children ages 6 to 12, the authors of the measure have encouraged researchers to use this measure in order to examine emotion regulation in preschoolers (Shields & Cicchetti, 1997). The ERC assesses children's affective lability, emotional intensity and valence, flexibility, and context through two subscales. Though the measure contains 24 items, only 23 of the items are used in scoring. The Lability/Negativity subscale includes 15 items (e.g., "Is prone to angry

outbursts/tantrums easily"), four of which are reverse-scored, with higher scores

reflecting greater dysregulation. The Emotion Regulation subscale includes 8 items (e.g.,

"Responds positively to neutral or friendly overtures by adults"), two of which are

reverse-scored, with higher scores reflecting greater emotion regulation. Shields and

Cicchetti (1997) reported internal consistencies of .96 and .83 for the Lability/Negativity

and Emotion Regulation scales, respectively. They also found a significant negative

relation between the Lability/Negativity and Emotion Regulation subscales. According to

Shields and Cicchetti (1998), both construct validity and discriminant validity have been

demonstrated. The ERC authors also developed a composite ERC score by calculating

the mean of the 23 items after reverse scoring all negatively-weighted items, and found an

internal consistency of .89. In their sample of maltreated and non-maltreated children

ages 7 to 10 years, Kim-Spoon and colleagues (2013) administered the ERC to two camp

counsellors and found Cronbach's alphas of .81 and .95 for the Emotion Regulation and

Lability/Negativity subscales, respectively. They also found inter-rater reliabilities of .72

for the Emotion Regulation scale and .85 for the Lability/Negativity scale.

Based on a review of the ERC, it appeared that a few items included words that

may be unfamiliar to some participants (i.e., "overture", "delay gratification",

"exuberant", and "modulate"). An estimate of the readability of the measure was at a

Grade 11.4 level according to the Flesch-Kincaid Grade Level in Microsoft Word.

Therefore, definitions of these words were provided to clarify the items for participants.

In the present study, the internal consistency reliability of the ERC Composite was

$\alpha = .88$, the Lability/Negativity scale was $\alpha = .87$, and the Emotion Regulation scale was

$\alpha = .68$. The ERC Composite score was computed based from all 23 items following the

directions from Shields and Cicchetti (1997), and an internal consistency reliability of $\alpha =$

.88 was found. Given that the comprehensive ERC Composite score had improved

psychometric properties over the individual subscales, this composite score was used in

further analyses.

Open-ended questions about parenting. Mothers were asked four open-ended

questions (Appendix C), each of which corresponded to a primary research question for

the present study. Mothers were invited to type as much as they would like in their

response. Before being presented with the questions, mothers were given an introduction

to the questions that contained a definition of emotion-related parenting: "Think about all

of the different emotions your child experiences. Reflect on the feelings and thoughts

you experience when your child is sad, angry, or fearful. Think about how you respond

to your child's emotional experiences and what you want to teach your child about

emotions. Emotion-related parenting practices express how you parent your child about

emotions." Mothers were asked four open-ended questions, as follows:

(1) Think about your most important cultural values. To what extent have your

cultural values influenced your emotion-related parenting practices?

(2) From a young age, children show their unique personalities. For example,

some children may be moody/irritable, some may be social/outgoing/bold, and some may

be careful/cautious in their actions. Also, your child's personality may be similar or

dissimilar to your own personality. How would you describe your child's personality as

compared to other children of the same age?

(3) To what extent does your child's personality influence your emotion-related

parenting practices?

(4) Think about your emotion-related parenting practices. To what extent have your emotion-related parenting practices influenced your child's development? (e.g., social development, emotional development, etc.).

Phase 2: Laboratory Task Completed by Mother-Child Dyads

Mother-child storytelling task. Mother-child dyads were invited to share a wordless picture book, *One Frog Too Many* (Mayer & Mayer, 1975). The purpose of this storytelling task was to obtain information on mothers' and children's emotional expressivity. *One Frog Too Many* (Mayer & Mayer, 1975) is a widely-used wordless picture book about a boy who receives a little frog as a gift. The little frog is not accepted into the group by a larger frog. The story content draws for discussion about a variety of emotions (e.g., love, joy, surprise, anger, sadness, and fear; Paterson et al., 2012). In the present study, mother-child dyads were instructed to share the story as they would normally, speaking only in English. Refer to Appendix D for the script that was followed for the administration of the storytelling task. For each mother-child dyad, the following were variables of interest: (1) total segments, (2) total segments containing emotion words, (3) the proportion of segments containing emotion words, and (4) the variety of emotion words used in the task.

Storytelling recordings were transcribed by five trained research assistants. Full-day transcription training involved an orientation to using an Infinity USB Digital foot pedal, a review of transcription procedures (Appendix E), and the independent transcription of two pilot audio files from a previous study by Dr. Julie Hakim-Larson and her colleagues (*Tell Me a Story, Mommy*). Those two pilot transcripts were typed in Microsoft Word and were checked for accuracy. These transcripts were then segmented in Microsoft Word by two trained research assistants. In a previous study (*Tell Me a*

Story, Mommy) using the same storytelling task, these two research assistants showed

perfect agreement in their segmenting for 78 to 82% of the segments across four pilot

transcripts. Sentence structure and voice intonation were used as clues for parsing clauses

into separate segments. Generally, clauses containing verbs constituted separate

segments. After fully segmenting each transcript, a separate variable was created that

removed all non-codable segments that were not considered meaningful. Non-codable

segments were vocalizations that only contained sounds (e.g., coughing or laughing) or a

filler word (e.g., um, uh). As was done in Melzi et al. (2011), only the storytelling

exchange was coded, not any pre- or post-reading exchanges.

Appendix F contains detailed information regarding the coding of the storytelling

task. The system used to code discrete positive and negative emotions was adapted from

Hakim-Larson, Voelker, and Babb (2008) and Goodwin (2009). Segments were coded in

Microsoft Word according to the presence or negation of emotion words related to love,

joy surprise, anger, sadness, and fear. Each segment was only coded once to indicate the

presence of one of the following:

- A discrete positive emotion word (e.g., Love, Joy, Surprise, Other Positive

  Emotions, Negation of Anger, Negation of Sadness, or Negation of Fear).

- A discrete negative emotion word (e.g., Anger, Sadness, Fear, Other

  Negative Emotions, Negation of Love, Negation of Joy, or Negation of

  Surprise).

- Multiple emotion words.

- No code (i.e., an absence of emotion language).

For training purposes, coders practiced coding on two pilot cases from a previous study (*Tell Me a Story, Mommy*) which used the same storytelling task. Transcripts were coded by two independent raters (the primary researcher and a female undergraduate Honours psychology student) for maternal and children's emotional expressivity. Both coders were blind to information about the mothers, their children, and their scores on other measures. Though video recordings were available for this task, they were not used for coding purposes in the present study.

Proportional frequencies are helpful as a means of standardizing participants' variation based on their amount of talk and no talk (Haden & Hoffman, 2013). For the storytelling task, proportional data were computed in order to compute the following variables of interest for each mother-child dyad: (1) total segments, (2) total segments containing emotion words, (3) the proportion of total segments containing emotion words, and (4) the variety of emotion words used in the task.

According to Haden and Hoffman (2013), percentage agreement between raters is typically calculated on 20 to 25% of the data set. Consistent with Favez (2011), reliability was computed by Cohen's kappa for both maternal and children's emotion language. The two coders compared codes and then discussed and resolved discrepancies. In the present study, inter-rater reliability based on 30% of the transcripts was excellent, with perfect agreement on 98.7% of the segments.

Children's storytelling behaviour. Mothers also completed a measure about their children's behaviour during the storytelling task referred to as the Parent Observation Rating (Appendix G; Voelker, Babb, Broga, Gragg, & Hakim-Larson, 2008). Information from mothers' observation ratings were helpful in better describing any potential outliers in terms of children's willingness, attention, and cooperation.

Phase 2: Laboratory Tasks Completed by Children

   Estimates of verbal skills. Children's verbal skills were estimated through a standardized test of children's expressive and receptive verbal skills in English.

   Wechsler Preschool and Primary Scale of Intelligence, Fourth Edition - Vocabulary Acquisition Index. First, the children's scores on Vocabulary Acquisition Index (VAI) from the Wechsler Preschool and Primary Scale of Intelligence - Fourth Edition, Canadian (WPPSI-IV; Wechsler, 2012) was used as an estimate of verbal skills in terms of receptive and expressive vocabulary skills. The VAI provides a less verbally demanding measure of language ability and includes tasks of vocabulary expression and understanding. The VAI is an ancillary index for ages 2:6-3:11 and 4:0-7:7 years that has a mean of 100 and a standard deviation of 15 (Wechsler, 2012). Subtests have a mean of 10 and a standard deviation of 3. There is no time limit for the VAI subtests, and instructions may be repeated to each child as many times as requested. The VAI was formerly known as the General Language Composite in previous editions of the WPPSI. The VAI comprises two subtests: Receptive Vocabulary and Picture Naming. Together, these two subtests provide an indication of children's receptive and expressive language ability and development. These subtests are easy to administer and can be completed within 7 minutes. The VAI standard score can fall in one of the following categories: Extremely Low (1st to 2nd percentile), Borderline (3rd to 8th percentile), Low Average (9th to 24th percentile), Average (25th to 74th percentile), High Average (75th to 91st percentile), Superior (92nd to 97th percentile), and Very Superior (98th to 99th percentile).

   The WPPSI-IV's normative sample was stratified to match census data (e.g., gender, race/ethnicity, parent education, and geographical region). Children with higher scores on the VAI show greater levels of receptive and/or expressive vocabulary skills

relative to their same-aged Canadian peers. According to the WPPSI-IV Canadian

Manual, children learning English as a second language may score lower on the VAI as

compared to children whose first language is English. While studies using the WPPSI-

IV's VAI as an estimate of verbal abilities are not yet available, the WPPSI-III General

Language Composite has been used to measure verbal abilities in a number of studies

(e.g., Lorenzo, Barton, Acosta, & North, 2011). Garred and Gilmore (2009) compared

the composite and factor score correlations between the WPPSI-III and the Stanford-

Binet Intelligence Scale Fifth Edition (SB5). They found that higher scores on the

General Language Composite were related to higher Verbal IQ and Full Scale IQ scores

of the SB5 ($r = .74$ and .71, respectively). Similarly, higher scores on the General

Language Composite were related to higher Verbal IQ and Full Scale IQ scores of the

WPPSI-II ($r = .73$ and .72, respectively). Given that the Receptive Vocabulary and

Picture Naming subtests of the WPPSI-IV VAI and the WPPSI-III General Language

Composite are nearly identical, the use of the VAI to estimate verbal abilities is suitable.

Receptive Vocabulary. During the WPPSI-IV Receptive Vocabulary subtest

(Wechsler, 2012; 31 items), children are presented with four pictures, and the examiner

instructs each child to select a specific picture. Items gradually get more difficult; for

example, an early item is "Show me the butterfly" and a more advanced item is "Show

me the bird beneath the tree". Verbal responses are not required for this subtest; children

may either point to the multiple choice option or say the number of the selected response.

If the child instead responds with a verbalization, the examiner prompts, "Show me".

Picture Naming. During the WPPSI-IV Picture Naming subtest (Wechsler, 2012;

24 items), children are presented with a picture and are asked to verbally name a depicted

object. The examiner points to the picture on the page and says, "What is this?" Pictures

start off with common, well-known objects (e.g., "car") and gradually progress to items

such as "globe". The starting point of these subtests is based on the child's age. The

Picture Naming subtest requires a verbal response. Some responses may need to be

clarified by the examiner; for instance, if a child says "fruit" when presented with a

picture of a banana, the examiner is to say "Yes, but what kind of fruit is it?" The WPPSI-

IV manual provides instructions as to which exact answers require further querying.

The WPPSI-IV was scored following the standardized procedure. In the present

study, the mean VAI standard score ($M = 106.90$, $SD = 9.70$) fell in the Average range.

Both the mean Receptive Vocabulary subscale ($M = 11.53$, $SD = 2.10$) and the mean

Picture Naming subscale ($M = 10.87$, $SD = 2.36$) fell in the Average range as well.

Children's VAI scores ranged from the Low Average to Superior range when compared

to same-aged peers. Clinical ranges were Low Average (3.3%), Average (56.7%), High

Average (36.7%), and Superior (3.3%).

Children's emotion regulation: Transparent Box Task. The Transparent Box

Task (TBT) was originally designed as the "Attractive Toy in a Transparent Box" by

Goldsmith and Rothbart (1996) to examine the ability to regulate anger among

preschoolers. Goldsmith and Rothbart (1996) recommend that the Transparent Box Task

be used in conjunction with the Children's Behavior Questionnaire. The Transparent Box

Task was designed to elicit frustration and provided an opportunity to observe task

persistence and frustration in preschoolers (Adrian et al., 2011; Goldsmith & Rothbart,

1996). The Transparent Box Task provides an observational method of examining

emotion regulation. The Transparent Box Task has been successfully implemented in a

number of studies (e.g., Armstrong, 2011). Armstrong (2011) reported excellent

percentage agreement between raters (range = 88-97%). She also found that children's

regulatory behaviour observed during the Transparent Box Task was stable over time from ages 36 months to 48 months. At ages 36 months and 5 years, boys expressed more anger during the task as compared to girls (Armstrong, 2011).

During the Transparent Box Task, children are presented with several toys and are asked to pick which one they prefer (Armstrong, 2011). The selected toy is then placed inside a locked transparent plastic box. The examiner demonstrates opening the box with a key. Children are left alone to work on opening the box with a ring of keys; however, none of the keys open the lock. After three minutes, the examiner returns with the correct key and explained, "*I guess I gave you the wrong keys. Let's try this one*" (Dennis, 2006). The examiner then opens the box and invites the child to play with the toy.

In the present study, the Transparent Box Task was completed in a research lab on campus and was audio and video recorded with permission, in order to code for facial, verbal, and behavioural signs of mild frustration and task engagement. When coding the Transparent Box Task, the three-minute activity is coded over six 30-second epochs. A separate rating is made for the child's frustration and persistence based on what was best captured during each 30-second epoch. Dennis (2006) rated persistence in three ways: (1) average persistence/task engagement rating across six time points during the 3 minute period, (2) number of seconds spent participating in task (out 180 seconds), and (3) number of seconds before interrupting task (e.g., protesting). Appendix H displays the detailed coding scheme for the Transparent Box Task. Persistence was rated on a scale from 1 (*gives up totally, clear resignation*) to 4 (*totally focused on task, expresses interest*). Frustration was coded on a 4-point scale, ranging from 1 (*no signs of frustration*) to 4 (*clear facial, verbal, and/or behavioral signs of frustration*). An average frustration rating was obtained across six time points during the 3-minute period.

The Transparent Box Task was coded by four independent raters (female undergraduate Honours psychology students). For training purposes, the four raters participated in a full-day training session, received a training manual, and independently coded six role play simulation videotapes. Inter-rater reliability was first computed on these practice videotapes, as was done by Dennis (2006). After reaching 85% agreement or higher (as recommended by Haden & Hoffman, 2013), raters coded the recordings.

Coders were blind to information about the parents, their children, and their scores on other measures. However, coders were aware of the children's gender and race through the video recordings. After coding the Transparent Box Task, each child had an average persistence rating and an average frustration rating, while the time spent on task and the time before stopping the task were recorded in seconds. To calculate inter-rater reliability, the percentage of perfect agreement of ratings across the six epochs was calculated separately for persistence and frustration. In the present study, inter-rater reliability, based on 30% of the Phase 2 sample, was 88.9% for persistence and 79.6% for frustration. Coders compared codes and then discussed and resolved discrepancies.

Procedure

After obtaining ethics approval from the University Research Ethics Board, mothers of children ages 4 to 7 years were recruited from a Psychology Department's Participant Pool and from a community sample. Community recruitment took place through a number of methods. Flyers, as shown in Appendix I, were posted in public areas, a local university's campus, a local college's campus, and community agencies (e.g., community centres, multicultural centres, and early years' centres). Online recruitment methods were conducted through Internet advertising, listservs, social networking sites (e.g., Facebook), and public classifieds (e.g., Kijiji, Mom2Mom, etc.).

First, measures were pilot tested in order to obtain a detailed estimate of the study duration. Data from 27 participants were collected. However, through an examination of survey completion time and IP addresses, it was identified that a survey bot (i.e., an automated program that completes a survey) completed 11 of these responses in order to obtain the study incentive. To remedy this, a CAPTCHA (i.e., "Completely Automated Public Test to tell Computers and Humans Apart") feature was added to the first page of the study, and access restrictions were enhanced (i.e., the survey could only be completed by participants who have been provided with a unique password-protected link). These data from the pilot study were not used in any analyses; however, the remaining 16 valid open-ended responses were used in thematic analysis training. With these security measures added, data for the present study were found to be free of unauthentic responses from survey bots. The present study included two procedural phases as next described.

Phase 1: Procedure for online questionnaires. Phase 1 was the online survey portion of the study with a focus on correlates of maternal emotion socialization. After accessing the online survey, mothers were presented with the study Consent Form and a background questionnaire that collected information about the family's composition and background, socioeconomic status, and immigration history. The remaining study questionnaires were presented in counterbalanced order and included measures pertaining to the mothers (ERPSST-L, ATQ-SF, SSVS, and SDS-17); and measures pertaining to the children (CBQ-VSF, ERC).

Mothers from the University Participant Pool were able to view the study advertisement and were able to see the study link once they signed up. In the study advertisements, mothers from the community who were interested in participating were invited to contact the researcher by e-mail. Mothers received an e-mail with the website

link and password needed to access the online survey hosted by Fluid Surveys (Appendix

J). Fluid Surveys is a comprehensive survey tool that allows data to be exported by the

researcher. When mothers accessed the Fluid Surveys site, they were first presented with

the study consent form to participate in the research. There were separate Phase 1

consent forms and letters of information for mothers from the community (Appendix K)

and participant pool (Appendix L). Mothers were invited to consent to the data being

used in subsequent studies and were asked if they would be willing to be contacted in the

future for further research studies. Mothers who chose to participate were instructed to

check the "I agree to participate" box in order to proceed with the study. Those who

selected the box "I do not agree to participate" were signed out of the website.

Participants were then presented with the background information questionnaires,

followed by the remaining study measures. To reduce the likelihood of missing data for

the study measures, participants were required to select a response for each item in order

to proceed to the next questionnaire. Participants were also given the option to choose

not to answer an item if they preferred not to respond to a particular question. Following

completion of the study measures, mothers from the University of Windsor Participant

Pool and the community were compensated for their participation in the following ways.

After finishing the online survey, Participant Pool participants were compensated through

one bonus point for an eligible course, while participants from the community were

compensated in the form of a $15 electronic gift certificate code to Cineplex

Entertainment or Amazon sent via e-mail. As shown in Appendix M, at the completion

of the study measures, participants were asked whether or not they would like to be

considered for participation in an additional, optional, follow-up study (Phase 2).

Participants interested in Phase 2 were asked to provide their name and contact

information. Following a phone script (Appendix N), the primary researcher contacted

participants to schedule appointments for the laboratory tasks, which took place

approximately 4 months after the completion of Phase 1.

   Phase 2: Procedure for laboratory tasks. A subset of the mothers from Phase 1

of the study participated in Phase 2. The focus of Phase 2 was on the assessment of

children's outcomes through a series of tasks completed in a laboratory setting. The

laboratory space was equipped with a one-way mirror and two video cameras connected

to a Panasonic Video Monitor WV-LD 2000A for audio and video recordings. All

mothers who participated in Phase 2 stated on the Phase 1 online survey that they were

interested in participating in future research and met the Phase 2 eligibility criteria.

Mothers were considered eligible for Phase 2 if they indicated in the Background

Information questionnaire that they and the target child from Phase 1 had proficiency in

English. As shown in Table 2, nearly all Phase 2 mothers and children were rated as

having a strong ability to understand and speak English.

   Eligible mothers who expressed interest in participating in Phase 2 were contacted

by the primary researcher through e-mail or phone to schedule a one-hour appointment in

which each mother-child dyad met with the primary researcher and a research assistant in

a laboratory space on campus. Prior to booking an appointment, mothers were reminded

of the initials and age of the child they reported on in the online survey to ensure that this

same child would be the one attending Phase 2. When a mother also brought along the

target child's siblings, the siblings did not participate in the tasks and were provided with

quiet activities in a separate room for the entire appointment. The primary researcher

stated to the parent the child's initials, as noted by mothers in the online survey, in order

to confirm that the target child participating in Phase 2 was the same as the child

Table 2

Mother-Child Proficiency in English for Phase 2 Dyads (*N* = 30)

	Understand English *n* (%)	Speak English *n* (%)	Read English *n* (%)	Write English *n* (%)
Mothers				
Not at all	0 (0)	0 (0)	0 (0)	0 (0)
A little	0 (0)	0 (0)	0 (0)	0 (0)
Somewhat	0 (0)	1 (3.3)	0 (0)	0 (0)
Very Well	30 (100)	29 (96.7)	30 (100)	30 (100)
Children				
Not at all	0 (0)	0 (0)	2 (6.7)	0 (0)
A little	0 (0)	0 (0)	9 (30)	13 (43.3)
Somewhat	1 (3.3)	1 (3.3)	9 (30)	8 (26.7)
Very Well	29 (96.7)	29 (96.7)	10 (33.3)	9 (30)

described in the questionnaires. Each mother was also asked to provide her child's

current age, as this information was required for the standardized scoring of the

vocabulary subtests.

Refer to Figure 3 for a procedural flow chart for Phase 2 tasks. Upon arriving to

their scheduled one-hour appointments, mothers completed the consent form (Appendix

O) and read the letter of information (Appendix P). Mothers were given a lists of mental

health resources and parenting resources (refer to Appendices Q and R, respectively).

Next, mothers were presented with a consent form for audio recording (Appendix S) and

a consent form for video recording (Appendix T). A research assistant then read aloud

the assent form to the children and they were invited to ask questions (Appendix U).

Children were asked to summarize the assent form in their own words as a check that the

child understood the tasks. If the child did not show an understanding of the tasks, the

form was re-read by the research assistant, and the child was given the chance to ask

questions. The tasks did not begin until the child appeared to understand the tasks.

Administration of storytelling task. As previously noted, refer to Appendix D for

a detailed script used in the administration of the storytelling task. Dyads were asked to

speak in English. As a backup, storytelling tasks were also recorded by the research

assistant using a Sony voice recorder. The primary researcher and research assistant were

not present in the room during this task. One mother opted to have the storytelling task

audio recorded but not video recorded. For another dyad, video recording was not

available due to a technical difficulty. Mother-child storytelling tasks were audio and

video recorded in the laboratory.

Administration of the WPPSI-IV subtests. After the storytelling task, the

primary researcher (a graduate student trained in administering and scoring the

Phase 2 involved three rooms in a laboratory space:
- Room 1 was the testing room where most of the tasks took place.
- Room 2 was the observation room, which was adjacent to the testing room. The observation room has a one-way mirror and video recording equipment.
- Room 3 was the waiting room which was adjacent to the testing room.

Task	**Primary Researcher**	**Research Assistant #2**
1	Greet mother and child and bring them to Room 1.	Greet mother and child and bring them to testing room.
2	Review consent forms with mother in Room 1.	Engage in informal chat/play with child in Room 1.
3	Review assent form with child in Room 1.	Engage in informal chat with mother in Room 1.
4	Follow script for Storytelling Task and begin audio recording. Leave Room 1 to allow mother and child to complete storytelling task.	Leave Room 1 to setup video recording equipment in Room 2. Record the storytelling task.
5	Return to Room 1 once the storytelling was complete. Turn off audio recorder. Continue with storytelling script.	Bring mother to Room 3.
6	In Room 1, administer the WPPSI-IV Receptive Vocabulary and Picture Naming subtests with child.	In Room 3, invite mother to complete the Parent Observation Rating. Reimburse mother for parking and give her the $15 gift card. Setup video recording equipment in Room 2.
7	Administer the Transparent Box Task with child.	In Room 2, record the Transparent Box Task. Write a timed running record of the Transparent Box Task.
8	Invite child to keep the toy from Transparent Box Task.	Accompany mother back to Room 1.

Figure 3. Phase 2 procedure flow chart.

WPPSI-IV; Wechsler, 2012) administered the Receptive Vocabulary and Picture Naming subtests (see Appendix V).

Administration of the Transparent Box Task and Parent Observation Rating. Following the procedures outlined in Dennis (2006), the primary researcher then presented children with the Transparent Box Task, a task designed to assess children's persistence and frustration tolerance. Refer to Appendix W for the Transparent Box Task script. For the Transparent Box Task, video recordings assist with the coding process, as behavioural observations and timing was involved. If a mother did not consent to video recording, the Transparent Box Task was administered but not video recorded. While the Transparent Box Task was administered, a research assistant wrote a running record (i.e., a moment-to-moment log of the child's actions and observable behaviours including facial expressions and verbal comments) in order to assist with the coding process. The running record was used in the coding process for one participant in which there was a technical difficulty, and when another mother declined consent for video recording. These notes were securely stored with the corresponding coding sheet.

While children met with the primary researcher to complete the two WPPSI-IV subtests and the Transparent Box Task, mothers met with a research assistant to complete the brief measure about their children's behaviour during the storytelling task (i.e., Parent Observation Rating; Appendix G). Mothers who participated in Phase 2 were offered a $15 gift card to a local mall and were reimbursed for their parking costs for their participation, while the children were offered an age-appropriate gift.

Refer to Tables 3 and 4 for a summary of the measures and variables used in testing the study hypotheses.

Table 3

Phase 1 (Online Questionnaires) Study Measures

Name of Measure	Construct	Approximate Task Duration	Variables	Hypotheses
Background Questionnaire	N/A	● 10 minutes	● Maternal generation status (1st, 1.5th, 2nd, 3rd or later) ● Maternal ethnicity ● Maternal level of education	Potential covariates

Emotion-Related Parenting Styles Self-Test – Likert (ERPSST-L)	Mothers' emotion-related parenting styles	● 4 minutes	● Emotion Coaching
			
			● Emotion Rejecting
			  ● includes Dismissing
			  ● includes Disapproving
				1a, 2a, 3a, 3b, 4, 5a, 6a
				
				1b, 2b, 3a, 3b, 4, 5b, 6b

Adult Temperament Questionnaire – Short Form (ATQ-SF)	Mothers' temperament	● 6 minutes	● Extraversion ● Negative Affectivity ● Effortful Control ● Orienting Sensitivity	2a, 2b, 4
Short Schwartz's Value Survey (SSVS)	Mothers' values	● 1 minute	● Conservation ● Self-Transcendence	1a, 1b, 3a 1a, 1b, 3b
Social Desirability Scale – 17 (SDS-17)	Mothers' socially desirable responding	● 1 minute	● SDS-17 total raw score	Potential covariate
Children's Behavior Questionnaire – Very Short Form (CBQ-VSF)	Children's temperament	● 8 minutes	● Extraversion ● Negative Affectivity ● Effortful Control	2a, 2b, 4

Emotion Regulation Checklist (ERC)	Children's emotion regulation	● 3 minutes	● ERC composite score
			  ● Lability/Negativity
			  ● Emotion Regulation
				3a, 3b, 4

Open-ended questions	Values, children's temperament, emotion-related parenting, and children's outcomes	● 10 minutes	● N/A	Qualitative: Thematic analysis

Note. Total time to complete Phase 1 (Online Questionnaires) ranged from 31 to 60 minutes.

Table 4

Phase 2 (Laboratory Tasks) Study Measures

Name of Measure	Construct	Approximate Task Duration	Variables	Hypotheses
Mother-child storytelling task	Mother-child emotional expressivity	≤30 minutes	● Proportion of mother, child, and mother-child segments with emotion words ● Variety of emotion words	5a, 5b
Parent Observation Rating	Children's behaviour during storytelling	1 minute	● Desire to do storytelling ● Attention during storytelling ● Cooperation during storytelling	Potential covariate

Wechsler Preschool and Primary Scale of Intelligence - Fourth Edition, Canadian (WPPSI-IV)	Estimation of children's verbal skills	7 minutes	● Vocabulary Acquisition Index
			  ● Receptive Vocabulary subtest
			  ● Picture Naming subtest
				Potential covariate

Transparent box task	Children's emotion regulation	3 minutes	● Persistence ratings (average over the 6 epochs) ● Time out of 180 seconds spent participating in task ● Frustration ratings (average over the 6 epochs)	6a, 6b 6a, 6b

Note. Total time to complete consent forms and Phase 2 (Laboratory Tasks) was no more than 60 minutes.

CHAPTER III

Results

Statistical analyses were conducted using IBM Statistical Package for the Social

Sciences (SPSS) Version 21.0 for Windows (IBM Corp., 2013).

Preliminary Quantitative Analyses

Data screening and preparation. Data were examined to assess incomplete and

missing data (e.g., those participants who closed the survey window prior to completing

the survey were removed from the analyses).

Missing data. The study sample size was maximized due to the fact that

participants were required to answer each and every question even if they selected "no

response". However, due to a technical error on the online survey, there were a few

participants who were never presented with one of the questionnaires and therefore had

no opportunity to respond. Questionnaires with missing data due to this technical error

included the CBQ-VSF ($n = 4$), ERC ($n = 3$), ERPSST-L ($n = 2$), SDS-17 ($n = 1$), and the

ATQ-SF ($n = 1$). These participants remained in the study sample but were omitted from

analyses that involved incomplete measures.

The percentage of missing data for each study measure is reported in Appendix X.

Patterns of missing data were analyzed to determine if data were missing completely at

random (MCAR), missing at random (MAR), and missing not at random (MNAR;

Tabachnick & Fidell, 2013). In the online questionnaire, items in which the participant

chose not to respond were examined as a missing value analysis in SPSS. While it is

possible to instead substitute the participant's subscale mean for a missing item, this

procedure is seen as problematic because the variance of the variable is reduced (Graham,

2012; Tabachnick & Fidell, 2013). Missing data analyses were conducted for all study

variables following the procedures described by Schlomer, Bauman, and Card (2010).

Less than 2.5% of data were missing for each measure. Little's Missing Completely at

Random (MCAR) test was conducted to examine patterns in missing data. With all data

points entered, Little's MCAR chi-square statistic was found to be non-significant, χ^2

$(13603) = 10577.61$, $p = 1.0$, indicating that the data were likely missing completely at

random. Expectation maximization is considered to be an efficient method to estimate

missing scores (Schlomer et al., 2010). This approach is considered to provide unbiased

parameters relative to other data-based missing data procedures (Graham, Cumsille, &

Elek-Fisk, 2003). Given that data were MCAR and there was a small amount of missing

data, expectation maximization was used in the present study. This approach was not

used for the SSVS because each of the ten values are weighted differently; rather,

dimension scores were not computed for study participants who chose not to rate one or

more of the values.

Assumptions of parametric tests. As described in detail below, the following

assumptions specific to parametric data (e.g., regressions) were tested: adequate sample

size (with regards to the ratio of cases to IVs), absence of outliers and influential

observations, normality, linearity and homoscedasticity of errors, absence of

multicollinearity and singularity, and independence of errors (Tabachnick & Fidell,

2013).

Scores on study scales were visually inspected through both histograms and

boxplots. According to Field (2013), the visual inspection of distributions is optimal for

large samples in identifying potential outliers. In addition to visually inspecting the data,

z-scores were computed to create standardized residuals for each scale. With a cutoff of

$z\pm 3.29$ (Tabachnick & Fidell, 2013; Field, 2013), outliers were identified on these scales:

Emotion Rejecting ($n = 1$, $M = 2.51$, $SD = .50$), SSVS Self-Transcendence ($n = 1$, $M = .34$, $SD = .80$), ERC Composite ($n = 2$, $M = 3.20$, $SD = .39$), ERC Lability/Negativity ($n = 1$, $M = 1.90$, $SD = .48$), and ERC Emotion Regulation ($n = 1$, $M = 3.38$, $SD = .41$).

Winsorizing, which is a procedure that involves replacing a score with the score that would be 3 SD away from the mean (Field, 2013), was conducted to reduce the impact of outliers by replacing outlier scores with scores that were less extreme. The normality of the distributions was re-examined after winsorizing, and it was determined that distributions appeared more normal and symmetrical for the Emotion Rejecting scale; normality of the distributions improved slightly on the other scales. After winsorizing data in the present study, all but one of the study scales had a Cronbach's alpha of .70 or higher, which is considered to be within an acceptable range (Field, 2013). After winsorizing data, the Emotion Regulation scale of the ERC had an internal consistency score that was low ($\alpha = .67$) and slightly below the general acceptable level. An item analysis was conducted and it was found that the scale's alpha would not fall into an acceptable range even if an item were removed. Therefore, the Emotion Regulation scale should be interpreted with caution. Winsorized data were used in further analyses.

In addition to a graphical inspection of the distributions, skewness and kurtosis were examined statistically. Skewness and kurtosis statistics were divided by their respective standard error to compute z-scores (Field, 2013; Tabachnick & Fidell, 2013). For moderate samples, an alpha level of .001 (i.e., an absolute value of 3.29) can be used to indicate a normal distribution (Tabachnick & Fidell, 2013). The following scales had relatively normal skewness and kurtosis statistics but graphically showed a slight negative skew: Emotion Coaching ($z = -1.68$), SDS-17 ($z = -2.49$), and children's Effortful Control ($z = -1.94$). The ERC Composite graphically appeared leptokurtic (i.e., a more peaked

distribution than expected. The Transparent Box Task Persistence scale appeared

negatively skewed and leptokurtic. The Transparent Box Task Frustration scale had

relatively normal skewness ($z = 2.42$) and kurtosis ($z = 1.22$) statistics but the distribution

appeared positively skewed. Data transformations were attempted as a way to improve

the normality of those six variables, but the non-transformed variables were used instead

in subsequent analyses for the following reasons: (1) the transformed variable did not

change the findings when compared to non-transformed variables, (2) the transformed

data seemed to complicate the interpretation of the results (Tabachnick & Fidell, 2013;

Field, 2013; Osborne, 2002; Feng et al., 2014), and (3) as described by Osborne (2002), it

is important to check that non-normality is due to a valid reason and not due to data entry

errors. In the current study, the data were checked and the non-normality of those six

variables seemed to theoretically fit the nature of the variable itself and thus was based on

real observed data points. A fourth reason is that robust procedures, such as

bootstrapping, are often preferred over transformations (e.g., Field, 2013). Bootstrapping

is a robust method that involves a resampling procedure; where appropriate, it was

utilized in subsequent analyses in the current study. All other variables met the

assumption of normality both graphically and statistically (skewness ranged from $z = $ -

2.21 to 1.67; kurtosis ranged from: $z = $ -1.02 to 1.86). Next, Cook's Distance was used to

test influential observations, and no values were greater than 1.0; therefore, there were no

cases that have an effect on the models as a whole.

 To assess linearity and homoscedasticity of errors, the residuals scatterplot

between predictor variable scores and errors of predictions were examined. Based on a

visual inspection of these scatterplots, it appeared that this assumption was met.

Multicollinearity occurs when two variables are highly correlated, and singularity occurs when two independent variables are redundant; that is, one predictor can be predicted by other predictors (Tabachnick & Fidell, 2013; Field, 2013). Multicollinearity was assessed through the variance inflation factor (VIF) between predictor variables. The VIF between predictor variables was below the cut-off value of 10, indicating that this assumption was met. Lastly, the assumption of independence of errors indicates that errors of prediction should be independent of one another. On this website survey, the participants' IP addresses were compared and no identical IP addresses were found across participants, suggesting that multiple responses were not present. The Durbin-Watson statistic was used to examine independence of errors. The assumption of independence of errors was met as indicated by Durbin-Watson statistics within the range of 1 to 3 (Field, 2013).

Tabachnick and Fidell (2013) note that violations of homogeneity of variance may decrease power; however, this is less problematic if group sizes are approximately equal and variances between groups do not differ greatly. For ANOVAs and ANCOVAs in the current study, the assumption of homogeneity of variance was assessed by the Levene's test and was met as indicated by non-significant Levene's statistics.

Descriptive statistics. Descriptive statistics for Phase 1 questionnaires are reported in Table 5, and for Phase 2 tasks in Table 6, including non-transformed mean subscale scores, standard deviations, observed score ranges, and internal consistency reliability. The proportion of story segments containing discrete positive and negative emotions are reported in Appendix Y, but were not further examined. On average, mother-child dyads most often used emotion language related to joy ($M = 4.39\%$ of total

Table 5

Descriptive Statistics for Phase 1 Primary Quantitative Variables after Expectation Maximization and Winsorizing of Outliers (*N* = 168)

Name of Measures and Variables	Items	Mean (*SD*)	Observed Score Ranges	Possible Score Ranges	Alpha Coefficient
ERPSST-L					
Emotion Coaching	23	4.02 (.44)	2.65–4.96	1–5	.86
Emotion Rejecting	48	2.51 (.49)	1.31–4.12	1–5	.93
ATQ-SF					
Negative Affectivity	26	4.19 (.68)	2.62–6.08	1–7	.78
Extraversion	17	4.31 (.76)	2.00–6.41	1–7	.73
Effortful Control	19	4.59 (.70)	3.05–6.47	1–7	.74
Orienting Sensitivity	15	4.80 (.79)	2.40–6.80	1–7	.74
CBQ-VSF					
Negative Affectivity	12	4.17 (.93)	1.50–6.50	1–7	.77
Extraversion	12	4.36 (.89)	2.08–6.75	1–7	.76
Effortful Control	12	5.44 (.77)	3.17–7.00	1–7	.77
SSVS Dimensions					
Conservation	10	.94 (.85)	-1.31–2.81	†	.78*
Self-Transcendence	10	.34 (.79)	-2.04–2.01	†	.73*
SSVS Basic Values					
Power	1	3.24 (1.83)	0–8	0–8	N/A
Achievement	1	5.35 (1.88)	0–8	0–8	N/A
Hedonism	1	4.13 (2.13)	0–8	0–8	N/A
Stimulation	1	4.13 (1.83)	1–8	0–8	N/A
Self-Direction	1	6.02 (1.78)	0–8	0–8	N/A
Universalism	1	5.78 (1.94)	1–8	0–8	N/A
Benevolence	1	7.05 (1.43)	1–8	0–8	N/A
Tradition	1	5.87 (2.01)	0–8	0–8	N/A
Conformity	1	5.48 (2.02)	1–8	0–8	N/A
Security	1	6.08 (1.80)	1–8	0–8	N/A
SDS-17	16	9.18 (3.27)	0.0–15.0	0–16	.75
ERC Composite	23	3.20 (.38)	2.02–3.96	1–4	.88
Lability/negativity	15	1.90 (.47)	1.00–3.33	1–4	.87
Emotion regulation	8	3.40 (.38)	2.23–4.00	1–4	.68

Note. Alpha coefficients marked with an asterisk (*) were computed by a general reliability coefficient as recommended by Verkasalo (personal communication, November 16, 2016). The maximum and minimum possible score range for the SSVS dimensions, as marked by a † symbol, cannot be computed according to Verkasalo (personal communication, November 17, 2016).

Table 6

Descriptive Statistics for Phase 2 Primary Quantitative Variables (*N* = 30)

Name of Measures/Variables	Mean (*SD*)	Observed Score Ranges	Possible Score Ranges
Storytelling Task			
Mother-Child Segments			
Total Segments	199.30 (91.48)	70–434	0-∞
Emotion Segments	31.70 (15.87)	7–65	0-∞
Proportion of Emotion Segments	16.26 (6.08)	7.58–29.58	0–100
Emotion Variety	6.70 (1.90)	2–12	0–15
Mother Segments			
Total Segments	122.57 (71.19)	14–299	0-∞
Emotion Segments	16.23 (10.94)	0–45	0-∞
Proportion of Emotion Segments	13.23 (6.49)	0–28.89	0–100
Emotion Variety	5.60 (2.36)	0–12	0–15
Child Segments			
Total Segments	76.70 (39.02)	1–182	0-∞
Emotion Segments	15.47 (10.84)	0–42	0-∞
Proportion of Emotion Segments	18.81 (9.54)	0–35.16	0–100
Emotion Variety	4.53 (1.85)	0–7	0–15
Parent Observation Rating			
Child desire	4.17 (1.12)	1–5	1–5
Child attention	4.67 (.48)	4–5	1–5
Child cooperation	4.50 (.78)	2–5	1–5
WPPSI-IV VAI	106.90 (9.70)	80–125	45–155
Receptive Vocabulary	11.53 (2.10)	8–16	1–19
Picture Naming	10.87 (2.36)	5–17	1–19
Transparent Box Task			
Persistence (sec. on task)	160.08 (34.97)	58–180	0-180
Persistence rating average	2.39 (.63)	.33–3.0	0–3
Persistence Epoch 1	2.87 (.51)	1–3	0–3
Persistence Epoch 2	2.77 (.57)	1–3	0–3
Persistence Epoch 3	2.47 (.97)	0–3	0–3
Persistence Epoch 4	2.20 (.96)	0–3	0–3
Persistence Epoch 5	2.07 (1.16)	0–3	0–3
Persistence Epoch 6	1.90 (1.15)	0–3	0–3
Frustration rating average	.66 (.56)	0–2.17	0–3
Frustration Epoch 1	.07 (.25)	0–1	0–3
Frustration Epoch 2	.40 (.56)	0–2	0–3
Frustration Epoch 3	.53 (.68)	0–3	0–3
Frustration Epoch 4	.83 (.87)	0–3	0–3
Frustration Epoch 5	1.07 (.96)	0–3	0–3
Frustration Epoch 6	1.14 (.99)	0–3	0–3

mother-child segments, $SD = 2.80$), anger ($M = 4.26\%$ of total mother-child segments, $SD = 2.36$), and sadness ($M = 3.20\%$ of total mother-child segments, $SD = 1.61$). Mothers most often used emotion language related to joy ($M = 3.65\%$ of total mothers' segments, $SD = 2.94$), anger ($M = 3.09\%$ of mothers' segments, $SD = 2.43$), and sadness ($M = 2.24\%$ of total mothers' segments, $SD = 1.56$). In contrast, children most often used emotion language related to anger ($M = 5.60\%$ of total children's segments, $SD = 3.68$), joy ($M = 4.96\%$ of total segments, $SD = 3.97$), and sadness ($M = 4.16\%$ of total segments, $SD = 3.75$).

Tables 7 and 8 contain zero-order bivariate correlation analyses for the primary Phase 1 and 2 study variables, respectively. Zero-order correlations between participants' background characteristics and primary variables from Phase 1 (Table 9) and Phase 2 (Table 10) were conducted to screen for covariates. As described in the next section, the following variables were screened as potential covariates: phase participation, mothers' ethnicity, mothers' generation status, mothers' social desirability, mothers' level of education, annual family income, mothers' age, children's age, children's gender, children's verbal skills (receptive and expressive language), and children's behaviour during the storytelling task.

Differences by phase participation. To characterize the sample, participants only in the online study (i.e., Phase 1; $n = 138$; coded as 2) were compared to participants in the full study (i.e., both Phases 1 and 2; $n = 30$; coded as 1) based on key demographics variables and study variables to determine if there were any meaningful differences between these groups of participants. Chi-square analyses were conducted to determine if there was an association between phase participation and the following dichotomous

Table 7

Zero-Order Correlations between Phase 1 Study Variables after Expectation Maximization and Winsorizing of Outliers (*N* = 168)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Coaching	—														
2. Rejecting	-.39***	—													
3. Mo Neg Aff	.06	.07	—												
4. Mo Extravers	.06	-.10	-.28***	—											
5. Mo Eff Con	.09	-.15*	-.42***	-.03	—										
6. Mo Orien Sen	.29***	-.18*	.21**	.15*	.01	—									
7. Ch Neg Aff	.01	.31***	.46***	-.18*	-.23**	.05	—								
8. Ch Extravers	.02	-.03	-.06	.25**	.05	-.01	-.02	—							
9. Ch Eff Con	.33***	-.30***	-.04	.15*	.17*	.24**	-.07	.01	—						
10. Conserv	-.04	.18*	.08	-.18*	.11	-.19*	.18*	.05	-.01	—					
11. Transcend	.18*	-.39***	.03	-.08	.16*	.18*	-.11	-.08	.16*	.13	—				
12. Social Des	.19*	-.03	-.14	-.11	.18*	.10	-.09	-.06	.12	.07	.20*	—			
13. ERC Comp	.24**	-.53***	-.21**	.06	.21**	.02	-.55***	-.10	.30***	-.04	.19*	.17*	—		
14. Lability	-.15	.48***	.25***	-.02	-.20**	.02	.58***	.20**	-.25***	.06	-.19*	-.17*	-.95***	—	
15. Emot Reg	.33***	-.44***	-.01	.13	.12	.12	-.24**	.19*	.29***	.01	.10	.10	.712***	-.47***	—

Note. Coaching = Emotion Coaching; Rejecting = Emotion Rejecting; Mo Neg Aff = Mother Negative Affectivity; Mo Extravers = Mother Extraversion; Mo Eff Con = Mother Effortful Control; Mo Orien Sen = Mother Orienting Sensitivity; Ch Neg Aff = Child Negative Affectivity; Ch Extravers = Child Extraversion; Ch Eff Con; Conserv = Conservation; Transcend = Self-Transcendence; Social Des = Social Desirability; ERC Comp = Emotion Regulation Checklist Composite; Lability = Lability/Negativity; Emot Reg = Emotion Regulation.
*$p \leq$ .05. **$p \leq$ .01. ***$p \leq$ .001.

Table 8

Zero-Order Correlations between Phase 2 Study Variables (*N* = 30)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. VAI	—																
2. Receptive Voc	.70***	—															
3. Picture Naming	.78***	.11	—														
4. Persistence	.06	.03	.08	—													
5. Frustration	-.09	-.10	-.04	-.74***	—												
6. Mo-Ch Total Segments	.06	.04	.02	-.24	-.02	—											
7. Mo-Ch Proportion Emotion Segments	.25	.19	.19	.39*	-.13	-.13	—										
8. Mo-Ch Emotion Variety	.22	.16	.18	-.10	.13	.42*	.42*	—									
9. Mo Total Segments	.04	.06	-.02	-.25	-.06	.92***	-.26	.44*	—								
10. Mo Proportion Emotion Segments	.09	-.03	.17	.38*	-.08	.01	.67***	.48**	.01	—							
11. Mo Emotion Variety	-.01	-.08	.05	-.06	.06	.54**	.24	.84***	.63***	.58***	—						
12. Ch Total Segments	.06	-.01	.08	-.09	.07	.68***	.17	.18	.32	.02	.11	—					
13. Ch Proportion Emotion Segments	.24	.35	.03	.38*	-.24	-.08	.78***	.18	-.26	.24	-.03	.29	—				
14. Ch Emotion Variety	.11	.26	-.06	.11	-.03	.23	.56***	.29	-.06	.27	.09	.65***	.68***	—			
15. Ch Desire	-.01	.06	-.04	.28	-.13	.09	.35	.17	-.12	.21	-.05	.44*	.22	.46*	—		
16. Ch Attention	.25	.25	.14	.29	-.33	-.28	.25	-.04	-.22	.24	-.12	-.14	.13	-.03	.17	—	
17. Ch Cooperation	.05	.11	.01	.48**	-.42*	-.26	.07	-.27	-.32	.01	-.34	-.02	.11	-.02	.38*	.65***	—

Note. VAI = Vocabulary Acquisition Index; Receptive Voc = Receptive Vocabulary; Mo-Ch = Mother-Child; Mo = Mother; Ch = Child.
*p ≤ .05. **p ≤ .01. ***p ≤ .001.

Table 9

Zero-Order Correlations between Background Characteristics and Primary Phase 1 Study Variables (*N* = 168)

	Mo Age	Mo Ethnicity[a]	Mo Generation Status[b]	Mo Education	Annual Family Income	Mo Social Desirability	Ch Age	Ch Gender[c]
Coaching	.11	-.14	-.09	.09	.09	.19*	.05	.03
Rejecting	-.26***	.28***	.18*	-.17*	-.17*	-.03	-.15†	-.08
Mo Neg Aff	-.03	.01	.07	.02	-.06	-.14	.04	-.08
Mo Extravers	-.07	-.10	-.15	-.09	-.10	-.11	-.05	.01
Mo Eff Con	.14	-.02	-.05	.13	.20*	.18*	.01	.14
Mo Orien Sen	.07	.04	.05	-.03	-.11	.10	-.02	-.03
Ch Neg Aff	.01	-.01	-.01	-.01	-.07	-.09	.16*	-.06
Ch Extravers	-.16*	-.17*	-.14	-.17*	-.16	-.06	-.19	-.17*
Ch Eff Con	.07	.01	.07	.10	.01	.12	.04	.29***
Conserv	-.01	.13	.26***	.04	-.01	.07	.04	.01
Transcend	.30***	-.18*	-.08	.04	-.03	.20*	.14	.25**
Social Des	.17*	.17*	.19*	.04	-.11	–	.01	.04
ERC Comp	.07	-.04	-.02	.13	.09	.17*	.03	.19*
Lability	-.09	.02	.01	-.12	-.12	-.17*	-.02	-.25***
Emot Reg	.01	-.09	-.07	.11	-.01	.10	.03	-.03

Note. Coaching = Emotion Coaching; Rejecting = Emotion Rejecting; Mo Neg Aff = Mother Negative Affectivity; Mo Extravers = Mother Extraversion; Mo Eff Con = Mother Effortful Control; Mo Orien Sen = Mother Orienting Sensitivity; Child Neg Aff = Child Negative Affectivity; Child Extravers = Child Extraversion; Child Effortful Control; Conserv = Conservation; Transcend = Self-Transcendence; Social Des = Social Desirability; ERC Comp = ERC Emotion Regulation Checklist Composite; Lability = Lability/Negativity; Emot Reg = Emotion Regulation. Mo = Mother; Ch = Child. [a]0 = European, 1 = non-European; [b]0 = Canada/U.S.-born, 1 = first generation; [c]1 = boy, 2 = girl.
†*p* ≤ .10. **p* ≤ .05. ***p* ≤ .01. ****p* ≤ .001.

Table 10

Zero-Order Correlations between Background Characteristics and Primary Phase 2 Study Variables (*N* = 30)

	Mo Age	Mo Ethnicity[a]	Mo Generation Status[b]	Mo Education	Annual Family Income	Ch Age	Ch Gender[c]
VAI	-.30	-.20	-.35†	-.07	-.04	-.22	.14
Receptive Vocabulary	-.09	.02	-.08	.29	-.03	-.21	.20
Picture Naming	-.32†	-.32†	-.42*	-.33†	-.03	-.12	.02
Persistence	-.19	.10	.29	.17	.10	-.20	.01
Frustration	.37*	-.28	-.18	-.16	-.20	.41*	-.12
Mo-Ch Total Segments	.17	.15	.06	.10	.19	-.12	.06
Mo-Ch Proportion Emotion Segments	-.08	.19	.14	-.09	.07	.09	.35†
Mo-Ch Emotion Variety	.01	.26	.06	.04	.01	-.01	.21
Mo Total Segments	.04	.26	.04	.16	.13	-.22	.05
Mo Proportion Emotion Segments	.08	.10	.17	-.02	.10	.22	.16
Mo Emotion Variety	.03	.22	.10	.07	.01	-.01	.05
Ch Total Segments	.33†	-.12	.07	-.07	.20	.12	.05
Ch Proportion Emotion Segments	-.06	.08	.15	.01	.10	.03	.35†
Ch Emotion Variety	.34†	-.05	.11	.15	.18	.30	.45*
Ch Desire	.21	.22	.25	.06	.20	.04	.12
Ch Attention	-.13	-.05	-.05	.04	.24	-.28	.05
Ch Cooperation	-.17	-.09	.10	.01	.17	-.40*	-.23

Note. VAI = Vocabulary Acquisition Index; Mo-Ch = Mother-Child; Mo = Mother; Ch = Child; [a]0 = European, 1 = non-European; [b]0 = Canada/U.S.-born, 1 = first generation; [c]1 = boy, 2 = girl.
†$p \leq .10$. *$p \leq .05$.

demographic variables: maternal generation status, maternal ethnicity, children's gender, and children's disability. Maternal generation status was dummy coded to produce two nominal variables: $0 =$ Canada/U.S.-born and $1 =$ first generation. Based on a chi-square analysis, phase participation was not associated with maternal generation status, χ^2 (1) = .164, $p = .685$. Maternal ethnicity was dummy coded to produce two nominal variables: 0 = European and 1 = non-European. Results of a chi-square analysis indicated that phase participation was associated with maternal ethnicity, χ^2 (1) = 3.53, $p = .06$. Based on the odds ratio, non-European participants were 2.14 times more likely to be Full Study participants ($n = 14$; 46.7%) than Phase 1 participants ($n = 52$; 31%). Children's gender was coded whereby 1 = boy and 2 = girl. Phase participation was not related to children's gender, χ^2 (1) = 3.083, $p = .079$. Finally, the presence of a disability in each target child was dummy coded whereby 0 = has no disability and 1 = has a disability (whether diagnosed or suspected). In total, 28 mothers (16.7%) reported that their children had at least one disability, with speech/language delay, anxiety/selective mutism, and attention-deficit/hyperactivity disorder being the most commonly reported. Phase participation was not related to children's disability, χ^2 (1) = .292, $p = .589$.

Seven one-way Analysis of Variance (ANOVAs) analyses were conducted to determine if Phase 1 only participants differed from those who participated in the full study (i.e., both Phases 1 and 2) in terms of maternal age, level of education, annual family income, social desirability, children's age, Emotion Coaching scores, and Emotion Rejecting scores. ANOVA results, as shown in Table 11, indicate that annual family income also differed significantly by phase participation such that mothers who participated in the full study had lower annual family income than Phase 1 only mothers.

Table 11

One-Way Analyses of Variance Comparing Phase Participation on Demographic Variables and Emotion-Related Parenting Styles Self-Test – Likert (ERPSST-L) Scores

	Participants in Phase 1 Only (n = 138) M (SD)	Participants in Full Study (n = 30) M (SD)	df	F	p	R
Maternal Characteristics						
Age	33.87 (5.40)	32.03 (5.89)	162	2.67	.104	.13
Level of Education	5.01 (.73)	4.93 (.64)	166	.26	.609	.04
Income	**7.43 (2.72)**	**5.90 (3.01)**	**150**	**7.35**	**.007**	**.22**
Social Desirability	9.15 (3.30)	9.30 (3.16)	165	.05	.822	.02
Children's Characteristics						
Age (months)	70.37 (13.70)	68.60 (12.59)	166	.42	.517	.05
ERPSST-L						
Emotion Coaching	4.00 (.43)	4.09 (.46)	164	.94	.333	.08
Emotion Rejecting	2.51 (.50)	2.49 (.44)	164	.06	.802	.02

Note. Bolded results were considered statistically significant.

No statistically significant differences were found between Phase 1 and Phase 2 participants in terms of maternal level of education, social desirability, child age, Emotion Coaching scores, and Emotion Rejecting scores (all ps > .05 and no effects were found). Overall, the Phase 1 only and full study samples differed in a couple of ways. On average, mothers who participated in the full study had lower annual family income than Phase 1 only mothers. In addition, the sample of participants who participated in both Phases 1 and 2 consisted of a greater proportion of non-European Canadian mothers as compared to the sample in Phase 1 only. It is possible that the financial incentive for participating may have been of greater interest to non-European mothers who happened to be of a lower income.

Differences by mothers' ethnicity. Table 12 includes a summary of independent samples t-tests comparing mothers' ethnicity (0 = European, 1 = non-European) on select variables. On average, European mothers reported marginally higher Emotion Coaching scores than non-European mothers. Non-European mothers reported significantly higher Emotion Rejecting scores than European mothers. European mothers reported greater Self-Transcendence and children's Extraversion than non-European mothers. Finally, non-European mothers scored significantly higher on social desirability as compared to European mothers. It is important to acknowledge that there were many variables, including all Phase 2 variables, which did not significantly differ on the basis on maternal ethnicity. However, given that maternal ethnicity was associated with several primary study variables, it was controlled for in subsequent analyses where specified.

Differences by mothers' generation status. Independent samples t-tests were conducted to compare mothers' generation status (0 = Canada/U.S.-born, 1 = first generation) on select variables (see Table 13). Mean scores on Emotion Coaching did not

Table 12

Independent Samples t-Tests Comparing European Canadians and Non-European Canadians on Select Variables

Variables	European Canadians *M (SD)*	Non-European Canadians *M (SD)*	*t*-test Results
Coaching	4.06 (.46)	3.93 (.39)	*t*(164) = 1.77, *p* = .079, *d* = .30
Rejecting	**2.42 (.48)**	**2.70 (.46)**	***t*(164) = -3.67, *p* = < .001, *d* = -.60**
Mo Neg Aff	4.19 (.67)	4.20 (.70)	*t*(165) = -.12, *p* = .902, *d* = -.01
Mo Extravers	4.36 (.79)	4.20 (.70)	*t*(165) = 1.25, *p* = .214, *d* = .21
Mo Eff Con	4.60 (.72)	4.57 (.65)	*t*(165) = .30, *p* = .762, *d* = .04
Mo Orien Sen	4.78 (.82)	4.84 (.73)	*t*(165) = -.48, *p* = .634, *d* = -.08
Ch Neg Aff	4.17 (.94)	4.16 (.92)	*t*(162) = .02, *p* = .986, *d* = .01
Ch Extravers	**4.46 (.86)**	**4.15 (.92)**	***t*(162) = 2.15, *p* = .033, *d* = .35**
Ch Eff Con	5.44 (.79)	5.45 (.72)	*t*(162) = -.10, *p* = .920, *d* = -.01
Conserv	.87 (.86)	1.11 (.84)	*t*(160) = -1.65, *p* = .101, *d* = -.28
Transcend	**.43 (.75)**	**.13 (.85)**	***t*(160) = 2.31, *p* = .022, *d* = .37**
Social Des	**8.81 (3.01)**	**9.97 (3.68)**	***t*(165) = -2.16, *p* = .032, *d* = -.35**
ERC Composite	3.22 (.38)	3.18 (.39)	*t*(163) = .55, *p* = .581, *d* = .01
Mo-Ch Proportion Emotion Segments	15.20 (6.01)	17.49 (6.15)	*t*(28) = -1.03, *p* = .312, *d* = -.38
Mo-Ch Emotion Variety	6.25 (1.53)	7.21 (2.19)	*t*(28) = -1.41, *p* = .169, *d* = -.51
Mo Proportion Emotion Segments	12.63 (6.36)	13.92 (6.82)	*t*(28) = -.54, *p* = .596, *d* = -.20
Mo Emotion Variety	5.13 (1.82)	6.14 (2.83)	*t*(28) = -1.19, *p* = .245, *d* = -.42
Ch Proportion Emotion Segments	18.15 (8.86)	19.56 (10.54)	*t*(28) = -.40, *p* = .693, *d* = -.14
Ch Emotion Variety	4.63 (1.75)	4.43 (2.03)	*t*(28) = .29, *p* = .778, *d* = .11
VAI	108.69 (9.35)	104.86 (10.03)	*t*(28) = 1.08, *p* = .288, *d* = .40
Receptive Vocabulary	11.50 (2.42)	11.57 (1.74)	*t*(28) = -.09, *p* = .928, *d* = -.03
Picture Naming	11.56 (2.10)	10.07 (2.46)	*t*(28) = 1.79, *p* = .084, *d* = .65

Note. Coaching = Emotion Coaching; Rejecting = Emotion Rejecting; Mo Neg Aff = Mother Negative Affectivity; Mo Extravers = Mother Extravers; Mo Eff Con = Mother Effortful Control; Mo Orien Sen = Mother Orienting Sensitivity; Ch Neg Aff = Child Negative Affectivity; Ch Extravers = Child Extraversion; Ch Eff Con; Conserv = Conservation; Transcend = Self-Transcendence; Social Des = Social Desirability; ERC = Emotion Regulation Checklist; Mo-Ch = Mother-Child; Mo = Mother; Ch = Child; VAI = Vocabulary Acquisition Index. Bolded results were considered statistically significant.

Table 13

Independent Samples t-Tests Comparing Canada/U.S.-Born Mothers and First Generation Mothers on Select Variables

Variables	Canada/U.S.-Born M (SD)	First Generation M (SD)	*t*-test Result
Coaching	4.04 (.43)	3.95 (.47)	*t*(164) = 1.19, *p* = .234, *d* = .20
Rejecting	**2.46 (.49)**	**2.67 (.47)**	***t*(164) = -2.39, *p* = .018, *d* = -.44**
Mo Neg Aff	4.16 (.66)	4.28 (.73)	*t*(165) = -.95, *p* = .345, *d* = -.17
Mo Extravers	4.37 (.77)	4.11 (.73)	*t*(165) = 1.89, *p* = .061, *d* = .35
Mo Eff Con	4.61 (.68)	4.53 (.75)	*t*(165) = .61, *p* = .542, *d* = .11
Mo Orien Sen	4.78 (.78)	4.87 (.83)	*t*(165) = -.67, *p* = .506, *d* = -.11
Ch Neg Aff	4.17 (.92)	4.16 (.96)	*t*(162) = .05, *p* = .962, *d* = .01
Ch Extravers	4.43 (.84)	4.15 (1.01)	*t*(162) = 1.74, *p* = .084, *d* = .30
Ch Eff Con	5.41 (.78)	5.54 (.75)	*t*(162) = -.94, *p* = .349, *d* = -.17
Conserv	**.83 (.85)**	**1.34 (.76)**	***t*(160) = -3.35, *p* = .001, *d* = -.63**
Transcend	.37 (.77)	.23 (.85)	*t*(160) = .990, *p* = .323, *d* = .17
Social Des	**8.83 (3.12)**	**10.31 (3.55)**	***t*(165) = -2.51, *p* = .013, *d* = -.44**
ERC Composite	3.21 (.38)	3.19 (.38)	*t*(163) = .31, *p* = .760, *d* = .05
Mo-Ch Proportion Emotion Segments	15.75 (5.71)	17.67 (7.24)	*t*(28) = -.76, *p* = .456, *d* = -.29
Mo-Ch Emotion Variety	6.64 (1.84)	6.88 (2.17)	*t*(28) = -.30, *p* = .766, *d* = -.12
Mo Proportion Emotion Segments	12.60 (6.50)	14.97 (6.58)	*t*(28) = -.88, *p* = .385, *d* = -.36
Mo Emotion Variety	5.45 (2.50)	6.00 (2.00)	*t*(28) = -.55, *p* = .584, *d* = -.24
Ch Proportion Emotion Segments	17.98 (9.66)	21.08 (9.42)	*t*(28) = -78, *p* = .441, *d* = .-.32
Ch Emotion Variety	4.41 (1.89)	4.88 (1.81)	*t*(28) = -.60, *p* = .552, *d* = -.25
VAI	**108.91 (8.36)**	**101.38 (11.53)**	***t*(28) = 1.97, *p* = .058, *d* = .75**
Receptive Vocab	11.64 (2.22)	11.25 (1.83)	*t*(28) = .44, *p* = .663, *d* = .19
Picture Naming	**11.45 (2.02)**	**9.25 (2.61)**	***t*(28) = 2.45, *p* = .021, *d* = .94**

Note. Coaching = Emotion Coaching; Rejecting = Emotion Rejecting; Mo Neg Aff = Mother Negative Affectivity; Mo Extravers = Mother Extraversion; Mo Eff Con = Mother Effortful Control; Mo Orien Sen = Mother Orienting Sensitivity; Ch Neg Aff = Child Negative Affectivity; Ch Extravers = Child Extraversion; Ch Effortful Control; Conserv = Conservation; Transcend = Self-Transcendence; Social Des = Social Desirability; ERC = Emotion Regulation Checklist; Mo-Ch = Mother-Child; Mo = Mother; Ch = Child; VAI = Vocabulary Acquisition Index; Receptive Vocab = Receptive Vocabulary. Bolded results were considered statistically significant.

significantly differ on the basis of mothers' generation status. However, Emotion Rejecting scores were significantly higher for first-generation mothers as compared to Canada/U.S.-born mothers. Of note, the relation between Emotion Coaching and maternal age of immigration was not statistically significant, $r(35) = .22$, $p = .194$. Likewise, the relation between Emotion Rejecting and maternal age of immigration was not statistically significant, $r(35) = .19$, $p = .266$. Next, it was found that first-generation mothers scored significantly higher on Conservation and social desirability as compared to Canada/U.S.-born mothers. Scores on Self-Transcendence, temperament variables, and storytelling variables did not significantly differ by mothers' generation status. Given that generation status was associated with a primary study variable (Emotion Rejecting), it was controlled for in subsequent analyses where specified.

Differences by mothers' social desirability. As previously shown in Table 9, greater maternal social desirability was associated with greater Emotion Coaching, but not with Emotion Rejecting. Greater social desirability was associated with greater maternal Effortful Control, greater Self-Transcendence, and greater ratings of children's Emotion Regulation. All other relations were not statistically significant. Second, as previously noted, non-European mothers scored significantly higher on social desirability as compared to European mothers. Thus, given that social desirability scores differed across both maternal ethnicity and Emotion Coaching, social desirability was controlled for in primary study analyses.

Differences by mothers' level of education. As previously shown in Tables 10 and 11, greater maternal level of education was related to lower Emotion Rejecting scores and to lower children's Extraversion. Level of education was not significantly related to remaining Phase 1 variables, nor was it related to any Phase 2 variables.

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Differences by annual family income. Greater annual family income was related to lower Emotion Rejecting and to greater maternal Effortful Control (see previous Table 9), but was not significantly related to Phase 2 variables (see previous Table 10).

Differences by mothers' age. Mothers' age was significantly related to lower Emotion Rejecting, greater Self-Transcendence, greater social desirability, and lower ratings of children's Extraversion (see Table 9). Greater maternal age was significantly related to greater children's frustration ratings during the Transparent Box Task (see Table 10).

To reduce the number of covariates, inter-correlations between annual family income, maternal education, and maternal age were examined. Maternal age was significantly related to both family income, $r(148) = .28$, $p < .001$, and maternal education, $r(164) = .37$, $p < .001$. In addition, family income and maternal education were significantly related, $r(152) = .47$ ($p < .001$). Given that annual family income, maternal age, and maternal education were significantly inter-correlated and all had a significant negative relation to Emotion Rejecting, which is a primary study outcome variable, further analyses were conducted to determine if the number of covariates could be further reduced. Three two-tailed partial correlation analyses were conducted to further examine the relation between Emotion Rejecting$_a$ with family income$_b$, maternal age$_c$, and maternal education$_d$. It was found that when maternal age was controlled for, the relation between maternal income and Emotion Rejecting was no longer statistically significant, $r_{ba.c}(142) = -.10$, $p = .230$. Likewise, when maternal age was controlled for, the relation between maternal education and Emotion Rejecting was no longer statistically significant $r_{da.c}(159) = -.09$, $p = .284$. However, even after controlling for both maternal education and family income, the relation between maternal age and

Emotion Rejecting was still significant, $r_{ca.db.}(142) = -.23$, $p = .005$. Thus, maternal age

remained in the analyses as a covariate, while family income and maternal education were

eliminated as potential covariates.

Differences by children's age. Older age in children was marginally related to

lower levels of Emotion Rejecting and to greater levels of children's Negative Affectivity

(see Table 9). As shown in Table 10, children's age at Phase 2 was associated with

greater frustration ratings on the Transparent Box Task and lower ratings on cooperation

during the storytelling task.

Differences by children's gender. As shown in Table 14, statistically significant

differences in primary study variables were found based on children's gender. On

average, mothers' Coaching and Rejecting did not significantly differ by children's

gender. Mothers rated their sons as being higher in Extraversion as compared to

daughters. Daughters were rated as having higher Effortful Control and Emotion

Regulation scores as compared to sons. With respect to the Phase 2 tasks, a few

differences were noted between mother-daughter and mother-son dyads. On average,

mother-daughter dyads produced greater proportions of emotion segments as compared to

mother-son dyads. Daughters produced a greater proportion of emotion segments and

expressed a greater variety of emotion words as compared to sons. The difference in

Vocabulary Acquisition Index (VAI) scores by children's gender was not significant.

Given that children's gender was associated with some primary study variables, it was

controlled for in subsequent analyses where specified.

Differences by children's verbal skills. As previously noted in Table 12,

Vocabulary Acquisition Index (VAI), receptive vocabulary, and picture naming scores

Table 14

Independent Samples t-Tests Comparing Children's Gender on Select Variables

Variables	Boys *M (SD)*	Girls *M (SD)*	*t*-test Result
Coaching	4.00 (.46)	4.03 (.42)	*t*(164) = -.34, *p* = .734, *d* = -.07
Rejecting	2.55 (.51)	2.47 (.47)	*t*(164) = 1.00, *p* = .318, *d* = .16
Ch Neg Aff	4.22 (.97)	4.10 (.88)	*t*(162) = .75, *p* = .457, *d* = .13
Ch Extravers	**4.51 (.90)**	**4.20 (.85)**	***t*(162) = 2.20, *p* = .029, *d* = .35**
Ch Effortful Control	**5.23 (.75)**	**5.67 (.73)**	***t*(162) = -3.82, *p* < .001, *d* = -.59**
ERC Composite	**3.13 (.39)**	**3.28 (.36)**	***t*(163) = -2.51, *p* = .013, *d* = -.40**
Mo-Ch Proportion Emotion Segments	**13.53 (4.06)**	**17.84 (6.58)**	***t*(28) = -1.96, *p* = .060, *d* = -.79**
Mo-Ch Emotion Variety	6.18 (2.71)	7.00 (1.20)	*t*(28) = -1.15, *p* = .262, *d* = -.39
Mo Proportion Emotion Segments	11.86 (4.83)	14.02 (7.29)	*t*(28) = -.87, *p* = .389, *d* = -.35
Mo Emotion Variety	5.45 (2.91)	5.68 (2.06)	*t*(28) = -.25, *p* = .802, *d* = -.09
Ch Proportion Emotion Segments	**14.55 (9.49)**	**21.27 (8.89)**	***t*(28) = -1.95, *p* = .062, *d* = -.73**
Ch Emotion Variety	**3.45 (1.81)**	**5.16 (1.61)**	***t*(28) = -2.67, *p* = .012, *d* = -.99**
VAI	105.18 (11.59)	107.89 (8.61)	*t*(28) = -.73, *p* = .470, *d* = -.27
Receptive Vocab	11.00 (2.65)	11.84 (1.71)	*t*(28) = -1.06, *p* = .297, *d* = -.38
Picture Naming	10.82 (2.40)	10.89 (2.40)	*t*(28) = -.08, *p* = .934, *d* = -.03
Persistence	2.39 (.59)	2.39 (.67)	*t*(28) = .01, *p* = .999, *d* = .00
Frustration	.75 (.61)	.61 (.53)	*t*(28) = .64, *p* = .528, *d* = .27

Note. Coaching = Emotion Coaching; Rejecting = Emotion Rejecting; Ch Neg Aff = Child Negative Affectivity; Ch Extravers = Child Extraversion; Ch Effortful Control; ERC = Emotion Regulation Checklist; Mo-Ch = Mother-Child; Mo = Mother; Ch = Child; VAI = Vocabulary Acquisition Index; Receptive Vocab = Receptive Vocabulary. Bolded results were considered statistically significant.

did not differ by mothers' ethnicity. However, VAI scores differed by mothers' generation status. On average, children of Canada/U.S.-born mothers scored higher on the VAI and Picture Naming subtest than children of first-generation mothers. For both groups, VAI scores still fell in the Average range. Finally, storytelling task variables were not associated with children's VAI scores (as previously shown on Table 8). Thus, emotional expressivity appears to be unrelated to overall vocabulary abilities and was not included as a covariate in further analyses.

Differences by children's storytelling behaviour. Mothers also completed the Parent Observation Rating scale so that children's desire to do the storytelling, attention during the storytelling, and cooperation during the storytelling could be examined. As shown in Table 8, there was not a significant relation between storytelling behaviour ratings and children's proportion of emotion segments, suggesting that children's storytelling behaviour was unrelated to their emotional expressivity. However, children's higher level of desire to do the storytelling task was related to a greater total number of segments and variety of emotions.

In summary, maternal ethnicity, maternal generation status, maternal age, social desirability, and children's gender were associated with dependent variables in the study and were, therefore, controlled for in the subsequent analyses.

Relations between maternal temperament and children's temperament variables. Maternal temperament variables included Negative Affectivity, Effortful Control, Extraversion, and Orienting Sensitivity. Children's temperament included Negative Affectivity, Effortful Control, and Extraversion. To better understand the relation between mothers' and children's temperament variables, a two-tailed partial correlation analysis was conducted, after controlling for maternal age, social desirability,

and children's gender (Table 15). Greater maternal Negative Affectivity was related to greater Negative Affectivity in children and maternal Orienting Sensitivity, but was related to lower levels of maternal Extraversion and Effortful Control. Greater maternal Extraversion was associated with greater maternal Orienting Sensitivity, greater children's Extraversion, greater children's Effortful Control, and lower children's Negative Affectivity. Greater maternal Effortful Control was associated with lower Negative Affectivity in children. With maternal age, social desirability, and children's gender controlled for, greater Emotion Coaching was related to greater maternal Orienting Sensitivity and children's Effortful Control. Higher levels of Emotion Rejecting were related to greater Negative Affectivity in children, lower maternal Orienting Sensitivity, and lower Effortful Control in children. To better understand the interactive nature of temperamental styles, a cluster analysis was conducted.

Dyadic temperamental patterns: Cluster analysis of cases. A cluster analysis of cases was conducted to identify meaningful mother-child temperament profiles. K-Means clustering is conducted to group individuals according to selected variables based on the best fit from the data, as opposed to being assigned a priori. A K-Means Classification, which is a non-hierarchical method for cluster analysis, was conducted to create clusters of mother-child (dyadic) temperamental patterns. Standardized z-scores of mean ratings for mother and children's temperament variables were used in this analysis. A two-cluster solution for dyadic temperamental patterns was generated, producing a coded cluster for each participant. Cluster 1 ($n = 106$) dyads were relatively low in Extraversion, low in Effortful Control, and high in Negative Affectivity. Cluster 2 ($n = 58$) dyads were relatively high in Extraversion, high in Effortful Control, and low in Negative Affectivity.

Table 15

Two-Tailed Partial Correlations between Temperament Variables, Emotion Coaching, and Emotion Rejecting after Controlling for Maternal Age, Maternal Social Desirability, and Children's Gender (*N* = 168)

	1	2	3	4	5	6	7	8	9
1. Coaching	—								
2. Rejecting	-.38***	—							
3. Mo Neg Aff	.07	.07	—						
4. Mo Extravers	.08	-.13	-.29***	—					
5. Mo Eff Con	.05	-.11	-.39***	-.01	—				
6. Mo Orien Sen	.27***	-.17*	.22**	.18*	-.02	—			
7. Ch Neg Aff	.03	.33***	.44***	-.18*	-.20*	.05	—		
8. Ch Extravers	.06	-.08	-.06	.24**	.08	.01	-.01	—	
9. Ch Eff Con	.32***	-.29***	-.01	.18*	.13	.23**	-.05	.08	—

Note. Coaching = Emotion Coaching; Rejecting = Emotion Rejecting; Mo Neg Aff = Mother Negative Affectivity; Mo Extravers = Mother Extraversion; Mo Eff Con = Mother Effortful Control; Mo Orien Sen = Mother Orienting Sensitivity; Ch Neg Aff = Child Negative Affectivity; Ch Extravers = Child Extraversion; Ch Eff Con = Child Effortful Control.
*p ≤ .05. **p ≤ .01. ***p ≤ .001.

Based on the *F*-values from the ANOVA produced with the cluster analysis, Maternal Orienting Sensitivity was not useful in determining cluster membership, $F(1, 162) = .68$, $p = .412$. Final clusters are shown in a bar graph in Figure 4.

Primary Quantitative Analyses

Overview. Quantitative analyses included hierarchical multiple regression analyses (Hypotheses 1a, 1b, 2a, and 2b), mediation models (Hypotheses 3a, 3b, and 4), and partial correlation analyses (Hypotheses 5a, 5b, 6a, and 6b).

Research question 1: Values and emotion-related parenting. To determine whether values (i.e., Conservation and Self-Transcendence) predicted Emotion Coaching and Emotion Rejecting, separate hierarchical multiple regression analyses (i.e., hierarchical MRA, also known as sequential regression) were conducted. Demographic variables found to be related to emotion-related parenting in the present study were entered in Step 1 (maternal age, maternal social desirability, and children's gender whereby 1 = boy and 2 = girl). At Step 2, maternal ethnicity (i.e., 1 = non-European, 0 = European) and maternal generation status (1 = first generation, 0 = Canada/U.S.-born) were entered. Primary predictor variables were entered in Step 3. This totalled a maximum of 7 predictors per regression. After the regressions were conducted, beta weights, *p*-values, 95% BCa CIs, and patterns of signs were observed.

Testing Hypothesis 1a. A hierarchical MRA was conducted to determine if mothers' values predict Emotion Coaching. After controlling for covariates in Steps 1 and 2, maternal Conservation and Self-Transcendence were entered as predictors (Table 16). Covariates were entered in Step 1, mothers' generation status and ethnicity were entered in Step 2, Conservation was entered in Step 3, and the outcome variable was Emotion Coaching. The overall model was statistically significant, $R^2 = .10$, $F(7, 156) =$
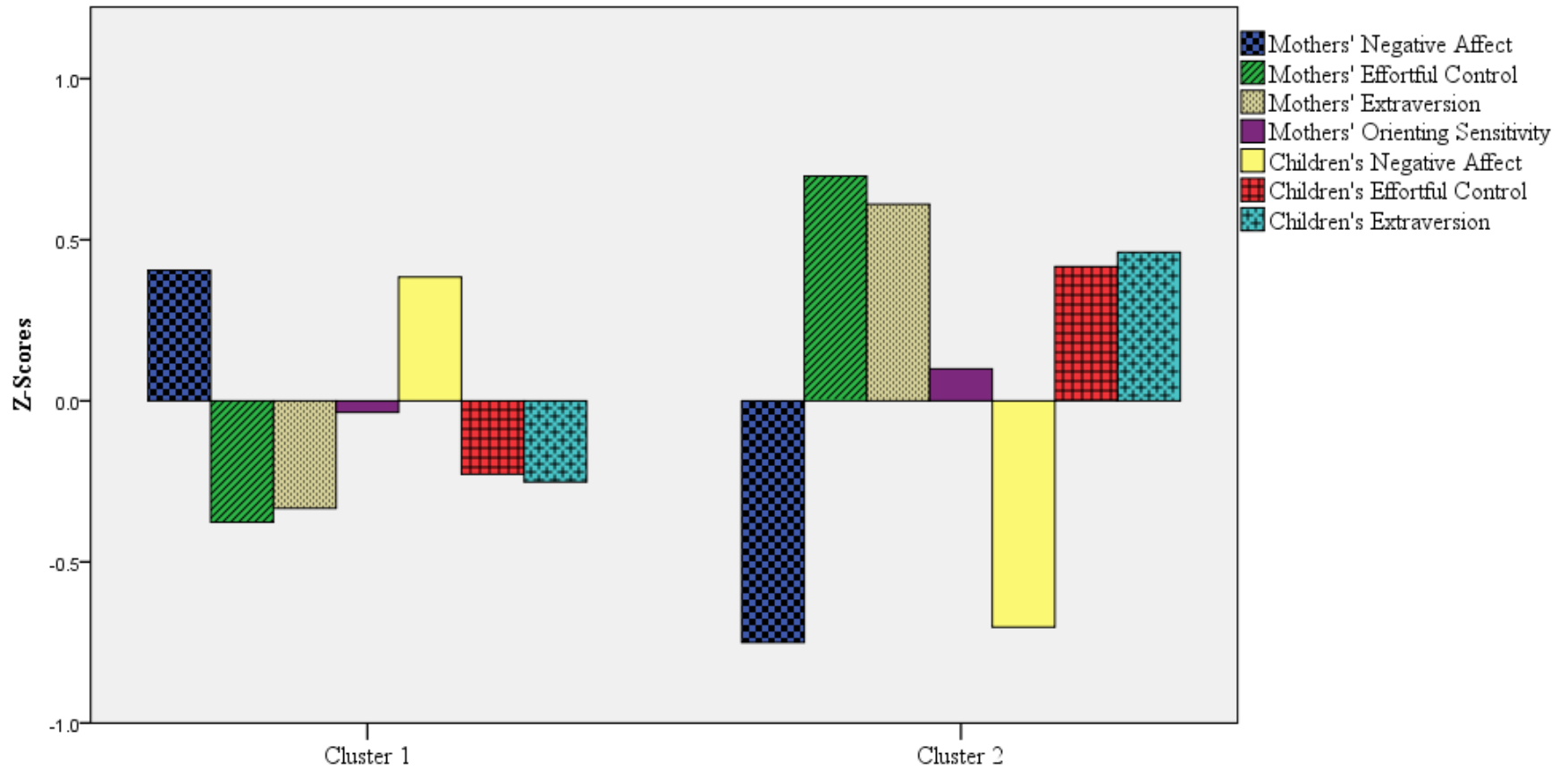
Figure 4. Final two mother-child temperament clusters.

Table 16

Hierarchical Multiple Regression Analysis with Values Predicting Emotion Coaching (N = 168)

Variable	R^2	ΔR^2	Unstandardized Coefficients		Standardized Coefficients	95% BCa CI
			B	SE B	B	
Step 1	.05*					
Maternal age			.01	.01	.11	[-.01, .02]
Social desirability			.03	.01	.19*	[.01, .05]
Children's gender[a]			-.01	.07	-.01	[-.13, .12]
Step 2	.09**	.04*				
Maternal age			.01	.01	.11	[-.01, .02]
Social desirability			.03	.01	.23**	[.01, .05]
Children's gender			-.01	.07	-.01	[-.14, .11]
Maternal ethnicity[b]			-.16	.10	-.17	[-.34, .01]
Maternal gen. status[c]			-.06	.12	-.06	[-.29, .19]
Step 3	.10*	.01				
Maternal age			.01	.01	.09	[-.01, .02]
Social desirability			.03	.01	.21**	[.01, .05]
Children's gender			-.02	.07	-.03	[-.16, .10]
Maternal ethnicity			-.15	.10	-.15	[-.33, .03]
Maternal gen. status			-.05	.12	-.05	[-.30, .23]
Conservation			-.02	.04	-.03	[-.09, .06]
Self-transcendence			.04	.05	.07	[-.06, .15]

Note. [a]1 = boy, 2 = girl; [b]0 = European, 1 = non-European; [c]0 = Canada/U.S.-born, 1 = first generation.
p ≤ .05. **p* ≤ .01.

2.31. $p = .029$, with the predictors explaining 9.8% of the variance in Emotion Coaching.

Step 2, which included maternal ethnicity and generation status, added to the predictive

power of the regression model, $\Delta R^2 = .09$, $F(2, 151) = 3.42$, $p = .035$. However, contrary

to Hypothesis 1a, Step 3 with the values did not account for any variance beyond Step 2,

$\Delta R^2 = .10$, $F(2, 149) = .37$, $p = .693$. Based on an examination of the beta weights, only

social desirability contributed significantly to the model at Step 3 and was associated with

greater Emotion Coaching scores. Therefore, Hypothesis 1a was not supported as values

did not significantly predict Emotion Coaching.

   Testing Hypothesis 1b. As previously described, hierarchical MRA was

conducted to determine if mothers' values in Conservation and Self-Transcendence

predict Emotion Rejecting. As shown in Table 17, the overall model was statistically

significant, $R^2 = .25$, $F(7, 156) = 7.21$. $p < .001$. Step 2 significantly contributed to the

model, $\Delta R^2 = .08$, $F(2, 151) = 7.47$, $p = .001$. Step 3 accounted for 10% of the variance

beyond Step 2 based on the R^2 change, and the change from Step 2 to 3 was statistically

significant, $\Delta R^2 = .10$, $F(2, 149) = 10.01$, $p < .001$. Based on an examination of the beta

weights, both maternal age and ethnicity contributed significantly to the model at Step 3,

whereby Emotion Rejecting scores were higher for younger mothers and mothers of a

non-European ethnicity. Hypothesis 1b was supported because values were significant

predictors of Emotion Rejecting, such that greater Emotion Rejecting was predicted by

greater Conservation and lower Self-Transcendence.

   Research question 2: Temperament and emotion-related parenting. To

examine if dyadic temperamental patterns predict emotion-related parenting styles, two

hierarchical MRAs were conducted. Cluster 1 dyads were low in Extraversion, low in

Effortful Control, and high in Negative Affectivity. Cluster 2 dyads were high in

Table 17

Hierarchical Multiple Regression Analysis with Values Predicting Emotion Rejecting (N = 168)

Variable	R^2	ΔR^2	Unstandardized Coefficients		Standardized Coefficients	95% BCa CI
			B	*SE B*	β	
Step 1	.07*					
Maternal age			-.02	.01	-.26**	[-.04, -.01]
Social desirability			.01	.01	.01	[-.02, .02]
Children's gender[a]			-.04	.08	-.04	[-.19, .12]
Step 2	.15***	.08***				
Maternal age			-.02	.01	-.26***	[-.04, -.01]
Social desirability			-.01	.01	-.04	[-.03, .01]
Children's gender			-.03	.08	-.03	[-.17, .12]
Maternal ethnicity[b]			.28	.11	.26**	[.07, .49]
Maternal gen. status[c]			.07	.11	.06	[-.17, .32]
Step 3	.25***	.10***				
Maternal age			-.02	.01	-.17*	[-.03, -.01]
Social desirability			.01	.01	.01	[-.02, .02]
Children's gender			.03	.08	.03	[-.11, .18]
Maternal ethnicity			.20	.11	.19*	[.01, .42]
Maternal gen. status			-.01	.12	-.01	[-.26, .26]
Conservation			.11	.04	.19**	[.02, .20]
Self-transcendence			-.21	.05	-.33***	[-.32, .10]

Note. [a]1 = boy, 2 = girl; [b]0 = European, 1 = non-European; [c]0 = Canada/U.S.-born, 1 = first generation.
p ≤ .05. **p* ≤ .01. ***p* ≤ .001.

Extraversion, high in Effortful Control, and low in Negative Affectivity. Field (2013) highlighted that categorical variables may be entered in regression analyses. Dyadic temperamental patterns were coded (1 = Cluster 1; 2 = Cluster 2).

Testing Hypothesis 2a. A hierarchical MRA was conducted to determine if dyadic temperamental patterns, as found through a cluster analysis, predict Emotion Coaching scores (Table 18). Covariates – as previously described – were entered in Step 1, mothers' generation status and ethnicity were entered in Step 2, dyadic temperamental pattern was entered in Step 3, and the outcome variable was Emotion Coaching. The overall model was statistically significant, $R^2 = .09$, $F(6, 158) = 2.50$. $p = .025$. Step 2 added to the predictive power of the regression model, $\Delta R^2 = .04$, $F(2, 153) = 3.21$, $p = .043$. However, contrary to Hypothesis 2a, Step 3 did not account for any variance beyond Step 2, $\Delta R^2 = .01$, $F(1, 152) = 1.16$, $p = .282$. Based on an examination of the beta weights, only social desirability contributed significantly to the model at Step 3, demonstrating a positive relation to Emotion Coaching. Therefore, Hypothesis 2a was not supported given that Emotion Coaching was not significantly predicted by dyadic temperamental patterns.

Testing Hypothesis 2b. A hierarchical MRA was conducted to examine if dyadic temperamental patterns predict Emotion Rejecting (Table 19). Covariates were entered in Step 1, mothers' generation status and ethnicity were entered in Step 2, dyadic temperamental pattern was entered in Step 3, and the outcome variable was Emotion Rejecting. The overall model was statistically significant, $R^2 = .23$, $F(6, 158) = 7.48$. $p < .001$. Step 2 significantly contributed to the model in predicting Emotion Rejecting, $\Delta R^2 = .09$, $F(2, 153) = 7.97$, $p = .001$. Step 3 accounted for 6.4% of the variance beyond Step 2 and the change from Step 2 to 3 was statistically significant, $\Delta R^2 = .06$, $F(1, 152) =$

Table 18

Hierarchical Multiple Regression Analysis with Temperament Predicting Emotion Coaching (N = 168)

Variable	R^2	ΔR^2	Unstandardized Coefficients		Standardized Coefficients	95% BCa CI
			B	*SE B*	β	
Step 1	.04					
Maternal age			.01	.01	.09	[-.01, .02]
Social desirability			.02	.01	.18*	[.01, .04]
Children's gender[a]			.02	.07	.02	[-.11, .15]
Step 2	.08*	.04*				
Maternal age			.01	.01	.08	[-.01, .02]
Social desirability			.03	.01	.21**	[.01, .05]
Children's gender			.01	.07	.02	[-.12, .14]
Maternal ethnicity[b]			-.15	.10	-.15	[-.33, .06]
Maternal gen. status[c]			-.07	.11	-.06	[-.30, .14]
Step 3	.09*	.01				
Maternal age			.01	.01	.09	[-.01, .02]
Social desirability			.03	.01	.20*	[.01, .05]
Children's gender			.01	.07	.01	[-.12, .14]
Maternal ethnicity			-.15	.10	-.16	[-.35, .06]
Maternal gen. status			-.06	.12	-.06	[-.30, .15]
Temperament pattern[d]			.08	.08	.08	[-.09, .25]

Note. [a]1 = boy, 2 = girl; [b]0 = European, 1 = non-European; [c]0 = Canada/U.S.-born, 1 = first generation; [d]1= Cluster 1 dyads (low in Extraversion, low in Effortful Control, high in Negative Affectivity), 2 = Cluster 2 dyads (high in Extraversion, high in Effortful Control, low in Negative Affectivity).
*p ≤ .05. **p ≤ .01.

Table 19

Hierarchical Multiple Regression Analysis with Temperament Predicting Emotion Rejecting (N = 168)

Variable	R^2	ΔR^2	Unstandardized Coefficients		Standardized Coefficients	95% BCa CI
			B	*SE B*	B	
Step 1	.08**					
Maternal age			-.02	.01	-.27***	[-.04, -.01]
Social desirability			.01	.01	.01	[-.02, .02]
Children's gender[a]			-.05	.08	-.05	[-.20, .10]
Step 2	.16***	.09***				
Maternal age			-.02	.01	-.26***	[-.04, -.01]
Social desirability			-.01	.01	-.05	[-.03, .01]
Children's gender			-.05	.07	-.05	[-.18, .11]
Maternal ethnicity[b]			.27	.11	.26**	[.07, .52]
Maternal gen. status[c]			.07	.11	.06	[-.13, .27]
Step 3	.23***	.06***				
Maternal age			-.02	.01	-.27***	[-.04, -.01]
Social desirability			-.01	.01	-.03	[-.02, .02]
Children's gender			-.03	.07	-.03	[-.17, .12]
Maternal ethnicity			.30	.11	.28**	[.09, .54]
Maternal gen. status			.06	.11	.05	[-.17, .26]
Temperament pattern[d]			-.26	.07	-.25***	[-.40, -.12]

Note. [a]1 = boy, 2 = girl; [b]1 = non-European, 0 = European; [c]1 = first generation, 0 = Canada/U.S.-born; [d]1= Cluster 1 dyads (low in Extraversion, low in Effortful Control, high in Negative Affectivity), 2 = Cluster 2 dyads (high in Extraversion, high in Effortful Control, low in Negative Affectivity).

*p ≤ .05. **p ≤ .01. ***p ≤ .001.

12.54, $p = .001$. Consistent with Hypothesis 2b, dyadic temperament patterns predicted Emotion Rejecting, such that membership in Cluster 2 (i.e., high in Extraversion, high in Effortful Control, and low in Negative Affectivity) was related to lower Emotion Rejecting scores. Based on an examination of the beta weights, maternal age, ethnicity, and dyadic temperamental patterns contributed significantly to the model at Step 3. Specifically, Emotion Rejecting scores were associated with younger maternal age, non-European maternal ethnicity, and maladaptive dyadic temperamental patterns.

Research question 3: Emotion-related parenting, values, and children's emotion regulation. Mediation analyses were conducted to examine this research question. In the past, researchers often used the Baron and Kenny (1986) approach to mediation analyses that involved a series of regressions and required several conditions of mediation (e.g., the independent variable to be tested must first be shown to predict the proposed mediator). However, a more recent approach called Hayes' PROCESS procedure provides a comprehensive way to estimate the model through simultaneous analyses (Hayes, 2013). Modern research involving mediation analysis does not focus on labelling processes as complete or partial mediation; instead, indirect effects are estimated and it is not a prerequisite for X to predict Y (Hayes, 2009; Hayes, 2013; Shrout & Bolger, 2002). Hayes' PROCESS procedure was used due to the limitations of other approaches: examining p-values create all-or-nothing interpretation of the results; beta weights can be difficult to interpret and their change may reduce even if the model is significant; and the Sobel test, which is primarily used in large samples, has been replaced by bootstrapping (Field, 2013; Hayes, 2013; Shrout & Bolger, 2002).

Indirect effects and their confidence intervals were examined to report the "degree of mediation observed in the data" (Field, 2013, p. 411). To estimate the indirect effects,

bootstrap methods (ab) were used in order to compute confidence intervals whereby

mediation is said to occur if the confidence interval does not contain zero (Field, 2013).

Bootstrapping is a non-parametric resampling procedure that derives bias-corrected and

accelerated (BCa) bootstrap confidence intervals for the indirect effects. As described by

Hayes (2013), "bootstrap confidence intervals respect the irregularity of the sampling

distribution of the indirect effect and provide an inference that is higher in power than the

normal theory approach" (p. 139). Bootstrap confidence intervals at 10,000 samples were

selected as per the recommendation in Hayes (2013). The use of dichotomous predictors

is permitted in mediation models through Hayes' PROCESS procedure (Hayes, 2013).

An additional feature of PROCESS is that multiple mediators can be included in the same

model. According to Hayes (2013), allowing for the inclusion of multiple mediators has

many advantages over a simple mediation model: (1) variables often operate through

multiple mechanisms and a model with one mediator may represent an

oversimplification; (2) statistics for total, direct, and indirect effects can be computed for

multiple mediators and compared in size; (3) a mediator may relate to an outcome simply

because that mediator is related to another variable; and (4) the strength of indirect effects

can be compared.

A parallel multiple mediator model was selected for the present study. Within a

parallel multiple mediator model, "X is modeled as influencing consequent Y directly as

well as indirectly through two or more mediators, with the condition that no mediator

causally influenced another" (Hayes, 2013, p. 125). Hayes (2013) also specified that the

mediators in such a model may, and are likely to be, correlated. The parallel multiple

mediator model features the independent variable (X), the dependent variable (Y),

mediators (M_1 and M_2), a_1 (relation between X and M_1), a_2 (relation between X and M_2),

b_1 (relation between M_1 and Y), b_2 (relation between M_2 and Y), c (the relation between X and Y without the inclusion of the mediators), and c' (the relation between X and Y after accounting for the mediators). Lastly, indirect effects (i.e., the amount of mediation) were represented by either a_1b_1 or a_2b_2 and were tested by bootstrapping. Given that Emotion Regulation significantly correlated with maternal social desirability and differed according to children's gender, those two variables were controlled in mediation models.

Two mediation models were conducted to test whether emotion-related parenting practices mediate the relation between mothers' values and children's emotion regulation, after controlling for maternal social desirability and children's gender. Bias corrected and accelerated bootstrap 95% CIs at 1000 samples are reported below in square brackets.

Testing Hypothesis 3a. As shown in Figure 5a, a mediation model was used to test Hypothesis 3a. In the model, X was Conservation, Y was children's Emotion Regulation, and Emotion Coaching (M_1) and Emotion Rejecting (M_2) were entered as parallel mediators. The first covariate, maternal social desirability, contributed significantly in predicting Emotion Coaching (path a_1) [.01, .05] and children's Emotion Regulation [.01, .04]. However, it did not make a significant contribution in predicting Emotion Rejecting (path a_2) [-.03, .02]. The second covariate, children's gender, did not contribute significantly in predicting Emotion Coaching [-.13, .15] or Emotion Rejecting [-.22, .09], but it was significantly associated with Emotion Regulation [.01, .21].

After controlling for covariates, the overall regression model was statistically significant, $R^2 = .34$, $p < .001$, 95% BCa CI [.01, 1.20]. The direct effect of Conservation on children's emotion regulation scores was nonsignificant (path c'). Greater Conservation significantly predicted greater Emotion Rejecting (path a_2), and greater Emotion Rejecting significantly predicted lower Emotion Regulation (path b_2), even after

a) Mediation model testing Hypothesis 3a:

Path a_1
$b = -.03, p = .527$

M_1: Emotion Coaching

Path b_1
$b = -.01, p = .880$

X: SSVS Conservation

Direct effect c'
$b = .02, p = .557$

Y: Children's Emotion Regulation scores

Path a_2
$b = .11\ p = .019$

M_2: Emotion Rejecting

Path b_2
$b = -.41, p < .001$

b) Mediation model testing Hypothesis 3b:

Path a_1
$b = .09, p = .063$

M_1: Emotion Coaching

Path b_1
$b = -.01, p = .890$

X: SSVS Self-Transcendence

Direct effect c'
$b = -.05, p = .158$

Y: Children's Emotion Regulation scores

Path b_2
$b = -.43, p < .001$

Path a_2
$b = -.25, p < .001$

M_2: Emotion Rejecting
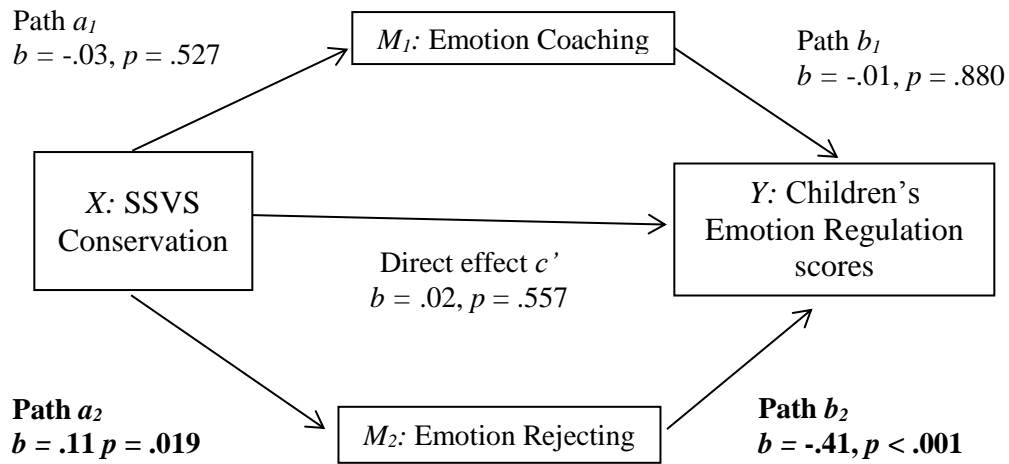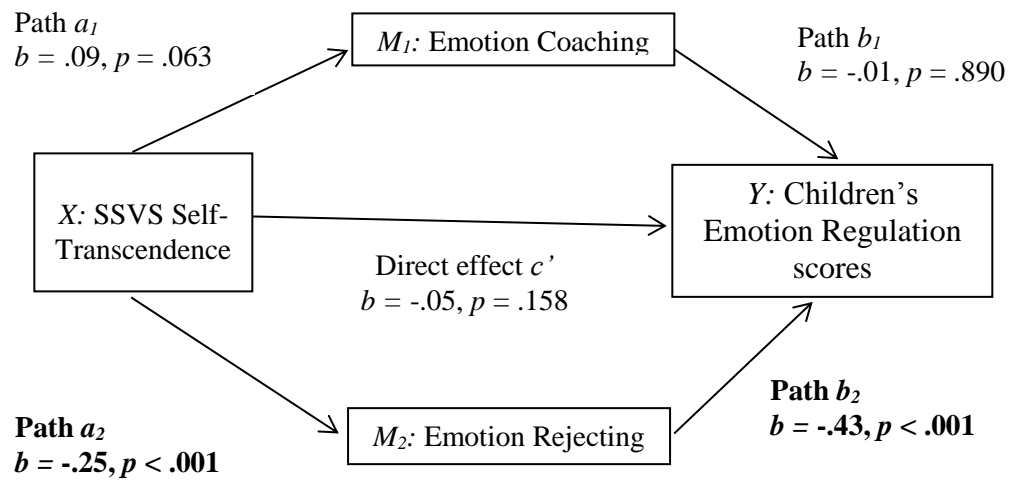
Figure 5. Emotion-related parenting styles mediating the relation between mothers' values and children's emotion regulation, after controlling for maternal social desirability and children's gender.

accounting for covariates. Zero was not in the 95% confidence interval of the bootstrapped estimate [-.09, -.01] for the indirect effect of Conservation on Emotion Regulation through Emotion Rejecting ($a_2b_2 = -.05$), indicating that the finding was statistically significant. However, zero was in the 95% confidence interval of the bootstrapped estimate [-.01, .01] for the indirect effect of Emotion Coaching ($a_1b_1 = .01$), indicating that there was no evidence of an indirect effect. Thus, Hypothesis 3a was supported for Emotion Rejecting but was not supported for Emotion Coaching.

Testing Hypothesis 3b. As shown previously in Figure 5b, a mediation model was used to test Hypothesis 3b. In this model, X was Self-Transcendence, Y was children's Emotion Regulation, and Emotion Coaching (M_1) and Emotion Rejecting (M_2) were entered as parallel mediators. The first covariate, maternal social desirability, contributed significantly in predicting Emotion Coaching (path a_1) [.01, .05] and children's Emotion Regulation [.01, .04]. As was found in the previous model, social desirability did not make a significant contribution in predicting Emotion Rejecting (path a_2) [-.02, .03]. The second covariate, children's gender, did not contribute significantly in predicting Emotion Coaching [-.17, .12] or Emotion Rejecting [-.12, .18], but it was significantly associated with Emotion Regulation [.03, .23].

After controlling for covariates, the overall regression model was statistically significant, $R^2 = .35$, $p < .001$, 95% BCa CI [.03, 1.21]. Results indicated that the direct effect of Self-Transcendence on children's emotion regulation scores was nonsignificant (path c'). Greater Self-Transcendence significantly predicted lower Emotion Rejecting (path a_2), while lower Emotion Rejecting predicted greater Emotion Regulation (path b_2), even after accounting for all covariates. Zero was not in the 95% confidence interval of the bootstrapped estimate [.06, .17] for the indirect effect of Self-Transcendence on

Emotion Regulation through Emotion Rejecting ($a_2b_2 = .11$), indicating that the finding was statistically significant. However, zero was in the 95% confidence interval of the bootstrapped estimate [-.02 .01] for the indirect effect of Emotion Coaching ($a_1b_1 = -.01$), indicating that there was no evidence of an indirect effect. Therefore, consistent with the findings from Hypothesis 3a, Hypothesis 3b was supported for Emotion Rejecting and but not supported for Emotion Coaching.

Research question 4: Emotion-related parenting, temperament, and children's emotion regulation. As shown in Figure 6, a mediation model was used to test whether emotion-related parenting practices mediated the relation between mother-child temperament patterns and children's emotion regulation as predicted by Hypothesis 4. Temperament patterns were coded as follows: Cluster 1 = dyads low in Extraversion, low in Effortful Control, and high in Negative Affectivity; Cluster 2 = dyads high in Extraversion, high in Effortful Control, and low in Negative Affectivity. Thus, a temperament pattern with a higher number indicates a potentially adaptive temperament pattern. Emotion Coaching and Emotion Rejecting were entered as parallel mediators in the model. Maternal social desirability and children's gender were controlled for, as those two variables were significantly associated with Emotion Regulation.

Testing Hypothesis 4. The first covariate, maternal social desirability, contributed significantly in predicting Emotion Coaching (path a_1) [.01, .05]. Social desirability did not make a significant contribution in predicting Emotion Rejecting (path a_2) [-.03, .02] or children's Emotion Regulation [-.01, .03]. The second covariate, children's gender, did not contribute significantly in predicting Emotion Coaching [-.11, .16] or Emotion Rejecting [-.22, .08], but it was significantly associated with Emotion Regulation [.02, .21].

Mediation model testing Hypothesis 4:

Path a_1
$b = .06, p = .400$

M_1: Emotion Coaching

Path b_1
$b = .01, p = .855$

X: Dyadic Temperamental Pattern

Y: Children's Emotion Regulation scores

Direct effect c'
$b = .17, p = .002$

Path a_2
$b = -.23, p = .004$

M_2: Emotion Rejecting

Path b_2
$b = -.37, p < .001$
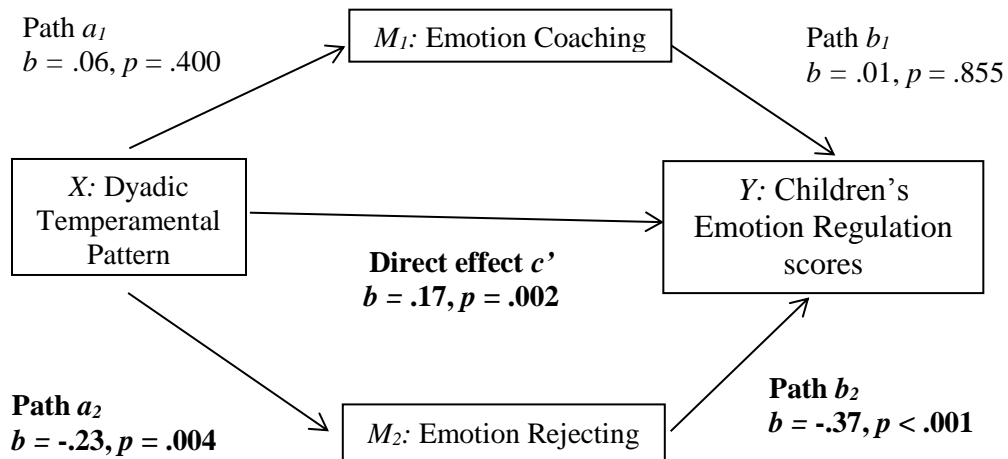
Figure 6. Emotion-related parenting styles mediating the relation between dyadic temperamental patterns and children's outcome, after controlling for maternal social desirability and children's gender.

Note. Temperamental patterns were coded as follows: 1= Cluster 1 dyads (low in Extraversion, low in Effortful Control, high in Negative Affectivity), 2 = Cluster 2 dyads (high in Extraversion, high in Effortful Control, low in Negative Affectivity).

After controlling for covariates, the overall regression model was statistically significant, $R^2 = .38$, $p < .001$, 95% BCa CI [0.01, 1.21]. Results indicated that the direct effect of temperament pattern on children's emotion regulation scores was statistically significant (path c'). A Cluster 2 temperament pattern (low in Negative Affectivity) significantly predicted lower Emotion Rejecting (path a_2), and lower Emotion Rejecting predicted greater Emotion Regulation (path b_2), even after accounting for all covariates. Zero was not in the 95% confidence interval of the bootstrapped estimate [.03, .15] for the indirect effect of temperament pattern on Emotion Regulation through Emotion Rejecting ($a_2b_2 = .09$), indicating that the finding was statistically significant. However, zero was in the 95% confidence interval of the bootstrapped estimate [-.01, .02] for the indirect effect of Emotion Coaching ($a_1b_1 = .01$), indicating that there was no evidence of an indirect effect. Overall, Hypothesis 4 was supported for Emotion Rejecting but was not supported for Emotion Coaching.

Research question 5: Emotion-related parenting and mother-child emotion talk. To test Hypotheses 5a and 5b associated with this research question, zero-order bivariate correlation analyses were conducted, along with partial correlation analyses with the following covariates: maternal age, social desirability, and children's gender.

Testing Hypotheses 5a and 5b. As shown in Table 20, zero-order bivariate correlational analyses were conducted between emotion-related parenting styles and mother-child emotion talk during the sharing of a wordless picture book. It was found that there was a positive relation between Emotion Coaching and the number of emotion segments spoken by a child, indicating that Emotion Coaching shared 15% of the variability in children's emotion talk. The relation between Emotion Coaching and children's proportion of emotion segments approached significance. The relation

Table 20

Two-Tailed Zero-Order Bivariate Correlations between Emotion-Related Parenting Styles and Mother-Child Emotion Talk ($N = 30$)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Coaching	–													
2. Rejecting	-.26	–												
3. Mo-Ch Total Segments	.09	-.03	–											
4. Mo-Ch Emotion Segments	.21	.11	.80***	–										
5. Mo-Ch Proportion Emotion Segments	.25	.21	-.13	.46**	–									
6. Mo-Ch Emotion Variety	-.10	.09	.42*	.61***	.42*	–								
7. Mo Total Segments	-.01	.01	.92***	.64***	-.26	.44*	–							
8. Mo Emotion Segments	-.08	.17	.75***	.73***	.10	.64***	.85***	–						
9. Mo Proportion Emotion Segments	.07	.34†	.01	.42*	.67***	.48**	.01	.45*	–					
10. Mo Emotion Variety	-.06	.22	.54**	.64***	.24	.84***	.63***	.82***	.58***	–				
11. Ch Total Segments	.23	-.08	.68***	.71***	.17	.18	.32	.21	.02	.11	–			
12. Ch Emotion Segments	.39*	-.01	.42*	.73***	.57***	.25	.08	.06	.17	.10	.83***	–		
13. Ch Proportion Emotion Segments	.35†	.12	-.08	.39*	.78***	.18	-.26	-.14	.24	-.03	.29	.71***	–	
14. Ch Emotion Variety	.25	-.04	.23	.53**	.56***	.29	-.06	.03	.27	.09	.65***	.74***	.68***	–

Note. Mo-Ch = Mother-Child; Mo = Mother; Ch = Child.
†$p \leq .10$. *$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

between Emotion Rejecting and mother-child emotion talk variables was not statistically significant.

To better examine the relation between emotion-related parenting styles and mother-child emotion talk, two-tailed partial correlation analyses were conducted, controlling for maternal age, social desirability, and children's gender. As shown in Table 21, the previous correlations were no longer statistically significant, indicating that neither Hypothesis 5a nor 5b was supported. However, a new finding emerged through this partial correlation analysis. Contrary to Hypothesis 5b, greater maternal Emotion Rejecting was associated with mothers' greater proportion of segments containing emotion talk.

Research question 6: Emotion-related parenting and children's persistence and frustration. The testing of Hypotheses 6a, and 6b involved both zero-order bivariate correlation analyses and partial correlation analyses. For partial correlation analyses, covariates included maternal age, social desirability, and children's gender.

Testing Hypotheses 6a and 6b. Children's emotion regulation was assessed through mothers' report as well as through an observational task (i.e., the Transparent Box Task). The same size requirement was not met for hierarchical MRA analyses, given that only 30 of the 168 children completed the Transparent Box Task. Instead, correlational analyses were conducted between emotion-related parenting styles and Transparent Box Task Frustration and Persistence scores. As shown in Tables 22 and 23, contrary to Hypotheses 6a and 6b, the relations between Transparent Box Task persistence and frustration variables and emotion-related parenting styles (i.e., Emotion Coaching and Emotion Rejecting) were not statistically significant, all ps > .05 in either the zero-order bivariate or partial correlations.

Table 21

Two-Tailed Partial Correlations between Emotion-Related Parenting Styles and Mother-Child Emotion Talk after Controlling for Maternal Age, Maternal Social Desirability, and Children's Gender ($N = 30$)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Coaching	–													
2. Rejecting	-.28	–												
3. Mo-Ch Total Segments	.01	-.02	–											
4. Mo-Ch Emotion Segments	.17	.15	.82***	–										
5. Mo-Ch Proportion Emotion Segments	.26	.31	-.17	.40*	–									
6. Mo-Ch Emotion Variety	-.07	.16	.50**	.61***	.33	–								
7. Mo Total Segments	-.10	-.01	.92***	.65***	-.33	.51**	–							
8. Mo Emotion Segments	-.11	.17	.81***	.72***	-.02	.64***	.89***	–						
9. Mo Proportion Emotion Segments	.16	.45*	.02	.38	.64***	.37	.02	.39*	–					
10. Mo Emotion Variety	-.04	.25	.63***	.63***	.12	.85***	.73***	.82***	.46*	–				
11. Ch Total Segments	.21	-.04	.66***	.76***	.23	.23	.32	.26	.02	.14	–			
12. Ch Emotion Segments	.35	.05	.38*	.72***	.60***	.25	.04	.05	.16	.09	.84***	–		
13. Ch Proportion Emotion Segments	.30	.21	-.13	.34	.79***	.14	-.34	-.22	.25	-.06	.33	.71***	–	
14. Ch Emotion Variety	.22	.13	.18	.53**	.58**	.25	-.12	.02	.23	.07	.66***	.75***	.72***	–

Note. Mo-Ch = Mother-Child; Mo = Mother; Ch = Child.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

Table 22

Two-Tailed Bivariate Correlations between Emotion-Related Parenting Styles and Child Persistence and Frustration (*N* = 30)

	1	2	3	4	5	6
1. Coaching	–					
2. Rejecting	-.17	–				
3. Child frustration	.04	.14	–			
4. Child persistence	.19	.11	-.73***	–		
5. Child persistence: Time on task	.06	.07	-.78***	.90***	–	
6. Child persistence: Time before stopping task	.01	.01	-.79***	.85***	.96***	–

Note. ***$p \leq .001$.

Table 23

Two-Tailed Partial Correlations between Emotion-Related Parenting Styles and Child Persistence and Frustration after *Controlling for Maternal Age, Social Desirability, and Children's Gender* ($N = 30$)

	1	2	3	4	5	6
1. Coaching	–					
2. Rejecting	-.25	–				
3. Child frustration	.13	.15	–			
4. Child persistence	.21	.16	-.71***	–		
5. Child persistence: Time on task	.01	.09	-.74***	.89***	–	
6. Child persistence: Time before stopping task	-.02	.07	-.76***	.82***	.97***	–

Note. ***$p \leq .001$.

Additional Analyses

Three additional analyses that were not hypothesis-driven but were nonetheless of interest were undertaken to inform future research. The sections that follow summarize findings from these three separate analyses.

Interactions between maternal generation status and ethnicity and children's gender on emotion-related parenting. Additional analyses were conducted to test the following research question: Is there an interaction effect between maternal generation status, maternal ethnicity, and children's gender on emotion-related parenting? To better understand the roles of key demographic variables on emotion-related parenting styles, two analysis of covariance (ANCOVAs) were conducted to test generation status x ethnicity x children's gender group differences in emotion-related parenting styles. Bootstrapping was used to obtain bias-corrected and accelerated (BCa) 95% bootstrap confidence intervals at 1000 samples.

In the first ANCOVA (Table 24), Emotion Coaching was analyzed using a 3 (generation status: first, second, third and beyond) x 2 (maternal ethnicity: European, non-European) x 2 (children's gender: male, female) design. Maternal age and social desirability were entered as covariates given that they were significantly associated with the dependent variables in previous analyses. Findings indicated that social desirability was significantly related to Emotion Coaching. The effect of children's gender on Emotion Coaching was approaching significance after controlling for the covariates. After controlling for covariates, a significant three-way interaction was found for the effect of maternal ethnicity x maternal generation status x children's gender on Emotion Coaching. For mothers of boys, Emotion Coaching scores were the highest for 2nd and 3rd generation mothers of European ethnicity. For mothers of girls, Emotion Coaching scores

Table 24

ANCOVA for Generation Status x Ethnicity x Children's Gender with Emotion Coaching as the Dependent Variable (*N* = 168)

	SS	*df*	*df*$_{error}$	*MS*	*F*	*p*	partial η²
Maternal age	.14	1	147	.14	.78	.378	.01
Social desirability	**1.16**	**1**	**147**	**1.16**	**6.45**	**.012**	**.04**
Maternal ethnicity	.34	1	147	.34	1.87	.174	.01
Maternal generation status	.13	2	147	.07	.37	.694	.01
Children's gender	.50	1	147	.50	2.79	.097	.02
Maternal ethnicity x generation status	.02	2	147	.01	.04	.959	.01
Maternal ethnicity x children's gender	.14	1	147	.14	.79	.375	.01
Maternal generation status x children's gender	.49	2	147	.25	1.37	.257	.02
Maternal ethnicity x generation status x children's gender	**1.09**	**2**	**147**	**.55**	**3.03**	**.051**	**.04**

Note. Covariates included maternal age and social desirability. Maternal ethnicity was coded as follows: 0 = European and 1 = Non-European. Maternal generation status in Canada/U.S. was coded as follows: 1 = 1st and 1.5th generation, 2 = 2nd generation, 3 = 3rd generation and beyond. Children's gender was coded as follows: 1 = boy, 2 = girl.

were the highest for first generation mothers of European ethnicity. Figures 7a and 7b

show the results for mothers of sons and daughters, respectively, with Emotion Coaching

as the dependent variable.

In the second ANCOVA (Table 25), Emotion Rejecting was analyzed using a 3

(generation status) x 2 (maternal ethnicity) x 2 (children's gender) ANCOVA with

maternal age and social desirability as covariates. Results indicated that covariate

maternal age was significantly related to Emotion Rejecting. After controlling for

covariates, there were main effects for both maternal ethnicity and generation status on

Emotion Rejecting. Two interactions were statistically significant after controlling for

covariates. There was a two-way interaction for the effect of maternal ethnicity x

maternal generation status on Emotion Rejecting. Lastly, there was a two-way interaction

for the effect of maternal ethnicity x children's gender on Emotion Rejecting. Among

mothers of boys, Emotion Rejecting scores were the highest for 1st and 2nd generation

mothers of non-European ethnicity. For mothers of girls, Emotion Rejecting scores were

the highest for second generation European mothers and first generation non-European

mothers. Figures 8a and 8b show the results for mothers of sons and daughters,

respectively, with Emotion Rejecting as the dependent variable.

Relations between children's emotion regulation scores across multiple

methods. Children's emotion regulation was examined in the present study through both

mothers' report on the Emotion Regulation Checklist (ERC), as well as through a

behavioural measure (i.e., the Transparent Box Task). To better understand the role of

children's persistence and frustration as observed during the Transparent Box Task, a few

additional analyses were conducted.

a) Emotion Coaching of Sons

b) Emotion Coaching of Daughters
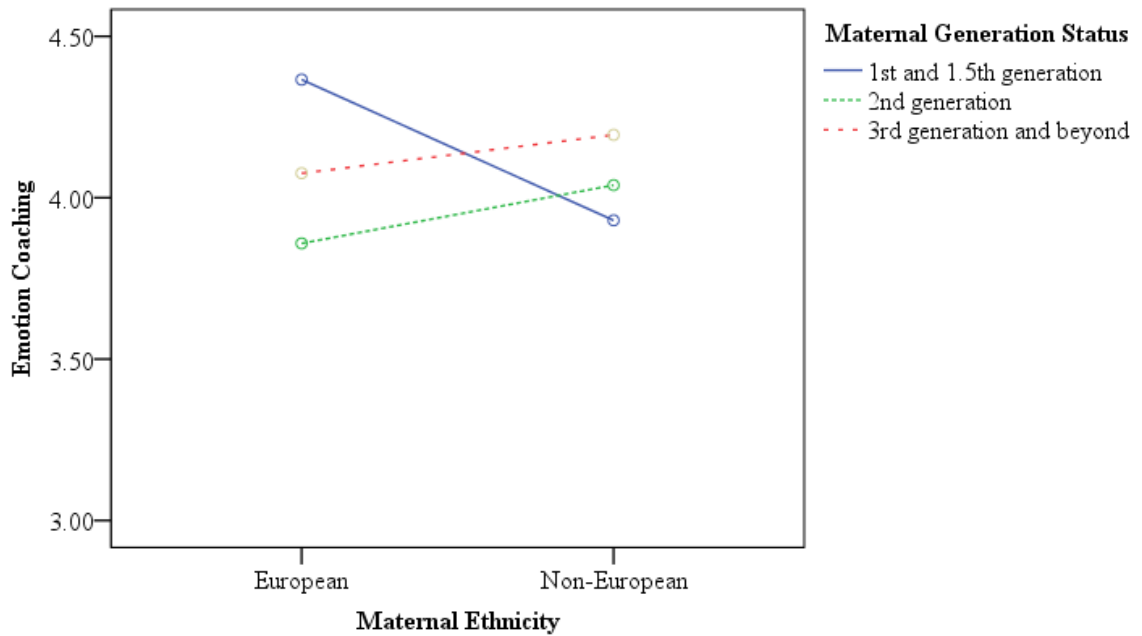
Figure 7. Results of ANCOVAs with Emotion Coaching as the dependent variable, after controlling for maternal age and social desirability.

Table 25

ANCOVA for Generation Status x Ethnicity x Children's Gender with Emotion Rejecting as the Dependent Variable (N = 168)

	SS	df	df_{error}	MS	F	P	partial η^2
Maternal age	**2.89**	**1**	**147**	**2.89**	**15.22**	**.000**	**.09**
Social desirability	.02	1	147	.02	.11	.738	.01
Maternal ethnicity	**1.18**	**1**	**147**	**1.18**	**6.23**	**.014**	**.04**
Maternal generation status	**1.52**	**2**	**147**	**.76**	**4.00**	**.021**	**.05**
Children's gender	.18	1	147	.18	.94	.335	.01
Maternal ethnicity x generation status	**1.41**	**2**	**147**	**.71**	**3.72**	**.027**	**.05**
Maternal ethnicity x children's gender	**1.76**	**1**	**147**	**1.76**	**9.27**	**.003**	**.06**
Maternal generation status x children's gender	.06	2	147	.03	.15	.858	.01
Maternal ethnicity x generation status x children's gender	.51	2	147	.26	1.35	.262	.02

Note. Covariates included maternal age and social desirability. Maternal ethnicity was coded as follows: 0 = European and 1 = Non-European. Maternal generation status in Canada/U.S. was coded as follows: 1 = 1st and 1.5th generation, 2 = 2nd generation, 3 = 3rd generation and beyond. Children's gender was coded as follows: 1 = boy, 2 = girl.

a) Emotion Rejecting of Sons
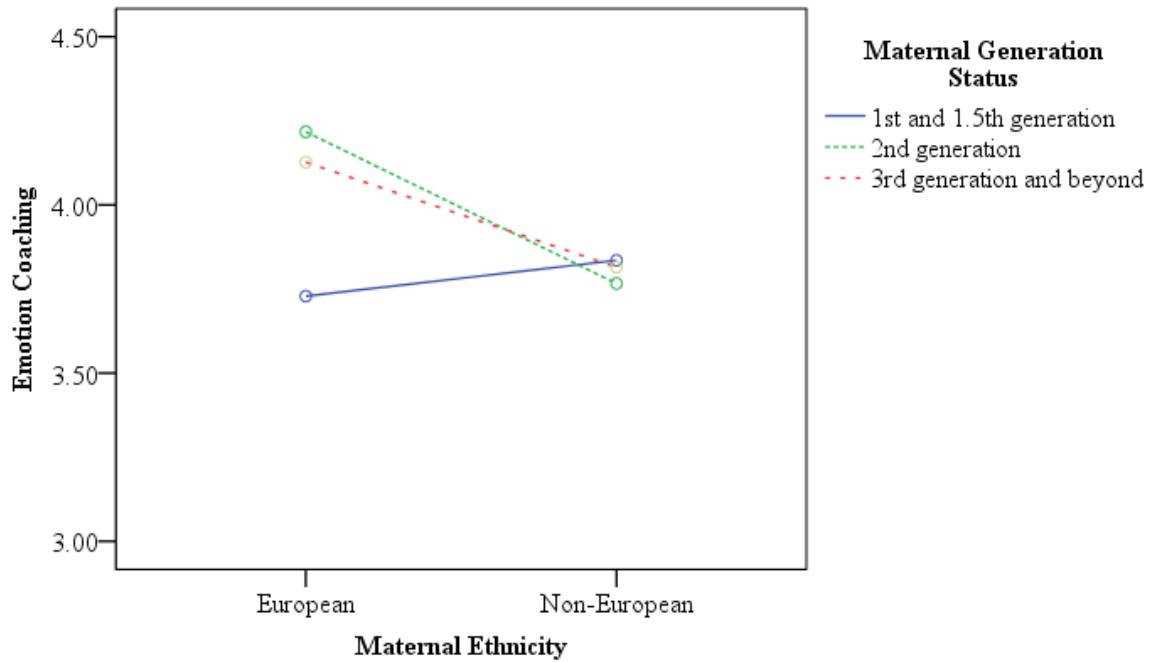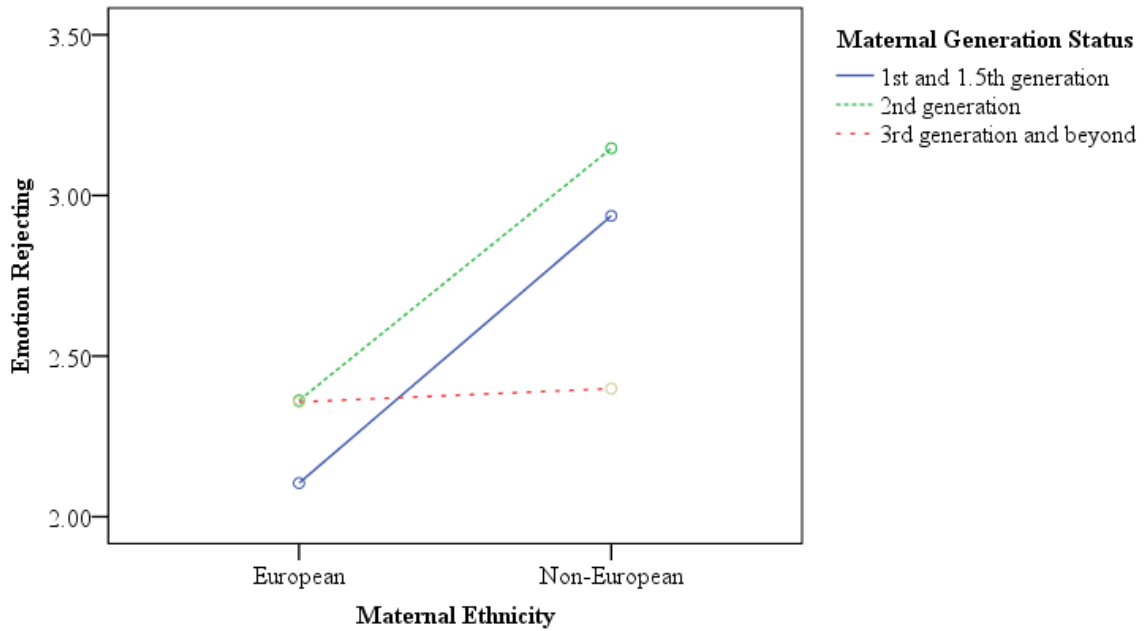

b) Emotion Rejecting of Daughters
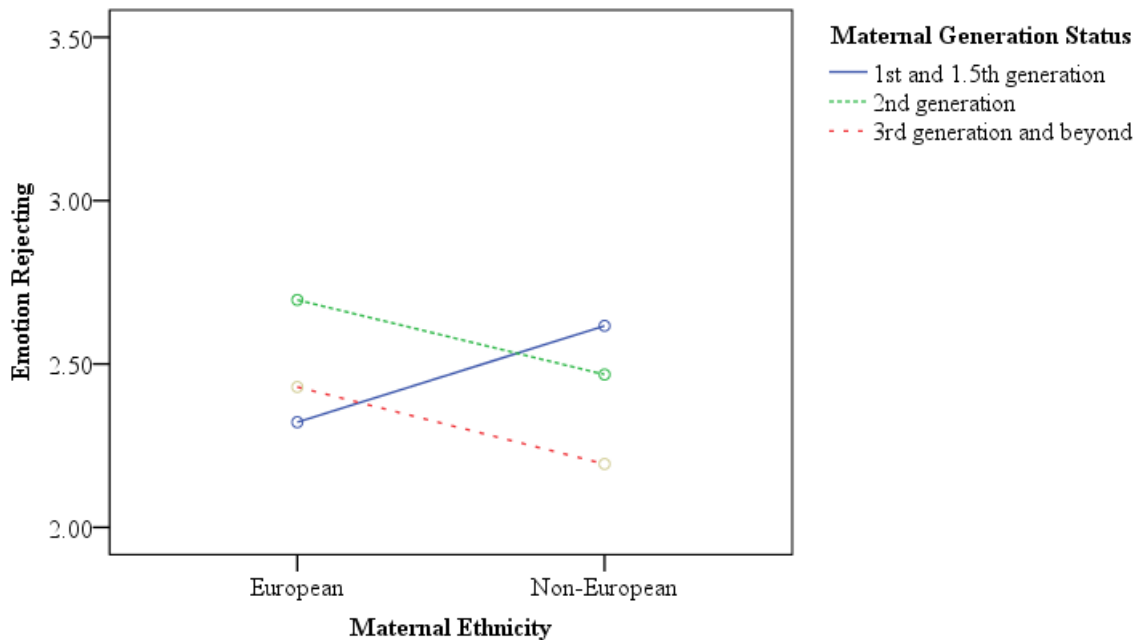
Figure 8. Results of ANCOVAs with Emotion Rejecting as the dependent variable, after controlling for maternal age and social desirability.

First, a zero-order correlation analyses (Table 26) were conducted between the ERC scores (i.e., ERC Composite, Lability/Negativity, and Emotion Regulation) and the Transparent Box Task scores (i.e., Persistence and Frustration). Transparent Box Task Persistence ratings were not significantly related to any of the ERC scores. However, it was found that greater Emotion Regulation Composite scores were associated with lower Transparent Box Task Frustration scores. Higher scores on the Lability/Negativity subscale were related to higher Frustration scores during the Transparent Box Task. These analyses were re-examined after accounting for covariates (Table 27). The relation between Lability/Negativity and Transparent Box Task Frustration remained statistically significant after controlling for maternal age, social desirability, and children's gender. The relation between Emotion Regulation Composite and Transparent Box Task Frustration was approaching significance, with Emotion Regulation Composite sharing 13.7% of the variability in Transparent Box Task Frustration. Thus, it appears that mothers' reports of their children's emotion regulation was supported by observational data to some extent.

Relations between children's persistence, frustration, and emotion talk. Finally, the relations between Transparent Box Task scores and emotion talk (i.e., proportion of mother-child, mother, and child segments that contain emotion language) during the storytelling task were examined. Refer to the zero-order correlation matrix for Phase 2 variables (Table 8) as previously displayed. To reiterate those findings, greater Transparent Box Task Persistence scores were related to greater mother-child emotion talk, greater mother emotion talk, and greater child emotion talk. Transparent Box Task Frustration scores were unrelated to all emotion talk variables.

Table 26

Two-Tailed Zero-Order Bivariate Correlations between Emotion Regulation Checklist Variables and Transparent Box Task Variables ($N = 30$)

	Persistence	Frustration
ERC Composite	.06	-.37*
Lability/Negativity	-.10	.40*
Emotion Regulation	-.11	-.03

Note. ERC = Emotion Regulation Checklist.
*$p < .05$.

Table 27

Two-Tailed Partial Correlations between Emotion Regulation Checklist Variables and Transparent Box Task Variables after Controlling for Maternal Age, Maternal Social Desirability, and Children's Gender ($N = 30$)

	Persistence	Frustration
ERC Composite	.08	-.37†
Lability/Negativity	-.14	.45*
Emotion Regulation	-.16	.12

Note. ERC = Emotion Regulation Checklist.
†$p \leq .10$. *$p < .05$.

These analyses were re-examined after accounting for covariates (Table 28). After controlling for maternal age, social desirability, and children's gender, greater Transparent Box Task Persistence scores remained related to greater mother-child emotion talk, greater mother emotion talk, and to greater child emotion talk during the storytelling task. Relations between Transparent Box Task Frustration and emotion talk remained statistically insignificant.

Qualitative Analyses

Qualitative data preparation. A thematic analysis was conducted on mothers' four open-ended responses. First, identifying information was removed from the responses and data were entered into Dedoose Version 7.1.3 (2016), which is a web-based application to assist with organizing and coding qualitative research data. To begin, four coders (female undergraduate Honours psychology students) were trained in thematic analysis following the methodology by Braun and Clarke (2006). To conduct a thematic analysis, coders familiarized themselves with the data, generated initial codes, searched and reviewed for themes, and defined and named themes (Braun & Clarke, 2006).

Coders were trained in using Dedoose and practiced using the application by coding 16 of the responses from the pilot study. Once trained, each coder independently conducted a thematic analysis on one of the four open-ended responses. The primary researcher provided support to coders when defining and naming themes. All coders were blind to the study hypotheses, information about the mothers, their children, and their scores on other measures. However, coders were aware of the children's gender based on the context of the open-ended responses. Responses were coded out of context (i.e., coders did not see mothers' other responses). Coding was also data-driven; that is, an inductive approach was used in which themes were not selected to fit pre-conceptions

Table 28

Two-Tailed Partial Correlations between Children's Persistence and Frustration and Mother-Child Emotion Talk after Controlling for Maternal Age, Maternal Social Desirability, and Children's Gender (*N* = 30)

	Persistence	Frustration
Mo-Ch Proportion Emotion Segments	.43*	-.06
Mo Proportion Emotion Segments	.45*	-.13
Ch Proportion Emotion Segments	.42*	-.19

Note. Mo-Ch = Mother-Child; Mo = Mother; Ch = Child.
*p < .05.

or theory (Braun & Clarke, 2006). In a few instances, mothers did not provide a response to the questions and were, therefore, not coded (i.e., three responses for Question 1, one response for Question 2, four responses for Question 3, and three responses for Question 4). Thus, the total number of codable responses varied slightly across the four questions.

Dedoose has a feature called *Training Center* which allows for independent raters to apply codes for a random set of excerpts for the purpose of calculating inter-rater reliability. During the exercise, the rater is blind to the ratings from the other coder. Once the coding is complete, the coder receives a results page that includes a Cohen's kappa coefficient for code application. In the present study, inter-rater reliability as indicated by a pooled kappa, based on 20% of the responses for each question, ranged from 71.8% to 89.0%. Thematic analysis results for each of the four questions are now presented. For presentation purposes, themes have been grouped into organizational domains, as has been done by other authors who used thematic analysis (e.g., Zechella & Raval, 2016). After each of the four sections, there is a table that contains a summary of the organizational domains and themes, as well as the proportion of mothers who identified with each theme. Four primary groups were formed based on mothers' ethnicity and generation status in Canada/U.S.: Non-European first generation ($n = 34$; 20.2%), Non-European Canada/U.S.-born ($n = 20$; 11.9%), European first generation ($n = 6$; 3.6%), and European Canada/U.S.-born ($n = 108$; 64.3%). Based on these proportions, it is clear that the maternal ethnicity by generation status group sizes were unequal. Therefore, it is important to interpret results with caution given that proportions are based on a small number of mothers in some groups. In text, findings based on the entire study sample are reported, and separate proportions by group are also reported when frequency patterns were observed. Many qualitative researchers (e.g., Braun & Clarke, 2013),

affirm that qualitative results have great value on their own, and the inclusion of

frequency counts in reporting is not thought to provide greater meaning. Braun and

Clarke (2006) indicated that the prevalence of a theme, whether the theme occurs

frequently or infrequently, is far less important than the fact that the theme has captured

an important link to the research question. However, within thematic analysis results,

proportions are included to demonstrate trends for the pervasiveness of themes and are

not meant to draw formal conclusions.

To illustrate each of the main themes, select exemplary quotes are provided. In

the interest of brevity, there were times in which excerpts from a longer response were

provided. Quoted statements come directly from mothers' typed responses but have been

de-identified as appropriate to protect their confidentiality. The qualitative research

questions were as follows: (1) How are mothers' values related to their emotion-related

parenting practices? (2) How are mothers conceptualizing their children's temperament as

compared to same-age peers? (3) How are children's temperaments related to their

mothers' emotion-related parenting practices? (4) How are mothers' emotion-related

parenting practices related to children's socio-emotional development?

Coding of question 1: Cultural values and emotion-related parenting. A

thematic analysis of mothers' responses to Question 1 generated 16 themes that were

organized into 7 domains: Values related to emotions; values of respect, obedience,

politeness, and discipline; values of freedom, independence, self-confidence, and

achievement; familial values; relationship values; values related to prayer, religion,

spirituality, and morals; and socialization of emotion-related parenting practices (Table

29). In the overall sample, 15.2% of the mothers in the sample expressed that their

cultural values have little to no association with their emotion-related parenting. There

Table 29

Cultural Values and Emotion-Related Parenting: Number and Proportion of Mothers Identifying with Themes

Domains and Themes	Non-Euro 1st Generation[a] n (%)	Non-Euro CDN/US Born[b] n (%)	Euro 1st Generation[c] n (%)	Euro CDN/US Born[d] n (%)	Full Sample[e] N (%)
Values related to emotions					
Emotional expression and discussion	9 (26.5)	2 (10.5)	2 (33.3)	24 (22.9)	37 (22.6)
Regulation and control of emotions	5 (14.7)	2 (10.5)	1 (16.7)	15 (14.3)	23 (14.0)
Empathy and understanding of others' emotions	1 (2.9)	1 (5.3)	0 (0)	10 (9.5)	12 (7.3)
Values of respect, obedience, politeness, and discipline					
Respect, obedience, and politeness	10 (29.4)	6 (31.6)	1 (16.7)	22 (21.0)	39 (23.8)
Discipline when child is disrespectful	4 (11.8)	2 (10.5)	0 (0)	3 (2.9)	9 (5.5)
Values of freedom, independence, self-confidence, and achievement					
Freedom, independence, self-confidence, and self-direction	0 (0)	2 (10.5)	2 (33.3)	8 (7.6)	12 (7.3)
Academics, education, and achievement	0 (0)	1 (5.3)	1 (16.7)	2 (1.9)	4 (2.4)
Familial values					
Family unity and interdependence	1 (2.9)	2 (10.5)	1 (16.7)	7 (6.6)	11 (6.7)
Children are to be protected	4 (11.8)	0 (0)	0 (0)	4 (3.8)	8 (4.9)
Relationship values					
Honesty and trust	4 (11.8)	1 (5.3)	1 (16.7)	4 (3.8)	10 (6.1)
Love	1 (2.9)	0 (0)	0 (0)	6 (5.7)	7 (4.3)
Prosocial behaviour	0 (0)	2 (10.5)	0 (0)	4 (3.8)	6 (3.7)
Values related to prayer, religion, spirituality, and morals.					
Prayer, religion, faith, and spirituality	2 (5.9)	1 (5.3)	0 (0)	5 (4.8)	8 (4.9)
Moral values	1 (2.9)	1 (5.3)	0 (0)	5 (4.8)	7 (4.3)
Socialization of emotion-related parenting practices					
Parenting practices can differ from what is learned from parents	4 (11.8)	2 (10.5)	0 (0)	9 (8.6)	15 (9.1)
Parenting practices are learned from parents	0 (0)	1 (5.3)	1 (16.7)	11 (10.5)	13 (7.9)
Cultural values have little to no influence on parenting	6 (17.6)	3 (15.8)	0 (0)	16 (15.2)	25 (15.2)
Cultural values greatly guide parenting	5 (14.7)	2 (10.5)	0 (0)	4 (3.8)	11 (6.7)
Cultural values not practiced	2 (5.9)	1 (5.3)	0 (0)	9 (8.6)	12 (7.3)
Unsure if cultural values have influenced parenting	0 (0)	1 (5.3)	0 (0)	7 (6.6)	8 (4.9)

Note. [a] = 34 responses; [b] = 19 responses; [c] = 6 responses; [d] = 105 responses; [e] = 164 total responses; κ = .89.

were mothers in this group who reported no relation between the values of their cultural

background and their own emotion-related parenting; some further described that their

parenting approaches actually oppose their cultural upbringing. A first generation

Caribbean mother indicated that she intentionally parents in a way that contrasts with the

"norms" from her heritage culture:

> None. My cultural values with regards to anger, sadness, fear, etc in children are
> very destructive to a human being. I try to ignore or look past what the 'norm'
> is/was in my home country. Children are/was seen as grunts to be ignored, told
> what to do, think and feel…very psychologically unhealthy.

In addition, 6.7% of the mothers specified that their cultural values greatly guide

their emotion-related parenting. For example, a European Canadian mother (second

generation) stated:

> I believe they are the centre of our teaching. For instance, in the case of anger we
> want to own the emotions that we have. They are true, and have a purpose. It's
> our actions and responses that we seek to control, not the feelings themselves.

In contrast, there were some mothers (7.3%) who did not believe that they have

particular values. A European Canadian mother (beyond 3rd generation), reported:

> I don't think there has been any cultural influence on my emotion-related
> parenting. I think I've just been influenced more by societal expectations to act in
> a legal and respectful way to honour ourselves and others.

Further, there were mothers (4.9% of the sample) who were unsure if their cultural

values are related to their emotion-related parenting. Nonetheless, mothers in the study

provided rich descriptions of their cultural values and the association between these

values and their emotion-related parenting. Mothers further explained the values they

strive to uphold through their emotion-related parenting.

Values related to emotions. Three themes emerged that highlighted values related

to emotions: emotional expression and discussion, regulation and control of emotions,

and empathy and understanding of others' emotions.

Emotional expression and discussion. Mothers across all groups described that

they value emotional expression (e.g., not holding emotions in) and discussion (e.g.,

emotion talk, examining the causes of the emotion). This theme was coded in 22.4% of

the excerpts. For instance, a European Canadian mother (third generation) stated:

> Emotions need to be expressed and should not be held in. We should think about
> what, why, how our emotions affect us and others.

Also coded under this theme was that some mothers encouraged emotion talk but

reported that they caution their children about the appropriate expression of negative

emotional states, such as anger:

> My cultural values have a huge role in my emotion related parenting. I grew up in
> a family where feelings were not valued. If we cried because we were upset, we
> were referred to as over emotional or over sensitive and were ignored. I
> encourage my child to tell me when he is sad and we talk about why he's sad. I
> also tell him that it's okay to feel angry, but how we handle our anger determines
> the person we are (South Asian Canadian mother, first generation).

Regulation and control of emotions. Approximately 14% of the mothers

highlighted the importance of teaching their children about the regulation and control of

emotions in a way that is consistent with their cultural values. They were taught that

emotions must be either controlled or only expressed in positive or appropriate ways.

The following excerpt is an example of how many mothers spoke about the regulation

and control of emotions while also clarifying that they do not dismiss, discourage, or

reject their children's experience of negative emotions.

> I feel as an Indian, it is my responsibility to teach my kids how to handle
> emotions. I always tell my kids that it is ok to get sad, angry or to cry and it is the
> part of growing old and understanding their feelings. I never ask my kids not to

get upset or sad, it is a very important emotions [*sic*] that needs to be shown but in a very controlled way. (South Asian Canadian mother, first generation).

Empathy and understanding of others' emotions. Mothers (7.3%) also expressed their hopes to teach their children to consider how their emotions may impact others. Such reports often included an acknowledgment of the regulation or control of emotions, which is why these themes have been organized under the same domain. Of the 12 mothers who reported empathy as one of their cultural values, 10 were European mothers born in Canada/U.S. For example,

> I think it is important for children to be empathetic, caring, and productive members of society. As such, my children are encouraged to think about their actions and how they will impact others. I encourage my children to experience their emotions, and try to understand why they are feeling the way they are, but also to realize that their reactions need to be appropriate in social situations. Example: it's OK to be angry, but you may not hit your friend. (European Canadian mother, third generation).

Values of respect, obedience, politeness, and discipline. This domain includes themes under the umbrella of respect for others. When socializing emotions, mothers promote the value of respect for others.

Respect, obedience, and politeness. Within this theme, mothers highlighted that respect is expected during emotion discussion or within the general context of parenting. The concept of respect varied from mother-to-mother, but often included being polite, not talking back, doing as asked, obeying elders, and respecting others and their feelings. This theme occurred in approximately 1/3 of the responses from Non-European mothers and 23.8% of the entire sample. Thus, the value of respect appears to be of utmost significance in the emotion-socialization process for many mothers.

> I was raised to respect my elders and not talk back. To talk with respect. However, I feel that my daughter's personality is similar to mine so she knows when she has to push through my demand to let me know how she's really feeling. I expect politeness and manners, deference to elders, valuing titles because they are

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meaningful (e.g. Aunt, Uncle, etc.). (Chinese-European Canadian mother, third generation)

Discipline when child is disrespectful. Related to the theme of respect, 5.5% of the mothers indicated that they will discipline or punish their children if negative emotions are expressed in a disrespectful manner, which is not consistent with their cultural values. In this theme, mothers have created a clear boundary about the manner in which negative emotions can be expressed. It is important to note that the mothers are not completely disapproving or rejecting the experience of negative emotions; they are instead disciplining the child for the manner in which the negative emotion is expressed or displayed. For example, a first generation African Canadian mother reported:

> My cultural values do influence my emotion-related parenting practice because in my culture children should be taught to not express their anger towards parents therefore if my child expresses anger in a negative way to me he is usually put in time out and when he calms down has to politely explain to me why he is angry with me.

Values of freedom, independence, self-confidence, and achievement.

Freedom, independence, self-confidence, and self-direction. Within this theme, 7.3% of the mothers described that they aim to foster individualistic (e.g., self-sufficiency) and intrapersonal values.

> I value freedom so I try to let him experience things on his own, e.g. I allow him to play outside on the street without constantly watching him. I let him explore and try new things. (European Canadian mother, first generation)

Academics, education, and achievement. Among a small portion of the sample (2.4%), mothers also described that academics, education, and achievement are areas of priority in parenting.

> Like my mother, I want to be stricter in terms of academic achievement in later schooling my daughter will experience. I want her to be able to achieve a standard of success, like it was taught to me. (European Canadian mother, second generation)

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Familial values. Familial values included themes of family unity and interdependence, as well as protecting children.

Family unity and interdependence. For 6.7% of mothers, familial support was promoted as a cultural value. This includes ensuring that family members are there for one another, keep connected, and work together to support their children's well-being.

> Family is everything, and maintaining a good foundation and stability for your family financially, emotionally, physically. The family dynamics are very important. A healthy and respectable family is very important. (Middle Eastern Canadian mother, first generation)

Children are to be protected. In some responses, mothers described that through their emotion-related parenting practices, their duty is to keep their children safe and to rescue them when they are struggling. This theme was coded among 11.8% of responses from non-European first generation mothers but only 4.9% of the entire sample. A South Asian mother who is a first generation Canadian reported:

> Living in Canada it's very important for me to teach my child our culture and tradition. I am very protective of my child. I accompany her to all places. She gets the best of everything and is grounded too when she misbehaves.

Relationship values. Relationship values of honesty and trust, love, and prosocial behaviour were also promoted by mothers through their emotion-related parenting.

Honesty and trust. Within the context of emotion-related parenting, 6.1% of mothers aimed to maintain honesty and trust in the relationship at all times.

> To always be honest & tell the truth even when she's worried she might get in trouble. (European Canadian mother, third generation)

Love. Within the overall sample, 4.3% of mothers described that love is a foundation of their emotion-related parenting. Excerpts coded under this theme included descriptions of the importance of mother-child love and mothers' hopes for children to experience loving relationships.

> To know that she's always loved no matter what her choices are. I may not always agree with her choices but no matter what she does, I will always love her. I tell her this daily as I want her to know that there is nothing in the world she could do that would stop me from loving her. I hope that she develops self-confidence as a result of this. (European Canadian mother, third generation)

Prosocial behaviour. Mothers also described how their values in friendship, kindness, inclusion of others, and supporting the needs of others can play roles in their emotion-related parenting. This theme did not emerge for either of the first-generation groups but was coded for Canada/U.S.-born mothers who were non-European (10.5%) and European (3.8%). In the following quote, the mother describes that she teaches her children about selflessness:

> I try to teach them that it's not all about what's best for the individual, but what's best for everyone. (Middle Eastern Canadian mother, second generation)

Values related to prayer, religion, spirituality, and morals.

Prayer, religion, faith, and spirituality. According to 4.9% of the mothers, values of prayer, religion, faith, and spirituality are promoted through their emotion-related parenting approaches. As part of their emotion-related parenting, mothers emphasize the importance of worship, prayer, spiritual values, meditation, and deep breathing.

> Our faith has strongly influenced how I handle situations... Sometimes I may lose my patience, I may feel sad, angry, frustrated... But Faith has been so powerful in our home... I say my prayers and I regain self control and patience. With this, so has my child. He too has learned that it is okay to feel angry and frustrated... And he too will pray for strength and soon feels a sense of relief and regains his sense of self. We are very in touch with our spiritual belief system. (European Canadian mother, third generation)

Moral values. A variety of moral values were highlighted by 4.3% of the mothers. For instance, mothers encouraged their children to: avoid blindly following authority; never throw the first punch; never use violence to solve anything; recognize the difference between right and wrong; develop a strong moral conscience overall.

My cultural values have help with parenting by teaching kids right and wrong. (European Canadian mother, third generation)

Socialization of emotion-related parenting practices. Mothers also provided reflections regarding how they feel their own emotion-related parenting practices correspond to the way they were parented in childhood. Some mothers acknowledged that their approaches differ from their own parents' approaches, while others feel their emotion-related parenting is related to the way they were parented.

Parenting practices can be different than what is learned from parents. Approximately 9% of the mothers described that they are utilizing emotion-related parenting styles that differ from the ways they were parented. Within the excerpts coded under this theme, mothers described ways in which their family's cultural values were associated with emotion-related parenting styles that were ineffective or, in some cases, harmful. These mothers described that they feel it is important that their approaches differ greatly from the approaches used by their own parents. In some cases, this novel approach has resulted in an inter-generational "clash" of emotion-related parenting styles.

> One thing that stands out for me is that my family was quite stoic. Large expressions of emotion, especially "negative" emotions such as anger, were not welcome from me - especially, I suspect, since I was the female child. When there was anger in my home as a child, usually from my father, it was frightening to me. One of my personal journeys has been to learn to deal with anger in a healthy way as an adult - to express it properly (in a non-hurtful, constructive, controlled way). Now that I have young children, I want them to be able to express all of their emotions and not internalize them. I want them to understand when things are not their fault, and how to be responsible when things are their fault. (Chinese-Caribbean Canadian mother, second generation)

Emotion-related parenting practices are learned from parents. In contrast to the previous theme, 7.9% of the mothers felt it is important that their emotion-related parenting practices are consistent with the approaches used by their own parents. As shown in the following excerpt, in some instances mothers maintain their family's

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emotion-related parenting practices even though they question the efficacy of their

approach.

> It influences greatly, because my parents were never emotionally open with me.
> So I find myself obligated to do the same, although it doesn't work. (Chinese
> Canadian mother, second generation)

Coding of question 2: Children's temperament. Though children's

temperaments were rated through the CBQ-VSF, a qualitative examination of children's

temperament was also conducted to obtain mothers' further descriptions. The initial

question posed to mothers uses the word "personality" as opposed to "temperament",

given that the former appeared to be a layperson's term for this construct. In examining

these qualitative responses, it was apparent that mothers' descriptions went beyond the

major areas of temperament that are assessed through most questionnaires.

The purpose of obtaining these responses was to better characterize the sample

and to better understand Question 3 in which mothers described the relation between their

children's personalities and their emotion-related parenting practices. A thematic

analysis of mothers' descriptions of their children's temperament traits produced 20

themes that were organized into 5 domains: extraverted, emotionally labile, inhibited,

prosocial, and cognitive. These organizational domains and themes are next described,

along with a mother's statement to illustrate each theme (Table 30).

Extraverted traits. Within this domain were the following themes: social, happy,

active, and bold.

Social. Nearly 40% of the mothers discussed their children's temperament as

social, friendly, bubbly, or outgoing. For example:

Table 30

Children's Temperament: Number and Proportion of Mothers Identifying with Themes

Domains and Themes	Non-Euro 1st Generation[a] n (%)	Non-Euro CDN/US Born[b] n (%)	Euro 1st Generation[c] n (%)	Euro CDN/US Born[d] n (%)	Full Sample[e] N (%)
Extraverted traits					
Social	13 (38.2)	7 (36.8)	1 (16.7)	44 (41.1)	65 (39.1)
Happy	7 (20.6)	4 (21.1)	0 (0)	13 (12.1)	24 (14.5)
Active	4 (11.8)	4 (21.1)	1 (16.7)	21 (19.6)	30 (18.1)
Bold	0 (0)	4 (21.1)	0 (0)	6 (5.6)	10 (6.0)
Emotionally labile traits					
Short-tempered	2 (5.9)	2 (10.5)	0 (0)	12 (11.2)	16 (9.6)
Emotional	0 (0)	1 (5.3)	0 (0)	13 (12.1)	14 (8.4)
Sensitive	1 (2.9)	1 (5.3)	1 (16.7)	10 (9.4)	13 (7.8)
Inhibited traits					
Reserved	9 (26.5)	5 (26.3)	1 (16.7)	21 (19.6)	36 (21.7)
Cautious	5 (14.7)	2 (10.5)	1 (16.7)	20 (18.7)	28 (16.9)
Prosocial traits					
Compassionate	1 (2.9)	2 (10.5)	1 (16.7)	18 (16.8)	22 (13.3)
Compliant	4 (11.8)	2 (10.5)	3 (50.0)	14 (13.1)	23 (13.9)
Loving	3 (8.8)	2 (10.5)	1 (16.7)	7 (6.5)	13 (7.8)
Empathic	0 (0)	0 (0)	0 (0)	10 (9.3)	10 (6.0)
Cognitive traits					
Intelligent	4 (11.8)	2 (10.5)	0 (0)	13 (12.1)	19 (11.4)
Mature	3 (8.8)	2 (10.5)	1 (16.7)	12 (11.2)	18 (10.8)
Articulate	3 (8.8)	3 (15.8)	0 (0)	9 (8.4)	15 (9.0)
Persistent	2 (5.9)	1 (5.3)	1 (16.7)	10 (9.3)	14 (8.4)
Attentive	2 (5.9)	0 (0)	1 (16.7)	5 (4.7)	8 (4.8)
Creative	1 (2.9)	3 (15.8)	0 (0)	3 (2.8)	7 (4.2)
Inquisitive	0 (0)	0 (0)	1 (16.7)	5 (4.7)	6 (3.6)

Note. [a] = 34 responses; [b] = 19 responses; [c] = 6 responses; [d] = 107 responses; [e] = 166 total responses; κ = .73.

> My daughter is super outgoing. She is often the friendliest person in a room. When she walks into her classroom all the kids yell her name. (European Canadian mother, third generation)

Happy. Happiness was a child temperament trait that was described by 14.5% of the mothers. Within this theme, children were also described as happy, cheerful, or pleasant.

> She is quite happy, does not become sad often and if she does it does not last long. (Aboriginal Canadian mother, beyond third generation)

Active. Eighteen percent of the mothers described their child's activity level energetic, a "handful", loud, or very active.

> My son is outgoing but at times he can go overboard and become to [*sic*] loud and hyperactive when playing with other children. (European American mother, beyond third generation).

Bold. Children who were described as brave, daring, fearless, impulsive, or not afraid were coded under the Bold theme. This trait was coded across 6% of the mothers' responses, all of which were Canada/U.S.-born mothers.

> My son has no fear. He is very active and brave. He's not afraid to try new things and he's a definite leader. (European Canadian mother, third generation)

Emotionally labile traits. Emotional lability involves a marked fluctuation of mood and encompassed a variety of themes as is next described.

Short-tempered. Nearly 10% of the children were described by their mothers as easily upset, easily frustrated, moody, irritable, or reactive. With a short-tempered temperament, these children tended to be outwardly angry or snappy. At times, the children were reported to show outbursts or tantrums that were difficult to predict.

> He is often wild or angry or brooding, but usually only sad when he gets hurt. He often has a tantrum if one or more of his immediate needs has not been met (has to use the toilet, is thirsty, hungry, cold, hot, tired.). (European Canadian mother, third generation)

Emotional. Children who were described as emotional tended to display very strong, "big" emotions. This trait was described by 8.4% of the mothers, all of whom were Canada/U.S.-born. For example, a European Canadian mother (beyond third generation) described:

> My son is more emotional than most children his age. He gets very upset by things that he feels are sad- dead animals on roads, sad television shows, sad books or stories. He sometimes cries when he sees home videos because he thinks he was all alone when the video was taped.

Sensitive. In 7.8% of cases, children who were described easily offended or sensitive.

> I refer to my son as a "sensitive-soul." Much more sensitive than other children his age. (European Canadian mother, beyond third generation)

Inhibited traits. Inhibited traits, including reserved and cautious behaviour, were coded as themes within this domain.

Reserved. Excerpts in which a child was described as shy, quiet, withdrawn, timid, slow-to-warm-up, or shy were coded under the Reserved theme. The Reserved theme is differentiated from the Cautious theme in that children whose social nature is timid were coded as Reserved; in contrast, children who were described as anxious or fearful in general were coded as Cautious. In 21.7% of cases, children were described as reserved or slow-to-warm up; that is, their apprehension is contextual and usually diminishes with time. The Reserved theme was coded in over 26% of the responses from Non-European mothers, both first generation and Canada/U.S.-born. In the following excerpt, for instance, the child of a first generation Chinese-Canadian mother is clearly described as shy and apprehensive to join activities. Note that in the excerpt that follows, Cautious was coded as well.

In comparison to other children, he is more cautious and vigilant (e.g., fearful of strangers, loud noises, physical activities that are "dangerous"). In a related way, he is shy; he rarely initiates conversation with strangers and often becomes very fearful when strangers talk to him; he rarely initiates to make friends with children of his own age. In comparison to other children of his age, he also appears to be more introspective and observant. Often before engaging in any new activity, he would observe for a while before trying.

Cautious. This theme included children who were described as cautious, anxious, careful, fearful, or hypervigilant. The Cautious theme was coded in 16.9% of the mothers' responses. In the following excerpt, the child is afraid across multiple contexts and her cautious nature best describes her temperament:

> I always try to set her up for success but she is a child that will still hide behind me when a family member she's seen numerous times and whom loves her dearly shows up. If there is no warning or time for her absorb what could happen, or what the expectations will be of her, she becomes a turtle for at least 2-3 hours. She is very afraid to make mistakes. She is afraid to make new friends or join a group of children she knows well for fear that she won't be "allowed" to play. Instead she'll play alone, and be happy to do that as it's safe. (European Canadian mother, beyond third generation)

Prosocial traits. The prosocial traits domain includes excerpts in which the primary theme featured temperaments that were compassionate, compliant, loving, or empathic.

Compassionate. Children who were described as caring, considerate, kind, or thoughtful were coded under the Compassionate theme. This theme was coded for 13.3% of the responses.

> My daughter is very nurturing, and thinks of other before herself. So different from others i.e., my daughter gave away all her birthday gifts to kids at [removed] and the money to a non-profit group that help other children with working with ponies to gain and enhance leadership skills. (European Canadian mother, beyond third generation)

Compliant. There was also a group of children (13.9% of the sample) who were described as Compliant; that is, they were eager to please, cooperative, rule-abiding, and well-behaved.

> She is very compliant around her peers and always lets others have their way and puts her own wishes aside. She becomes sad if someone says anything mean to her and is always trying to please everyone. (South Asian Canadian mother, first generation)

Loving. In nearly 8% of the responses, mothers reflected on their child's loving, affectionate, or sweet nature. In the following example, multiple themes were coded due to the combination of nurturing, compassionate, and loving qualities.

> She is extremely caring for those around her, sensitive to their emotions, and is always asking if people are okay, asking if there is anything she can help with, always giving hugs, expressing compassion and love. I recall a time I was bedridden from the flu, and she sat by my side the entire day rubbing my back and getting me cups of water, and crackers throughout the day. She's constantly "taking care" of her stuffed animals and loves making other people happy. (European Canadian mother, second generation)

Empathic. Six percent of mothers who described their children as empathetic, sensitive to the emotional experiences of others, or concerned about the well-being of others. All responses coded under the Empathy theme came from European mothers born in Canada/U.S.

> When she hears of an animal passing, where some children may dismiss it etc., she truly feels for the animal or person. When she feels someone is being picked on, she will right away stand up for them, but for some reason won't for herself as quickly. (European Canadian mother, beyond third generation)

Cognitive traits. This domain includes cognitive traits of intelligent, mature, articulate, attentive, and creative.

Intelligent. Within this theme, mothers described their children as bright, reflective, smart, or wise. This theme was coded in 11.4% of the responses.

> I would say that my child is "an old soul." In many ways, she is wise beyond her years. She is reading well above grade level and as a results has a desire to learn about things that wouldn't be of interest to her peers such as politics and religion. I think she is more confident than her peers which I think relates to her intellect. (European Canadian mother, second generation)

Mature. Statements in which children were described as independent, organized, or responsible were also coded under this theme. Nearly 11% of the mothers described their children as mature.

> She is extremely helpful and skillful at completing adult type chores... making dinners, making lunches, doing laundry (sorting, folding, putting away, etc.), understanding routines and who is responsible for what in the home. She loves to control situations and others especially if someone is not following the exact instructions. She has a very A type personality and it has been very evident from a very young age (10 months old). She's been very independent in her abilities (dressing, self care etc.). (European Canadian mother, beyond third generation)

Articulate. When children were described as verbally direct, expressive, outspoken, or talkative, the statement was coded under the Articulate theme. Nine percent of the mothers reported that their children were Articulate.

> He loves to talk to anyone. He explains strangers any recent incidents that had happened to him or anyone he knows. (Southeast Asian Canadian mother, first generation)

Persistent. This theme encompassed children who were described as ambitious, focused, serious, and strong-willed. The Persistent theme was coded in 8.4% of the excerpts.

> (Child's name) is a strong willed little girl. She is determined. (European Canadian mother, beyond third generation)

Attentive. The Attentive theme, which was coded in 4.8% of cases, included attentive, conscientious, and observant traits. If the description of the child's attention had a vigilant quality, it was instead coded under Cautious.

> I find my daughter to be more considerate and thoughtful than other children her age. She handles disappointments well and is the first to notice someone's new

haircut or tell someone they did a good job on a colouring page, etc. (European Canadian mother, second generation)

Creative. Creative and artistic traits were coded under the Creative theme. The theme was coded in 4.2% of excerpts.

He is also very keen on the arts, especially singing and dancing. He is an artsy fartsy type. (Caribbean Canadian mother, first generation)

Inquisitive. Excerpts in which children was described as curious, eager to learn, or inquisitive were coded as Inquisitive. The theme was coded in 3.6% of the mothers' responses.

He will always ask a question if he is curious, and expects grownups to answer him thoroughly and honestly. (European American mother, beyond third generation)

Coding of question 3: Children's temperament and mothers' emotion-related parenting. Emotion socialization is a dynamic, and transactional process (Rogers, Halberstadt, Castro, MacCormack, & Garrett-Peters, 2016). Consistent with the transactional nature of emotion socialization, it is important to examine how child factors, such as temperament, contribute to maternal emotion-related parenting. To further examine this complex process, the aim of this qualitative question was to invite mothers to comment on how their emotion-related parenting is associated with their children's temperament. The majority of the mothers in this study reported that their emotion-related parenting styles have been moderately to strongly influenced by their children's temperaments. Based on their children's temperament traits, mothers described that their emotion-related parenting styles have been shaped in many ways. A qualitative analysis of mothers' responses to Question 3 generated 22 themes that were organized into four domains: Contextual differences in emotion-related parenting practices; modulation of

maternal-child emotional states; strategies that work best with children's temperament; and difficulties encountered within the context of children's temperament (Table 31).

Contextual differences in emotion-related parenting practices.

Adapts style based on child's mood and behaviour associated with temperament. Within this theme, mothers expressed that they keep aware of their children's mood and behaviour, consider their children's typical way of responding, and reflect on their children's temperament. In keeping aware of their children's unique traits, mothers felt they were able to utilize a flexible emotion-related parenting style. This theme was coded among 22% of the mothers' responses.

> I think that you need to understand how your child handles their emotions before you can work with them through sadness and anger. I'm more gentle, soft spoken when dealing with my daughter because of her thoughtful personality. (European Canadian mother, second generation)

Adapts style for each child in family. Nearly ten percent of mothers articulated that though their emotion socialization goals are generally consistent for each of their children, their emotion-related parenting approaches differ based on each child's temperament. In most cases, mothers attributed these different approaches to meeting the unique needs of each child in consideration of temperament. The vast majority of the responses coded under this theme (13/16) were from mothers born in Canada/U.S. An exemplary quote is now provided.

> I have children with two different personalities, so I feel like we parent differently. Because (child's name) can be more stubborn, he often gets a consequence (no TV time etc.) and then gets upset, then is willing to talk about it, whereas I have an older son who feels guilt internally, and doesn't often receive consequences. Both of my children get a lot of time to talk and debrief emotions once they have calmed down if they are upset. (European Canadian mother, beyond third generation)

Table 31

Children's Temperament and Mothers' Emotion-Related Parenting: Number and Proportion of Mothers Identifying with Themes

Domains and Themes	Non-Euro 1st Generation[a] *n* (%)	Non-Euro CDN/US Born[b] *n* (%)	Euro first Generation[c] *n* (%)	Euro CDN/US Born[d] *n* (%)	Full Sample[e] *N* (%)
Contextual differences in emotion-related parenting practices					
Adapts style based on child's mood and behaviour	6 (18.8)	3 (15.8)	1 (16.7)	26 (24.5)	36 (22.1)
Adapts style for each child in family	1 (3.1)	2 (10.5)	0 (0)	13 (12.3)	16 (9.8)
Has a flexible/adaptable response to child's emotions	1 (3.1)	1 (5.3)	1 (16.7)	6 (5.7)	9 (5.5)
Tries to learn about other emotion-related parenting practices	0 (0)	1 (5.3)	1 (16.7)	7 (6.6)	9 (5.5)
Modulation of maternal-child emotional states					
Modulates own negative affect to reduce/avoid negative emotionality in child	4 (12.5)	4 (21.1)	1 (16.7)	23 (21.7)	32 (19.6)
Matches child's negative emotionality	2 (6.3)	4 (21.1)	0 (0)	8 (7.5)	14 (8.6)
Matches child's positive emotionality	2 (6.3)	0 (0)	0 (0)	3 (2.8)	5 (3.1)
Distracts/protects child from experiencing negative emotions	2 (6.3)	0 (0)	0 (0)	2 (1.9)	4 (2.5)
Strategies that work best with child's temperament					
Discusses/labels emotions with child	2 (6.3)	2 (10.5)	0 (0)	23 (21.7)	27 (16.6)
Aims to become emotionally close to child	5 (15.6)	4 (21.1)	1 (16.7)	8 (7.5)	18 (11.0)
Uses problem-solving approaches	2 (6.3)	2 (10.5)	0 (0)	12 (11.3)	16 (9.8)
Assists with child's emotion regulation	2 (6.3)	3 (15.8)	0 (0)	9 (8.5)	14 (8.6)
Attempts to identify trigger for child's emotions	1 (3.1)	0 (0)	0 (0)	11 (10.4)	12 (7.4)
Gives child space and time to calm down	0 (0)	0 (0)	1 (16.7)	9 (8.5)	10 (6.1)
Allows child to experience and express all emotions	3 (9.4)	1 (5.3)	0 (0)	3 (2.8)	7 (4.3)
Comforts child physically	0 (0)	0 (0)	0 (0)	5 (4.7)	5 (3.1)
Treats child like an adult	1 (3.1)	0 (0)	1 (16.7)	3 (2.8)	5 (3.1)
Provides warnings and reminders to prevent negative emotions	0 (0)	0 (0)	0 (0)	4 (3.8)	4 (2.5)
Difficulties encountered within the context of child's temperament					
Becomes frustrated/loses patience or control	3 (9.4)	2 (10.5)	3 (50.0)	13 (12.3)	21 (12.9)
Experiences difficulties related to temperament match	0 (0)	2 (10.5)	1 (16.7)	4 (3.8)	7 (4.3)
Has difficulty responding to her child's negative emotions	0 (0)	0 (0)	0 (0)	7 (6.6)	7 (4.3)
Gives in to child or goes easy on child when he or she is upset	1 (3.1)	1 (5.3)	0 (0)	2 (1.9)	4 (2.5)

Note. [a] = 32 responses; [b] = 19 responses; [c] = 6 responses; [d] = 106 responses; [e] = 163 total responses; κ = .72.

Has a flexible/adaptable response to child's emotions. There was a subset of

mothers (5.5%) who specified that they need to be flexible in terms of their emotion-

related parenting and they have found that their strategies evolve as their children

develop.

> Seeing the distinct personality traits he has, helps me change everyday and help or
> hinder him to become a better person. My parenting changes with the same speed
> as my sons change. As he gets only [*sic*] certain tactics will no longer work and I
> will need to go along at the same pace to assure the best result for his future well-
> being. (European Canadian mother, beyond third generation)

Tries to learn about other emotion-related parenting practices. An interest in

learning about emotion-related parenting was described by 5.5% of the mothers. This

included reading parenting books and trying to learn about other approaches.

> His emotions are the biggest thing in our home. I am determined to be able to
> teach and allow him to experience all feelings. I take classes on parenting and do
> a lot of research. (European Canadian mother, beyond third generation)

In the excerpt to follow, a mother reported that though she prepared for parenting

by reading literature, she had to modify her approach once she uncovered her child's

temperament.

> His personality influences a lot of my parenting practices. When pregnant I read
> books and articles and pretty much had exactly how I wanted to parent my child
> figured out but the moment I had him it all went out the window. For example:
> The books would say never let your child sleep with you, but when they are
> screaming for hours and are only quiet when being held, you hold the baby
> because you're exhausted and just want to rest instead of toughing it out and
> staying up all night. (European Canadian mother, beyond third generation)

Modulation of maternal-child emotional states. Within this domain are themes

that highlight reciprocal emotional states within mother-child dyads.

Modulates own negative affect to reduce/avoid negative emotionality in child.

One predominant theme, coded in nearly 20% of the responses, was that mothers

modulate their own affect to reduce the child's negative affectivity. Strategies include

mothers' attempts to be calm and patient even when that is in contrast with inner feelings; controlling emotions; and attempting to not feel anger.

> Knowing her sensitive personality I try not to show too much of my own stresses because she would pick up on it in a heartbeat, and I try to remain calm and supportive when she is having a crisis. I also talk her through things and let her know that it's not okay to express harmful displays of emotions. (European Canadian mother, second generation)

Matches children's negative emotionality. There was a subset of mothers (8.6%) who expressed that their children's negative emotionality induces negative emotionality in themselves.

> In the daily routine, when (child's name) is mad that her socks are not comfortable and we need to get out the door ... I do what I can to finish things up as quickly as possible so we can get to work/school on time. In other words my intentions are to teach her to deal with emotions in a healthy way (resolve the big emotions in a positive constructive way that is respectful to others) ... but sometimes the situation gets the better of me. If I lose my temper I apologize, and do my best not to do a fake "sorry I got mad but you should have put on your socks" apology ... I really try to apologize then ask for collaboration to solve the problem, e.g. "I was really mad that we were late, I'm sorry I was grumpy. Can we do something different, like pick out our socks the night before?" (Chinese-Caribbean Canadian mother, second generation).

Matches children's positive emotionality. Similar to the last theme, mothers (3.1%) expressed that their children's positive emotionality induces positive emotionality in themselves.

> My child is a happy, outgoing child therefore when I see my child happy most of the time it makes me happy. Also seeing my child happy and worry free makes me less stressed out about the stressors in my own life. (African Canadian mother, first generation)

Distracts/protects child from experiencing negative emotions. Some mothers (2.5%) reported that they try to shield their children from experiencing or processing negative emotions.

Sometimes, I have to tell him to let things go rather than explore his feelings because I know he's at an age where he will not be able to grasp the nature of the situation. (South Asian Canadian mother, first generation)

Strategies that work best with child's temperament. Mothers emphasized the importance in identifying emotion-related parenting practices that are effective given the children's temperament.

Discusses/labels emotions with the child. Across 16.6% of the sample (*n* = 27 mothers, 23 of whom were European mothers born in Canada/United States), mothers wrote that they feel it is important that they discuss and/or label emotions with their children. For a variety of reasons, mothers felt it is important that they facilitate emotion talk with their children. For instance:

Based on his personality (which is similar in some ways and different in others to mine and my younger son's) I've learned what works and what doesn't work with respect to helping him process his feelings, coping with big feelings, returning to a state of feeling safe, naming his feelings and helping him articulate what he needs most in a given moment. (European Canadian mother, beyond third generation)

Aims to become emotionally close to child. Developing an emotionally close relationship with their children was described as being quite important to 11% of the mothers.

Because she leans to the quiet side, whenever she does open to me, I try to tell her that everything will always be okay and that I am so happy she can talk to me about things that are bothering her. I want her to always be able to come to (me). Sometimes I just listen, reassure, and reflect back what I'm hearing from her. We are very close and spend all of our free time together. (European Canadian mother, second generation)

Uses problem-solving approaches. Many mothers (9.8%) explained that they wanted to have rational conversations with their children about the situations that led to the negative emotions. Typically, this involved an analysis of their children's behaviour, the situation, and the consequences of their children's behaviour. Mothers often

expressed that they focus on collaboratively solving the problem or working through the

situations with their children. Such a problem-solving approach has been highlighted by

Eisenberg, Cumberland, and Spinrad (1998) as a form of a supportive reaction to a

children's negative emotion.

> With other children we would encourage the idea of "letting go" of some of their emotions, with this child we would encourage some temperance in his acting upon his emotions. We encourage him to think first and check his actions against facts instead of just his emotional state. (European Canadian mother, second generation)

Assists with child's emotion regulation. Within this theme, 8.6% of the mothers

reported that they try to help their children learn how to regulate their emotions and

express themselves appropriately.

> My child exhibits strong and real emotion. It requires me to teach her what is appropriate and when, my parenting practices are surely not what I was expecting when I had a child. I have learned a lot with a child with a strong personality and how to deal with her day to day emotion. (European Canadian mother, beyond third generation)

Attempts to identify trigger for child's emotions. Working towards identifying

what caused their children's emotions was one important practice to mothers. In 7.4% of

cases, as shown in the exemplary quote below, mothers did this during a debriefing

process with their children.

> My son is far more sensitive than my other children (to physical and emotional stimulation). I have had to spend much more time debriefing with him after stressful events than with my other children. His personality influences my parenting significantly, as he has a harder time reconciling his feelings to events and understanding why things happen. He is a deep thinker that requires more time and contemplation than my other children, while at the same time is often overwhelmed by his own emotions causing outbursts. Sometimes it is hard to give him the space he needs while also having behavioural expectations and parenting other children. (European Canadian mother, beyond third generation)

Gives child time and space to calm down. Within this theme, mothers (6.1%)

reported that when their children are experiencing negative emotion, they feel that giving

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children time and space to calm down is the best approach given their children's

temperament.

> I know that my child is sensitive, so I approach parenting knowing that she can be set off easily. I try hard to approach her with a calm voice. We talk though [*sic*] situations and I give her time alone to calm herself knowing that often she can't be calmed with my help. (European Canadian mother, third generation)

> *Allows child to experience and express all emotions*. Mothers (4.3%) stated that

they accept and see the importance in the experience and expression of all emotions. The

following quote is an example of a mother who invites the expression of negative

emotions due to her personal negative background experience of being socialized in the

suppression of negative emotions.

> I have very good intentions that I am not going to try to suppress expressions of anger or sadness etc. in my kids for the reasons I noted in #1 - I grew up that way and it had a profound negative effect on me. My goal is to teach them to feel their emotions and process them in a healthy way, and to express them in a healthy way. (Chinese-Caribbean mother, second generation)

> *Comforts child physically.* Physical comfort, including hugging, holding, and

cuddling, were also expressed as important strategies in consideration of their children's

temperament. This theme was coded among 3.1% of the excerpts.

> Knowing that (child's name) is a gentle and sensitive soul we need to approach discipline with that in mind. Sometimes the best approach with him is simply to talk it through and hug/cuddle until he has calmed down. (European Canadian mother, beyond third generation)

> *Treats child like an adult.* This theme involves mother's tendency to discuss

emotions with their children in an adult-appropriate manner. That is, mothers (3.1%)

reported treating their children's emotions in a way that would be expected for an adult.

In some cases, mothers reported that they have to step back and remind themselves that

they are speaking to children.

I think because she's mature sometimes I think of her as older and sometimes expect more of her and am in shock when she sometimes has a tantrum or gets angry about something. (European Canadian mother, third generation)

Providing warnings and reminders to prevent negative emotions. Especially in cases in which the child has an emotionally labile temperament, mothers (2.5%) expressed how they feel the need to provide warnings and reminders to prevent negative emotions in their children.

Often I feel her personality influences our parenting. She is easily switched from one mood to another so we feel we need to give lots of warnings for transitions, reminders of new events and try to remain calm with her at all times. (European Canadian mother, beyond third generation)

Difficulties encountered within the context of child's temperament.

Becomes frustrated/loses patience or control when child expresses negative emotions. Within this theme, mothers (12.9%) reported that they lose control, become frustrated, or feel impatient when their children display sadness, anger, or fear.

His personality, knowing he is sensitive and a perfectionist, being easily discouraged if he does not do well at something, I too have to be sure not to be patronizing or demeaning in my punishment... I really have to be stern yet not insulting. I have to remain patient and calm yet show him control. Once I lose control then that sense of comfort and security vanishes until we regain our strength within again. I hate when I lose my patience or when I can feel my patience wearing thin... Sometimes I can stop it from emerging and other times the beast escapes me. (European Canadian mother, beyond third generation)

Experiences difficulties because of the way the mother relates to her child's temperament. Among 4.3% of the responses, mothers expressed difficulties in the emotion-socialization process based on the extent to which they could identify with their children's temperament. For some mothers, difficulties emerged because of stark temperament differences which lead to a "clash", while in other cases difficulties emerged due to the similarities and tendency to "butt heads".

I suppose I identify with her, as I was similar as a child. Consequently, I think of how I felt when I consider her actions and emotional reactions to circumstances. Unfortunately, I also feel that I sometimes get a little frustrated with her reluctance to try things as I find this annoying in my temperament as well. (European Canadian mother, first generation)

Has difficulty responding to her child's negative emotions. Mothers reported that they struggle to respond to negative emotions in their children. In some cases, the mothers felt they had trouble giving their children space when needed, struggled to tolerate anger or "big emotions", and felt hurt by their children's expressions of negative emotions. This theme was coded among 4.3% of the mothers, all of whom were of European ethnicity and Canada/U.S.-born.

Sometimes, like all children, my daughter will experience feelings of anger and become upset when things don't go exactly the way she wanted them to. I try to be understanding of this behavior, however, in her anger she sometimes says hurtful things that do affect me greatly and I take very much to heart. I try not to express this sadness in front of her, because I know she says this in anger, and try to be objective. However, these hurtful things can stay on my mind for a while and impact my mood. (European Canadian mother, second generation)

Gives in to child or goes easy on child when he or she is upset. At times, mothers (2.5%) withdraw their demands or struggle to be firm with their children when their children are upset.

I go easy on him compared to his older siblings because he is the baby of the house. But I always parent him with the idea that he is to become a man someday, and try to encourage the best kinds of behaviour when possible. (Non-European Canadian mother, beyond third generation)

Coding of question 4: Emotion-related parenting and children's development. In response to this qualitative question, mothers expressed a number of ways in which their emotion-related parenting has influenced their children's socio-emotional development.

A thematic analysis of mothers' responses to Question 4 generated 10 primary themes across four domains (Table 32) which are now described.

Adaptive child outcomes in socio-emotional development. The majority of the mothers (55.5%) specifically indicated that their emotion-related parenting has had a positive influence on their children's socio-emotional development ($n = 91$).

Expresses, understands, and discusses emotions. Nearly 29% of the mothers felt that through their emotion-related parenting approach, their children were better able to express, understand, and/or discuss emotions. In the excerpt below, a mother reported that as part of her emotion-related parenting style, she uses a variety of tools to encourage emotion talk. This mother believes that her child expresses her mood and feelings, and reported an improvement in her daughter's overall socio-emotional development.

> My daughter did not know how to express emotions (anger, sadness etc.) verbally and always took the approach to either push me away from her or wanting to be left alone in her room. So I have used mood charts, relating feelings to colors (I feel purple as in happy or I feel yellow as in angry), and various other tools to incorporate learning and expressing feelings together more openly. With this on-going learning approach, she is able to verbally express different moods i.e. happy, sad, angry etc. When angry or in disagreement, she is able to say 'Mama this is not right, I feel it should be this or that way..." My emotion related parenting style has definitely influenced her social as well as emotional development. (South Asian Canadian mother, first generation)

This theme highlights a unique part of the emotion socialization process in which mothers strive for a relationship with their children in which both the mothers and the children are free to express negative emotions. Examples include the intentional/direct expression or modelling, an "open chat" policy in which mothers use their own emotional experiences as a teaching tool, or in the case that mothers do not attempt to conceal their emotions.

Table 32

Emotion-Related Parenting and Children's Development: Number and Proportion of Mothers Identifying with Themes

Domains and Themes	Non-Euro 1st Generation[a] n (%)	Non-Euro CDN/US Born[b] n (%)	Euro 1st Generation[c] n (%)	Euro CDN/US Born[d] n (%)	Full Sample[e] N (%)
Adaptive child outcomes in socio-emotional development	16 (48.5)	10 (55.6)	3 (50.0)	62 (57.9)	91 (55.5)
Expresses, understands, and discusses emotions	10 (30.3)	2 (11.1)	0 (0)	35 (32.7)	47 (28.7)
Uses coping strategies	4 (12.1)	2 (11.1)	0 (0)	20 (18.7)	26 (15.9)
Adaptability and openness to novelty	1 (3.0)	3 (16.7)	1 (16.7)	12 (11.2)	17 (10.4)
Confidence	7 (21.2)	1 (5.6)	1 (16.7)	7 (6.5)	16 (9.8)
Social skills	3 (9.1)	3 (16.7)	2 (33.3)	7 (6.5)	15 (9.1)
Empathy	1 (3.0)	1 (5.6)	1 (16.7)	11 (10.3)	14 (8.5)
Reduction in reserved and cautious traits	2 (6.1)	0 (0)	0 (0)	11 (10.3)	13 (7.9)
Compassion	1 (3.0)	2 (11.1)	1 (16.7)	5 (4.7)	9 (5.5)
Regulation of emotions	1 (3.0)	0 (0)	0 (0)	8 (7.5)	9 (5.5)
Recognizes emotions in others	1 (3.0)	0 (0)	0 (0)	7 (6.5)	8 (4.9)
Unsure about relation to child's socio-emotional development	3 (9.1)	1 (5.6)	1 (16.7)	11 (10.3)	16 (9.8)
Little to no relation to socio-emotional development	2 (6.1)	1 (5.6)	0 (0)	1 (0.9)	4 (2.4)
Negative relation to child's socio-emotional development	0 (0)	1 (5.6)	1 (16.7)	3 (2.8)	5 (3.0)

Note. [a] = 33 responses; [b] = 18 responses; [c] = 6 responses; [d] = 107 responses; [e] = 164 total responses; κ = .82.

For example, a South Asian Canadian mother (first generation) stated:

> I am a very emotional person and very introverted, I feel my son gets a lot of his traits from me. Plus if I am expressing emotions so openly at home they think its ok to express and do the same.

Also coded under the emotion talk theme were situations in which mothers use their own experience of negative emotions in the discussion. This involves maternal self-expression or self-disclosure of negative emotions around child.

> As a (name of field) student, I understand the importance of talking things through and allowing my hold to be open with what she thinks and feels and to encourage her to explore that. I try to display my own emotions appropriately and tell her why i [*sic*] feel the way i [*sic*] feel and help her to talk about her own feelings. (European American mother, beyond third generation)

> *Uses coping strategies.* Children's use of coping strategies or "tools" to deal with

emotions was reported by 15.9% of mothers as an indicator of adaptive socio-emotional development.

> My child is easily able to express his feelings with others and sometimes help others with process of evaluating situations and their own emotions. He is able to control his anger in school and public situations with "normal" temper tantrums of children his age. It is easy for my child to get over sad or angry feelings by talking it out or evaluating the situation. (European Canadian mother, beyond third generation)

> *Adaptability and openness to novelty.* The ability to be flexible, adaptable, open,

and well-adjusted were coded within this theme. This theme was coded in 10.4% of the excerpts. The following mother reported that her emotion-related parenting is associated with her child's adaptability:

> I see the results of my emotion related parenting practices as she entered school. I find that she has been able to deal with all the new situations that occur and adjust appropriately to all the new challenges that arise. I see her using the tools I have given her to help her independently deal with hard emotions. (European Canadian mother, beyond third generation)

Confidence. Through mothers' emotion-related parenting, they felt their approach promoted their children's self-confidence. Nearly ten percent of mothers' excerpts received a Confidence theme. This theme was coded in a large portion (21.2%) of the excerpts from non-European first generation mothers.

> He is able to express emotions easily and know that he will not be punished for expressing his emotions (but perhaps the way that he chooses to express his emotions) I believe this enables him to develop self confidence and self esteem. (Latin American Canadian mother, 1.5th generation)

Social skills. The ability to get along with others was coded under the Social Skills theme. Within this theme, mothers (9.1%) indicated that their children were well-liked, accepted, or engaged well with others. In the following example, the mother provided a clear connection between his emotional self-regulation and his social development.

> I feel we have had a positive influence on our child's social and emotional development as we have helped him to manage his emotions in a positive way, and to be aware of other people's emotions and feelings. When compared to other children his age, he is socially well-adjusted, is a good friend, and is well-liked by peers and adults, which I feel is important. (European Canadian mother, beyond third generation)

Empathy. The ability to be empathic was highlighted as one adaptive area of development associated with socio-emotional development in general. Of the 14 mothers (8.5%) whose excerpts were coded under this theme, 11 were of European ethnicity and Canada/U.S.-born.

> As she grows, it becomes a bit more apparent. The true measure will be in the coming years. I see glimmers of it now in her ability to empathise or talk through certain situations. She doesn't cause physical or emotional distress to others, and will verbalize with me her feelings, and seek to develop a plan of action. If she had a sibling it may be more apparent as she would be exercising said skill on a regular basis with a mate that would cause provocations to illicit response, generally speaking. (European Canadian mother, beyond third generation)

Reduction in reserved and cautious traits. Mothers (7.9%) highlighted that due to their emotion-related parenting styles, their children are, or are becoming, less timid, shy, and cautious.

> I think that the way that I have parented her has set her up to be able to handle situations better because she feels safe and secure at home. She knows that I will and her Dad will always be there for her to support her and to catch her. We try to foster a positive social and emotional development with her by encouraging her to step outside of her comfort zone, she fights us and will not go or do it if she doesn't feel comfortable, it doesn't matter if it's a stranger, her dad or another family member or friend she adores. If something is off she simply won't go. I support her and try to help her through the situation as best as I can so that she's not missing out on opportunities and experiences. This takes lots of practice and lots of support. She typically has to experience the same type of thing roughly 10 times before she'll realize that she can do it alone comfortably. (European Canadian mother, beyond third generation)

Compassion. The ability to be compassionate was described as an adaptive outcome by 5.5% of the mothers. The theme of compassion included behaviours associated with compassionate actions toward others. This was considered as distinct from the Empathy theme, which involved an ability to walk in another's shoes.

> She is able to handle situations with ease, compassionate towards others, tries to include everyone, tends to gravitate towards the children who do not have friends or are alone so they are not sad. (Aboriginal Canadian mother, beyond third generation)

Regulation of emotions. A subset of the mothers (5.5%) reported that through their emotion-related parenting styles, their children have developed a better ability to regulate their emotions.

> I think my children are creative, confident and self-aware. I believe that allowing them to express and work through their emotions has allowed them to remain more "whole", and not be afraid to be themselves and feel their feelings. They are all very social despite having different personalities, and my son being very introverted. They are aware of their emotions, but have also learned to control and examine them at developmentally appropriate times. They also are able to show empathy towards others. (European Canadian mother, beyond third generation)

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Recognizes emotions in others. Nearly 5% of the mothers provided examples of ways in which their children are able to detect the emotional states of others. For example, a European Canadian mother (beyond third generation) reported:

> My child is easily able to express his feelings with others and sometimes help others with process of evaluating situations and their own emotions. He is able to control his anger in school and public situations with "normal" temper tantrums of children his age. It is easy for my child to get over sad or angry feelings by talking it out or evaluating the situation.

Unsure about relation to child's socio-emotional development. There was also a sizable portion of mothers (9.8%) who reported they were unsure about the extent to which their emotion-related parenting styles is associated with their children's development. For instance, a Chinese mother (second generation Canadian) questioned the extent to which her emotion-related parenting has impacted her child's development:

> I would love to think that it is due to my amazing emotion-related parenting practices that have led to my daughter's easy-going nature and well-developed social skills and personality! However, my son (whom I parent in a similar way) shows me that while one child may accept my parenting style with no problem and incorporate it as her own, another may rebel and test his limits constantly! This goes back to the nature vs. nurture debate...and although of course as parents I think we all play a role in contributing to our children's personalities and development through the way we raise them, a good other portion of their personality and how they develop is simply genetic!

Little to no relation to socio-emotional development. Four mothers (2.4%) reported their emotion-related parenting had little to no relation to their children's development. These mothers stated that their emotion-related parenting has not had "too much to do with" their children's development.

Negative relation to child's socio-emotional development. Five mothers (3%) reported a negative relation between their emotion-related parenting and their children's socio-development. To exemplify this theme, one mother highlighted that her son's emotional expressivity has been difficult to manage in a school setting:

> Allowing my child to have free reign over his emotions (as long as we can decompress after an outburst) has not helped him much socially at school because there isn't always time to coach children on appropriate ways of handling their emotions when there are so many students to deal with in the classroom. (European Canadian mother, beyond third generation)

Summary of Findings

Summary of quantitative findings. Refer to Table 33 for a summary of the hypotheses that were supported and not supported. In sum, maternal generation status, maternal ethnicity, maternal age, social desirability, and children's gender were all identified as being significantly related to dependent variables. Contrary to Hypotheses 1a and 2a, Emotion Coaching was not significantly predicted by Conservation, Self-Transcendence, and dyadic temperamental patterns. Consistent with Hypotheses 1b, Emotion Rejecting was significantly predicted by greater Conservation and lower Self-Transcendence. Also, consistent with Hypothesis 1b, membership in Cluster 2 (i.e., high in Extraversion, high in Effortful Control, and low in Negative Affectivity) predicted lower Emotion Rejecting scores. Next, with social desirability controlled for, Emotion Coaching was not a significant mediator in any models predicting emotion regulation. However, Emotion Rejecting made significant contributions in all models predicting emotion regulation. Thus, Hypotheses 3a, 3b, and 4 were supported for Emotion Rejecting but was not supported for Emotion Coaching. Hypotheses 5a and 5b were not supported as relations between emotion-related parenting and mother-child emotion talk were no longer statistically significant once covariates were controlled for. Contrary to Hypotheses 6a and 6b, emotion-related parenting was not significantly related to children's persistence and frustration. In terms of additional analyses that were conducted, it was found that greater children's persistence during the Transparent Box

Table 33

Summary of Quantitative Results

Study Hypotheses	Supported?
Research question 1: Do values predict emotion-related parenting practices?	
Hypothesis 1a	
• Lower maternal Conservation will predict greater Emotion Coaching	No
• Greater maternal Self-Transcendence will predict greater Emotion Coaching	No
Hypothesis 1b	
• Greater maternal Conservation will predict greater Emotion Rejecting	Yes
• Lower maternal Self-Transcendence will predict greater Emotion Rejecting	Yes
Research question 2: Do mother-child temperament patterns predict emotion-related parenting practices?	
Hypothesis 2a	
• Mother-child temperament patterns that are high in Extraversion, high in Effortful Control, and low in Negative Affectivity will predict greater Emotion Coaching	No
Hypothesis 2b	
• Mother-child temperament patterns that are low in Extraversion, low in Effortful Control, and high in Negative Affectivity will predict greater Emotion Rejecting	Yes
Research question 3: Do emotion-related parenting styles mediate the relation between values and children's emotion regulation?	
Hypothesis 3a	
• The relation between maternal Conservation and children's Emotion Regulation will be mediated by Emotion Coaching	No
• The relation between maternal Conservation and children's Emotion Regulation will be mediated by Emotion Rejecting	Yes
Hypothesis 3b	
• The relation between maternal Self-Transcendence and children's Emotion Regulation will be mediated by Emotion Coaching	No
• The relation between maternal Self-Transcendence and children's Emotion Regulation will be mediated by Emotion Rejecting	Yes

Research question 4: Do emotion-related parenting styles mediate the relation between mother-child temperament patterns and children's emotion regulation?

Hypothesis 4

- The relation between mother-child temperament patterns and children's Emotion Regulation will be mediated by Emotion Coaching

  No

- The relation between mother-child temperament patterns and children's Emotion Regulation will be mediated by Emotion Rejecting

  Yes

Research question 5: Is there an association between emotion-related parenting and mother-child emotion talk?

Hypothesis 5a

- Emotion Coaching scores will be related to greater mother-child emotion talk

  No

Hypothesis 5b

- Emotion Rejecting scores will be related to lower mother-child emotion talk.

  No

Research question 6: Is there an association between emotion-related parenting and children's persistence and frustration?

Hypothesis 6a

- Emotion Coaching scores will be related to greater child persistence and lower frustration during the emotion regulation task

  No

Hypothesis 6b

- Emotion Rejecting scores will be associated with lower child persistence and greater frustration during the emotion regulation task

  No

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Task was significantly associated with greater mother-child emotion talk during a storytelling task, even after controlling for covariates. Finally, interactions between maternal generation status, ethnicity, and children's gender on Emotion Coaching and Emotion Rejecting were found.

Summary of qualitative findings. Mothers reported that their values, to some extent, shape their emotion-related parenting approaches. Consistent with literature on meta-emotion philosophy, mothers identified that their values about emotions influence their emotion-related parenting practices. Specifically, mothers greatly valued respect, obedience, politeness, and discipline. In some cases, mothers commented that mutual mother-child respect must be established before they engage in any form of parenting behaviours related to emotion coaching. Promoting relational aspects, such as respect, was described as a greater priority than fostering children's emotional expression in some circumstances. A unique finding in this study is that mothers sometimes disciplined their children if they felt their children's emotions were expressed in a disrespectful manner, but would later encourage emotional expression. Further, mothers identified that the following are related to their emotion-related parenting: values of freedom, independence, self-confidence, and achievement; familial values; relationship values; values related to prayer, religion, spirituality, and morals; and how emotion-related parenting practices can be conveyed in families.

Mothers' descriptions of their children's temperament traits produced a number of themes that fell into domains of extraverted, emotionally labile, inhibited, prosocial, and cognitive traits. These traits overlapped with many of the temperament traits measured by the CBQ-VSF but also provided some additional traits of utmost importance from the mothers' perspectives (e.g., compassionate, intelligent, persistent, etc.).

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Overall, mothers described that their emotion-related parenting styles have been moderately to strongly influenced by their children's temperaments. In particular, when considering their children's temperament characteristics, mothers vary their emotion socialization approaches based on certain contexts, indicating there is quite a bit of flexibility and adaptability. When considering their children's temperaments, mothers sometimes monitored and modulated their own affect in order to not adversely trigger negative affect in their children. This finding seems to relate to the construct of emotion reciprocity, which is when an individual responds to another individual's emotional expression with a similarly-valenced emotion (Gottman & Levenson, 1986). As such, mothers were self-aware of their negative affect and actively attempted to avoid negative affect reciprocity with their children. Likewise, mothers also reported a number of ways in which their children's temperament is adversely related to their own responses. For example, there were mothers who felt they easily become frustrated as a result of their children's temperament, adversely impacting the emotion socialization process. Further, mothers provided a number of strategies that they feel are suitable when working with their children's unique temperament traits.

Nonetheless, mothers overall reported a number of ways in which they feel their emotion-related parenting practices are linked to adaptive outcomes in their children. Key areas reported by mothers included their children's ability to talk about emotions, cope, and adapt. There were also mothers who were unsure if their emotion-related parenting is associated with their children's development, and instead cited other possible explanations for their children's outcomes (e.g., genetics).

CHAPTER IV

Discussion

The primary goal of this study was to examine the relations between mothers' values, temperament, and emotion-related parenting styles within culturally diverse families living in Canada, as well as to investigate how these emotion-related parenting styles relate to preschoolers' emotion regulation and emotional expressivity. The quantitative portion of this study was guided by meta-emotion theory as described by Gottman and colleagues (1996). The specific constructs examined in this study were largely influenced by the heuristic model of emotion socialization by Eisenberg, Cumberland, and Spinrad (1998), which presented theoretical relations between children's characteristics, parent characteristics, cultural factors, contextual factors, emotion-related parenting, and children's outcomes. The purpose of the qualitative portion of the study was to understand mothers' perspectives about aspects of emotion socialization, values, and temperament that may not have been captured in the quantitative questionnaires. The following sections include a review of quantitative and qualitative findings, an examination of the study strengths and limitations, clinical applications of this research and recommendations for future research directions.

Quantitative Findings

Values and emotion-related parenting. Values of conservation (i.e., one's resistance of change; Lindeman & Verkasalo, 2005) and self-transcendence (i.e., the concern for the welfare of others with a focus on interpersonal harmony) were tested as predictors of emotion coaching and emotion rejecting.

Contrary to study hypotheses, emotion coaching was not significantly predicted by mothers' values in conservation and self-transcendence. Based on Schwartz's (1992)

theory of basic human values, low scores in conservation indicate greater openness to change. While openness to change may be related to an element of emotion coaching (e.g., allowing children's perspectives to be heard and respected), it does not necessarily mean that the mother will engage in other aspects of emotion coaching. Likewise, it is possible that mothers high in self-transcendence are concerned about the emotional well-being of their children but do not score high in emotion coaching if it is not consistent with their overall beliefs about emotions and about parenting. For example, in a study by Fishman and colleagues (2014), Indian American mothers were concerned about their children's emotional well-being but their overall emotion socialization approach was not consistent with emotion coaching. In the present study, greater emotion coaching was only predicted by greater maternal social desirability. Overall, results suggest that emotion coaching is especially susceptible to socially-desirable responding. In Western society, an emotion coaching style may be considered optimal; thus, mothers who want to "look good" in a questionnaire by fitting in with societal norms may report greater emotion coaching.

As hypothesized, emotion rejecting was significantly predicted by greater conservation and lower self-transcendence, even when covariates were controlled for. It is possible that mothers who place value in preserving the status quo may be less receptive to hearing children's perspectives, and in turn reject emotions. When mothers are low in self-transcendence, they have lower concern for the welfare of others and perhaps also have lower concern for their children's emotional experiences. When a value in self-transcendence is low, it means that the value in self-enhancement is high, suggesting that one's personal interests take precedence over the welfare of others. In

turn, a mother low in self-transcendence may be more likely to disapprove of negative emotions in others if it is not in line with her own meta-emotion philosophy.

In the regression analysis predicting emotion rejecting, maternal ethnicity made a significant contribution to the model, such that non-European mothers reported higher emotion rejecting and self-transcendence scores than European mothers. European mothers reported marginally higher emotion coaching scores than non-European. It is important to acknowledge that the concept of emotion socialization is derived from Western psychological literature and may not capture some culture-specific emotion socialization practices (Camras et al., 2014; Fishman, Raval, Daga, & Raj, 2014; Raval & Martini, 2011). Though emotion coaching did not differ on the basis of maternal generation status, emotion rejecting and conservation scores were higher for first-generation mothers as compared to Canada/U.S.-born mothers.

In interpreting this finding, it must be understood that the construct of emotion coaching was developed on a population in Western culture and was not developed for particular ethnic groups. To understand why values predicted emotion rejecting but not emotion coaching, sample characteristics, factors pertaining to developmental differences and culture must be considered. For young children in particular, negative emotions are often difficult to understand and regulate (Laible & Panfile, 2009). Mothers may use coaching and scaffolding strategies to address their children's *individual* emotional experiences and expression, behaviour, and/or emotion regulation. According to Mesquita and colleagues (2016), emotions are described "either as phenomena within a person (in interdependent cultures) or as a phenomenon between people (in collectivistic cultures)" (p. 684). It is possible that emotion coaching – which focuses on the child's individual emotional experiences – may actually be more specific to members of

Western, European culture. With respect to emotion rejecting, it is important to uncover exactly *why* the parent is rejecting the child's emotional experience. When parents respond to their children's challenging behaviour or emotions, their goals may be to teach values, maintain harmony, or to teach obedience (Grusec & Davidov, 2015). In addition, it is also known that domains of socialization – protection, control, guided learning, group participation, and reciprocity – do not operate in isolation (Grusec & Davidov, 2015). It is possible that when mothers reject their children's emotions, it may because their desire to reach goals from other domains of socialization take precedence. That is, we must understand emotion-related parenting within the hierarchy of parenting goals, and this hierarchy appears to differ from culture to culture. For example, mothers may reject their children's emotions in order to instead focus on teaching their children about safety (the protection domain). In a sense, promoting emotion coaching as the optimal response to children's negative emotions actually makes assumptions about the parent's socialization goals. Parents may be oriented to emotion coaching approaches in certain contexts. The present study presents preliminary associations and theoretical links between emotion-related parenting and the domains of socialization. Emotion socialization can fit in the domains of socialization identified by Grusec and Davidov (2015) in a number of ways. In terms of the protection domain, children need to be emotionally and physically protected by parents. Within the control domain, parents who reject their children's emotions may discipline or scold their children for their displays of negative emotions. Guided learning can fit in with coaching in that children may make bids to receive assistance with their emotional needs; likewise, parents aware of their children's emotions can notice when their children are in need of coaching. For group participation, children are learning how to become emotionally connected to others and may be directly or

indirectly socialized. In the reciprocity domain, children may be emotionally dismissed when they make bids to interact with their parents.

Present study findings must also be considered within the context of Meta-Emotion Theory. As previously noted, the Meta-Emotion Interview (Katz & Gottman, 1986) has largely been the foundation of research on meta-emotion and has been extensively examined among American families. For the past 30 years, the Meta-Emotion Interview has been providing an in-depth look into parents' thoughts and emotions about emotions pertaining to themselves and their children. The ERPSST-L subscales from the present study correspond to the Meta-Emotion Interview domains. A look at the scoring of the Meta-Emotion Interview (Katz & Gottman, 1986) indicates, for instance, that parents will score high on awareness of their children's emotions when they show an interest in their children's experience and have insight into their children's experience of emotion. Acceptance of children's emotions is indicated when parents seem comfortable with their children's emotion and expression, want their children to know it is okay to experience the feeling, want their children to talk about the emotion, do not isolate their children when they are expressing, do not punish their children for expressing, and do not attempt to distract their children from that emotion. In terms of coaching, parents are to show respect for the children's emotional experience, provide comfort, teach rules for appropriate expressiveness, and are involved in their children's experience and regulation of the emotion. However, current Meta-Emotion Theory does not seem to account for other domains of socialization that can take precedence over emotion coaching depending on mothers' values. In future research, it will be important to determine if emotion rejecting is more of a universal phenomenon than emotion coaching.

Temperament and emotion-related parenting. Contrary to study hypotheses, mother-child temperament patterns high in extraversion, high in effortful control, and low in negative affectivity did not predict emotion coaching scores. Once the contributions from social desirability were removed from the model, temperament did not predict emotion coaching. In the present study and in previous work (e.g., Hakim-Larson et al., 2006), greater social desirability was related to greater emotion coaching scores. Parents' reports of their emotion socialization practices can be susceptible to social desirability bias (Klimes-Dougan & Zeman, 2007). Social desirability is a response set bias in which respondents aim to "look good" by over reporting socially desirable behaviour (Tran et al., 2012). Items on social desirability measures include socially undesirable but highly frequent behaviour, as well as socially desirable but highly infrequent behaviour (Tran et al., 2012). It is possible that mothers who want to "look good" rate greater emotion coaching because emotion coaching has been thought to be an adaptive parenting style in Western society. The social desirability measure used in the present study (SDS-17; Stöber, 2001), has been used in Germany (Stöber, 1999), United States (Blake et al., 2006; Tran et al., 2012), Austria (Tran et al., 2012), and Canada (Tran et al., 2012). Fleming (2012) suggested that further research is needed on social desirability to determine if it is a measure of one's propensity to provide responses that coincide with societal norms, or if it is actually an "other-focused trait" (p. 16) related to personality. In the present study, greater maternal effortful control (which involves response inhibition) was related to greater social desirability. It is recommended that further links between social desirability and personality traits – particularly effortful control – be examined. Further studies are needed to find out if parents high in social desirability also rate emotion coaching and effortful control highly in other cultures.

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As expected, mother-child temperament patterns low in extraversion, low in effortful control, and high in negative affectivity significantly predicted emotion rejecting. In that model, it was also found that Emotion Rejecting was associated with mothers' younger age and non-European ethnicity. In the present study, greater maternal age was associated with lower emotion rejecting scores. In addition, greater maternal age was also associated with greater social desirability, self-transcendence, and extraversion scores for children. Consistent with findings from Dunstan, Anderson, and Marks (2015), maternal age was associated with less rejection of negative emotions. Dunstan et al. (2015) highlighted that older parents, as compared to younger parents, tend to report less stress, cope more adaptively, and engage in more positive interactions with their children. Likewise, recent work by Karkhanis and Winsler (2016) identified that greater maternal age was related to lower emotion dismissing and lower children's anxiety. Given that mothers' age may be related to an increase in maternal maturity and confidence in parenting, maternal experience is one variable that may be worthy of exploring in future studies. For example, Scott (2012) created a proxy variable maternal experience, including the age of each mother's oldest child and the number of children she cares for. The birth order of the target child may also play a role in the emotion socialization process. It is also important to note that maternal age, maternal education, and annual family income were all significantly inter-correlated in the present study and had some unique relations to key study variables. For instance, there is some evidence that parental income has some unique relations beyond other demographic variables to outcomes related to children's socio-emotional functioning, mental health, and internalizing and externalizing behaviour (e.g., Mayer, 2002).

Contrary to previous research (e.g., Cunningham, Kliewer, & Garner, 2009), neither emotion coaching nor emotion rejecting differed by children's gender. However, gender differences on children's temperament, emotion regulation, and emotional expressivity were found. In particular, mothers rated sons as being higher in extraversion than daughters. Higher ratings for effortful control and emotion regulation were found for daughters as compared to sons.

Emotion-related parenting, values, and children's emotion regulation. With social desirability controlled for, emotion coaching was not a significant mediator in any models predicting emotion regulation. The hypothesis that emotion coaching will mediate the relation between conservation and children's emotion regulation was not supported. As later discussed, the results from the thematic analysis provides possible explanations as to why outcomes were not consistent with past research with primarily European American samples. Fishman and colleagues (2014) highlighted that though European American parents' responses to the experience and expression of emotions may lead to adaptive outcomes, we cannot assume such an association will be found among immigrant families. Fishman et al. (2014) have called for a "culturally situated theory of emotion socialization" (p. 887). Fishman and colleagues (2014) questioned the extent to which meta-emotion philosophes identified in Gottman's work with European American families can apply to Indian immigrant families living in the U.S.

In line with hypotheses, emotion rejecting made significant contributions in models predicting emotion regulation. Even after controlling for maternal social desirability and children's gender, indirect effects were found in the models with emotion rejecting entered as a mediator. Greater conservation significantly predicted greater emotion rejecting which in turn predicted lower emotion regulation scores for children.

Greater self-transcendence significantly predicted lower emotion rejecting which in turn predicted greater emotion regulation scores for children. These findings highlight the indirect effect of mothers' values on children's emotion regulation through mothers' emotion rejecting.

Emotion-related parenting, temperament, and children's emotion regulation. The relation between mother-child temperament patterns and children's emotion regulation was not mediated by emotion coaching. However, findings indicate that there was an indirect effect of temperament pattern on children's emotion regulation through mothers' emotion rejecting. Mother-child temperament patterns high in negative affectivity predicted greater emotion rejecting, which in turn predicted lower emotion regulation scores for children. There was also a direct effect of temperament profiles on children's emotion regulation. These temperament profiles identified in the present study were interactional and data-driven. Laukkanen and colleagues (2014) highlighted the importance of mothers being able to understand their children's temperament and learn ways to foster an adaptive parent-child interaction. Present findings pertaining to temperament profiles, emotion-related parenting, and children's emotion regulation could help inform studies on goodness-of-fit. To measure goodness-of-fit, parent-child characteristics are often compared to determine the combination of traits that have the best outcome for children (Newland & Crnic, 2016). For example, Newland and Crnic (2016) examined the effect of preschoolers' temperament on developmental outcomes (i.e., early developmental delay), with consideration of mothers' scaffolding and stress. They found that mother-preschooler goodness-of-fit was related to preschoolers' functioning and mother's stress (Newland & Crnic, 2016). The present finding that there was an indirect effect of temperament pattern on children's emotion regulation through

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mothers' emotion rejecting can be of potential interest to those who research goodness-of-fit.

Emotion-related parenting and mother-child emotion talk. Associations were examined between mothers' emotion coaching scores, emotion rejecting scores, and mother-child emotion talk during the sharing a wordless picture book. Contrary to hypotheses and past literature (e.g., Voelker, Babb, Broga, Gragg, & Hakim-Larson, 2008), emotion coaching scores were not significantly related to greater mother-child emotion talk. Though greater maternal emotion coaching was associated with greater emotion talk for children, this relation was no longer statistically significant after controlling for covariates. Also, another unexpected finding emerged after controlling for covariates: though greater emotion rejecting was unrelated to children's emotion talk, greater emotion rejecting related to greater maternal talk about emotions during a storytelling task. It is possible that mothers who self-report higher scores on dismissing or disapproving of children's emotion expression spend more time leading the conversation about the story characters' emotions as opposed to encouraging emotion talk from their children. To better understand this finding, it will be important to investigate the following with a larger sample: (1) the *type* of emotions that were labelled and discussed, (2) the extent to which mothers' emotion talk about the story's characters corresponds to emotion talk about children's own emotions, and (3) mothers' conversational flow and elaboration. Gender differences in emotion talk were also examined. During the storytelling task, mother-daughter dyads scored slightly higher in emotional expressivity as compared to mother-son dyads. Consistent with previous literature (e.g., Bosacki & Moore, 2004), girls expressed a greater variety of emotion words as compared to boys.

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Emotion-related parenting and children's persistence and frustration.

Contrary to expectations, neither emotion coaching nor emotion rejecting was significantly related to children's persistence and frustration scores during the Transparent Box Task. It is important to acknowledge that the small sample size for Phase 2 likely reduced the statistical power to detect significant relations.

Additional findings. First, an analysis was conducted to examine interactions between maternal generation status and ethnicity and children's gender on emotion-related parenting. A three-way interaction effect (maternal ethnicity x maternal generation status x children's gender) was found for emotion coaching, even after controlling for covariates. For mothers of boys, emotion coaching was the highest for second and third generation mothers of European ethnicity. For mothers of girls, emotion coaching scores were the highest for first generation mothers of European ethnicity. For emotion rejecting, there was a significant main effect for maternal ethnicity and generation status, an interaction effect for maternal ethnicity x generation status, as well as an interaction effect for maternal ethnicity x children's gender. Among mothers of boys, emotion rejecting scores were the highest for first and second generation mothers of non-European ethnicity. For mothers of girls, emotion rejecting scores were the highest for second generation European mothers and first generation non-European mothers. These complex findings indicate that mothers' emotion-related parenting differ on the basis of children's gender and mothers' background characteristics. It is possible that socialization goals may differ within immigrant, non-European families. As noted before, it may be helpful to interpret this finding with respect to domains of socialization (Grusec & Davidov, 2015). It is possible that immigrant mothers may be rejecting their children's emotions to give precedence to socialization goals from other domains (e.g., behavioural

control or safety) that may be more adaptive in the context. Interactions between emotion-related parenting, children's gender, and mothers' characteristics (ethnicity and generation status) will certainly be an area worthy of further investigation. In particular, the influences of acculturation and enculturation should be examined to understand immigrant parents' socialization goals and behaviours (Camras et al., 2014).

Second, further analyses were conducted to examine relations between children's emotion regulation scores across multiple methods. Persistence and frustration as observed during an emotion regulation task (Transparent Box Task) was compared to children's scores on the Emotion Regulation Checklist as reported by their mothers. Mothers' reports of their children's emotion regulation measure was supported by observational data to some extent. In particular, greater emotion regulation scores on a checklist measure was significantly related to lower frustration for children during a behavioural task of emotion regulation. Though the Emotion Regulation Checklist was initially developed as a parent-report measure emotion regulation for children ages 6 to 12 years (Shields & Cicchetti, 1997), present findings provide some preliminary support for convergent validity with observed emotion regulation among preschoolers.

Third, relations were observed between children's Transparent Box scores and emotion talk during a storytelling task. Greater children's persistence during the Transparent Box Task was significantly associated with greater mother-child emotion talk during the storytelling task, even after controlling for covariates. However, children's frustration during the Transparent Box Task was not significantly related to mother-child emotion talk. According to Cole, Armstrong, and Pemberton (2010), children's development of expressive language through parent-child discussion can help children understand and communicate emotions, contributing to their self-regulatory strategies.

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Overall, present findings show some support for links between preschoolers' emotion regulation and emotional expression.

Qualitative Findings

Mothers in this study were presented with the opportunity to openly describe (1) how their values relate to their emotion-related parenting, (2) how they perceive their children's temperament, (3) how their temperament is related to their emotion-related parenting, and (4) how their emotion-related parenting is associated with their children's socio-emotional development. Mothers' responses were coded through a thematic analysis (Braun & Clarke, 2006). In addition, the frequency and proportion of each code was computed across ethnicity x generation status groups. Qualitative analyses examined the research questions further by uncovering further aspects of emotion-related parenting that have not yet been highlighted in the literature.

Cultural values and emotion-related parenting. Mothers reported on the extent to which their cultural values are related to their emotion-related parenting. Mothers highlighted that the following values are incorporated in their emotion-related parenting: values related to emotions; values of respect, obedience, politeness, and discipline; values of freedom, independence, self-confidence, and achievement; familial values; relationship values; values related to prayer, religion, spirituality, and morals; and how emotion-related parenting practices can be conveyed in families.

Many of the values described by mothers appear to be domain-specific cultural values. Mothers' values appear to differ from the life-guiding principles as measured by the SSVS (Lindeman & Verkasalo, 2005). Some themes were consistent with current literature on emotion-related parenting, but unique findings were revealed as well. Mothers described a number of circumstances in which they dismiss or disapprove of

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their children's emotions. A unique finding in this study is that mothers sometimes disciplined their children if they felt their children's emotions were expressed in a disrespectful manner, but would later encourage emotional expression. Once again, socialization goals may differ based on contextual and sociocultural factors (Camras et al., 2014). When mothers disapproved of their children's emotions because their children's expressions were perceived as disrespectful, it appeared likely that their socialization goals were focused on harmonious interpersonal relationships, family unity, and respect.

Present qualitative findings uncovered that among nearly one-third of the first generation families in the present study, respect was described as paramount in the emotion socialization process. That is, mothers described that though they think it is important to validate and acknowledge their children's emotions, they want their children to learn to express emotions in a way that respects others. In some cases, mothers reported that their children would be disciplined if their expression of emotion was disrespectful but would later encourage expression once children were more polite. Respect involves taking into account other people and can be seen as being collectivistic in nature. Friedlmeier, Corapci, and Cole (2011) described that families that value *individualistic* emotion competence tend to promote self-expression and open communication about ego-focused emotions (e.g., anger and pride), while families that value *relational* emotion competence tend to promote respect, harmony, and foster the expression of other-focused emotions (e.g., sympathy and shame). Western approaches of emotion-related parenting focus on parental coaching, validation of emotions, and freedom of emotional self-expression (e.g., Klimes-Dougan & Zeman, 2007). This Western approach may come into conflict with approaches in which respect for others is

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prioritized over the children's individual processing of emotions. The present finding that mothers may initially reject children's negative emotions but later encourage a respectful, polite expression of negative emotion should be considered in future measures of emotion-related parenting.

Cross-cultural research on socialization practices including Canadian samples has been conducted in previous work. For example, Chen and colleagues (1998) examined cross-cultural variabilities in mothers' child rearing attitudes and toddlers' behavioural inhibition (i.e., duration of contact with their mothers during free play) between Canadian and Chinese samples. They found that Chinese toddlers displayed greater behavioural inhibition than Canadian toddlers during the task (Chen et al., 1998). Among the Canadian sample, toddlers' inhibition was associated with mothers' beliefs in using physical punishment as a disciplinary tool. Greater inhibition in toddlers was related to lower acceptance and encouragement of achievement in mothers. In contrast, for the Chinese sample, greater inhibition in toddlers was related to greater maternal warmth and acceptance, but was related to lower rejection and punishment orientation (Chen et al., 1998). In a study by Liu and colleagues (2005) socialization and values were compared between mothers of toddlers from China and Caucasian mothers from Canada. They found that Chinese mothers had higher scores on the encouragement of connectedness – a socialization goal that encourages group responsibility, *respect for authority*, belongingness/affiliation, and intimacy – as compared to Canadian mothers. In contrast, Canadian mothers had higher scores on the encouragement of autonomy (i.e., supporting values related to self-reliance) as compared to Chinese mothers. Thus, in both past work and in the present study, socialization beliefs and goals appear to be linked to values. In addition, it appears that a "one size fits all" approach is not appropriate in evaluating

child-rearing beliefs and children's outcomes. To further complicate this matter, as a result of globalization and social change, non-traditional systems of values have been introduced in both Western and non-Western societies (Chen et al., 2015), indicating that values and socialization practices may be less static than in the past.

Canada has been considered to be a *cultural mosaic* (Statistics Canada, 2003). Accordingly, one might presume that individual Canadians also hold a mosaic of values. A policy of multiculturalism was introduced in Canada in 1972 with the goals to avoid assimilation, increase intergroup harmony, increase intergroup contact and sharing, and encourage the learning of English and French (Berry, Phinney, Sam, & Vedder, 2006). Further, according to Statistics Canada's (2010) projections of the diversity of the Canadian population, by the year 2031, approximately 46% of the Canadian population ages 15 and over will be first generation or second generation and visible minorities are expected to make up the majority of the population in many Canadian cities.

In terms of mothers' report of their cultural values, there were mothers – both immigrant and non-immigrant – who wrote that they were uncertain if cultural values relate to their emotion-related parenting and/or were unable to describe their cultural values in general. Immigrant mothers may be engaged in a process of exploring their cultural beliefs, values, parenting approaches, and philosophies. In addition, immigrant mothers likely compare perceived parenting practices and philosophies in Canada to those found in their host countries. Non-immigrant Canadian mothers may also struggle to describe their cultural identity because within a Canadian cultural mosaic, there is no definitive group to compare or contrasts one's values with. Mothers' identities and cultural values as Canadians and are certainly worthy of exploring further. The next individual characteristic that was examined was children's temperament.

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Children's temperament. Several temperament themes presented by mothers fit the three broad temperament dimension outlined by Putnam and Rothbart (2006). The negative affectivity scale in the work by Putnam and Rothbart (2006) appears to fit with the emotionally labile traits theme in the present study. Their extraversion scale appears to correspond to the extraverted traits theme in the present study. Finally, their effortful control scale seems to fit with the inhibited traits theme in the present study. One benefit of looking at mothers' perceptions of their children's temperament through a qualitative approach is that the temperament characteristics mothers see as most notable may go beyond what has been measured quantitatively. For instance, mothers in this study felt that notable temperament traits in their children also included prosocial traits and cognitive traits.

Acknowledging mothers' descriptors of their children's temperament helps set up for a better understanding of how children's temperament relates to their emotion-related parenting. Responses from this particular qualitative question has helped with the interpretation of themes in the next section.

Children's temperament and mothers' emotion-related parenting. Mothers described how their children's temperament relates to their emotion-related parenting. Contextual differences in emotion-related parenting were described by mothers. Mothers described how they adapt their emotion-related parenting based on their children's mood and behaviour. Mothers also highlighted a flexible and adaptable response to their children's emotions. In addition, mothers described their rationale for modulating and repairing of their own emotional states. As found in this study, mothers highlighted their own need to process and/or suppress their own emotions during the emotion socialization process in order to avoid eliciting negative emotionality in their children. In previous

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work, parents' values in attending to/accepting emotions and in repairing their own

negative moods were related to greater supportive emotion socialization and children's

constructive self-regulation (Meyer et al., 2014). Further, the present finding highlights

the bidirectional nature of emotion socialization; that is, socialization is not merely

mothers' responses to their children's emotions, as children's behaviour and temperament

can relate to mothers' socialization approaches. Eisenberg and colleagues (2001)

highlighted that maternal expression of negative emotion may disrupt children's

regulation and may also be modelling dysregulated behaviour. Mothers described that

their children's negative emotionality induces negative emotionality in themselves. This

theme of maternal matching of children's negative emotionality appears to fit a domain

that is measured on the Coping with Children's Negative Emotions Scale (CCNES;

Fabes, Eisenberg, & Bernzweig, 1990) that highlights how parents match the distress of

the child. Mothers also appeared to be highly cognisant of their own emotional responses

when around their children.

Mothers also highlighted parenting strategies that best match their children's

temperament. For example, mothers in the study – especially Canada/U.S.-born mothers

of a European ethnicity – reported that they feel it important to discuss and label emotions

with their children. Mothers also described the importance of being emotionally close to

their children, using problem-solving approaches, supporting their children's emotion

regulation, and providing comfort.

Finally, mothers reported on the difficulties they have encountered within the

context of their children's temperament. For instance, mothers were aware that they can

become frustrated and lose their own patience. In some cases, mothers experienced

difficulties because they felt their own temperament did not match their children's temperament.

Emotion-related parenting and children's development. Among mothers who reported that their emotion-related parenting is associated with adaptive socio-emotional outcomes for their children, a primary outcome was that their children can express, understand, and discuss emotions. Mothers also felt that children's use of coping strategies was evidence of an adaptive outcome. Children's adaptability and openness to novelty, confidence, social skills, and empathy were also reported as adaptive outcomes. As previously noted, there was a group of children who were described as having an inhibited temperament. Mothers felt that children's reduction in their reserved and cautious traits was another example of an adaptive outcome. There were also mothers in the study who were unsure if their emotion-related parenting was related to their children's socio-emotional development, or in a few cases felt there was no relation or a negative relation.

Study Limitations and Strengths

Limitations and strengths of the present study are now described in relation to contemporary literature.

Limitations. Due to the cross-sectional design of this study, causal relations could not be examined. The present study focused on emotion-related parenting of preschoolers. A longitudinal study design would be beneficial to examine causal relations between individual and contextual factors, emotion-related parenting, and children's outcomes over children's developmental periods. Additionally, the bidirectional nature of emotion socialization has been highlighted in the literature. Katz, Maliken, and Stettler (2012) urged researchers to explore bidirectional relations between

parents' characteristics and children's characteristics, but this was not explicitly explored in this study. Further, emotion-related parenting was measured through mothers' retrospective self-reports and was not measured by direct observation. Relations in present study findings should be examined further in models that will allow a look into the complex, bidirectional processes.

Though mothers reported on family traditions and reasons for immigration, these variables were described but not further explored in analyses in order to limit the number of variables in this study. It will be helpful for future researchers to examine if family traditions and reasons for immigration have any relation to values. The examination of parents' acculturation and racial identity would also be beneficial. Further, Raval and colleagues (2013) noted that between- and within-culture differences may be present in cultural values and associated emotion socialization processes. Accordingly, values and emotion socialization were compared across groups in the present study between European and non-European mothers, as well as by maternal generation status. Due to sample size restrictions, analyses were not conducted by more specific ethnic groups. Thus, heterogeneity within the non-European group was not differentiated or examined in this study. Instead, a limitation of the current study is that ethnicity was only examined in terms of mothers' European or non-European ethnicity.

The results of this study only pertain to mothers of preschool-age children. Paternal ethnicity and generation status were not examined in this study. Only having input from one parent in a study of emotion socialization is likely not fully capturing the complexity of the process taking place. In the literature on emotion socialization, research has been primarily conducted with mothers. The roles of other socializing agents are still important to consider (Klimes-Dougan & Zeman, 2007). Lewis (2014)

noted that children are also substantially influenced by their fathers, siblings, other members of the extended family, and peers. Paternal emotion socialization is certainly an area in need of further study. There is some preliminary research to suggest that mothers score higher on positive self-expressiveness and expressive encouragement (i.e., encouraging children to express negative emotions) than fathers, while fathers score higher on emotion dismissing than mothers (Hakim-Larson et al., 2006). As compared to fathers, mothers have been found to be more accepting of their adolescents' expression of negative emotions (Stocker, Richmond, Rhoades, & Kiang, 2007). Bowie and colleagues (2013) examined maternal and paternal emotion socialization and children's mental health outcomes. Their sample included African American, European American, and multiracial parents of children ages 7 to 9 years ($N = 99$). They found that similar parental emotion coaching and emotion regulation patterns across racial/ethnic groups were related to different mental health outcomes for children within groups (Bowie et al., 2013). For instance, among African American families, greater maternal coaching of anger and sadness was related to lower depressive symptoms in children. Among the multiracial group, greater paternal coaching of anger was related to lower anxiety and depressive symptoms in children. As noted by Bowie et al. (2013), there is a great need for research on emotional development and parenting in multi-ethnic and multi-racial families.

It is important to acknowledge that young children often engage in socialization through storytelling with siblings, grandparents, and other members of the extended family (Schick & Melzi, 2010). In terms of examining emotion-related parenting, it is important to note that the literature has recently expanded to examining this construct among other dyads, including grandparent-child, teacher-child (e.g., Morris, Denham,

Bassett, & Curby, 2013), and early childhood educator-child (e.g., Ciucci, Baroncelli, & Toselli, 2015).

Another limitation is that mothers were recruited from locations where mothers may have access to parent-education materials (e.g., at child care centres, community centres, etc.) and findings, therefore, may not be generalizable to parents recruited from other sources. Despite making attempts to recruit mothers from a variety of settings, the sample was homogeneous in terms of maternal level of education, with over 95% of the mothers having at least some college/university education.

Mothers provided a self-report account of their emotion-related parenting. As found in this study, some mothers responded using a socially desirable response bias in their self-report. Mothers' self-report responses may not be an accurate reflection of what they actually practice in their parenting.

In addition, some children in this study were reported by mothers as being diagnosed with or suspected of having a disability, most often including speech/language delay, anxiety/selective mutism, and Attention-Deficit/Hyperactivity Disorder. These participants were not screened out because doing so may limit the generalizability of the study findings. However, a limitation of this study is that the presence of children's disability was not further examined in study models. Speech-language delays, anxiety, and Attention-Deficit/Hyperactivity Disorder can certainly explain, at least in part, mothers' ratings for their children's temperament characteristics. Given that group sizes were small across children's disability type, further analyses were not conducted.

The sample size for Phase 2 was small ($n = 30$ mother-child dyads). In having a small sample size and including several control variables, statistical power was limited and it became more difficult to find statistically significant relations. Statistical power

was also reduced because multiple control variables were included in the models, which takes up additional degrees of freedom in the statistics. With a small Phase 2 sample size, the types of analyses that could be conducted were limited as well. Generalizability of Phase 2 findings may be particularly limited for these reasons, but hopefully pave the way for future research on these constructs.

There are several limitations regarding the administration and coding of the four open-ended questions. In the online survey, mothers were asked to describe the extent to which they believe their emotion-related parenting has been influenced by their values and children's temperament. Mothers were also asked to describe the extent to which their emotion-related parenting has influenced their children's development. There were mothers in this study whose responses indicated that in their view, these variables influence one another to *no extent*. For example, there were some mothers who denied that their values have influenced their emotion-related parenting at all. Ideally, these open-ended questions should have been delivered in a multi-part format (e.g., If yes, to what extent…) in order to be less leading. Further, there are a few aspects of qualitative research quality that were not feasible in the thematic analysis of mothers' open-ended responses. Braun and Clarke (2013) highlighted the quality criteria for qualitative research. One recommended practice is member checking, which is where participants are invited to check over the report of the study to comment on its trustworthiness or authenticity (Braun & Clarke, 2013). The second recommended practice is triangulation, which involves multiple data sources in order to strengthen analytical claims and to understand a phenomenon (Braun & Clarke, 2013). Member checking and triangulation were not explicitly built into the study design and thus were not conducted.

In addition, this study can be considered *multi-method* (e.g., cultural values were examined by mothers' ratings and qualitatively; children's temperament was examined by mother's ratings and qualitatively; children's emotion regulation was examined by mothers' ratings and through behavioural observation). However, the study design is not considered *mixed methods* because qualitative findings did not inform the quantitative analyses; though the quantitative and qualitative research questions certainly overlapped, there were no linked hypotheses. Instead, qualitative findings were used to help explain observed relations between quantitative variables and to identify new relations not captured in quantitative measures.

Strengths. In many ways, the demographic characteristics of the sample were fairly heterogeneous and relatively representative of the general population. In having participants from both the community and local post-secondary institutions, there was some diversity in terms of socio-economic status and background which is an improvement over much of the past research in this area, which has been limited to middle class, well-educated Caucasian samples. For example, with respect to mothers' generation status in Canada/U.S., 23.8% were first generation, which was slightly higher than national estimate of 22% (Statistics Canada, 2011). Mothers who were born outside of Canada originated from 22 different countries located in five continents: Asia, Africa, North America, South America, and Europe. Relative to most studies in the emotion socialization literature, parents in this study were ethnically diverse with 32.1% reporting a non-European ethnicity. A focus on the emotion socialization of preschoolers, many of whom were from immigrant families, provided considerations for future work.

Much of what is known about the emotion socialization process has been based on predominately White, well-educated samples living in the United States. A specific

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contribution of this study is that it appears to be the first to link values, temperament, and emotion socialization practices among a sample of ethnically diverse mothers of preschoolers living in Canada. Many of the constructs in this study were examined in novel ways. For example, instead of looking at maternal and children's temperament in a linear way, a cluster analysis was used to generate an interactional, data-driven model of mother-child temperament profiles. K-Means clustering is a type of a fit statistic has been conducted in studies to classify children into temperament types (e.g., Boström, Broberg, & Bodin, 2011) as well as to classify maternal factors (e.g., Melzi et al., 2011), but this is the first known study to examine mother-child temperament profiles through this method. Beekman and colleagues (2015) identified that a major benefit of using a data-driven approach to temperament research, differences by profile membership can be made in such a way that best fit the study sample. Ellis, Alisic, Reiss, Dishion, and Fisher (2014) found that the relation between family risk and children's emotion regulation was mediated by maternal emotion coaching. In addition, the present study appears to be the first to examine emotion coaching and emotion rejecting within the same model as a mediator between values and children's emotion regulation.

Strengths of the present study include its multi-method and multi-informant design (i.e., mother report, child observation, and mother-child observation). Data-driven typologies of mother-child temperament patterns were generated. In addition, qualitative coding through thematic analysis was data-driven and responses were, therefore, not forced to fit pre-conceived categories that may have originally been developed based on work with American families.

A major strength of the qualitative analysis was that the coding and analyses met Braun and Clarke's (2006) criteria for a good thematic analysis. For instance, coding in

this study was thorough and comprehensive, themes were checked back against the original data, and all phases of the thematic analysis were completed.

Clinical Implications

A number of individual characteristics, both biological and environmental, appear to be important in understanding emotion socialization processes. As found in this study, emotion-related parenting of preschool-age children differs on the basis of mothers' ethnicity and generation status. Immigrants living in Canada certainly have various meta-emotion philosophies and approaches to parenting children about emotions. Canadian researcher, Joan Grusec, has highlighted that it is important to consider the meaning, motives, sociocultural norms, and context associated with parenting behaviours, as well as children's perception of those approaches (Grusec, 2011). Within Western society, it is often valued that children have a right to self-expression. By its very nature, emotion-related parenting focuses on parental roles in processing their children's *own* emotional responses and reactions. Self-expression has been considered an individualistic value, as the goal is to make one's personal needs known to another (Ajrouch & Antonucci, 2014). Grusec (2011) stated that universally harmful parenting includes "harsh punishment, lack of psychological support, and threatening of children's sense of autonomy" (p. 163). Regardless of whether parents value children's self-expression or not, parenting approaches should not be demeaning or emotionally abusive, regardless of what can be labelled culturally relative.

The examination of emotion coaching styles may have implications for parent training, referred to as meta-emotion training (Gottman, Katz, & Hooven, 1997); however, it is unclear just how to best adapt meta-emotion training to be appropriate for diverse groups. Clinicians should be culturally sensitive and mindful of their own biases

as they discuss emotion-related parenting and values with parents. For example, Daga, Raval, and Raj (2015) recommended that clinicians be aware that there are cultural variations in mothers' philosophies about emotional control and expression. Within some cultures, promoting emotional control in children can help foster interpersonal harmony, while promoting awareness and expression of emotion can harm interpersonal harmony (Daga et al., 2015).

As described by Cole and Tan (2015), it does not appear to be universal that that parents' encouragement of children's emotional expression is associated with children's self-esteem. Halberstadt and Lozada (2011) stated that culture has been thought to have direct and indirect relations to emotion socialization behaviour. Halberstadt and Lozada (2011) described that culture affects parental beliefs and socialization behaviours, which then affect infants' emotional experiences. In the present study, a similar framework was assessed but with a focus on preschoolers' emotional experiences. One aim of a study by Parker et al. (2012) was to demonstrate the relations between culture and ethnicity and parental beliefs about emotions (i.e., value of emotion in the family, socialization of emotion, and controllability of emotion). They found two new belief dimensions: the relational nature of emotions, which included themes of emotional privacy, connectedness, and contagion, and the changeability of parental beliefs about emotions, which included themes of developmental processes, the fluctuation of emotion, and the generational change in parenting styles. Consistent with the findings by Parker and colleagues (2012), results of the present study also identified contextual factors in terms of mothers' emotion-related parenting. Current findings indicated that mothers adapt their approaches based on their children's mood and behaviour, approaches can differ for each child in the family, mothers feel it is important to have a flexible/adaptable response

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to child's emotions, and mothers have an interest in learning about other emotion-related parenting practices.

Families that have recently immigrated to Western society may face unique challenges. Intergenerational conflict may occur when parents' traditional values conflict with children's acculturation processes and is more likely to occur as subsequent generations become acculturated (Haboush, 2005). For example, if a mother living in Canada instructed her child to only play with children of the same sex, the child's expression of negative emotion about the situation may be disregarded or invalidated in order to preserve traditional values. Among families with young children, there is a possibility that the family's social hierarchy may shift if they do not have adequate social support. That is, young children may be responsible for interpreting the new culture for their parents, which may threaten parents' leadership roles (McGoldrick et al., 2005).

The examination of how processes such as language skills, effortful control, and attention work together was identified as having potential clinical implications (Roben et al., 2013). With a better understanding of how mother-child temperament patterns and cultural values are associated with mothers' emotion-related parenting styles and subsequent outcome in children, clinicians may be better able to identify the strengths and difficulties faced by immigrant families. Findings have helped inform literature on emotion-related parenting by highlighting key considerations in conducting studies on emotion socialization among diverse populations.

Directions for Future Research

Understanding emotion socialization through a cultural lens needs to go beyond a simple report of participants' demographic characteristics. In the present research, mothers' ethnicity and generation status made significant contributions in many of the

models. There is a need to examine emotion socialization processes in more diverse

samples, especially in terms of parents' ethnicity, generation status, income and

education, and family composition. Parental socialization when children have disabilities

is also an area in which additional research is warranted.

Literature on emotion-related parenting of children with disabilities has recently

been emerging. For example, Paterson and colleagues (2012) developed the Emotion-

Related Parenting Styles – a short-form measure of the ERPSST-L – based on their study

that included a sample of mothers of children with autism spectrum disorder or another

developmental disability. They found that evidence for a new subscale that measured

mothers' feelings of uncertainty/ineffectiveness in emotion socialization (Paterson et al.,

2012). In addition, Hurrell, Houwing, and Hudson (2016) compared meta-emotion

philosophy among parents of children with and without anxiety disorder. They found that

parents of children with anxiety engaged in less emotion coaching and were less aware of

emotions in themselves and their children (Hurrell et al., 2016). One potential direction

for future research would be to examine emotion-related parenting and values among

ethnically diverse parents of children with disabilities.

In this study, the proportion of segments containing various emotion types was

reported descriptively but not examined in detail. Thus, a more comprehensive analysis

of the specific types of emotions expressed by mother-child dyads can provide insight

into the socialization of *specific* emotions (Camras et al., 2014). That is, much of the

research on emotion socialization surrounds anger, sadness, and fear. A better

understanding of other emotions, such as pride, love, shame, and guilt can be quite

helpful in a cultural context. More particularly, Friedlmeier and colleagues (2011)

highlighted that "other-focused" emotions (e.g., sympathy and shame) are often fostered

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in East-Asian societies. Recent literature has also focused on culture, social relations, and forgiveness among Arab Americans (Ajrouch & Antonucci, 2014). It is possible that members of certain groups may respond more differentially to particular emotional experiences. Recent literature has suggested that mothers may perceive certain emotions as more acceptable than other emotions and may, therefore, encourage children's expression of specific emotions (e.g., Raval, Daga, Raval, & Panchal, 2016). There is a need to further examine socialization of positive emotions, as it is possible that parents' awareness, acceptance, regulation, and coaching of emotions may differ according to emotion type. As one mother wrote in her open-ended response in the present study, "Writing this and taking the survey has made me realize I need to also give some airtime to positive emotions, i.e. help them also learn to recognize situations and things that make them happy and proud."

Behavioural/nonverbal descriptions of emotions (e.g., laughing, crying) in mother-child storytelling were beyond the scope of the present study. However, an examination of behavioural descriptions of emotions may provide information about an additional way of socializing emotions, beyond the expression of emotion words. Additional avenues could be pursued by coding elaboration in the mother-child storytelling transcripts.

Longitudinal studies can be of particular use in examining emotion-related parenting practices among mothers who have immigrated to Canada. For instance, the stability of emotion-related parenting of immigrant mothers in a longitudinal study can help shed light on the extent to which mothers' meta-emotion philosophies change, or do not change, over time and why. For example, it might be helpful to determine if acculturative stress has any impact mothers' meta-emotion philosophies over time. Though none of the mothers in the study were refugees, examining emotion socialization

among refugees living in Canada may be another direction for future research. As found in this study, mothers reported that they use different emotion-related parenting styles for each of their children. An examination of mothers' meta-emotion philosophy within multi-child families can help researchers better understand the stability of emotion-related parenting styles.

This is the first known study to examine emotion-related parenting, maternal characteristics and values, preschoolers' characteristics, and contextual factors in an ethnically diverse sample in Canada. It is recommended that analyses be replicated in future work to determine if the validity of the findings can be established. Replicability of this Phase 2 study results will be especially important, given that Phase 2 only included 30 mother-child dyads.

Conclusion

Overall, study findings highlighted many associations between maternal emotion-related parenting styles and cultural values, mother-child temperament traits, and children's socio-emotional development. Findings contribute to a better understanding of the emotional worlds among mothers and preschool-age children. Results indicate that emotion-related parenting among mothers of preschoolers living in Canada can vary with cultural and contextual factors. Emotion socialization appears to be a culturally loaded and gender loaded construct. Present findings provided support for past links between contextual factors and mothers' responses to children's emotions. Emotion-related parenting can certainly be better understood when the cultural context of the family is clarified. With Canada's diverse groups of parents and children, the study of immigrants living in Canada provides a unique and promising opportunity, as there is currently very little literature about emotion socialization in ethnically diverse families living in Canada.

REFERENCES

Abudabbeh, N. (2005). Arab families: An overview. In M. McGoldrick, J. Giordano, & N. Garcia-Preto (Eds*.), Ethnicity and Family Therapy* (3rd ed., pp. 423–436). New York: Guilford Press.

Adler, J. M. & McAdams, D. P. (2007). Time, culture, and stories of self. *Psychological Inquiry, 18*(2), 97–128. doi:10.1080/10478400701416145

Adrian, M., Zeman, J., & Veits, G. (2011). Methodological implications of the affect revolution: a 35-year review of emotion regulation assessment in children. *Journal of Experimental Child Psychology, 110,* 171–197. doi:10.1016/j.jecp.2011.03.009

Ahadi, S., Rothbart, M.K., & Ye, R. (1993). Children's temperament in the United States and China: Similarities and differences. *European Journal of Personality, 7*, 359–378.

Ajrouch, K. A., & Antonucci, T. C. (2014). Using convoys of social relations to understand culture and forgiveness from an Arab American perspective. In S.C. Nassar-McMillan, K.J. Ajrouch, & J. Hakim-Larson (Eds*.), Biopsychosocial perspectives on Arab Americans: Culture, development and health* (pp. 127–146). New York: Springer.

Alexander, K. W., & O'Hara, K. D. (2009). An integrated model of emotional memory: Dynamic transactions in development. In J. A. Quas, & R. Fivush (Eds.), *Emotion and memory in development: Biological, cognitive, and social considerations* (pp. 221–254). New York: Oxford University Press.

Allan, N. P., Lonigan, C. J., & Wilson, S. B. (2013). Psychometric evaluation of the Children's Behavior Questionnaire – Very Short Form in preschool children

using parent and teacher report. *Early Childhood Research Quarterly, 28*, 302–313. doi:10.1016/j.ecresq.2012.07.009

Almeida, R. (2005). Asian Indian families: An overview. In M. McGoldrick, J. Giordano, & N. Garcia-Preto (Eds*.), Ethnicity and Family Therapy* (3rd ed., pp. 377–394). New York: Guilford Press.

Armstrong, L. M. (2011). *Emotion language in early childhood: Relations with children's emotion regulation strategy understanding and emotional self-regulation* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3483684)

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.

Bates. E., Bretherton, I. and Snyder, L. (1988). *From first words to grammar*. New York: Cambridge University Press.

Bates, J. E., Goodnight, J. A., & Fite, J. E. (2008). Temperament and emotion. In M. Lewis, J. M. Haviland-Jones, & L. Feldman Barrett (2008). *Handbook of emotions* (3rd ed., pp. 485–496). New York: Guilford Press.

Beekman, C., Neiderhiser, J. M., Buss, K. A., Loken, E., Moore, G. A., Leve, L. D., Ganiban, J. M., Shaw, D. S., & Reiss, D. (2015). The development of early profiles of temperament: Characterization, continuity, and etiology. *Child Development, 86*(6), 1794–1811. doi:10.1111/cdev.12417

Beitin, B. K., & Aprahamian, M. (2014). Family values and traditions. In S.C. Nassar-McMillan, K.J. Ajrouch, & J. Hakim-Larson (Eds*.), Biopsychosocial perspectives*

on Arab Americans: Culture, development and health (pp. 67–88). New York: Springer.

Bernal, G., & Shapiro, E. (2005). Cuban families. In M. McGoldrick, J. Giordano, & N. Garcia-Preto (Eds*.), Ethnicity and Family Therapy* (3rd ed., pp. 202–215). New York: Guilford Press.

Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review, 46,* 5–68.   doi:10.1080/026999497378467

Berry, J. W. (2001). A psychology of immigration. *Journal of Social Issues, 57*, 615–631. doi:10.1111/0022-4537.00231

Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations, 29*, 697–712. doi:10.1016/j.ijintrel.2005.07.013

Berry, J. W., Phinney, D. L. Sam, & P. Vedder (Eds.) (2006). *Immigrant youth in cultural transition: Acculturation, identity and adaptation across national contexts*. Mahwah, NJ: Lawrence Erlbaum Associates.

Bilsky, W., & Hermann, D. (2016) Individual values and delinquency: On considering universals in the content and structure of values. *Psychology, Crime & Law, 22*(10), 921–944, doi:10.1080/1068316X.2016.1202250

Blake, B. F., Valdiserri, J., Neuendorf, K. A., & Nemeth, J. (2006). Validity of the SDS-17 measure of social desirability in the American context. *Personality and Individual Differences, 40*, 1625–1636. doi:10.1016/j.paid.2005.12.007

Bosacki, S. L., & Moore C. (2004). Preschoolers' understanding of simple and complex emotions: Links with gender and language. *Sex Roles, 50*(9), 659–675. doi:10.1023/B:SERS.0000027568.26966.27

Boström, P. K., Broberg, M., and Bodin, L. (2011). Child's positive and negative impacts on parents—A person-oriented approach to understanding temperament in preschool children with intellectual disabilities. *Research in Developmental Disabilities, 32*, 1860–1871. doi:10.1016/j.ridd.2011.03.017

Bowie, B. H., Carrère, S., Cooke, C., Valdivia, G., McAllister, B., & Doohan, E. (2013). The role of culture in parents' socialization of children's emotional development. *Western Journal of Nursing Research, 35*(4), 514–533. doi:10.1177/0193945911411494

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3,* 77–101. doi:10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. London: Sage.

Bridgett, D. J., Laake, L. M., Gartstein, M. A., & Dorn, D. (2013). Development of infant positive emotionality: The contribution of maternal characteristics and effects on subsequent parenting. *Infant and Child Development, 22*(4), 362–382. doi:10.1002/icd.1795

Camras, L. A., Schuster, M. M., & Fraumeni, B. R. (2014). Emotion socialization in the family with an emphasis on culture. In K. H. Lagattuta K (Ed.), *Children and emotion: New insights into developmental affective sciences* (pp. 67–80). Davis, California: Karger. doi:10.1159/000354355

Castro, V. L., Halberstadt, A. G., Lozada, F. T., & Craig, A. B. (2014). Parents' emotion-related beliefs, behaviours, and skills predict children's recognition of emotion. *Infant and Child Development.* Advance online publication. doi:10.1002/icd.1868

Chen, X., Fu, R., & Zhao, S. (2015). Culture and socialization. In J. E. Grusec & P. D. Hastings (Eds.). *Handbook of socialization: Theory and research* (2nd ed. pp. 451–471). New York: Guilford Press.

Chen, X., Hastings, P. D., Rubin, K. H., Chen, H., Cen, G., & Stewart, S. L. (1998). Child-rearing attitudes and behavioral inhibition in Chinese and Canadian toddlers: A cross-cultural study. *Developmental Psychology, 34*, 677-686. doi:10.1037/0012-1649.34.4.677

Ciucci, E., Baroncelli, A., & Toselli, M. (2015). Meta-emotion philosophy in early childhood teachers: Psychometric properties of the Crèche Educator Emotional Styles Questionnaire. *Early Childhood Research Quarterly, 33*, 1–11. doi:http://dx.doi.org/10.1016/j.ecresq.2015.04.006

Cole, P. M., Armstrong, L. M., & Pemberton, C. K. (2010). The role of language in the development of emotion regulation. In S. D. Calkins & M. A. Bell (Eds.), *Child development at the intersection of emotion and cognition* (pp. 59–77). Washington, DC: American Psychological Association.

Cole, P. M., & Tan, P. Z. (2015). Emotion socialization from a cultural perspective. In J. E. Grusec & P. D. Hastings (Eds.). *Handbook of socialization: Theory and research* (2nd ed. pp. 499–519). New York: Guilford Press.

Colwell, M. J., & Hart, S. (2006). Emotion framing: Does it relate to children's emotion knowledge and social behavior. *Early Child Development and Care, 176*(6), 591–603. doi:10.1080/03004430500147367

Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24,* 349–354.

Cunningham, J. N., Kliewer, W., & Garner, P. W. (2009). Emotion socialization, child

emotion understanding and regulation, and adjustment in urban African American

families: Differential associations across child gender. *Development and

Psychopathology, 21*, 261–283. doi:10.1017/50954579409000157

Daga, S. S., Raval, V. V., & Raj, S. P. (2015). Maternal meta-emotion and child

socioemotional functioning in immigrant Indian and White American families.

Asian American Journal of Psychology, 6(3), 233–241. doi:10.1037/aap0000014

Dedoose (2016). Dedoose Version 7.1.3 [web application for managing, analyzing, and

presenting qualitative and mixed method research data]. Los Angeles, CA:

SocioCultural Research Consultants, LLC. Retrieved from www.dedoose.com

Dennis, T. (2006). Emotional self-regulation in preschoolers: The interplay of child

approach reactivity, parenting, and control capacities. *Developmental

Psychology, 42*, 84–97. doi:10.1037/0012-1649.42.1.84

Derryberry, D. & Rothbart, M. K. (1988). Arousal, affect, and attention as components of

temperament. *Journal of Personality and Social Psychology, 55*(6), 958–966.

doi:10.1037/0022-3514.55.6.958

Derryberry, D. & Rothbart, M. K. (1997). Reactive and effortful processes in the

organization of temperament. *Development and Psychopathology, 9*(4), 633–652.

doi:10.1017/S0954579497001375

Dunstan, D. A., Anderson, D. L, & Marks, A. D. G. (2015). Reliability of the Emotion-

Related Parenting Styles Scale across gender and parent status groups. *Early

Education and Development, 26*(8), 1234–1250.

doi:10.1080/10409289.2015.1039435

Dwairy, M. (2009). Culture analysis and metaphor psychotherapy with Arab-Muslim clients. *Journal of Clinical Psychology, 65*(2), 199–209. doi:10.1002/jclp.20568.

Eisenberg, N. (1996). Meta-emotion and socialization of emotion in the family–A topic whose time has come: Comment on Gottman et al. (1996). *Journal of Family Psychology, 10*(3), 269–276. doi:10.1037/0893-3200.10.3.269

Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry, 9*(4), 241–273. doi:10.1207/s15327965pli0904_1

Eisenberg, N., Spinrad, T. L., & Cumberland, A. (1998). The socialization of emotion: Reply to commentaries. *Psychological Inquiry, 9*(4), 317–333. doi:10.1207/s15327965pli0904_17

Eisenberg, N., Thompson Gershoff, E., Fabes, R. A., Shepard, S. A., Cumberland, A. J., Losoya, S. H...Murphy, B. C. (2001). Mothers' emotional expressivity and children's behaviour problems and social competence: Mediation through children's regulation. Developmental Psychology, 37, 475–490.

Ellis, B. H., Alisic, E., Reiss, A., Dishion, T., & Fisher, P. A. (2014). Emotion regulation among preschoolers on a continuum of risk: The role of maternal emotion coaching. *Journal of Child and Family Studies, 23*(6), 965–974. doi:10.1007/s10826-013-9752-z

Evans, D. E. & Rothbart, M. K. (2007). Developing a model for adult temperament. *Journal of Research in Personality, 41*(4), 868–888. doi:10.1016/j.jrp.2006.11.002

Evans, D. E., & Rothbart, M. K. (2009). A two-factor model of temperament. *Personality and Individual Differences, 47*, 565-570. doi:10.1016/j.paid.2009.05.010

Fabes, R. A., Eisenberg, N., & Bernzweig, J. (1990). Coping with Children's Negative

    Emotions Scale (CCNES): Description and Scoring. Tempe, AZ: Arizona State

    University.

Fabes, R. A., Eisenberg, N., Karbon, M., Bernzweig, J., Speer, A. L., & Carlo, G. (1994).

    Socialization of children's vicarious emotional responding and prosocial

    behavior: Relations with mothers' perceptions of children's emotional reactivity.

    Developmental Psychology, 30, 44–55. doi:10.1037/0012-1649.30.1.44

Favez, N. (2011). Elaboration and regulation of lived emotion in preschoolers'

    autobiographical narratives: The role of maternal conversational cooperation.

    Journal of Narrative Inquiry, 21, 1–23. doi:10.1075/ni.21.1.01fav

Feng, C., Wang, H., Lu, N., Chen, T., He, H., Lu, Y., & Tu, X. M. (2014). Log-

    transformation and its implications for data analysis. *Shanghai Archives of*

    Psychiatry, 26(2), 105–109. http://dx.doi.org/10.3969/j.issn.1002-

    0829.2014.02.009

Field, A. P. (2013). *Discovering Statistics using IBM SPSS Statistics* (4th ed.). London:

    Sage.

Fiese, B. H., & Sameroff, A. J. (1999). The family narrative consortium: A

    multidimensional approach to narratives. In B. H. Fiese, A. J. Sameroff, H. D.

    Grotevant, F. S. Wambolt, S. Dickstein, & D. Fravel (Eds.). The stories that

    families tell: Narrative coherence, narrative interaction and relationship beliefs.

    Monographs of the Society for Research in Child Development, 64(2), 1–36.

Fiese, B. H., & Spagnola, M. (2005). Narratives in and about families: An examination of

    coding schemes and a guide for researchers. *Journal of Family Psychology, 19*,

    51–61. doi:10.1037/0893-3200.19.1.51

Fishman, J. L., Raval, V. V., Daga, S. S., & Raj, S. P. (2014). Meta-emotion philosophy among Asian Indian immigrant mothers in the United States. *Qualitative Health Research, 24*(7), 875–889. doi:10.1177/1049732314537403

Fivush (2009). Co-constructing memories and meaning over time. In J. A. Quas, & R. Fivush (Eds.), *Emotion and memory in development: Biological, cognitive, and social considerations* (pp. 343–354). New York: Oxford University Press.

Fivush, R., Haden, C. A., & Reese, E. (2006). Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development, 77*(6), 1568–1588. doi:10.1111/j.1467-8624.2006.00960.x

Fleming, P. (2012). Social desirability, not what it seems: A review of the implications for self-reports. *The International Journal of Educational and Psychological Assessment, 11*, 3–22.

Friedlmeier, W., Corapci, F., & Cole, P. M. (2011). Emotion socialization in cross-cultural perspective. *Social and Personality Psychology Compass, 5*(7), 410–427. doi:10.1111/j.1751-9004.2011.00362.x

Garred, M., & Gilmore, L. (2009). To WPPSI or to Binet, that is the question: A comparison of the WPPSI-III and SB5 with typically developing preschoolers. *Australian Journal of Guidance & Counselling, 19*(2), 104–115. doi:10.1375/ajgc.19.2.104

Gibson, T. A., Oller, D. K., Jarmulowicz, L., & Ethington, C. A. (2012). The receptive-expressive gap in the vocabulary of young second-language learners: Robustness and possible mechanisms. *Bilingualism (Cambridge, England), 15*(1), 102–116. doi:10.1017/S1366728910000490.

Goldenberg, H., & Goldenberg, I. (2013). *Family therapy: An overview* (8th ed.).

Belmont, CA: Brooks Cole Cengage Learning.

Goldsmith, H. H., & Rothbart, M. K. (1996). The Laboratory Temperament Assessment

Battery (LabTAB): Locomotor, Version 3.0. [Technical manual] Madison, WI:

Department of Psychology, University of Wisconsin.

Goodwin, J. (2009). *Parent-child reminiscing about emotions* (Doctoral dissertation).

Available from ProQuest Dissertations and Theses database. (UMI No. NR57571)

Gottman, J. M., & DeClaire, J. (1997). *Raising an emotionally intelligent child: The heart

of parenting*. New York: Simon & Schuster.

Gottman, J. M., & Levenson, R. W. (1986). Assessing the role of emotion in marriage.

Behavioral Assessment, 8, 31-48.

Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and

the emotional life of families: Theoretical models and preliminary data. *Journal of

Family Psychology, 10*(3), 243–268. doi:10.1037/0893-3200.10.3.243

Gottman, J. M., Katz, L. F., & Hooven, C. (1997). *Meta-emotion: How families

communicate emotionally*. Mahwah, NJ: Lawrence Erlbaum Associates Inc.

Graham, J. W. (2012). Missing data: Analysis and design. New York: Springer.

Graham, J. W., Cumsille, P. E., & Elek-Fisk, E. (2003). Methods for handling missing

data. In J. A. Schinka & W. F. Velicer (Eds.). *Research Methods in Psychology

(pp. 87-114) Volume 2 of Handbook of Psychology* (I. B. Weiner, Editor-in-

Chief). New York: John Wiley & Sons.

Grusec, J. E. (2011). Socialization processes in the family: Social and emotional

development. *Annual Review of Psychology, 62*, 243-269.

doi:10.1146/annurev.psych.121208.131650

Grusec, J. E., & Davidov, M. (2015). Analyzing socialization from a domain-specific

    perspective. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization:*

    Theory and research (2nd ed., pp. 158-181). New York, NY: Guilford Press

Haboush, K. L. (2005). Lebanese and Syrian families. In M. McGoldrick, J. Giordano, &

    N. Garcia-Preto (Eds*.), Ethnicity and Family Therapy* (3rd ed., pp. 468–486).

    New York: Guilford Press.

Haboush, K.L. & Barakat, N. (2014). Education and employment among Arab

    Americans: Pathways to individual identity and community resilience. In S.C.

    Nassar-McMillan, K.J. Ajrouch, & J. Hakim-Larson (Eds*.), Biopsychosocial*

    perspectives on Arab Americans: Culture, development and health (pp. 229–255).

    New York: Springer.

Haden, C. A., & Hoffman, P. C. (2013). Cracking the code: Using personal narratives in

    research. *Journal of Cognition and Development, 14*(3), 361–375.

    doi:10.1080/15248372.2013.805135

Hakim-Larson, J., Dunham, K., Vellet, S., Murdaca, L., & Levenbach, J. (1999). Parental

    affect and coping. *Canadian Journal of Behavioural Sciences, 31*, 5–18.

    doi:10.1037/h0087069

Hakim-Larson, J., Parker, A., Lee, C., Goodwin, J., & Voelker, S. (2006). Measuring

    parental meta-emotion: Psychometric properties of the Emotion-Related

    Parenting Styles Self-Test. *Early Education and Development, 17*(2), 229–251.

    doi:10.1207/s15566935eed1702_2

Hakim-Larson, J., Voelker, S., & Babb, K. (2008). *Socializing emotional competence in*

    the family: The role of narratives and storytelling. Paper presented at the

    Canadian Psychological Association, Halifax, NS.

Halberstadt, A. G. (1998). Of models and mechanisms. *Psychological Inquiry, 9*, 290–294. doi:10.1207/s15327965pli0904_9

Halberstadt, A. G., & Lozada, F. T. (2011). Emotion development in infancy through the lens of culture. *Emotion Review, 3*(2), 158–168. doi:10.1177/1754073910387946

Halberstadt, A. G., Cassidy, J., Stifter, C. A., Parke, R. D., & Fox, N. A. (1995). Self-expressiveness within the family context: Psychometric support for a new measure. *Psychological Assessment, 7*, 93–103. doi:10.1037/1040-3590.7.1.93

Harkins, D. A. (1992). Parental goals and styles of storytelling. In J. Demick, K. Bursik, & R. Dibiase (Eds.). *Parental Development* (pp. 61–74). Hillsdale, NJ: Lawrence Erlbaum Associates.

Harkins, D. A., & Ray, S. (2004). An exploratory study of mother-child storytelling in East India and Northeast United States. *Narrative Inquiry, 14*(2), 347–367.

Harkins, D. A., Koch, P. E., & Michel, G. F. (1994). Listening to maternal story telling affects narrative skill of 5-year-old children. *Journal of Generic Psychology, 155*(2), 247–257. doi:10.1080/00221325.1994.9914775

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs, 76*(4), 408–420. doi:10.1080/03637750903310360

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression based approach*. New York: Guildford Press.

Hurrell, H. E., Houwing, F. L., & Hudson, J. L. (2016). Parental meta-emotion philosophy and emotion coaching in families of children and adolescents with an anxiety disorder. *Journal of Abnormal Child Psychology,* doi:10.1007/s10802-016-0180-6

Hurrell, H. E., Hudson, J. L., & Schniering, C. A. (2015). Parental reactions to children's

    negative emotions: Relationships with emotion regulation in children with an

    anxiety disorder. *Journal of Anxiety Disorders, 29*, 72–82.

    doi:10.1016/j.janxdis.2014.10.008

IBM Corp. (2013). IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM

    Corp.

Kamya, H. (2005). African immigrant families. In M. McGoldrick, J. Giordano, & N.

    Garcia-Preto (Eds*.), Ethnicity and Family Therapy* (3rd ed., pp. 101–116). New

    York: Guilford Press.

Karkhanis, D. G., & Winsler, A. (2016). Temperament, gender, and cultural differences

    in maternal emotion socialization of anxiety, somatization, and anger.

    Psychological Studies, 61(3), 137–158. doi:10.1007/s12646-016-0360-z

Katz, L. F., & Gottman, J. M. (1986). The Meta-Emotion Interview. Unpublished

    manuscript, University of Washington.

Katz, L. F., Gottman, J. M., & Hooven, C. (1996). Meta-emotion philosophy and family

    functioning: Reply to Cowan (1996) and Eisenberg (1996). *Journal of Family*

    Psychology, 10(3), 284–291. doi:10.1037/0893-3200.10.3.284

Katz, L. F., Maliken, A. C., & Stettler, N. M. (2012). Parental meta-emotion philosophy:

    A review of research and theoretical framework. *Child Development*

    Perspectives, 6(4), 417–422. doi:10.1111/j.1750-8606.2012.00244.x

Kim, B. C., & Ryu, E. (2005) Korean families. In M. McGoldrick, J. Giordano, & N.

    Garcia-Preto (Eds*.), Ethnicity and Family Therapy* (3rd ed., pp. 349–362). New

    York: Guilford Press.

Kim, B., & Park, Y. (2008). Enculturation. In F. Leong (Ed.), *Encyclopedia of counseling.* (Vol. 3, pp. 1130–1132). Thousand Oaks, CA: SAGE Publications, Inc. doi:10.4135/9781412963978.n368

Kim-Spoon, J., Cicchetti, D., & Rogosch, F. A. (2013). A longitudinal study of emotion regulation, emotion lability-negativity, and internalizing symptomatology in maltreated and nonmaltreated children. *Child Development, 84*(2), 512–527. doi:10.1111/j.1467-8624.2012.01857.x

Klimes-Dougan, B., & Zeman, J. (2007). Introduction to the Special Issue of Social Development: Emotion socialization in childhood and adolescence. *Social Development, 16*(2), 203–209. doi:10.1111/j.1467-9507.2007.00380.x

Komsi, N., Räikkönen, K., Heinonen, K., Pesonen, A., Keskivaara, P., Järvenpää, A., & Strandberg, T. E. (2008). Transactional development of parent personality and child temperament. *European Journal of Personality, 22*(6), doi:10.1002/per.690

Lagacé-Séguin, D. G., & Coplan, R. J. (2005). Maternal emotional styles and child social adjustment: Assessment, correlates, outcomes, and goodness of fit in early childhood. *Social Development, 14*(4), 613–636. doi:10.1111/j.1467-9507. 2005.00320.x

Laible, D. (2004). Mother-child discourse in two contexts: Links with child temperament, attachment security, and socioemotional competence. *Developmental Psychology, 40*(6), 979–992. doi:10.1037/0012-1649.40.6.979

Laible, D., & Panfile, T. (2009). Mother-child reminiscing in the context of secure attachment relationships: Lessons in understanding and coping with negative emotions. In J. A. Quas, & R. Fivush (Eds.), *Emotion and memory in*

development: Biological, cognitive, and social considerations (pp. 166–195). New York: Oxford University Press.

Laukkanen, J., Ojansuu, U., Tolvanen, A., Alatupa, S., & Aunola, K. (2014). Child's difficult temperament and mothers' parenting styles. *Journal of Child and Family Studies, 23*, 312–323. doi:10.1007/s10826-013-9747-9

Lazarus, R. (1991). *Emotion and Adaptation*. New York: Oxford University Press.

Lee, E., & Mock, M. R. (2005a). Asian families: An overview. In M. McGoldrick, J. Giordano, & N. Garcia-Preto (Eds*.), Ethnicity and Family Therapy* (3rd ed., pp. 269–289). New York: Guilford Press.

Lee, E., & Mock, M. R. (2005b). Chinese families. In M. McGoldrick, J. Giordano, & N. Garcia-Preto (Eds*.), Ethnicity and Family Therapy* (3rd ed., pp. 302–318). New York: Guilford Press.

Lewis, K. (1999). Maternal style in reminiscing: Relations to child individual differences. *Cognitive Development, 14*(3), 381–399. doi:10.1016/S0885-2014(99)00011-8

Lewis, M. (2014). *The rise of consciousness and the development of emotional life*. New York: Guilford Press.

Lindeman, M., & Verkasalo, M. (2005). Measuring values with the Short Schwartz's Value Survey. *Journal of Personality Assessment, 85*(2), 170–178. doi:10.1207/s15327752jpa8502_09

Lipscomb, S. T., Leve, L. D., Shaw, D. S., Neiderhiser, J. M., Scaramella, L. V., Ge, X., Conger, R. D., Reid, J. B., & Reiss, D. (2012). Negative emotionality and externalizing problems in toddlerhood: Overreactive parenting as a moderator of genetic influences. *Development and Psychopathology, 24*, 167–179. doi:10.1017/S0954579411000757

Liu, M., Chen, X., Rubin, K. H., Zheng, S., Cui, L., Li, D., …Wang, L. (2005). Autonomy- vs. connectedness-oriented parenting behaviors in Chinese and Canadian mothers. *International Journal of Behavioral Development, 29*(6), 489–495. doi:10.1080/01650250500147063

Lorenzo, J., Barton, B., Acosta, M. T., & North, K. (2011). Mental, motor, and language development of toddlers with Neurofibromatosis Type 1. *The Journal of Pediatrics, 158*(4), 660–665. doi:10.1016/j.jpeds.2010.10.001

Mayer, M. (1969). *Frog, where are you*? New York: The Dial Press.

Mayer, M., & Mayer, M. (1975). *One frog too many.* New York: Dial Books for Young Readers.

Mayer, S. E. (2002). The influence of parental income on children's outcomes. *Knowledge Management Group, Ministry of Social Development, Te Manatū Whakahiato Ora.* ISBN: 0-478-25121-1

McAdams, D. P. (2006). The problem of narrative coherence. *Journal of Constructivist Psychology, 19*, 109–125. doi:10.1080/10720530500508720

McGoldrick, M., Giordano, J., & Garcia-Preto, N. (2005). Overview. In M. McGoldrick, J. Giordano, & N. Garcia-Preto (Eds.*), Ethnicity and Family Therapy* (3rd ed., pp. 1–40). New York: Guilford Press.

Melzi, G., Schick, A.R., & Kennedy, J. L. (2011). Narrative elaboration and participation: Two dimensions of maternal elicitation style. *Journal of Child Development, 82*(4), 1282–1296. doi:10.1111/j.1467-8624.2011.01600.x

Mesquita, B., De Leersnyder, J., & Boiger, M. (2016). The cultural psychology of emotions. In L. Feldman Barrett, M. Lewis, & J. M. Haviland-Jones (2016). *Handbook of emotions* (4th ed., pp. 674–705). New York: Guilford Press.

Meyer, S., Raikes, H. A., Virmani, E. A., Waters, S., & Thompson, R. A. (2014). Parent

emotion representations and the socialization of emotion regulation in the family.

International Journal of Behavioral Development, 38(2), 164–173.

doi:10.1177/0165025413519014

Miller, P. J., Wiley, A. R., Fung, H., & Liang, C. (1997). Personal storytelling as a

medium of socialization in Chinese and American families. *Child Development,

68*(3), 557–568. doi:10.1111/j.1467-8624.1997.tb01958.x

Morris, A. S., Denham, S. A., Bassett, H. H., & Curby, T. W. (2013). Relations among

teachers' emotion socialization beliefs and practices and preschoolers' emotional

competence. *Early Education and Development, 24*(7), 979–999.

Morris, A. S., Silk, J. S., Morris, M. D. S., Steinberg, L., Aucoin, K. J., & Keyes, A. W.

(2011). The influence of mother-child emotion regulation strategies on children's

expression of anger and sadness. *Developmental Psychology, 47*, 213–225.

doi:10.1037/a0021021

Nath, S. (2005). Pakistani families. In M. McGoldrick, J. Giordano, & N. Garcia-Preto

(Eds*.), Ethnicity and Family Therapy* (3rd ed., pp. 407–420). New York: Guilford

Press.

Newland, R. P., & Crnic, K. A. (2016). Developmental risk and goodness of fit in the

mother-child relationship: Links to parenting stress and children's behaviour

problems. *Infant and Child Development*. Advance online publication.

doi:10.1002/icd.1980.

Oppenheim, D. (2006). Child, parent, and parent-child emotion narratives: Implications

for developmental psychopathology. *Development and Psychopathology, 18*, 771

Oppenheim, D., Nir, A., Warren, S., & Emde, R. N. (1997). Emotion regulation in
mother–child narrative co-construction: Associations with children's narrative
and adaptation. *Developmental Psychology, 33*, 284–294. doi:10.1037/0012-
1649.33.2.284

Osborne, J. (2002). Notes on the use of data transformations. *Practical Assessment,
Research & Evaluation, 8*(6), 1–8. Retrieved from
http://PAREonline.net/getvn.asp?v=8&n=6

Parke, R. D., & McDowell D. J. (1998). Toward an expanded model of emotion
socialization: New people, new pathways. *Psychological Inquiry, 9,* 303–307.
doi:10.1207/s15327965pli0904_13

Parker, A. E., Halberstadt, A. G., Dunsmore, J. C., Townley, G. E., Bryant, A.,
Thompson, J. A., & Beale, K. S. (2012). "Emotions are a window into one's
heart": A qualitative analysis of parental beliefs about children's emotions across
three ethnic groups. *Monographs of the Society for Research in Child
Development, 77.*

Pasalich, D. S., Waschbusch, D. A., Dadds, M. R., & Hawes, D. J. (2014). Emotion
socialization style in parents of children with callous-unemotional traits. *Child
Psychiatry and Human Development, 45,* 229–242. doi:10.1007/s10578-013-
0395-5

Paterson, A. D., Babb, K. A., Camodeca, A., Goodwin, J., Hakim-Larson, J., Voelker, S.,
& Gragg, M. (2012). Emotion-Related Parenting Styles (ERPS): A short form for
measuring parental meta-emotion philosophy. *Early Education and Development,
23*, 583–602. doi:10.1080/10409289.2011.569316

Premo, J. E., & Kiel, E. J. (2014). The effect of toddler emotion regulation on maternal emotion socialization: Moderation by toddler gender. *Emotion*. Advance online publication. doi:10.1037/a0036684

Premo, J. E., & Kiel, E. J. (2016). Maternal depressive symptoms, toddler emotion regulation, and subsequent emotion socialization. *Journal of Family Psychology, 30*(2), 276–285. doi:10.1037/fam0000165

Putnam, S. P., & Rothbart, M. K. (2006). Development of Short and Very Short forms of the Children's Behavior Questionnaire. *Journal of Personality Assessment, 87*, 103–113. doi:10.1207/s15327752jpa8701_09

R Core Team (2013). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. ISBN 3-900051-07-0, http://www.R-project.org/

Raval, V. V., & Martini, T. S. (2011). "Making the child understand:" Socialization of emotion in urban India. *Journal of Family Psychology, 25*(6), 847–856. doi:10.1037/a0025240

Raval, V. V., Daga, S. S., Raval, P. H., & Panchal, I. N. (2016). Asian Indian mothers' emotion socialization and child emotion expression as a function of situational context. *Journal of Child and Family Studies, 25*(9), 2853–2861. doi:10.1007/s10826-016-0451-4.

Raval, V. V., Raval, P. H., & Deo, N. (2014). Mothers' socialization goals, mothers' emotion socialization behaviors, child emotion regulation, and child socioemotional function in urban India. *Journal of Early Adolescence, 34*(2), 229–250. doi:10.1177/0272431613485821

Raval, V. V., Raval, P. H., Salvina, J. M., Wilson, S. L., & Writer, S. (2013). Mothers'
socialization of children's emotion in India and the USA: A cross-and within-
culture comparison. *Social Development, 22*(3), 467–484. doi:10.1111/j.1467-
9507.2012.00666.x

Rettew, D. C., Stanger, C., McKee, L., Doyle, A., & Hudziak, J. J. (2006).
Comprehensive Psychiatry, 47(5), 412–420,
doi:10.1016/j.comppsych.2005.12.008

Roben, C. K. P., Cole, P. M. & Armstrong, L. M. (2013). Longitudinal relations among
language skills, anger expression, and regulatory strategies in early childhood.
Child Development, 84(3), 891–905. doi:10.1111/cdev.12027

Rogers, M. L., Halberstadt, A. G., Castro, V. L., MacCormack, J. K., & Garrett-Peters, P.
(2016). Maternal emotion socialization differentially predicts third-grade
children's emotion regulation and lability. *Emotion, 16*(2), 280–291.
doi:10.1037/emo0000142.

Rothbart, M. (1988). Temperament and the development of inhibited approach. *Child
Development, 33*, 284–294.

Rothbart, M. K. (2007). Temperament, development, and personality. *Current Directions
in Psychological Science, 16*(4). 207–212. doi:10.1111/j.1467-
8721.2007.00505.x

Rothbart, M. K., & Ahadi, S. A. (1994). Temperament and the development of
personality. *Journal of Abnormal Psychology, 103,* 55–56. doi:10.1037/0021-
843X.103.1.55

Rothbart, M. K., Ahadi, S. A., & Evans, D. E. (2000). Temperament and personality: Origins and outcomes. *Journal of Personality and Social Psychology, 78*(1), 122–135. doi:10.1037/0022-3514.78.1.122

Rothbart, M. K., Ahadi, S. A., & Hershey, K. L. (1994). Temperament and social behavior in childhood. *Merrill-Palmer Quarterly, 40,* 21–39.

Rothbart, M. K., Ahadi, S. A., Hershey, K. L., & Fisher, P. (2001). Investigations of temperament at three to seven years: The Children's Behavior Questionnaire. *Child Development, 72,* 1394–1408. doi:10.1111/1467-8624.00355

Saarni, C. (1985). Indirect processes in affect socialization. In M. Lewis & C. Saarni (Eds), *Handbook of emotions* (pp. 187–209). New York: Plenum.

Saarni, C. (1999). *The development of emotional competence*. New York: Guilford Press. Sage.

Saudino, K. J., & Micalizzi, L. (2015). Emerging trends in behavioral genetic studies of temperament. *Child Development Perspectives, 9*(3), 144–148. doi:10.1111/cdep.12123

Schick, A., & Melzi, G. (2010). The development of children's oral narratives across contexts. *Early Education and Development, 21*(3), 293–317. doi:10.1080/10409281003680578

Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Practices for missing data management in counseling psychology. *Journal of Counseling Psychology, 57,* 1–10. doi:10.1037/a0018082

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in*

experimental social psychology, Vol. 25, pp. 1–65. doi:10.1016/S0065-2601(08)60281-6

Schwartz, S. H. (2012). An Overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture, 2*(1). http://dx.doi.org/10.9707/2307-0919.1116

Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology, 53*, 550–562. doi:10.1037/0022-3514.53.3.550

Schwartz, S. H., & Bilsky, W. (1990). Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications. *Journal of Personality and Social Psychology, 58*,878–891. doi:10.1037/0022-3514.58.5.878

Schwartz, S. H., & Boehnke, K. (2004). Evaluating the structure of human values with confirmatory factor analysis. *Journal of Research in Personality, 38*,230–255. doi:10.1016/S0092-6566(03)00069-2

Schwartz, S. H., & Huismans, S. (1995). Value priorities and religiosity in four western religions. *Social Psychology Quarterly, 58,* 88–107. doi:10.2307/2787148

Scott, S. A. (2012). *Parental meta-emotion: Validity of the Emotion-Related Parenting Styles Self-Test and Emotion-Related Parenting Styles* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. MR84449)

Shaver, P., Schwartz, J., Kirson, D., & O'Connor, C. (1987). Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology, 52*(6), 1061–1086. doi:10.1037/0022-3514.52.6.1061

Shibusawa, T. (2005). Japanese. In M. McGoldrick, J. Giordano, & N. Garcia-Preto (Eds.), *Ethnicity and Family Therapy* (3rd ed., pp. 339–348). New York: Guilford Press.

Shields, A. M., & Cicchetti, D. (1995, March). *The development of an emotion regulation assessment battery: Reliability and validity among at-risk grade-school children*. Poster session presented at the biennial meeting of the Society for Research in Child Development, Indianapolis, IN.

Shields, A. M., & Cicchetti, D. (1997). Emotion regulation among school-age children: The development and validation of a new criterion q-sort scale. *Developmental Psychology, 33*(6), 906–916. doi:10.1037/0012-1649.33.6.906

Shields, A. M., & Cicchetti, D. (1998). Reactive aggression among maltreated children: The contributions of attention and emotion dysregulation. *Journal of Clinical Child Psychology, 27*(4), 381–395.

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods, 7*, 422–445. doi:10.1037//1082-989X.7.4.422

Shulova-Piryatinsky, I., & Harkins, D. A. (2009). Narrative discourse of native and immigrant Russian-speaking mother-child dyads. *Narrative Inquiry, 19*(2), 329–355. doi:10.1075/ni.19.2.07shu

Sleddens, E. F. C., Hughes, S. O., O'Connor, T. M., Beltran, A., Baranowski, J. C., Nicklas, T. A., & Baranowski, T. (2012). The Children's Behavior Quesitonnaire Very Short Scale: Psychometric properties and development of a one-item temperament scale. *Psychological Reports, 110*, 197–217. doi:10.2466/08.10.21.PR0.110.1.197-217

Statistics Canada (2003). Canada's ethnocultural portrait: The changing mosaic, 2001 census. Catalogue number 96F0030XIE2001008 retrieved November 12, 2016 from http://publications.gc.ca/site/eng/314235/publication.html

Statistics Canada. (2010). Projections of the diversity of the Canadian population 2006 to 2031. Catalogue number 91-551-X retrieved October 23, 2016 from http://www.statcan.gc.ca/pub/91-551-x/91-551-x2010001-eng.htm

Statistics Canada. (2011). 2011 National Household Survey: Data tables. Citizenship, place of birth, immigrant status and period of immigration, age groups and sex for the population in private households of Canada, provinces, territories, census metropolitan areas and census agglomerations. Catalogue number 99-010-X2011026 retrieved March 16, 2014 from https://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/dt-td/index-eng.cfm

Stöber, J. (1999). The Social Desirability Scale-17 (SDS-17): Development and first results on reliability and validity. *Diagnostica, 45*, 173–177. doi:10.1026//0012-1924.45.4.173

Stöber, J. (2001). The Social Desirability Scale – 17 (SDS-17): Convergent validity, discriminant validity, and relationship with age. *European Journal of Psychological Assessment, 17*(3), 222–232. doi:10.1027//1015-5759.17.3.222

Stocker, C. M., Richmond, M. K., Rhoades, G. K., & Kiang, L. (2007). Family emotional processes and adolescents' adjustment. *Social Development, 16*, 310-325. doi:10.1111/j.1467-9507.2007.00386.x

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Upper Saddle River, NJ: Pearson.

Tafarodi, R. W., Bonn, G., Liang, H. Takai, J., Moriizumi, S., Belhekar, V., & Padhye, A. (2012). What makes for a good life? A four-nation study. *Journal of Happiness Studies, 13,* 783–800. doi:10.1007/s10902-011-9290-6

Tarkkonen, L., & Vehkalahti, K. (2005). Measurement errors in multivariate measurement scales. *Journal of Multivariate Analysis, 96*, 172–189. doi:10.1016/j.jmva.2004.09.007

Taylor, A. C., Fisackerly, B. L., Mauren, B. R., & Taylor, K. D. (2013). "Grandma, Tell Me Another Story": Family narratives and their impact on young adult development. *Marriage & Family Review, 49*(5), 367–390, doi:10.1080/01494929.2012.762450

Tenenbaum, H. R., Alfieri, L., Brooks, P. J., & Dunne, G. (2008). The effects of explanatory conversations on children's emotion understanding. *British Journal of Developmental Psychology, 26,* 249–263. doi:10.1348/026151007X231057

Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs for the Society for Research in Child Development, 59*(2-3), 25–52. doi:10.2307/1166137

Thompson, R. A. (2006). Conversation and developing understanding: Introduction to the special issue. *Merrill-Palmer Quarterly, 52*, 1–16. doi:10.1353/mpq.2006.0008

Tran, U. S., Stieger, S., & Voracek, M. (2012). Psychometric analysis of Stöber's Social Desirability Scale (SDS-17): An item response theory perspective. *Psychological Reports: Measures and Statistics, 111*(3), 870–884. doi:10.2466/03.09.PR0.111.6.870-884

Ukrainetz, T., Justice, L. M., Kaderavek, J. N., Eisenberg, S. L., Gillam, R. B., & Harm, H. M. (2005). The development of expressive elaboration on fictional narratives.

Journal of Speech, Language, and Hearing Research, 48, 1363–1377.

doi:10.1044/1092-4388(2005/095)

Voelker, S., Babb, K., Broga, M., Gragg, M., & Hakim-Larson, J. (2008). *Promoting emotional competence in children with developmental disabilities: Parent-child interactions during storytelling*. Final Outcomes Report for Children's Hospital of Eastern Ontario (CHEO): The Provincial Centre of Excellence for Child and Youth Mental Health (Grant# 28025-021). Windsor, ON: University of Windsor.

Walling, B. R., Mills, R. S. L., & Freeman, W. S. (2007). Parenting cognitions associated with the use of psychological control. *Journal of Child and Family Studies, 16,* 642–659. doi:10.1007/s10826-006-9113-2

Wechsler, D. (2012).*Wechsler Preschool and Primary Scale of Intelligence—Fourth Edition Technical manual and interpretive manual.* San Antonio, TX: Psychological Corporation.

Yoon, E., Chang, C.-T., Kim, S., Clawson, A., Cleary, S. E., Hansen, M., Bruner, J. P., Chan, T. K., & Gomes, A. M. (2013). A meta-analysis of acculturation/enculturation and mental health. *Journal of Counseling Psychology, 60*, 15–30. doi:10.1037/a0030652

Zaman, W., & Fivush, R. (2013). Gender differences in elaborative parent-child emotion and play narratives. *Sex Roles, 68*, 591–604. doi:10.1007/s11199-013-0270-7

Zechella, A. N., & Raval, V. V. (2016). Parenting children with intellectual and developmental disabilities in Asian Indian families in the United States. *Journal of Child and Family Studies, 25*, 1295–1309. doi:10.1007/s10826-015-0285-5

APPENDICES

Appendix A

Permissions for Study Measures

Measure	Permission Obtained From
ERC	Dante Cicchetti, Ph.D., Professor of Child Psychology and Psychiatry Institute of Child Development, University of Minnesota (e-mail communication; July 1, 2014)
ERPSST-L*	Agnes Fischer, Director, Permissions Department, Simon & Schuster (e-mail communication, August 21, 2014)
Rothbart Instruments: ATQ-SF and CBQ-VSF	Sam Putnam, Associate Professor of Psychology, Bowdoin College (e-mail communication; February 25, 2014)
SDS-17	Joachim Stöber, Ph.D, Professor of Psychology & Head of School, School of Psychology, University of (e-mail communication; May 5, 2014)
SSVS	Markku Verkasalo, Psychology Institute of Behavioural Sciences (e-mail communication; March 11, 2014)
Transparent Box Task procedures*	Tracy A. Dennis, Ph.D., Professor, Department of Psychology, Hunter College and the Graduate Center (e-mail communication; March 26, 2014). Additional permission to use this task was given by Lab-TAB and TBAQ Management Team, University of Texas at Arlington (e-mail communication; February 2, 2016)

* *Note.* Permission granted to use and modify the measure/procedures. ERPSST-L: Adapted with the permission of Simon & Schuster, Inc. from THE HEART OF PARENTING: Raising an Emotionally Intelligent Child by John Gottman, Ph.D. Copyright©1997 by John Gottman, Ph.D. All rights reserved.

Unless otherwise stated, permission to use the above listed measures was granted to

Shawna Scott by the individuals indicated. These measures should not be reproduced

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Appendix B

Background Questionnaire

Background Questionnaire: Questions about You and Your Family (Part 1)
Note: Questions adapted from Shawna A. Scott's Honours Thesis, Samantha Daniel's M.A. Thesis, Ashley D. Paterson's Doctoral Dissertation, and Julie Hakim-Larson's Tell Me a Story, Mommy Study

1. What is your age (in years)?

2. What is your gender?
○ Female
○ Male
○ Neither of these options speak to who I am. I consider myself to be:
_____

3. What is the highest level of education you have completed?
○ Elementary School (Grades 1-6)
○ Middle School (Grades 7-8)
○ High School (Grades 9-12)
○ Some university or college, or CEGEP
○ University/College
○ Graduate School

4. Which category BEST describes your occupation?
(Source for occupational categories used in this Demographics Questionnaire: Adapted from Statistics Canada, http://www.statcan.gc.ca/subjects-sujets/standard-norme/soc-cnp/2006/noc2006-cnp2006-menu-eng.htm, October 21, 2009)
○ Management (e.g., facility operation, service director, school principal)
○ Business, finance, and administrative (e.g., banking clerk, secretary, bookkeeping)
○ Natural and applied sciences and related (e.g., engineer, biologist)
○ Health (e.g., dentist, pharmacist, veterinarian)
○ Social science, education, government service, and religion (e.g., psychologist, social worker, teacher)
○ Art, culture, recreation, and sport (e.g., librarian, journalist, photographer, professional athlete)
○ Sales and service (e.g., retail, food service, cleaner, police officer)
○ Trades, transport, and equipment operator (e.g., carpenter, roofer, repair worker)
○ Processing, manufacturing, and utilities (e.g., assembler, machine operator)
○ Student
○ Homemaker/stay-at-home mother
○ Other (please specify) _____

5. What is your marital status?

○ Single or in a relationship but not living together
○ Married
○ Living together
○ Separated
○ Divorced
○ Other (please specify) _____

6a. What is your current living situation?
○ Living without any other adults
○ Living with parents full time
○ Living with roommates full time
○ Living with parents during the summer, and alone or with roommates during the school year
○ Living with spouse or partner full time
○ Other _____

6b. Does you live with your child(ren)?
○ Yes
○ No
○ Other (please specify) _____

7. What is your approximate annual family income?
○ $10, 000 or less
○ $10, 001 to $20, 000
○ $20, 001 to $30, 000
○ $30, 001 to $40, 000
○ $40, 001 to $50, 000
○ $50, 001 to $60, 000
○ $60, 001 to $70, 000
○ $70, 001 to $80, 000
○ $80, 001 to $90, 000
○ $90, 001 and up
○ Prefer not to answer

8. What is your self-identified ethnic background or heritage culture?

┌─────────────┐
│   │
└─────────────┘

9. Which ethnic category best describes you?
○ Aboriginal (First Nations, Métis, or Inuit)
○ Arab (e.g., Lebanese, Palestinian, Egyptian, Iraqi, etc.)
○ African
○ Caribbean
○ Caucasian
○ Chinese
○ Filipino
○ Korean

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○ Latin American
○ Mixed/Biracial (please specify) _____
○ Other (please specify) _____
○ South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
○ Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian, etc.)

10. Which statement is most true about the neighbourhood where you live?
○ Almost all people are from a different ethnic group than mine
○ A majority of the people is from a different ethnic group than mine
○ There is about an equal mix of people from my ethnic group and other groups
○ A majority of the people is from my ethnic group
○ Almost all people are from my ethnic group

11. Were you born in Canada?
○ Yes
○ No

11b.
Please specify your country of birth: [   ]

How old were you when you came to Canada? [   ]

How many years have you lived in Canada? [   ]

11c. If you were born outside of Canada, please indicate your main reason for immigration:
○ Voluntary (i.e., a better life, more opportunities, etc.)
○ War
○ Political oppression/persecution
○ Poverty
○ Other (please specify) _____

12. What is your current immigration status?
○ Canadian Citizen
○ Landed Immigrant
○ Refugee
○ Other (please specify) _____

13. What is your generation status in Canada?
○ 1st generation (born outside of Canada & immigrated to Canada after the age of 12)
○ 1.5 generation (born outside of Canada & immigrated to Canada before the age of 12)
○ 2nd generation (born in Canada & have at least one parent who was born outside of Canada)
○ 3rd generation (born in Canada & have one parent who was born in Canada)
○ Beyond 3rd generation (born in Canada & both parents also born in Canada)

○   I am an international student who was born outside of Canada

14. What language do you speak most often with your family?
○   English
○   French
○   Other (please specify) _____

15. Think about your native language. How well do you:

	Not at all	A little	Somewhat	Fairly well	Very well	N/A (not applicable)
Understand your native language?	○	○	○	○	○	○
Speak your native language?	○	○	○	○	○	○
Read your native language?	○	○	○	○	○	○
Write your native language?	○	○	○	○	○	○

16. How well do you:

	Not at all	A little	Somewhat	Fairly well	Very well
Understand English?	○	○	○	○	○
Speak English?	○	○	○	○	○
Read English?	○	○	○	○	○
Write English?	○	○	○	○	○

17. What is your religion?
○   Buddhist
○   Christian
○   Greek Orthodox
○   Hindu
○   Jewish
○   Muslim
○   No religion
○   Protestant
○   Roman Catholic
○   Other (please specify) _____
○   Prefer not to answer

18. Which of the following religious practices do you engage in at home? Please check all that apply.
☐   Praying
☐   Scripture reading
☐   Diet
☐   Celebrating holidays
☐   Other (please specify) _____
☐   I do not practice religion in my home

19. Approximately how often do you visit your family members who live outside your home?
- ○ Daily
- ○ Weekly
- ○ Monthly
- ○ Once a year or less
- ○ Never
- ○ Not applicable (N/A)

20. Do you prepare foods of your ethnic background?
- ○ Yes
- ○ No

21. Think about your heritage culture. Which of the following cultural practices do you engage in? Please check all that apply.
- ☐ Singing
- ☐ Holiday celebrations
- ☐ Dancing
- ☐ Festivals
- ☐ Costumes
- ☐ Other (please specify) _____
- ☐ I do not participate in practices associated with my heritage culture

22. How many children do you have?

23. For each of your children, please list their age, sex, and relationship to you (i.e., biological, adoptive, step-child, foster child).
Please only fill out the number of rows that apply to you. For example, if you have 3 children you will complete rows 1, 2, and 3.

	Age (years)	Age (and months)	Sex	Relationship
1	○ 4	○ 0	○ Male	○ Biological child
	○ 5	○ 1	○ Female	○ Adoptive child
	○ 6	○ 2		○ Step child
	○ 7	○ 3		○ Foster child
		○ 4		
		○ 5		
		○ 6		
		○ 7		
		○ 8		
		○ 9		
		○ 10		
		○ 11		

Background Questionnaire: Questions about Your Child Aged 4 to 7 Years (Part 2)
At the beginning of this study, you confirmed that you have a child who is within the age range of 4 to 7 years. If you have more than one child within the age range of 4 to 7 years, please select your oldest child within the age range of 4 to 7 years. Please keep only this child in your mind when completing the questionnaire. Thank you!

24. Please enter your child's initials.
Note that you will be asked to re-enter these initials on later questionnaires about this child.

[ ]

25. How old is your child?
For example, if your child is 4 years and 7 months old, please select 4 in the Years row and 7 in the Months row.

Years
- ○ 4
- ○ 5
- ○ 6
- ○ 7

and Months
- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7
- ○ 8
- ○ 9
- ○ 10
- ○ 11

26. Your child is a:
- ○ Boy
- ○ Girl

27. Which ethnic category best describes your child?
- ○ Aboriginal (First Nations, Métis, or Inuit)
- ○ Arab (e.g., Lebanese, Palestinian, Egyptian, Iraqi, etc.)
- ○ African
- ○ Caribbean
- ○ Caucasian
- ○ Chinese
- ○ Filipino
- ○ Korean
- ○ Latin American

○   Mixed/Biracial (please specify) _____
○   Other (please specify) _____
○   South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.)
○   Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian, etc.)

28. Was your child born in Canada?
○   Yes
○   No

28b.
Please specify your child's country of birth:

How old was your child when he/she came to Canada?

How many years has your child lived in Canada?

29. Who lives at home with your child?

                                                    How many?

○   Child's parents   _____
○   Child's siblings   _____
○   Child's grandparents   _____
○   Child's great grandparents   _____
○   Child's other relatives who are adults   _____
○   Child's other relatives who are   _____
     children
○   Other adults   _____
○   Other children   _____

30. What language does your child most often speak?
○   English
○   French
○   Other (please specify) _____

31. Think about your child's native language. How well does your child:

	Not at all	A little	Somewhat	Fairly well	Very well	N/A (not applicable)
Understand your native language?	○	○	○	○	○	○
Speak your native language?	○	○	○	○	○	○
Read your native language?	○	○	○	○	○	○
Write your native language?	○	○	○	○	○	○

32. How well does your child:

	Not at all	A little	Somewhat	Fairly well	Very well
Understand English?	○	○	○	○	○
Speak English?	○	○	○	○	○
Read English?	○	○	○	○	○
Write English?	○	○	○	○	○

33. Does your child have any of the following developmental, physical, or psychiatric disorders? Please check all that apply.

☐ Anxiety disorder
☐ Attention-Deficit/Hyperactivity Disorder (ADHD or ADD)
☐ Autism Spectrum Disorder
☐ Depression
☐ Disorder of Written Expression
☐ Epilepsy
☐ Intellectual disability or mental retardation
☐ Math Disorder or Math Disability
☐ Oppositional defiant disorder
☐ Reading Disability
☐ Speech or language delay
☐ Other (please specify) _____

Background Questionnaire: Questions about Your Child's Father (Part 3)

34. Was your child's father born in Canada?
○ Yes
○ No

35b.
If you are unsure, please provide your best estimate. If you choose, you may also leave these responses blank.

Please specify your child's father's country of birth:

How old was your child's father's when he first came to Canada?

How many years have your child's father's lived in Canada?

36. What is the highest level of education your child's father has completed?
○ Elementary School (Grades 1-6)
○ Middle School (Grades 7-8)
○ High School (Grades 9-12)
○ Some university or college, or CEGEP
○ University/College
○ Graduate School

37. Which category BEST describes your child's father's occupation?

(Source for occupational categories used in this Demographics Questionnaire: Adapted from Statistics Canada, http://www.statcan.gc.ca/subjects-sujets/standard-norme/soc-cnp/2006/noc2006-cnp2006-menu-eng.htm, October 21, 2009)

- ○ Management (e.g., facility operation, service director, school principal)
- ○ Business, finance, and administrative (e.g., banking clerk, secretary, bookkeeping)
- ○ Natural and applied sciences and related (e.g., engineer, biologist)
- ○ Health (e.g., dentist, pharmacist, veterinarian)
- ○ Social science, education, government service, and religion (e.g., psychologist, social worker, teacher)
- ○ Art, culture, recreation, and sport (e.g., librarian, journalist, photographer, professional athlete)
- ○ Sales and service (e.g., retail, food service, cleaner, police officer)
- ○ Trades, transport, and equipment operator (e.g., carpenter, roofer, repair worker)
- ○ Processing, manufacturing, and utilities (e.g., assembler, machine operator)
- ○ Student
- ○ Homemaker/stay-at-home father
- ○ Other (please specify) _____

Appendix C

Open-Ended Questions about Parenting

Please answer the questions on this page about your oldest child who is between 4 to 7 years old. Re-enter your child's initials in this box:

☐

Think about all of the different emotions your child experiences. Reflect on the feelings and thoughts you experience when your child is sad, angry, or fearful. Think about how you respond to your child's emotional experiences and what you want to teach your child about emotions. <u>Emotion-related parenting practices</u> express how you parent your child about emotions.

1. Think about your most important cultural values. <u>To what extent have your cultural values influenced your emotion-related parenting practices?</u>

Feel free to type as much as you would like. There are no right or wrong answers.

☐

2. From a young age, children show their unique personalities. For example, some children may be moody/irritable, some may be social/outgoing/bold, and some may be careful/cautious in their actions. Also, your child's personality may be similar or dissimilar to your own personality. <u>How would you describe your child's personality as compared to other children of the same age?</u>

Feel free to type as much as you would like. There are no right or wrong answers.

☐

3. <u>To what extent does your child's personality influence your emotion-related parenting practices?</u>

Feel free to type as much as you would like. There are no right or wrong answers.

☐

4. Think about your emotion-related parenting practices. <u>To what extent have your emotion-related parenting practices influenced your child's development?</u> (e.g., social development, emotional development, etc.).

Feel free to type as much as you would like. There are no right or wrong answers.

☐

Appendix D

Storytelling Task Script

Materials required:
- *Wordless picture book: One Frog Too Many (Mayer & Mayer, 1975)*
- *Parent Observation Rating (Voelker, Babb, Broga, Gragg, & Hakim-Larson, 2008)*

Research Assistant #1 will invite the mother and her child to get comfortably seated on the couch. Show them the One Frog Too Many Book. Say:

I have a book for you two to share together. This is a picture book about a boy, his dog, and some frogs. There are no words, just pictures in this book. I will let you and your child share this book alone in the room. Look at each picture with your child and talk about what the characters are thinking, feeling, and doing in the story. We would like you to make up the words for this story as you go along. Please speak in English. Do either of you have any questions?

Answer any questions presented by the mother or her child. If consent was provided for audio-visual recording, say:

Before I leave the room, I am going to start the audio recorder. I will be in the room next door and will be recording the video too.

Give the book to the mother. Start recording using the Sony Voice Recorder (see instructions below; this is a backup for the Panasonic Video Monitor). Leave the room. Research Assistant #2 will immediately start recording with the Panasonic Video Monitor.

Return to the room once it is clear that the storytelling task is complete (e.g., they put the book away or say "The End"). Research Assistant #1 will say:

Thank you for sharing that book together! I have a few questions for you. How did you like the story? (allow the child to respond). What was your favourite part of the story? (allow the child to respond). It's time for us to do a different activity now. Mom, can you please go with (Research Assistant #2) to do a quick questionnaire? I am going to stay with (child's name) to do a couple of fun activities.

Research Assistant #2 will take the mother to another room to complete the Parent Observation Rating. Research Assistant #1 will begin the WPPSI-IV subtests.

Appendix E

Transcription of Storytelling Task

Preparation:
- Plug your headphones into the green audio jack located on the back of the main lab computer. You might have to use the stereo extension cable to make the cord longer
- Plug the Infinity USB Digital foot pedal into the USB port
- Right click on the audio file and select Open With - Express Scribe
- Get the foot pedals working (centre = play, right = rewind, left = fast forward, feet off = stop)
- Transcribe in Microsoft Word, not in Express Scribe

1) Copy the file "Storytelling Task - Transcript Template". Paste it in Shawna's transcription folder. Rename the new word document as follows: ParticipantXXShawna. Pilot transcripts will be named as follows: PilotParticipantXXShawna. We need to put my name in the file name so people don't confuse my transcripts with the TMASM transcripts.

2) At the top of the transcript, fill in the fields with the required information.

3) Double space the entire transcript. Each line should be numbered. To do this, click Home and then the arrow at the bottom of the Styles tab. To add the line numbers, click Page Layout→ Line Numbers→ Continuous. The font is likely wrong, so click Manage Styles→ Edit→ Sort Alphabetical→ Line Number→ Modify, Cambria 12.

4) Use a header or footer for the page number. It needs to say "Page ___ of ___." *In Microsoft Word, do the following:*
-View→Header and Footer→ Insert Auto Text→ Page X of Y. Highlight the text and move it to the right side of the page. Change the font accordingly.
Use a header or footer for the Participant # as well.

5) Transcribe verbalizations in order, beginning a new line with each new speaker and designating each speaker with a letter. For this type of interview, put P for parent and C for children. Example:
P: This is a story about a frog.

C: Okay.

**** Please note: **Do not put any proper names on the transcript.** For example, if a child's name is mentioned, put in brackets (child's name). If a child's friend's name is mentioned, put in brackets (child's friend's name) etc. This helps protect confidentiality.*

6) Put a period after complete thoughts.

7) Use commas to separate false starts. A false start is when someone begins to say something and then changes it. Example:
P: When I was a child I never could show, I didn't want to show anger as a child.

8) Use question marks for questions, using voice intonation as a guide.

9) When speakers talk simultaneously or overlap, <u>underline</u> the word(s) that were spoken at the same time. Example:
P: Do you think the frog in this story is feeling <u>sad at all</u>?

C: <u>Yup</u>. I think so.

10) For incomplete thoughts that are interrupted, put three periods. Example:
P: The frog really wants to…the boy is looking for the frog.

11) For incomplete words, use a hyphen. Example:
P: I didn't like feeling sca-.

12) Separate run-on sentences with periods. Use voice intonation as a guide.
Example:

Instead of…
P: When the frog ran away, the boy looked for him, and the dog helped too, and they all

worked together.

Write it like this instead:
P: When the frog ran away, the boy looked for him. And the dog helped too. And they all

worked together.

13) If a word or phrase is unclear, put the closest approximation possible in parentheses with a question mark in the parentheses. Example:
P: I couldn't understand why the boy never (understood?) the big frog's feelings.

14) If something is completely inaudible (e.g., there was loud static) and you were completely unable to hear any of the words spoken, write "inaudible" in parentheses. Example:
P: They were all (inaudible). Whoops, I dropped the recorder there.

15) Include any sounds by italicizing them in parentheses. This can include crying and laughing. Example:
P: The frogs are acting like you and your brother (*laughs*).

16) Use the context of the story to mark the page numbers of the story. There are 24 pages in the One Frog Too Many book.

17) Mark the points in which the story starts (**STORY STARTS HERE**) and ends (**STORY ENDS HERE**). Here are the rules from the TMASM study:

- The story begins when there is some reference to the story, the book, or the task. This could include:
  - Reference to the title (e.g., "This book is called One Frog Too Many")
  - Reference to the author (e.g., "This is a Mercer Mayer book")
  - Reference to the front cover of the book (e.g., "Look at the frog.")
  - Reference to the act of reading the story (e.g., "Now we are going to read a story.")
  - If the transcript begins with some unintelligible comment, assume that it is unrelated to the story
- The story ends when:
  - The parent or child says something to indicate the end of the story (e.g., "The End," "Happily Ever After")
  - The parent stops referring to the story and starts referring to something other than the story without making reference to the story. This could include reminiscing (e.g., "Remember when …") or could include reference to a new task (e.g., "Now, it's time to for bed")
  - If the transcript ends with some unintelligible comment, assume that it is unrelated to the story
- To be considered later: comments that are unrelated to the story occur throughout the transcripts. They can include the following:
  - Discipline (e.g., "Sit up straight)
  - Specific instructions to the child that are practical in nature and unrelated to the talking about the story (e.g., "Speak loudly")
  - Comments about the equipment (.e.g., "Can we keep the tape recorder?")
  - Talk about the study (e.g., "We're doing this for a study")

When done:
- All transcripts and audio recordings are to be saved on Shawna's WD My Passport external hard drive
- Put away all materials and be sure to wrap the cords
- Shut down the computer
- Make sure cabinets are closed and locked

Appendix F

Coding Mother-Child Emotion Words in Storytelling Task

General Guidelines:

1. Coding is to be done on transcripts that have been segmented and checked over.

2. Only the actual discussion about the story is to be coded. Thus, code the transcribed text between the "story starts here" and "story ends here" markers.

3. The following tables contain lists of potential emotion words that may be coded:

   o Discrete Positive Emotion Words

   o Discrete Negative Emotion Words

4. To code a transcript, follow the following steps:

   o Step 1: Open the segmented transcript in Microsoft Word. Go to Review and click Show Comments. That way, you will be able to see your codes as you develop them.

   o Step 2: Read the segment carefully, considering the context of potential emotion words. Each segment will be numbered and a line will come after the text.

     ▪ Example: P: |(18) He looks excited. |

   o Step 3: Detect whether or not an emotion word is present according to the rules outlined in this document.

   o Step 4: Make sure there are no other words within the segment (refer to #12 for multiple emotion words).

   o Step 5: If an emotion word is present, highlight the emotion word and click Review→ New Comment. A keyboard shortcut is Ctrl + Alt + M.

   o Step 6: Paste the appropriate emotion code in the comment bubble. To make this process quicker, here is a list of coloured emotion codes that you may copy and paste into the comment bubble:

Love	Joy	Surprise	Other Positive Emotions	Negation of Anger	Negation of Sadness	Negation of Fear
(LO)	(JO)	(SU)	(POSOT)	(NEGAN)	(NEGSA)	(NEGFE)

Anger	Sadness	Fear	Other Negative Emotions	Negation of Love	Negation of Joy	Negation of Surprise
(AN)	(SA)	(FE)	(NEGOT)	(NEGLO)	(NEGJO)	(NEGSU)

Multi	No Code
(MULTI)	(NC)

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- - Step 6: When you put your cursor over top of the comment, it should highlight the emotion word in text.

108   P: |(133) Yeah. |(134) They're all looking, |(135) and it looks like maybe he's calling

109   his name? |(136) Do you think they're, maybe they're worried. |(137) They can't

110   find him. |

    Shawna Scott **[FE]**
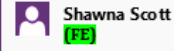
- - Step 7: When the transcript has been segmented, enter the frequency counts of each code in the Excel file "Emotion Language Code Count". Segments without a code are coded No Code (NC). All entered data will be checked by another member of the coding team.

5. For the purpose of this study, we are only looking at <u>discrete emotion words</u>. Do not code behavioural expressions of emotions (e.g., "crying", "kissing", "smiling", "biting", "scolding", etc.).

   - To decide if it is an emotion word, determine if it would make sense if the word "feel" preceded the word. For example, the word "screaming" is not considered an emotion word because you cannot "feel screaming". For the purpose of this coding, screaming is a behavioural expression of emotion, not a discrete emotion word.

6. Words describing morality judgments of others (e.g., "bad", "mean", or "nasty") will not be coded as emotion words. However, note that "feels bad" is not a moral judgment and is listed in the table under Other Negative Emotions **(NEGOT)**.

   - Example: In the segment "She feels really bad right now", **(NEGOT)** should be coded.

   - Example: In the segment "He feels mean", **(AN)** should be coded. However, in the segment "He is mean", no code should be applied because *mean* is being used as a moral judgment.

   - Example: In the segment "He is a bad frog", emotion language is not present and no code should be applied.

7. As can be seen in the emotion word lists below, emotion language may be coded as a single word (e.g., "jealous") or multiple words (e.g., "not happy").

8. The emotion words on the list below also allow for different forms of the word.

   - Example: Though the list includes the emotion word "excitement", the word "excited" or "excitedly" would also be coded under Joy **(JO)**.

9. It is very important for you to <u>examine the context</u> in which the word has been used.

   - Example: In the segment "She feels really upset about what she did", **(NEGOT)** should be coded.

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- Example: In the segment "He's acting like he's upset", there is no emotion word present (*upset* is being used as a behavioural descriptor) and no code should be applied.

- Example: In the segments "(54) Does he look happy? |(55) No he's not. |", the context indicates that the character is being described as *not happy* and is coded **(NEGJO)**.

10. Some emotion words in the list can be perceived as being a matter of degree. For example, the word "like" is included because it can be used as a less intense form of "love". As previously described, it is very important for you to examine the context in which the word has been used.

- Example: In the segment "He really likes the little frog", **(LO)** should be coded.

- Example: In the segment "The big frog is like the little frog because they both hop", there is no emotion word present and no code should be applied.

11. Be aware that the word "unhappy" is coded **(SA)**, while "not happy" is coded **(NEGJO)**. There is a distinction because the former describes a particular mood state, while the latter is describes what one is not experiencing and is the negation of happiness.

12. If you come across a potential emotion word that is not included in the tables below, please bring this to the attention of the coding team. Together, we will determine if the word should be included in the list.

13. It is possible for more than one emotion word to appear in each segment. However, do not code each emotion word. Only one emotion word can be coded in each segment. If more than one emotion word appears in the same segment, code it as **MULTI**. At the end, the proportion of segments containing multiple emotion words will be calculated.

- Example: In the segment "The boy is angry and mad right now", **MULTI** should be coded even though both words are **(AN)** words. Think of **MULTI** as a code that possibly shows greater complexity.

- Example: In the segment "The boy, frog, and dog are scared", **(FE)** should be coded. Even though three characters have been noted, the emotion word is used once to describe all characters. No novel emotion words were introduced.

14. If a participant repeats an emotion word in the same segment and it is still expressing the same idea, only count it as an individual emotion word code.

- Example: In segment "He's sad, really sad", **(SA)** should be coded because the emotion word is used twice with the exact same idea.

15. "Uncodable" is an additional code. Uncodable segments are those that are not meaningful and cannot be coded because it:

- o Includes only a non-meaningful filler (e.g., "Um", "Uh", "Hm", "Oh", "Mm"; note that "Mm hm" is an affirmative response and is considered codable.

- o Includes only a non-word vocalizations (e.g., gasps, laughs, sneezes).

- o Was completely inaudible.

- o Contains a statement that is clearly unrelated to the story (e.g., "Do you need a Kleenex?").

Discrete Positive Emotion Words

Love (LO)	Joy (JO)	Surprise (SU)	Other Positive Emotions (POSOT)	Negation of Anger (NEGAN)	Negation of Sadness (NEGSA)	Negation of Fear (NEGFE)
Adoration	Amusement	Amazement	Feel better	Negation of an (AN) word.	Negation of a (SA) word.	Negation of a (FE) word.
Affection	Bliss	Astonishment	Feel good			
Arousal	Cheerfulness	Disbelief	Feel great			
Attraction	Contentment	Startle		Examples:		
Caring	Delight	Surprise			Examples:	Examples:
Compassion	Eagerness			"Not jealous"		
Desire	Ecstasy			"Wasn't angry"	"Not sad"	"Not afraid"
Fondness	Elation			"Don't be mad"	"Wasn't guilty"	"Wasn't anxious"
Friendly	Enjoyment					
Infatuation	Enthrallment					
Liking	Enthusiasm					
Longing	Euphoria					
Love	Excitement					
Lust	Exhilaration					
Passion	Funny					
Sentimentality	Gaeity					
Taking care of	Gladness					
Tenderness	Glee					
	Gratitude					
	Happiness					
	Hilarious					
	Hope					
	Impressed					
	Jolliness					
	Joviality					
	Joy					
	Jubilation					
	Optimism					
	Pleasure					
	Pride					
	Rapture					
	Relief					
	Safe					
	Satisfaction					
	Thrill					
	Triumph					
	Wonderful					
	Zeal					
	Zest					

Note. List of emotion words adapted from Shaver, Schwartz, Kirson, & O'Connor (1987); as cited in Lazarus (1991). Only one emotion word can be coded in each segment. If more than one emotion word appears in the same segment, code it as MULTI.

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Discrete Negative Emotion Words

Anger (AN)	Sadness (SA)	Fear (FE)	Other Negative Emotions (NEGOT)	Negation of Love (NEGLO)	Negation of Joy (NEGJO)	Negation of Surprise (NEGSU)
Aggravation	Agony	Alarm	Feels bad	Negation of a (LO) word.	Negation of a (JO) word	Negation of a (SU) word.
Agitation	Alienation	Anxiety	Feels awful			
			Upset			
Anger	Anguish	Apprehension		Examples:	Examples:	Examples:
Annoyance	Defeat	Distress				
Bitterness	Dejection	Dread		"Not friendly"	"Not happy"	"Not surprised"
Bothering	Depression	Fear/Afraid		"Wasn't taking care of"	"Wasn't enjoying"	"Wasn't startled"
Contempt	Despair	Fright				
Disgust	Disappointment	Horror				
Dislike	Dismay	Hysteria		"Doesn't like"		
Envy	Displeasure	Mortification		"Doesn't care"		
Exasperation	Embarrassment	Nervousness		"Didn't love"		
Ferocity	Give up	Panic				
Frustration	Gloom	Scared				
Fury	Glumness	Shock				
Grouchiness	Grief	Shy				
Grumpiness	Guilt	Suspicious				
Hate	Homesickness	Tenseness				
Hostility	Hopelessness	Terror				
Irritation	Humiliation	Uneasiness				
Jealousy	Hurt	Worry				
Loathing	Insecurity					
Mad	Insult					
Mean	Isolation					
Nasty	Left out					
Outrage	Loneliness					
Rage	Melancholy					
Resentment	Misery					
Revulsion	Miss					
Rudeness	Neglect					
Scorn	Pity					
Spite	Poor					
Torment	Pout					
Vengefulness	Regret					
Wrath	Rejection					
	Remorse					
	Sadness					
	Shame					
	Sorrow					
	Sorry					
	Suffering					
	Sympathy					
	Unhappiness					
	Woe					

Note. List of emotion words adapted from Shaver, Schwartz, Kirson, & O'Connor (1987); as cited in Lazarus (1991). Only one emotion word can be coded in each segment. If more than one emotion word appears in the same segment, code it as MULTI.

Appendix G

Parent Observation Rating
(Voelker, Babb, Broga, Gragg, & Hakim-Larson, 2008)

Participant #: _____

Date: _____

Instructions: After completing the storybook with your child, please use the rating scale
below to rate your child's behaviour during the storytelling.

		1 Not at all	**2** Just a little	**3** Some What	**4** Pretty Much	**5** Very much
1	How much did your child want to do the storytelling?	1	2	3	4	5
2	How well did your child pay attention during the storytelling?	1	2	3	4	5
3	How cooperative was your child during the storytelling?	1	2	3	4	5

Other comments (optional):

Appendix H

Children's Emotion Regulation: Transparent Box Task Coding

Participant #:   _____

Name of Rater: _____

Higher scores indicate more persistence:
0 – Gives up totally and displays clear resignation, or spends less time working on the task than
　　　not working on the task
1 – Mixed behavior; sometimes works, but without interest; often averting gaze away from task or
　　　stopping for more than 3 seconds; switching/ changing subjects
2 – Continues to work and keeps focused on task, but gaze averts or pauses to stop working a few
　　　times (no more than three to four times); still engaged/ interest in task, pausing for 2-3
　　　seconds.
3 – Is totally focused on task, expresses interest, doing task as instructed.

Higher scores indicate more frustration:
0 – Does not appear frustrated
1 – Appears slightly frustrated (sighs, talks to self or to the research assistant – "this is hard";
　　　makes a frustrated-looking face). Low facial expressions of frustration, verbal frustration
　　　(whining, question making, slight irritation)
2 – Becomes visibly upset (clear emotional distress, but isn't overwhelmed), physical displays of
　　　frustration (posture/gesture, putting head on table, playful actions, hitting table), increase of
　　　verbal expression (high pitch, loud whining)
3 – Loses it (cries, whines loudly, tries to leave, completely overwhelmed)

	Persistence				**Frustration**			
	0	**1**	**2**	**3**	**0**	**1**	**2**	**3**
Epoch 1 - 30 sec								
Epoch 2 - 60 sec								
Epoch 3 - 90 sec								
Epoch 4 - 120 sec								
Epoch 5 - 150 sec								
Epoch 6 - 180 sec								

Appendix I

Recruitment Advertisement

THE EMOTIONAL LIVES AND PERSONALITIES OF MOTHERS AND THEIR CHILDREN

Are you the mother of a child who is 4 to 7 years old?

We are conducting an online survey to learn more about how mothers' styles of teaching their children about emotions are related to cultural values, personalities, and emotional experiences in families. The online survey will take no more than 60 minutes to complete.

After you complete the online survey, you can decide whether you would like to receive a $15 electronic gift certificate code to Cineplex Entertainment or to Amazon.ca for your participation in this study.

To participate, you must:
- Be the mother of a child who is 4 to 7 years old
- Be able to read and understand English
- Live in Canada

What will I be asked to do?
If you volunteer to participate in this study, you will be asked to complete an online survey which includes:
- A background information questionnaire
- A series of questionnaires related to:
  - Your style of teaching your child about emotions
  - Your personality and your child's personality
  - Your cultural values
  - Your child's ability to handle difficult emotions

All information is confidential. You can choose to no longer participate at any time prior to submitting your questionnaire. You may also have another opportunity to take part in a follow-up study.

How do I get started?
1. Email the researchers at XXXX@XXXX.ca in order to obtain the password for the online survey.
2. You will receive an email with the survey link, password, and further instructions.

Thank you very much for taking the time to read this study advertisement! This study has received clearance from the University of Windsor's Research Ethics Board.

Primary Investigator:
Shawna Scott, M.A.
Ph.D. Candidate, Child Clinical Psychology
Department of Psychology
University of Windsor
XXXX@XXXX.ca
519-253-3000 ext. XXXX

Research Supervisor:
Julie Hakim-Larson, Ph.D.
Professor, Child Clinical Psychology
Department of Psychology
University of Windsor
XXXX@XXXX.ca
519-253-3000 ext. XXXX

University of Windsor

Appendix J

E-mail to Potential Phase 1 Community Participants

University of Windsor

Thank you for your interest in participating in the study, **The Emotional Lives and Personalities of Mothers and their Children**. The study has received REB clearance from the University of Windsor.

As a reminder, there are a few requirements in order to participate in the study. You must be the mother of a child who is 4 to 7 years old. If you have more than one child within this age range, please only respond about your oldest child who is 4 to 7 years old. You must be able to read and understand English and live in Canada in order to participate.

If you and your child meet the above requirements, please follow the link below to access the study:
(FluidSurveys link with unique invite code here)

You will be asked to enter the following password: **CDNfamilies1**

If you are willing to participate in this research study, please complete this survey within 1 week of receiving this email. You may complete and receive compensation for participating in the online survey one time only. Please complete the survey in a quiet place where you are able to concentrate in order to participate meaningfully.

Do not share the link above with others, as you are being provided with a unique survey link. If you know of a mother who may want to participate in this study, please ask her to contact XXXX@XXXX.ca in order to send a separate request to participate.

Finally, if you have any questions or concerns about the research, please feel to contact Shawna Scott at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX. You may also contact my faculty supervisor, Dr. Julie Hakim-Larson, at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX.

Thank you,
Shawna Scott

Hello,

Thank you for your interest in the study! I just emailed you a link to the study website and a password to access the site through a Fluid Surveys email account. Please let me know if you have any questions.

Appendix K

Letter of Information and Consent to Participate in Research for Community Sample:
Phase 1 of 2

**LETTER OF INFORMATION AND CONSENT TO PARTICIPATE IN
RESEARCH**

Title of Study: **The Emotional Lives and Personalities of Mothers and their Children**

You are asked to participate in a research study conducted by Shawna Scott, M.A. (Ph.D.
Candidate) under the supervision of Dr. Julie Hakim-Larson (Professor), from the
Department of Psychology at the University of Windsor. The results of this study will
contribute to Shawna Scott's doctoral dissertation.

If you have any questions or concerns about the research, please feel to contact Shawna
Scott at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX, or the faculty supervisor, Dr.
Julie Hakim-Larson at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX.

PURPOSE OF THE STUDY

This study is designed to examine how mothers' styles of teaching their children about
emotions are related to cultural values, personalities, and emotional experiences in families.

PROCEDURES

By agreeing to this consent form, you are indicating that you are the mother of a child
within the age range of 4 to 7 years and you wish to participate in the present study. If you
volunteer to participate in this study, you will be asked to complete an online survey which
includes:

- A background information questionnaire.
- A series of questionnaires related to:
    - Your style of teaching your child about emotions.
    - Your personality and your child's personality.
    - Your cultural values.
    - Your child's ability to handle difficult emotions.

This study will be completed online at the Fluid Surveys website and will take no more
than 60 minutes to complete. Please complete the survey in a quiet place where you are
able to concentrate. After finishing the online survey, you will be directed to a form where

you will enter your name and e-mail address so that your $15 electronic gift code for participation can be e-mailed to you.

POTENTIAL RISKS AND DISCOMFORTS

This study does not have any major risks. The questionnaires may remind you of some uncomfortable feelings (e.g., anxiety, sadness, fear) about parenting and how you respond to your child's emotions. It is also possible that you might be reminded of some uncomfortable situations involving your child. You may refuse to answer any questions that you are uncomfortable answering. For each questionnaire item you will be given the option "no response" if you do not want to give a response. In addition, you may leave the study at any time by clicking on the "discard responses and exit" icon. You may also choose to take a break from the study by clicking on the "save and continue later" icon. If you experience distress as a result of participating in this research, you may wish to access professional help by dialling the telephone code 211 or accessing the web address for 211Ontario http://www.211ontario.ca.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Participating in this study may help you learn more about your cultural values, personality, and thoughts and feelings about emotions. It may allow you to reflect on your parenting approach and learn more about your behaviours and beliefs. In addition, participating in this study will provide you with the opportunity to learn about and contribute to psychological research. The results of this study will improve our understanding about how mothers' style of teaching their children about emotions impacts their children's social and emotional development.

COMPENSATION FOR PARTICIPATION

This study will take no more than 60 minutes of your time. You will be e-mailed a $15 electronic gift certificate code to Cineplex Entertainment or Amazon.ca for your participation in this study.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Your name and your child's name will not appear in any reports of this study. Note that we must collect your contact information at the end of the study in order for you to receive credit for your participation. Once the follow-up study is complete, your survey responses will then be kept separate from your contact information. Both files will be encrypted and stored in the University of Windsor data servers. In accordance with the American Psychological Association, your data will be kept for five years following the last publication of the data. After this point, all data will be securely wiped from the servers.

PARTICIPATION AND WITHDRAWAL

Your participation in this study is completely voluntary. If you decide to participate, you may withdraw at any time during the study by clicking the "discard responses and exit" icon without negative consequences. To receive your $15 electronic gift certificate code, you must give a response to each and every item listed even if your response choice is "no response." You may refuse to answer any question you do not want to answer by responding "no response" and still remain in the study. We encourage you to answer all questions with which you are comfortable answering, as your responses are important to our investigation. You can leave the survey at any time and return to it later by selecting the "save and continue later" icon at the bottom of the page. After you save your data you can close the browser to leave the survey. You can re-enter the survey by accessing your study link and entering the password. You will have 5 days to complete the survey after you begin. You can leave the survey and return to it later as many times as you wish within the 5 days limit until the survey is complete and your data have been submitted. If you do not complete the study within the 5 day limit your data will be deleted and you will not be compensated for your participation. Once all data have been collected, any participant contact information will be permanently and securely deleted. After this point, you will not be able to withdraw your data from the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so (e.g., very incomplete questionnaires).

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

Research findings will be available to participants and will be posted on the University of Windsor REB website. In addition, a copy of the principal investigator's doctoral dissertation will be available to the public in the both the Psychology graduate secretary's office and in the Leddy Library. Results of the study can be found at www.uwindsor.ca/reb under 'Study Results'. Findings will be available by January 31st, 2016.

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications, and in presentations. Your information will still be confidential and identified only by an identification number. At the end of this study, you will be asked whether or not you would like to be considered for participation in an additional, optional, follow-up study. Your decision to participate in the additional study will in no way impact your compensation for participating in the present study. If you indicate that you would like to participate in the additional follow-up study, the data being collected from the questionnaires will be associated with your contact information so that you can be contacted at a later date.

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATORS

These are the terms under which this research will be conducted.

Shawna Scott, M.A.,   Julie Hakim-Larson, Ph.D.
Ph.D. Candidate, Child Clinical Psychology   Professor, Child Clinical Psychology
Department of Psychology   Department of Psychology
University of Windsor   University of Windsor

It is recommended that you print out a copy of this letter of information for your records. It also is recommended that you turn off your pop-up blockers before beginning the survey, should you choose to do so.

CONSENT OF RESEARCH PARTICIPANT

I understand the information provided for the study **The Emotional Lives and Personalities of Mothers and their Children** as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I will print a copy of this form for my own reference.

To acknowledge that you have read the letter of information, and that you are providing informed consent to participate in this study, please click "I agree to participate" below.

○ I agree to participate

○ I do not wish to participate

Are you the mother of a child who is 4 to 7 years old?
Note: This study is only for mothers who have a child within the age range of 4 to 7 years. If you do not meet that requirement, you will not be able to participate in the study, and your data will be withdrawn.
○ Yes
○ No

Do you live in Canada?
Note: This study is only for mothers who live in Canada. If you do not meet that requirement, you will not be able to participate in the study, and your data will be withdrawn.
○ Yes
○ No

Appendix L

Letter of Information and Consent to Participate in Research for Participant Pool Sample:
Phase 1 of 2

LETTER OF INFORMATION AND CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: **The Emotional Lives and Personalities of Mothers and their Children**

You are asked to participate in a research study conducted by Shawna Scott, M.A. (Ph.D. Candidate) under the supervision of Dr. Julie Hakim-Larson (Professor), from the Department of Psychology at the University of Windsor. The results of this study will contribute to Shawna Scott's doctoral dissertation.

If you have any questions or concerns about the research, please feel to contact Shawna Scott at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX, or the faculty supervisor, Dr. Julie Hakim-Larson at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX.

PURPOSE OF THE STUDY

This study is designed to examine how mothers' styles of teaching their children about emotions are related to cultural values, personalities, and emotional experiences in families.

PROCEDURES

By agreeing to this consent form, you are indicating that you are the mother of a child within the age range of 4 to 7 years and you wish to participate in the present study. If you volunteer to participate in this study, you will be asked to complete an online survey which includes:
- A background information questionnaire.
- A series of questionnaires related to:
  - Your style of teaching your child about emotions.
  - Your personality and your child's personality.
  - Your cultural values.
  - Your child's ability to handle difficult emotions.

This study will be completed online at the Fluid Surveys website and will take no more than 60 minutes to complete. Please complete the survey in a quiet place where you are able to concentrate. After finishing the online survey, you will be directed to a form where you can fill in your name and student number for verifying your bonus credit.

POTENTIAL RISKS AND DISCOMFORTS

This study does not have any major risks. The questionnaires may remind you of some uncomfortable feelings (e.g., anxiety, sadness, fear) about parenting and how you respond to your child's emotions. It is also possible that you might be reminded of some uncomfortable situations involving your child. You may refuse to answer any questions that you are uncomfortable answering. For each questionnaire item you will be given the option "no response" if you do not want to give a response. In addition, you may leave the study at any time by clicking on the "discard responses and exit" icon. You may also choose to take a break from the study by clicking on the "save and continue later" icon. You may re-enter the survey by accessing your study link and entering the password. If you experience distress as a result of participating in this research, you may wish to contact the University of Windsor Student Counselling Centre at 519-253-3000 ext. 4616.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Participating in this study may help you learn more about your cultural values, personality, and thoughts and feelings about emotions. It may allow you to reflect on your parenting approach and learn more about your behaviours and beliefs. In addition, participating in this study will provide you with the opportunity to learn about and contribute to psychological research. The results of this study will improve our understanding about how mothers' style of teaching their children about emotions impacts their children's social and emotional development.

COMPENSATION FOR PARTICIPATION

This study will take no more than 60 minutes of your time, and is worth 1 bonus point if you are registered in the pool and you are registered in one or more eligible psychology courses.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. Your name and your child's name will not appear in any reports of this study. Note that we must collect your contact information at the end of the study in order for you to receive credit for your participation. Once the follow-up study is complete, your survey responses will then be kept separate from your contact information. Both files will be encrypted and stored in the University of Windsor data servers. In accordance with the American Psychological Association, your data will be kept for five years following the last publication of the data. After this point, all data will be securely wiped from the servers.

PARTICIPATION AND WITHDRAWAL

Your participation in this study is completely voluntary. If you decide to participate, you may withdraw at any time during the study by clicking the "discard responses and exit" icon without negative consequences. To receive your bonus credit, you must give a

response to each and every item listed even if your response choice is "no response." You may refuse to answer any question you do not want to answer by responding "no response" and still remain in the study. We encourage you to answer all questions with which you are comfortable answering, as your responses are important to our investigation. You will have 5 days to complete the survey after you begin. You can leave the survey and return to it later as many times as you wish within the 5 days limit until the survey is complete and your data have been submitted. If you do not complete the study within the 5 days limit your data will be deleted and you will not be compensated for your participation. Once all data have been collected, any participant contact information will be permanently and securely deleted. After this point, you will not be able to withdraw your data from the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so (e.g., very incomplete questionnaires).

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

Research findings will be available to participants and will be posted on the University of Windsor REB website. In addition, a copy of the principal investigator's doctoral dissertation will be available to the public in the both the Psychology graduate secretary's office and in the Leddy Library. Results of the study can be found at www.uwindsor.ca/reb under 'Study Results'. Findings will be available by January 31st, 2016.

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications, and in presentations. Your information will still be confidential and identified only by an identification number. At the end of this study, you will be asked whether or not you would like to be considered for participation in an additional, optional, follow-up study. Your decision to participate in the additional study will in no way impact your compensation for participating in the present study. If you indicate that you would like to participate in the additional follow-up study, the data being collected from the questionnaires will be associated with your contact information so that you can be contacted at a later date.

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATORS

These are the terms under which this research will be conducted.

Shawna Scott, M.A.,	Julie Hakim-Larson, Ph.D.
Ph.D. Candidate, Child Clinical Psychology	Professor, Child Clinical Psychology
Department of Psychology	Department of Psychology
University of Windsor	University of Windsor

It is recommended that you print out a copy of this letter of information for your records. It also is recommended that you turn off your pop-up blockers before beginning the survey, should you choose to do so.

CONSENT OF RESEARCH PARTICIPANT

I understand the information provided for the study **The Emotional Lives and Personalities of Mothers and their Children** as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I will print a copy of this form for my own reference.

To acknowledge that you have read the letter of information, and that you are providing informed consent to participate in this study, please click "I agree to participate" below.

- ○ I agree to participate
- ○ I do not wish to participate

I am the mother of a child who is 4 to 7 years old.
Note: This study is only for mothers who have a child within the age range of 4 to 7 years. If you do not meet that requirement, you will not be able to participate in the study, and your data will be withdrawn.

- ○ Yes
- ○ No

Appendix M

Survey Complete

Participant Pool Sample

Thank you for completing the survey! If you experience distress as a result of participating in this research, you may wish to contact the University of Windsor Student Counselling Centre at 519-253-3000 ext. 4616.

Before clicking Submit, please answer the following three questions.

1. Would you like to receive compensation (1 bonus point) for completing this study?
○ Yes
○ No

2. Would you like to be contacted about the optional, follow-up study that takes place at the University of Windsor?
Information about optional follow-up study (Phase 2): You are invited to participate in an additional, optional, follow-up study. The purpose of this follow-up study is to investigate how mothers' styles of teaching their children about emotions relate to different outcomes. In this follow-up study, you and your child (ages 4 to 7 years) will meet with a researcher in a laboratory at the University of Windsor campus in order to do a storytelling task together. Next, your child will be asked to complete an assessment of his or her verbal skills, followed by a problem-solving task. While your child does these tasks, you will be asked to complete a brief measure about your child's behaviour during the storytelling task. With your consent, the storytelling and problem-solving activities will be audio and video-recorded. You will be asked to sign consent forms for audio recording and video recording. In order to participate in this research, you must be able to speak, read, write, and understand English. If you would like to participate in this follow-up study, you will be asked to provide your contact information so that you can be contacted at a later time. Those who are selected to participate in the follow-up activities will be compensated for 60 minutes or less of participation.
○ Yes
○ No

3. May we contact you in the future about additional studies?
○ Yes
○ No

Please enter your contact information.
Name	[＿＿＿＿＿]
Phone Number	[＿＿＿＿＿]
Email Address	[＿＿＿＿＿]
Student Number	[＿＿＿＿＿]
Please click Submit to finish the survey.

Community Sample

Thank you for completing the survey! If you experience distress as a result of participating in this research, you may wish to access professional help by dialing the telephone code 211 or accessing the web address for 211Ontario: http://www.211ontario.ca.

Before clicking Submit, please answer the following three questions.

1. Which type of $15 electronic gift code would you like to receive for completing this study? Your contact information is required below so that the electronic gift code can be emailed to you.
○   Cineplex Entertainment
○   Amazon.ca
○   I do not want to receive any compensation

2. Would you like to be contacted about the optional, follow-up study?
Information about optional follow-up study (Phase 2): You are invited to participate in an additional, optional, follow-up study. The purpose of this follow-up study is to investigate how mothers' styles of teaching their children about emotions relate to different outcomes. In this follow-up study, you and your child (ages 4 to 7 years) will meet with a researcher in a laboratory at the University of Windsor campus in order to do a storytelling task together. Next, your child will be asked to complete an assessment of his or her verbal skills, followed by a problem-solving task. While your child does these tasks, you will be asked to complete a brief measure about your child's behaviour during the storytelling task. With your consent, the storytelling and problem-solving activities will be audio and video-recorded. You will be asked to sign consent forms for audio recording and video recording. In order to participate in this research, you must be able to speak, read, write, and understand English. If you would like to participate in this follow-up study, you will be asked to provide your contact information below so that you can be contacted at a later time. Those who are selected to participate in the follow-up activities will be compensated for 60 minutes or less of participation.
○   Yes
○   No

3. May we contact you in the future about additional studies?
○   Yes
○   No

Please enter your contact information.

Name	[ ]
Phone Number	[ ]
Email Address	[ ]

Please click Submit to finish the survey.

Appendix N

Telephone Script to Potential Phase 2 Participants

Hello, may I please speak with (mother's name)?

Hi, (mother's name). This is (your name) from the University of Windsor. I am calling about a research study with mothers and their children ages 4 to 7 years. You completed our online survey and indicated that you would be open to participating in further research. We are conducting a study that will take place at the University of Windsor campus. Would you like to hear more about this part of the study?

If **NO** – That's no problem. Have a nice day!

If **YES**   - That's wonderful. The study is called "The Emotional Lives and Personalities of Mothers and their Children". The researcher is Shawna Scott, a Ph.D. student from the University of Windsor who is supervised by Dr. Julie Hakim-Larson. The study is completed in a laboratory at the University of Windsor's Child Study Centre. The activities take no more than 60 minutes to complete and you will receive a $15.00 gift card to the Devonshire Mall for your participation. You will also be offered up to $5 for a travel reimbursement towards parking fees, bus fare, or taxi fare in order to attend this appointment. Your child will also receive a small toy.

I see in my notes that when you completed the online survey, you selected your child with the initials (state the initials). I would like to schedule an appointment 60 minute appointment with you and this child. Only you and this child would be part of the study. Are you available on (date) at (start time to end time)? Confirm the appointment time. Note that the appointment can take place no later than May 1, 2015. We will meet in room 273 in Chrysler Hall South. Are you familiar with the University of Windsor Campus?

If **NO** – To get to room 273 in the Chrysler Hall South Building, you will first drive Sunset Avenue. Describe parking. For example, after 6:00 PM on weekdays and on Sundays, parking at a City of Windsor street metre is free. You will go inside the entrance to Chrysler Hall South off California Avenue and will walk to the second floor. Turn left, and room 273 in the Child Study Centre is around the end of the hall.

Do you have any questions for me?

If **YES**   - Respond to all questions.

If **NO** – Okay! If you need to contact me, feel free to email XXXX@XXXX.ca. I can also be reached at 519-253-3000 ext. XXXX. You may also contact my faculty supervisor, Dr. Julie Hakim-Larson, at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX. I look forward to meeting with you and your child!

Note: If the participant asks for more details about the study, feel free to provide any of the following information: In this follow-up study, you and your child (ages 4 to 7 years) will meet with a researcher in a laboratory at the University of Windsor campus in order to do a storytelling task together. Next, your child will be asked to complete an assessment of his or her verbal skills, followed by a problem-solving task. While your child does these tasks, you will be asked to complete a brief measure about your child's behaviour during the storytelling task. With your consent, the storytelling and problem-solving activities will be audio and video-recorded. Do you have any more questions?

Appendix O

Consent Form: Phase 2 of 2

CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: **The Emotional Lives and Personalities of Mothers and their Children**

You are asked to participate in a research study conducted by Shawna Scott, M.A. (Ph.D. Candidate) under the supervision of Dr. Julie Hakim-Larson (Professor), from the Department of Psychology at the University of Windsor. The results of this study will contribute to Shawna Scott's doctoral dissertation.

If you have any questions or concerns about the research, please feel to contact Shawna Scott at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX, or the faculty supervisor, Dr. Julie Hakim-Larson at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX.

PURPOSE OF THE STUDY

This study is designed to examine how mothers' styles of teaching their children about emotions are related to cultural values, personalities, and emotional experiences in families.

PROCEDURES

By agreeing to this consent form, you are indicating that you are the mother of a child within the age range of 4 to 7 years and wish to participate in the present study. This study will be completed in a laboratory at the University of Windsor. The entire appointment will take no more than 60 minutes to complete. If and your child volunteer to participate in this study:
- You and your child will be asked to meet with a researcher in a laboratory on campus.
- You will be asked to sign consent forms for audio recording and video recording. With your consent, the storytelling task and the problem-solving activity will be audio and video-recorded.
- You will be invited to share a wordless picture book with your child.
- You will be asked to complete a brief measure of your child's behaviour during the storytelling task.
- Your child completes the assessment of verbal skills and the problem-solving task while you are not present in the room.

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POTENTIAL RISKS AND DISCOMFORTS

This study does not have any major risks. The activities may remind you of some uncomfortable feelings (e.g., anxiety, sadness, fear) about parenting and how you respond to your child's emotions. It is also possible that you might be reminded of some uncomfortable situations involving your child. Your child may experience mild frustration during the assessment of verbal skills and the problem-solving task. You and your child may refuse to answer any questions or participate in activities that you do not feel comfortable with. If you experience distress as a result of participating in this research, you may wish to access professional help by dialling the telephone code 211 or accessing the web address for 211Ontario http://www.211ontario.ca. You may also wish to refer to the attached list of community mental health and parenting resources if you wish to seek help for dealing with these feelings.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Participating in this study may help you learn more about your style of teaching your child about emotions. It may allow you to reflect on your parenting approach and learn more about your behaviours and beliefs. You and your child may enjoy the storytelling task and other activities. In addition, participating in this study will provide you with the opportunity to learn about and contribute to psychological research. The results of this study will improve our understanding about how mothers' style of teaching their children about emotions impacts their children's social and emotional development.

COMPENSATION FOR PARTICIPATION

Those who show meaningful engagement in this phase of the study will be compensated for their participation in the form of a $15 gift card for the Devonshire Mall. Whether or not you and your child complete the study, your child will receive an age-appropriate gift and you will be offered a travel reimbursement up to $5. You will also be given a list of community mental health resources, as well as a list of parenting resources and services.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. We will keep the paperwork and audio/video-recorded responses for this project confidential. Your data and your child's data will be stored in a secure location that can only be accessed by the primary investigator and her research assistants. These data will be identified by number, and your names will not appear in any reports of this study. By law, there is an exception to confidentiality. Researchers must report any suspicions of child abuse or neglect to the Children's Aid Society. In accordance with the American Psychological Association, your data will be kept for five years following the last publication of the data. After this point, all data will be securely wiped from the servers.

PARTICIPATION AND WITHDRAWAL

You and your child can choose whether to be in this study or not. If you and your child volunteer to be in this study, you may withdraw at any time during the study without negative consequences of any kind. You and your child may also refuse to answer any questions or participate in activities you are uncomfortable with and still remain in the study. Once all data have been collected, any participant contact information will be permanently and securely deleted. After this point, you will not be able to withdraw your data from the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

Research findings will be available to participants and will be posted on the University of Windsor REB website. In addition, a copy of the principal investigator's doctoral dissertation will be available to the public in the both the Psychology graduate secretary's office and in the Leddy Library. Results of the study can be found at www.uwindsor.ca/reb under 'Study Results'. Findings will be available by January 31st, 2016.

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications, and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF RESEARCH PARTICIPANT/LEGAL REPRESENTATIVE

I understand the information provided for the study **The Emotional Lives and Personalities of Mothers and their Children** as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form. I agree to participate in this study with my child.

I give my permission for my child _____, age _____ years, to participate in this study.   (print child's name)   (print child's age)

_____
Name of Participant

_____   _____
Signature of Participant   Date

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

_____   _____

Signature of Investigator   Date

Appendix P

Letter of Information: Phase 2 of 2

LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: **The Emotional Lives and Personalities of Mothers and their Children**

You are asked to participate in a research study conducted by Shawna Scott, M.A. (Ph.D. Candidate) under the supervision of Dr. Julie Hakim-Larson (Professor), from the Department of Psychology at the University of Windsor. The results of this study will contribute to Shawna Scott's doctoral dissertation.

If you have any questions or concerns about the research, please feel to contact Shawna Scott at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX, or the faculty supervisor, Dr. Julie Hakim-Larson at XXXX@XXXX.ca or (519) 253-3000 ext. XXXX.

PURPOSE OF THE STUDY

This study is designed to examine how mothers' styles of teaching their children about emotions are related to cultural values, personalities, and emotional experiences in families.

PROCEDURES

By agreeing to this consent form, you are indicating that you are the mother of a child within the age range of 4 to 7 years and wish to participate in the present study. This study will be completed in a laboratory at the University of Windsor. The entire appointment will take no more than 60 minutes to complete. If and your child volunteer to participate in this study:

- You and your child will be asked to meet with a researcher in a laboratory on campus.
- You will be asked to sign consent forms for audio recording and video recording. With your consent, the storytelling task and the problem-solving activity will be audio and video-recorded.
- You will be invited to share a wordless picture book with your child.
- You will be asked to complete a brief measure of your child's behaviour during the storytelling task.
- Your child completes the assessment of verbal skills and the problem-solving task while you are not present in the room.

POTENTIAL RISKS AND DISCOMFORTS

This study does not have any major risks. The activities may remind you of some uncomfortable feelings (e.g., anxiety, sadness, fear) about parenting and how you respond to your child's emotions. It is also possible that you might be reminded of some uncomfortable situations involving your child. Your child may experience mild frustration during the assessment of verbal skills and the problem-solving task. You and your child may refuse to answer any questions or participate in activities that you do not feel comfortable with. If you experience distress as a result of participating in this research, you may wish to access professional help by dialling the telephone code 211 or accessing the web address for 211Ontario http://www.211ontario.ca. You may also wish to refer to the attached list of community mental health and parenting resources if you wish to seek help for dealing with these feelings.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Participating in this study may help you learn more about your style of teaching your child about emotions. It may allow you to reflect on your parenting approach and learn more about your behaviours and beliefs. You and your child may enjoy the storytelling task and other activities. In addition, participating in this study will provide you with the opportunity to learn about and contribute to psychological research. The results of this study will improve our understanding about how mothers' style of teaching their children about emotions impacts their children's social and emotional development.

COMPENSATION FOR PARTICIPATION

Those who show meaningful engagement in this phase of the study will be compensated for their participation in the form of a $15 gift card for the Devonshire Mall. Whether or not you and your child complete the study, your child will receive an age-appropriate gift and you will be offered a travel reimbursement up to $5. You will also be given a list of community mental health resources, as well as a list of parenting resources and services.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. We will keep the paperwork and audio/video-recorded responses for this project confidential. Your data and your child's data will be stored in a secure location that can only be accessed by the primary investigator and her research assistants. These data will be identified by number, and your names will not appear in any reports of this study. By law, there is an exception to confidentiality. Researchers must report any suspicions of child abuse or neglect to the Children's Aid Society. In accordance with the American Psychological Association, your data will be kept for five years following the last publication of the data. After this point, all data will be securely wiped from the servers.

PARTICIPATION AND WITHDRAWAL

You and your child can choose whether to be in this study or not. If you and your child volunteer to be in this study, you may withdraw at any time during the study without negative consequences of any kind. You and your child may also refuse to answer any questions or participate in activities you are uncomfortable with and still remain in the study. Once all data have been collected, any participant contact information will be permanently and securely deleted. After this point, you will not be able to withdraw your data from the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE PARTICIPANTS

Research findings will be available to participants and will be posted on the University of Windsor REB website. In addition, a copy of the principal investigator's doctoral dissertation will be available to the public in the both the Psychology graduate secretary's office and in the Leddy Library. Results of the study can be found at www.uwindsor.ca/reb under 'Study Results'. Findings will be available by January 31st, 2016.

SUBSEQUENT USE OF DATA

These data may be used in subsequent studies, in publications, and in presentations.

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research participant, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

_____   _____
Signature of Investigator   Date

Appendix Q

Community Mental Health Resources

COMMUNITY MENTAL HEALTH RESOURCES

The questionnaire may remind you of some uncomfortable feelings about parenting and emotions. Please refer to the list of counselling resources below if you wish to seek help from a mental health professional in order to deal with these feelings.

Can-Am Indian Friendship Centre of Windsor
- 2929 Howard Avenue
  Windsor, ON N8X 4W4
- (519) 253-3243 x 238
- Aboriginal Child and Youth Mental Health and Addictions (AYMHA) program offers individual and family counselling, coping programs, workshops, and many other mental health services

Canadian Mental Health Association (CMHA) Windsor-Essex County Branch
- 1400 Windsor Avenue
  Windsor, ON N8X 3L9
- (519) 255-7440
- www.cmha-wecb.on.ca
- Age range: All ages
- Counselling

Community Crisis Centre of Windsor-Essex County
- Jeanne Mance Building, Hôtel-Dieu Grace Healthcare
  1030 Ouellette Avenue
  Windsor, ON N9A 1E1
- 24 hour crisis line: (519) 973-4435
- http://www.hdgh.org/crisis
- Age range: 16 years and older
- Crisis intervention

Family Service Windsor
- 235 Eugenie West, Suite 105A
  Windsor, ON N8X 2X7
- (519) 256-1831
- www.familyservicewindsor.on.ca
- Age range: All ages

- Counselling

Hôtel-Dieu Grace Healthcare: Windsor Regional Children's Centre
- Huot Building
3901 Connaught Street
Windsor, ON N9C 4H4
- (519) 257-5215
- http://www.hdgh.org/regionalchildrenscentre
- Age range: 0 to 15 years
- Walk-in crisis counselling for children

Psychological Services and Research Centre (for University of Windsor students)
- 326 Sunset Avenue
Windsor, ON N9B 3A9
- (519) 973-7012
- http://www1.uwindsor.ca/psychology/psychological-services-and-research-centre
- Child, adolescent, and adult psychological assessments

Windsor Essex Community Health Centre: Teen Health Centre
- 1585 Ouellette Avenue
Windsor, ON N8X 1K5
- (519) 253-8481
- http://www.wechc.org/teenhealth_home
- Age range: 12 to 24 years
- Counselling

University of Windsor Student Counselling Centre (for University of Windsor students)
- Room 293 CAW Centre, University of Windsor
- 401 Sunset Avenue
Windsor, ON N9B 3P4
- (519) 253-3000 x 4616
- http://www1.uwindsor.ca/scc/
- Counselling for University of Windsor students

Windsor Family Forum
- 1720 Walker Road
Windsor, ON N8W 3P4
- (519) 253-2607
- Marriage and family counsellors

Appendix R

Parenting Resources and Services

University of Windsor

PARENTING RESOURCES AND SERVICES

The following is a list of local resources and services for parents of typically developing children and parents of children with special needs.

211 Windsor Essex
- (519) 258-0247 or 211
- http://www.211ontario.ca/
- Services directory

Children First
- 3295 Quality Way (Suite 102)
  Windsor, ON N8T 3R9
- (519) 250-1850
- http://www.children-first.ca/
- Parenting resources for parents of children ages 0 to 6 years with special needs

Connections Early Years Family Centre
- 795 Giles Boulevard E.
  Windsor, ON N9A 4E5
- (519) 252-9696
- http://www.connectwithus.ca/
- Parenting education/ parenting resources for parents of children ages 0 to 6 years
- Ontario Early Years, Essex Preschool Speech and Language (Talk 2 Me), Essex-Kent Infant Hearing Program, and Essex-Kent Blind-Low Vision Program

Drouillard Place
- 1102 Drouillard Road
  Windsor, ON N8Y 2R1
- (519) 253-1073
- www.drplace.mnsi.net/
- Parent education and support program

Family Respite Services Windsor – Essex

- 3295 Quality Way Unit 101A
  Windsor, ON N8T 3R9
- (519) 972-9688
- http://www.familyrespite.org/
- Resources and respite services for parents of children with developmental and physical disabilities

Healthy Babies, Healthy Children
- 1005 Ouellette Avenue
  Windsor, ON N9A 4J8
- (519) 258-2146 x 1350
- www.wechealthunit.org
- Parenting resources for parents of children ages 0 to 6 years

Help-Link Access Services for Children, Youth and Families
- Huot Building
- 3901 Connaught Street
  Windsor, ON N9C 4H4
- (519) 257-5215
- http://www.hdgh.org/rccservices
- Resources and referral services for parents of children and youth

John McGivney Children's Centre
- 3945 Matchette Road
  Windsor ON N9C 4C2
- http://www.jmccentre.ca/
- Treatment and services for children and youth with physical and/or neurological disabilities and their families

Multicultural Council of Windsor and Essex County
- 245 Janette Ave
  Windsor, ON N9A 4Z2
- (519) 255-1127
- http://www.themcc.com/
- Services and events for all cultural groups

Ontario Early Years Centre (OEYC)
- www.ontarioearlyyears.ca
- Activities and resources for parents and their children ages 0 to 6 years. There are numerous centres in Windsor/Essex County (map: http://www.oeyc.edu.gov.on.ca/locations/index.aspx)

Positive Parenting Program (Triple P)
- Hôtel-Dieu Grace Healthcare, Windsor Regional Children's Centre, Huot Building

3901 Connaught Street
Windsor, ON N9C 4H4
- (519) 257-5215 x 74033
- http://www.hdgh.org/triplep
- Parent training program for child behaviour management

Ready-Set-Go
- 647 Ouellette Avenue
  Windsor, ON N9A 4J4
- (519) 977-9407
- www.ready-set-go.ca
- Parent support programs for parents of at-risk children ages 0 to 6 years

Windsor Women Working with Immigrant Women (5W)
- 500 Ouellette Avenue, 3rd floor
  Windsor, ON N9A 1B3
- (519) 973-5588
- http://www.wwwwiw.org/
- Support and services for newcomers and first generation Canadians

Windsor-Essex Children's Aid Society
- 1671 Riverside Drive East
  Windsor, ON N8Y 5B5
- (519) 252-1171
- Child Abuse Prevention Council of Windsor and Essex County:
  http://www.wecas.on.ca/
- Positive parenting tips and strategies for parents:
  http://www.preventchildabuse.ca/ParentsCorner/tabid/74/Default.aspx

Windsor-Essex County Health Unit
- (519) 258-2146
- Health resources: http://www.wechealthunit.org/
- Parenting resources: http://www.wechealthunit.org/family-health/parenting

Youth Connection Association for Academic Excellence Inc.
- Youth drop-in centre for children ages 6 to 15 years
- http://windsoressex.cioc.ca/record/WIN0483

Appendix S

Consent for Audio Recording

University of Windsor

CONSENT FOR AUDIO RECORDING

Participant's Name (parent): _____

Child's Name: _____

Title of the Project: **The Emotional Lives and Personalities of Mothers and their Children**

I consent to the audio-recording of me and my child during a storytelling task. I also consent to the audio-recording of my child during a problem-solving activity.

I understand these are voluntary procedures and that I am free to withdraw at any time by requesting that the taping be stopped. I also understand that my name or my child's name will not be revealed to anyone and that taping will be kept confidential. Recordings will be password protected, encrypted, and stored on a computer.

Audio recordings will be kept for five years following the last publication of the data and will then be permanently deleted.

I understand that confidentiality will be respected and that the audio recording will be for professional use only.

_____   _____
(Signature of Parent or Guardian)   (Date)

Appendix T

Consent for Video Recording

CONSENT FOR VIDEO RECORDING

Participant's Name (parent): _____

Child's Name: _____

Title of the Project: **The Emotional Lives and Personalities of Mothers and their Children**

I consent to the video recording of me and my child during a storytelling task. I also consent to the video-recording of my child during a problem-solving activity.

I understand these are voluntary procedures and that I am free to withdraw at any time. I may stop recording me and my child whenever I want to. I understand that I can ask that the recording be erased. I also understand that my name or my child's name will not be revealed to anyone and that viewing will be kept confidential. DVD recordings are filed by number only and are stored in a locked cabinet.

Video-recordings will be kept for five years following the last publication of the data and will then be permanently deleted.

I understand that confidentiality will be respected and the viewing of materials will be for professional use only.

_____   _____
(Signature of Parent or Guardian)   (Date)

Appendix U

Assent Form for Child Participants

ASSENT FORM FOR CHILD PARTICIPANTS

Today I will be asked to make up a story with my mother, answer some questions about words, and solve a problem. I understand that my mother and I will be videotaped while we make up a story together and while I work on solving a problem. I understand that my mother will not be in the same room as me when I work on solving a problem, but I know that I can visit her whenever I want. I know that only study staff members will be allowed to watch the videotape. I understand that I can stop doing the activities at any time. I know that before I leave today I will get a prize. I know that I can ask questions at any time and that these questions will be answered.

I understand what I am being asked to do to be in this study, and I agree to be in this study.

_____   _____
Child's Signature   Date

_____
Witness

Appendix V

Administration of WPPSI-IV Vocabulary Acquisition Index Subtests

Materials required:
- *WPPSI-IV Administration and Scoring Manual*
- *WPPSI-IV Record Form*
- *WPPSI-IV Stimulus Book 1*

At this point, the child's mother would have left the room in order to complete a brief questionnaire with a Research Assistant #2. Research Assistant #1 will read the following:

Now, you and I are going to do two activities together here at this table. Please sit here.

Read the statement in the WPPSI-IV Administration and Scoring Manual that introduces the WPPSI-IV.

(Instructions are copyright and are not reproduced here).

Turn to page 258 for the **Receptive Vocabulary** subtest. Follow all prompts. Begin the subtest at the appropriate start point (#5 for children ages 4:0-5:11 and #13 for children ages 6:0-7:7). Instructions say, "Show me _____". Follow the WPPSI-IV General Directions for item repetition, scoring, and discontinue criteria.

Once discontinue criteria are met, say:

Wow, thank you for working on that with me! Let's try another activity now.

Turn to page 263 for the **Picture Naming** subtest. Follow all prompts. Begin the subtest at the appropriate start point (#7 for children ages 4:0-5:11 and #9 for children ages 6:0-7:7). Turn to the appropriate item. Point to the picture on the page and say:

What is this?

Follow the WPPSI-IV General Directions for item repetition, scoring, and discontinue criteria.

We finished the two activities! Now it is time to do something else.

Guide the child to the middle of the room, free of distractions. Begin the Transparent Box Task.

Appendix W

Transparent Box Task

Materials required:
- *Basket of approximately five age-appropriate toys*
- *A plastic transparent box that has a metal lock on it*
- *A ring of keys (2) that do not open the transparent box*
- *A ring keys (2) that unlock the transparent box*

Note: The following procedures are adapted from Dennis (2006), with permission.

At this point, the child's mother is still in an adjacent room with Research Assistant #2. Research Assistant #1 will guide the child to the middle of the room, free of distractions. Start video recording if consent was provided. Read the following:

Look at these toys!

Allow the child to explore the toys for approximately 1 minute. While the child is playing, remove the other toys and place them out of view. Read the following:

Which toy is your favourite?

Allow the child to select his or her favourite toy. Place the toy inside the transparent box and lock it. Show the child how to open the lock with a set of two keys that unlock the lock. Hand the child the keys and say:

You can try to unlock it now.

Allow the child approximately 1 minute to practice opening the lock and the box. Say:

I am going to see if your mom is ready. I will let you work on that for a while. When you open the box, you can play with the toy inside.

Hand the child the set of keys that do not unlock the box. The child should not realize that the switch was made. Leave the room and allow the child 3 minutes to work on unlocking the box. Observe the child through the observation window. Cue the other Research Assistant #2 so that he or she knows it is almost time to return to the room with the child's mother. At the 3 minute mark, come back into the room. Say:

Could you open the box?

Allow the child to respond. Reach in your pocket and reveal the set of keys that unlock the box. Say:

Oops! I guess I gave you the wrong keys. Let's try this one.

Allow the child to unlock and open the box (help if needed) and provide the child with an opportunity to play with the toy until his or her mother returns to the room with the other research assistant. Stop the video recording. The child will take this toy home as a prize.

Appendix X

Missing Data Analysis for Study Scales

Subscale Name	*N* with Complete Data	% Missing Data
ERPSST-L		
Emotion Coaching	166	1.2%
Emotion Rejecting	166	1.2%
ATQ-SF		
Negative Affectivity	167	.6%
Extraversion	167	.6%
Effortful Control	167	.6%
Orienting Sensitivity	167	.6%
SSVS Dimensions		
Conservation	162	3.6%
Self-Transcendence	162	3.6%
SSVS Basic Values		
Power	167	.6%
Achievement	167	.6%
Hedonism	164	2.4%
Stimulation	166	1.2%
Self-Direction	167	.6%
Universalism	167	.6%
Benevolence	167	.6%
Tradition	166	1.2%
Conformity	165	1.8%
Security	166	1.2%
SDS-17	167	.6%
CBQ-VSF		
Extraversion	164	2.4%
Negative Affectivity	164	2.4%
Effortful Control	164	2.4%
ERC Composite	165	1.8%
Lability	165	1.8%
Emotion Regulation	165	1.8%

Appendix Y

Descriptive Statistics for Proportions of Segments with Discrete Positive and Negative Emotions ($N = 30$)

Emotion Category	M (SD)	Min (%)	Max (%)
Love			
Mo-Ch	.46 (.53)	0	1.99
Mo	.39 (.67)	0	2.41
Ch	.58 (.84)	0	2.50
Joy			
Mo-Ch	4.39 (2.80)	0	11.04
Mo	3.65 (2.94)	0	11.11
Ch	4.96 (3.97)	0	13.19
Surprise			
Mo-Ch	.34 (.56)	0	1.95
Mo	.47 (.90)	0	3.92
Ch	.21 (.54)	0	1.83
Other Positive			
Mo-Ch	.13 (.36)	0	1.76
Mo	.10 (.28)	0	1.25
Ch	.16 (.62)	0	3.00
Negation of Anger			
Mo-Ch	.04 (.16)	0	.79
Mo	.02 (.09)	0	.49
Ch	.05 (.26)	0	1.45
Negation of Sadness			
Mo-Ch	.02 (.11)	0	.60
Mo	.03 (.17)	0	.93
Ch	0	0	0
Negation of Fear			
Mo-Ch	0	0	0
Mo	0	0	0
Ch	0	0	0
Anger			
Mo-Ch	4.26 (2.36)	0	9.15
Mo	3.09 (2.43)	0	10.00
Ch	5.60 (3.68)	0	13.79
Sadness			
Mo-Ch	3.20 (1.61)	0	7.25
Mo	2.24 (1.56)	0	5.26
Ch	4.16 (3.75)	0	14.63

Emotion Category	*M* (*SD*)	Min (%)	Max (%)
Fear			
Mo-Ch	1.18 (1.37)	0	5.84
Mo	1.16 (1.56)	0	6.67
Ch	1.05 (1.47)	0	5.50
Other Negative			
Mo-Ch	.32 (.49)	0	1.88
Mo	.28 (.45)	0	1.36
Ch	.33 (.99)	0	4.35
Negation of Love			
Mo-Ch	.82 (1.00)	0	4.29
Mo	.56 (1.08)	0	5.32
Ch	.99 (1.31)	0	5.36
Negation of Joy			
Mo-Ch	.70 (.97)	0	4.46
Mo	.87 (1.25)	0	5.34
Ch	.40 (.88)	0	3.62
Negation of Surprise			
Mo-Ch	0	0	0
Mo	0	0	0
Ch	0	0	0
Multiple Codes			
Mo-Ch	.42 (.58)	0	2.19
Mo	.53 (.89)	0	3.80
Ch	.30 (.96)	0	4.88

Note. Mo-Ch = Mother-Child; Mo = Mother; Ch = Child. The proportion is the average frequency of the variable divided by the total number of segments for the particular speaker(s) with a possible range of 0–100.

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