Maternal Personality, Socialization Factors and the Relations with Children's Social Skills

Jennifer Scammell

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Maternal Personality, Socialization Factors and the Relations with Children’s Social Skills

by

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16 September 2011
DECLARATION OF ORIGINALITY

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ABSTRACT

To examine relations between maternal factors and children’s social skills, twenty-six mothers of children, ages 3 to 12, completed online questionnaires about their personality, emotion socialization (emotion coaching), coping socialization, parental stress, and their children’s social skills. Emotion coaching mediated each of the positive relations between two personality factors (agreeableness and conscientiousness) and supportive coping socialization; however, these mediational findings became non-significant when controlling for parental stress. Children’s social skills were positively associated with maternal agreeableness and conscientiousness and negatively associated with distress reactions to children’s negative emotions, but these results also became non-significant when controlling for parental stress. Additionally, parental stress was negatively associated with agreeableness, conscientiousness, emotion coaching, and children’s social skills. These findings highlight the importance of maternal personality and parental stress for mothers’ emotion and coping socialization behaviours and children’s social skills.
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CHAPTER I

INTRODUCTION

Children often look to their parents for guidance in most aspects of their life, including how to understand, regulate and cope with their emotions (Thompson & Meyer, 2007). The way in which parents teach their children about emotions and coping is dependent on many factors, such as their own personality, beliefs and attitudes toward emotions and perceived level of stress (Eisenberg, Cumberland, & Spinrad, 1998). These factors also can influence how parents teach their children about emotions and coping. The purpose of this study was to explore the relations between maternal personality dimensions, emotion socialization (i.e., emotion-related parenting styles, such as emotion coaching), coping socialization, perceived parental stress and children’s social skills.

Social skills are important for children to develop and are the main skills children use when interacting with their peers, such as turn-taking, conversational abilities and teamwork. Social skills are part of a broader social ability referred to as social competence, which is “the ability to achieve personal goals in social interaction while simultaneously maintaining positive relationships with others over time and across situations” (Rubin, Bukowski & Parker, 1998, p. 645). A lack of social competence has been shown to lead to loneliness, depression, disruptive behaviour and truancy (McDowell, Kim, O’Neil & Parke, 2002). Another broad ability that is related to social competence and social skills is emotional competence, which is the “understanding of one’s own and other’s emotions, the tendency to display emotions in a situationally and culturally appropriate manner and the ability to inhibit or modulate experiences and expressed emotion and emotionally derived behavior as needed to achieve goals in a
socially acceptable manner” (Eisenberg, Cumberland, et al., 1998, p. 242). When children understand and regulate their emotions well, they are more likely to perform well academically, be physically healthy, have good social skills, get along with other children and have fewer behaviour problems (Gottman, 1997).

To illustrate the importance of the parental role in children’s social and emotional development, Garner and Estep (2001) examined mothers’ reports about their children’s emotional intensity, mothers’ reports of their own anger when reacting to their children’s negative emotions, children’s emotional situation knowledge and children’s social competence in a peer interaction task. They found that when mothers reported more anger towards their children’s negative emotions, children also showed more anger reactions towards their peers. Mothers who expressed less anger towards their children’s negative emotions had children who initiated social interactions and showed less anger in peer interactions. Additionally, children who could not manage their emotional expression effectively (i.e., had higher emotional intensity) were less likely to respond appropriately to peer interactions and conflict. These findings showed that when mothers respond to their children’s negative emotions with anger, children are not being taught effective and appropriate emotional regulation or social problem-solving strategies, resulting in poorer peer interactions. This study underscored the importance of children learning appropriate social and emotional competence skills from their parents in order to establish good peer relationships. The present study further examined these relations between maternal emotion and coping socialization and children’s social skills, while also exploring other factors that contributed to mothers’ actions and attitudes, such as personality and parental stress.
CHAPTER II
REVIEW OF LITERATURE

Emotion Socialization

Children learn about and understand emotions based on their interactions with their parents (Gottman, 1997, Eisenberg, Cumberland, et al., 1998). This process of parental emotion socialization refers to how parents teach their children to understand, regulate and express their emotions (Eisenberg, Cumberland, et al., 1998; Eisenberg, Spinrad, & Cumberland, 1998). Parental teaching and guidance about emotions is based on parents’ own attitudes about emotions, consistent with the parents’ own values, beliefs, goals and culture (Eisenberg, Cumberland, et al., 1998; Eisenberg, Spinrad, et al., 1998; Saarni, 1999).

Emotion socialization can happen two ways: directly and indirectly. Direct socialization of emotion refers to how parents interact with their children with specific intentions or goals of teaching their children about emotion (Eisenberg, Spinrad, et al., 1998). One mechanism of direct socialization is parents’ direct reactions to their children’s emotions (Eisenberg, Cumberland, et al., 1998). For example, when a child reacts to losing a game with anger by yelling and throwing the game across the room, the parent responds by assisting the child to calm down and modeling a better response to losing the game. Children see their parents react to their emotions and then learn to express their emotions in similar situations, as well as learn from their parents what reactions and emotions are appropriate to express. Another means of direct socialization is when parents regulate their children’s opportunities to learn about emotions (Parke & McDowell, 1998; Power, 2004). Parents have control over their children’s environment,
such as what they watch on TV or what social interactions they have (Eisenberg, Spinrad, et al., 1998; Parke & McDowell, 1998; Power, 2004). If parents become overprotective of their children, limiting their interactions and exposure to emotion-eliciting events, children lose opportunities to develop emotion-related skills and may become more anxious or have other internalizing problems when faced with situations that elicit negative emotions (McDowell & Parke, 2000; McShane & Hastings, 2009). Finally, parents can discuss emotions directly with their children. Research has shown that parents who discuss emotions with their children have children who have a better understanding of how to express emotions (Eisenberg et al., 2001; Garner, 1999; Gottman, 1997).

Indirect socialization of emotion refers to parent interactions with their children and their children’s environment that do not have specific goals related to emotion, but still influence children’s emotional understanding and experience (Eisenberg, Spinrad, et al., 1998). One mechanism of indirect socialization is parental modeling of emotional expression in situations in which they are not specifically trying to teach their children how to express their emotions, such as how they react to and express their emotions in everyday situations (McDowell et al., 2002). For instance, if parents respond with anger and swearing in response to being cut off in traffic, children are likely to emulate these behaviours when confronted with an anger-eliciting situation. General parenting behaviours, such as warmth, sensitivity and behavioural control, also play a role in parent emotion socialization behaviours. For example, parents who show warmth and responsiveness to their children will be more likely to empathize with their children’s emotions. These practices influence how parents interact with their children and
establish a positive or negative emotional climate in the family (Chan, Bowes, & Wyver, 2009). In addition, overall family environment and how emotion is expressed by the family impacts children’s emotional development because it is the main setting where children’s emotional development takes place (Eisenberg, Cumberland, et al., 1998). For example, if parents are engaged in a higher level of marital conflict, they are more likely to express an increased amount of negative emotions on a day-to-day basis, leading to negative family interactions (Wong, McElwain, & Halberstadt, 2009). Finally, other environmental and contextual factors, such as culture, serve as a jumping-off point for parents’ behaviour, as parents develop their parenting practices based on their cultural values (Chan et al., 2009; Klimes-Dougan & Zeman, 2007; Parke & McDowell, 1998). For example, Novin, Banerjee, Dadkhah and Rieffe (2009) found that Iranian children were much more likely to suppress their expressions of negative emotions than were Dutch children, especially in front of family members. This pattern reflects the fact that Iranian culture is more collectivist than Dutch culture; Iranian parents are more likely to emphasize social harmony and hierarchy in their parenting practices. By emphasizing these goals, parents are communicating what emotions are appropriate to express, leading to more suppression of negative emotions by their children. Overall, all of these indirect influences provide the context for which emotion socialization occurs and this context plays an important role in emotion socialization of children and can have outcomes similar to outcomes associated with direct socialization (Chan et al., 2009; Wong et al., 2009).

Emotion socialization is important for many developmental outcomes. As emotion is part of the fabric of everyday interpersonal relationships and social life,
emotion socialization sets the stage for how children will be perceived by their peers, interact appropriately with their peers, regulate their emotions, express their emotions in dynamic and changing situations and develop social and emotional competence (Eisenberg, Cumberland, et al., 1998; Garner, 1999; Saarni, 1999). Children first learn about emotions and how to regulate them from their families and then apply those strategies to their interactions with peers (Saarni, 1999). When children are emotionally knowledgeable and can regulate their emotions well, they are better able to navigate complex social interactions more effectively, leading to better peer relationships and acceptance (Garner & Estep, 2001; Saarni, 1999). For example, McDowell et al. (2002) examined the relations between indirect socialization (e.g., parental relationship qualities such as warmth, responsiveness), direct socialization (e.g., amount of parental control over their children’s emotions, with high levels indicating a controlling interaction style) and children’s emotional regulation and social competence. They found that parental relationship qualities were positively related to better emotional regulation in their children and that when parents had high levels of control over their children’s emotions, their children were more likely to be rated as aggressive. Overall, when parents engage in positive direct and indirect emotion socialization practices, their children are better able to regulate their emotions, leading to increased social competence and social skills (Garner, Dunsmore, & Southam-Gerrow, 2008; McDowell et al., 2002).

**Parent Meta-Emotion Philosophy**

Given that emotion socialization is important for children’s emotional and social development, researchers have examined how parents foster good emotional competence skills in their children. One important theory guiding much of this research is Gottman
and colleagues’ (1996, 1997) parental meta-emotion philosophy, which is “an organized set of feelings and thoughts about one’s own and one’s children’s emotions” (Gottman, Katz, & Hooven, 1996, p. 243). This philosophy encompasses parents’ thought processes and fundamental attitudes about emotion and underlies parenting behaviours.

As part of the work on meta-emotion philosophy, Gottman (1997) identified four types of emotion-related parenting styles. The first style is emotion coaching. Parents who are primarily emotion coachers accept and respect their children’s emotions, but also set limits on inappropriate behaviour by teaching their children about emotions and helping their children to problem solve. The second style is laissez-faire. Parents who are primarily laissez-faire also generally accept their children’s emotions, but provide little guidance on how to cope with those emotions, problem solve, or provide guidelines for appropriate behaviour. The third style is dismissing. Parents who are primarily dismissing see their children’s negative emotions as trivial and unimportant, perceiving their children’s negative emotions as toxic, harmful and a reflection of child maladjustment. Finally, the last style is disapproving. Parents who are primarily disapproving view their children’s negative emotions in a way that is similar to those who adopt a dismissing style, but these parents often discipline or punish children for their emotional expression whether or not their children misbehave. They see negative emotions as a waste of time and something to be rigidly controlled, focusing more on conformity to good behaviour standards.

Of each of these styles, the emotion coaching style is the most adaptive, as it has been associated with better child outcomes, such as better social skills, emotional regulation and fewer behaviour problems (Gottman, 1997). In their preliminary study,
Gottman et al. (1996) identified five main characteristics of parents who have an emotion coaching meta-emotion philosophy. First, parents who are good emotion coachers recognized subtle, low intensity emotions in both their children and themselves. Second, they saw their children’s negative emotions as an occasion for intimacy and teaching. Third, they validated the emotions their children experienced. Fourth, they helped their children verbally label the emotion they were feeling. Fifth, they assisted their children with problem solving by discussing goals and strategies for managing the situation and setting appropriate behavioural limits. In general, these parents were more likely to have children who were better at understanding and regulating their emotions.

Emotion coaching has the characteristics of warmth, behavioural control and other characteristics that are also typical to positive parental disciplinary styles (Gottman, Katz, & Hooven, 1997). For example, Baumrind (1971) identified an adaptive disciplinary style called authoritative parenting. Those with an authoritative parenting style have high warmth, but also firm behavioural control, expressing sensitivity to their children’s needs and setting appropriate behavioural limits and consequences. These parents had children who were self-reliant, self-controlled, confident in themselves and displayed fewer behaviour problems. While these characteristics of an adaptive, authoritative style are also important facets of emotion coaching, these characteristics alone do not encompass a complete picture of what emotion coaching entails (Gottman et al., 1996; Gottman, Katz, et al., 1997; Lagacé-Séguin & d’Entremont, 2006). Parents can show warmth toward their children and set behavioural limits, but having an authoritative parenting style does not mean that the parent has a good understanding of emotion (Gottman, Katz, et al., 1997). An emotion coaching parenting style contains a distinct
emotional understanding component as a part of the parent-child interaction that reaches beyond warmth and limit setting.

Another characteristic of emotion coaching is a specific type of interaction that Gottman and colleagues called “scaffolding-praise” (Gottman et al., 1996; Gottman, Katz, et al., 1997; Katz, Gottman, & Hooven, 1996). Scaffolding-praise is when parents structure, respond to and praise their children during learning tasks. For example, Gottman et al. (1996) had parents teach their children how to play a video game. Emotion coaching parents tended to break the game up into small steps, moved at a speed that was comfortable for their children and praised the children for their progress at each step in learning the game. Furthermore, these parents tended to respond to children’s frustration in an adaptive way by assisting their children with coping with frustration using adaptive strategies, such as problem solving. This behaviour reflected parents’ capabilities to recognize their children’s abilities, teach their children and assist their children in accomplishing a goal in a reasonable manner.

An emotion coaching philosophy has been shown to have many positive benefits for children and their families, such as better emotional regulation and protective effects against adverse circumstances (Gottman, 1997). For example, Gottman et al. (1996) examined parental meta-emotion philosophy and parenting behaviours (e.g., scaffolding-praise) in relation to child emotional regulation, physiological functioning, adaptive behaviour and peer interactions when the children were five and eight years old. Parents who had an emotion coaching philosophy had children with better physiological regulation at age five, which predicted better emotional regulation (regulating emotional arousal, focusing on tasks and self-soothing) at age eight. In addition, compared to
children of non-emotion-coaching parents, children of emotion-coaching parents had a better understanding of their emotions, were more likely to do what was needed or appropriate in peer interactions and were better able to regulate their emotions. This study was one of the first studies to show that an emotion-coaching philosophy can have implications for children’s emotional regulation and social skills in later childhood.

Finally, parents who adopt an emotion-coaching meta-emotion philosophy are likely to have children who are more emotionally and socially competent. For instance, Lunkenheimer, Shields, and Cortina (2007) compared emotion coaching and emotion dismissing styles to determine whether an emotion-coaching style was a protective factor for children’s emotional competence (e.g., emotion regulation). The results showed that higher levels of emotion coaching were positively associated with children’s adaptive outcomes, such as better emotion regulation. In contrast, parents who dismissed their children’s emotions more often had children with poorer emotional regulation. Furthermore, when a parent exhibited both emotion coaching and dismissing, emotion coaching mitigated the negative effects of emotion dismissing, acting as an indirect protective factor for children’s emotional competence. Taken together with the other findings on emotion coaching, these studies suggest that having an emotion-coaching philosophy tends to be related to better emotion regulation abilities in children and these abilities can carry over into interactions with other people and skills that will help children to respond more adaptively to potentially stressful situations (Gottman et al., 1996; Katz & Windeck-Nelson, 2006; Saarni, 1999)

Recent work has provided a re-examination of Gottman’s (1997) emotion-related parenting styles. As part of an examination of Gottman’s (1997) self-report measure used
to examine these emotion-related parenting styles, Paterson et al. (in press) used factor analysis to examine the underlying structure of this measure in two samples of parents of children with and without developmental disabilities. These analyses revealed a slightly different underlying structure. In their analyses, the first style that emerged was the same as Gottman’s (1997) emotion coaching style. The second style, re-named \textit{parental acceptance of negative emotion}, is similar to Gottman’s (1997) laissez-faire style, such that the items assessing this new style indicate acceptance of children’s negative emotions without attempts at providing guidance with understanding or dealing with these emotions. The third style, renamed \textit{parental rejection of negative emotion}, encompasses both of Gottman’s (1997) dismissing and disapproving types. Although Gottman (1997) identified dismissing and disapproving as distinct, in Paterson and colleagues’ study, the items assessing these styles loaded on the same factor. The authors argued for combining the styles into one because both have a rejection of emotion component at their core and because of evidence that these styles have similar correlations with child outcomes. A fourth style, referred to as uncertainty/ineffectiveness, also emerged, but only for the parents of children with developmental disabilities. This style encompasses the feelings of not knowing how to deal with children’s negative emotions or feeling ineffective in helping children with negative emotions. This new reconceptualization of the emotion-related parenting styles was used for the present study.

\textbf{Coping Socialization}

While teaching children to understand emotions is important, teaching children to regulate their emotions is equally important. More than just the basic, temperamental
disposition that children are born with, emotion regulation “consists of internal and external processes involved in initiating, maintaining and modulating the occurrence, intensity and expression of emotion” (Morris, Silk, Steinberg, Myers, & Robinson, 2007, p. 363; Thompson, 1994). This skill develops over time during interactions with others, usually parents, with children progressing from using external sources (e.g., going to mother for comfort) to internal sources (e.g., using self-talk) of self-regulation (Baker, Fenning, Crnic, Baker, & Blancher, 2007; Gottman, Guralnick, Wilson, & Swanson, 1997; Wilson, Fernandes-Richards, Aarskog, Osborn, & Capetillo, 2007). Thus, emotion regulation is important to the development of social and coping skills (Guralnick, 2006; Saarni, 1999).

One context in which emotion regulation plays an important role in the well-being of children is in relation to how they cope with stressful situations (Bradley, 2007; Eisenberg, Fabes, & Murphy, 1996; Power, 2004; Saarni, 1999; Smith, Eisenberg, Spinrad, Chassin, Morris, & Kupfer, 2006). When confronted with a stressful event, children first appraise the threat and significance of the situation and then based on this appraisal they will take action to deal with the situation (e.g., using problem-solving strategies; Power, 2004). The appraisals and actions that children use are often taught by their parents and this teaching of specific coping skills is referred to as coping socialization (Kliewer, Fearnow, & Miller, 1996; Power, 2004). Similar to emotion socialization, parents influence the way children manage stressful events through direct and indirect pathways.

Direct coping socialization refers to how parents behave and interact with their children when they have the specific intention of teaching their children coping skills
As parents react to and cope with the emotions their children express, they directly model how to cope with emotions and stressful situations. Fabes, Poulin, Eisenberg and Madden-Derdich (2002) found that parents can respond directly to their children’s emotions in several different ways. They can react negatively by responding punitively, minimizing their children’s emotions, or becoming personally distressed themselves. Alternatively, they can react positively by encouraging the expression of their emotions, helping their children to feel better, or assisting their children in solving the problem causing their distress. Another direct method of coping socialization is coaching (Gottman, 1997; Power, 2004). If parents coach their children to view stressful situations as challenges and assist them to problem-solve, children are more likely to appraise stressful situations as more manageable (Power, 2004). Finally, parents regulate and monitor the opportunities their children have to learn about and to use appropriate coping skills, such as not allowing their children to go out and play with other children. If parents protect their children too much from stressful events, children lose opportunities to develop adaptive coping skills (Bradley, 2007; Eisenberg et al., 1996; Eisenberg, Spinrad, et al., 1998; McShane & Hastings, 2009; Power, 2004).

Indirect coping socialization refers to how parents interact with their children in ways that do not have specific intentions related to coping, but still influences children’s appraisals of and coping skills in stressful situations. Children observe parents’ day-to-day interactions and reactions to stressful situations (Parke, 1994). During these interactions and situations, parents model how to manage and express emotions, even if they are not directly teaching their children (Contreras, Kerns, Weimer, Gentzler, &
Tomich, 2000; Eisenberg, Cumberland, et al., 1998; Fabes, Lenonard, Kupanoff, & Martin, 2001; Power, 2004). For example, in response to stress at work, a parent may vent to her spouse by making rude and mean comments about her boss. A child who witnesses this may emulate this behaviour by making rude and mean comments about a teacher when feeling stressed at school. Often, how parents teach their children to cope with negative emotions is discrepant from how they actually cope with negative emotions themselves (Fabes et al., 2001).

To illustrate a model of coping socialization processes, Fabes et al. (2001) examined the relations between parental distress, harsh parental coping with their children’s negative emotions (e.g., punitive reactions), negative emotions expressed by their children and their children’s social competence. They found that if parents often reacted harshly to their children’s negative emotions, children’s frequency of displaying negative emotions decreased; however, when children did display negative emotions, these reactions were more intense. This relation was moderated by parental distress: if parents experienced more distress, the stronger the relation between harsh reactions and children’s display of negative emotions. Furthermore, the more intense children’s displays of negative emotions were, the more they were rated as less socially competent. These results suggest that harsh reactions to children’s negative emotions (a form of direct coping socialization) and a parent’s own distress level (a form of indirect coping socialization) can play a role in how children cope with stress, regulate their emotions and become socially competent.
Parent Characteristics: The Role of Personality in Parenting

Parental teaching and modeling of emotional understanding and coping skills is important for children’s social skills. However, while much research has been done about how parenting affects children’s outcomes, little is known about what factors influence parenting attitudes and behaviours. Factors, such as the parent’s own personality, can play a role in these parenting skills (Belsky & Barends, 2002; Bornstein et al., 2007). For example, based on his review of the determinants of parenting behaviour, Belsky’s (1984) parenting process model posited that there were three main sources of influence on parenting: parent characteristics, child characteristics and contextual factors (e.g., social support, stress). In this model, the most important determinant of parenting behaviour was parent characteristics, most notably personality. Of the research that has been conducted, personality and other dispositional traits have been shown to affect parents’ behaviour and how parents respond to different situations, but personality-parenting links have not been well established (Cumberland-Li, Eisenberg, Champion, Gershoff, & Fabes, 2003; de Haan, Prinzie, & Deković, 2009; Prinzie, Stams, Deković, Reijntjes & Belsky, 2009).

One of the most commonly used descriptive models of personality is called the “Big Five” (John & Srivastava, 1999). The Big Five refers to five broad dimensions of traits that are continuous and broad in scope and this model is a widely-used and well-validated approach to personality (John & Srivastava, 1999). The five dimensions include: openness to experience (i.e., curiosity, intellect, imaginativeness, originality), conscientiousness (i.e., efficient, organized, planful, responsible, reliable), extraversion (i.e., energetic, sociable, outgoing, talkative), agreeableness (i.e., appreciative, forgiving,
Four of the Big Five personality dimensions have been associated with positive parenting behaviours: openness to experience, conscientiousness, extraversion and agreeableness. Higher scores on these four dimensions have been shown to be positively associated with greater warmth and behavioural control (e.g., appropriate, clear limit setting; Prinzie et al., 2009). Additionally, increased parental sensitivity (e.g., attunement to their children’s behaviour and affect at an appropriate level) has been found to be associated with higher levels of conscientiousness and agreeableness (Smith et al., 2007), whereas over-reactivity to children’s behaviour (e.g., more extreme, distressing reactions to children’s behaviours) has been shown to be negatively associated with higher levels of agreeableness and extraversion (de Haan et al., 2009). Finally, higher levels of openness was found to be positively associated with nurturance and negatively associated with restrictiveness (Metsäpelto & Pulkkinen, 2003). Overall, parents who rate moderate to high on these four dimensions tend to exhibit various positive parenting behaviours, such as sensitivity, warmth and behavioural control, that are important to characteristics and practices that are known to facilitate adaptive emotion and coping socialization (Bornstein et al., 2007).

Three dimensions of personality also have been linked to characteristics of parenting competence. For example, Bornstein et al. (2007) examined personality and parenting competence in parents from different cultural backgrounds and found that higher ratings of openness to experience was positively associated with increased
parenting competence, parenting knowledge and investment in the parenting role.
Furthermore, higher ratings of agreeableness were linked to increased parenting
knowledge and satisfaction with the parenting role. Conscientiousness also was
associated with perceived parenting competence, but this finding held only for parents
who came from collectivist cultures. In contrast, increased extraversion was linked to
decreased perceived competence, parenting knowledge and satisfaction, but also
decreased stress. Possible reasons for these mixed results could be that although parents
with high levels of extraversion are energetic and sociable with their children, they are
also like that in their other social interactions, drawing attention away from their children
(Bornstein et al., 2007). Thus, these findings suggest that higher levels of openness,
conscientiousness and agreeableness are associated with better parenting competence,
whereas this relation does not hold for higher levels of extraversion.

These four personality dimensions also have been linked to Baumrind’s (1971)
parental disciplinary styles. In their study, Metsäpelto and Pulkkinen (2003) examined
the Big Five personality dimensions and other parenting behaviours (e.g., parenting
knowledge and nurturance) to explore whether there would be a difference in these
variables between each of Baumrind’s (1971) disciplinary styles. They found that an
authoritative, emotionally-involved parenting style (i.e., parenting high in warmth and
appropriate limit setting) was differentiated from other parenting styles by higher levels
of extraversion, openness, nurturance and parenting knowledge. On the other hand, an
authoritarian, emotionally-detached parenting style (i.e., harsh, rule-oriented parenting in
which parents display high levels of behavioural control and low levels of warmth) was
associated with lower levels of extraversion, openness, parenting knowledge and
nurturance and increased restrictiveness. Parents who were permissive (e.g., lenient parenting in which parents display high levels of warmth but low levels of behavioural control) had higher levels of extraversion, openness and neuroticism, but had decreased parenting knowledge and restrictiveness. Agreeableness and conscientiousness did not differentiate between any of the styles. In sum, those who are moderate to high on the personality dimensions of openness, extraversion, agreeableness and conscientiousness usually exhibit positive parenting behaviours, such as warmth, behavioural control and an authoritative parent disciplinary style.

Neuroticism has been one of the most researched personality dimensions in relation to parenting behaviours. In contrast to the other four personality domains of the Big Five, higher levels of neuroticism have consistently been related to fewer positive parenting behaviours (Prinzie et al., 2009). High levels of neuroticism have been associated with lower levels of warmth, behavioural control and autonomy support, as well as being positively related to increased negative mood and increased intrusiveness in the parent-child interaction (Belsky, Crnic, & Woodworth, 1995; Prinzie et al., 2009, Smith et al., 2007). In addition, high levels of neuroticism have been associated with lower perceived parenting competence, lower parenting satisfaction and less knowledge of parenting and child development (Bornstein et al., 2007; Metsäpelto & Pulkkinen, 2003). Higher levels of neuroticism also have been associated with a permissive parenting style (Metsäpelto & Pulkkinen, 2003). Thus, high levels of neuroticism tend to be negatively related to positive parenting behaviours.

Few studies have examined the relationship between parent personality characteristics and emotion and coping socialization, even though parent characteristics
have been included in many heuristic and process models (e.g., Belsky, 1984; Eisenberg, Cumberland, et al., 1998; Eisenberg, Spinrad, et al., 1998). Of those studies that have examined personality factors and parenting, most have found that higher levels of traits related to other positive parenting behaviours also are related to positive emotion and coping socialization behaviours. For example, Cumberland-Li et al. (2003) examined parent dispositional factors (e.g., temperament regulation, personality traits) and emotional regulation in relation to parenting behaviours, child emotion regulation and child social functioning. These researchers found that parent personality and emotion regulation predicted parenting behaviour and better developmental outcomes for children. Specifically, when parents were high in negative emotionality (i.e., neuroticism) and low in agreeableness, their children had poorer social adjustment. This study showed that, overall, parent personality characteristics are associated with parenting behaviours related to emotion and coping socialization and have implications for their children’s development of social skills and emotional regulation.

**Parental Stress**

Another general influence on parenting behaviours is parental stress, from such factors as home chaos, marital relations and child behaviour problems (Nelson et al., 2009). While Belsky (1984) posited that parent characteristics were a main determinant of parenting behaviour, he also acknowledged the effect of contextual factors, such as social support and stress. Thus, consistent with this model, parental stress also could have a significant effect on parent emotion and coping socialization behaviours and child outcomes.
Although little research has explored the relations between stress and emotion coaching, some studies have shown that an emotion coaching philosophy can have positive effects for parents dealing with stressful situations. For example, Katz and Windecker-Nelson (2006) explored the use of emotion coaching in families facing domestic violence. Parents in these homes typically face more stress, tend to engage in more parent-child aggression and show less warmth and effectiveness in the parenting role (Katz & Windecker-Nelson, 2006; Katz, Hunter, & Klowden, 2008). In addition, children from homes with domestic violence are exposed to hostile, threatening and emotionally-arousing events and situations and they tend to have difficulty with emotion regulation and expression (Katz & Windecker-Nelson, 2006; Katz, Hunter, & Klowden, 2008). These researchers found that in a community sample, even if domestic violence was present in the family, parents’ emotion coaching style moderated the relation between level of domestic violence in the home and children’s behaviour problems. When parents were high in emotion coaching, there was no relationship between level of overall domestic violence in the home and child adjustment outcomes (i.e., aggression, withdrawal, anxiety and depression). When mothers were low in emotion coaching, high levels of domestic violence were associated with increased child adjustment problems. These findings suggest that even if parents are facing a situation with higher levels of stress, such as domestic violence, an emotion coaching philosophy could buffer the effects of that stress on their children’s development.

Parental stress variables also have been found to affect parental coping socialization behaviours (i.e., supportive and non-supportive reactions to children’s negative emotions). For instance, Nelson et al. (2009) examined several parental stress-
related variables (e.g., marital dissatisfaction, home chaos) in relation to reactions to children’s negative emotions. For both mothers and fathers, they found higher levels of marital dissatisfaction were associated with lower levels of supportive reactions and higher levels of home chaos were related to higher levels of non-supportive reactions. Overall, these researchers concluded that levels of stress were associated with parents’ coping socialization behaviours, such that higher levels of stress were related to fewer supportive and more non-supportive reactions.

Finally, parent characteristics, such as personality factors, also have been associated with parental stress (Belsky et al., 1995; Bornstein et al., 2007; Paczkowski & Baker, 2008; Vermaes et al., 2008). Parents who are higher in positive dispositional factors, such as positive beliefs and optimism, have been found to have decreased stress and better adjustment and coping with child behaviour problems (Paczkowski & Baker, 2008). In another example, Vermaes, Janssens, Mullaart, Vinck and Gerris (2008) examined parent personality and parental stress in families of children with spina bifida. They found that higher levels of extraversion in mothers and higher levels of emotional stability (low neuroticism) and agreeableness in fathers were related to decreased levels of stress. Furthermore, these personality traits were found to be a stronger predictor of parental stress than were the child’s physical dysfunction problems. This study suggests that personality can have an impact on parents’ stress levels. Given that parental stress is related to both personality and parenting behaviours (e.g., Prinzie et al., 2009; Paczkowski & Baker, 2008; Vermaes et al., 2008), studying personality and parental stress may be especially important when considering what contributes to positive parenting behaviours.
Present Study and Hypotheses

The purpose of the present study was to explore the relations between maternal personality, emotion socialization (i.e., emotion coaching style), coping socialization, parental stress and children’s social skills. While other researchers (e.g., Belsky, 1984; Eisenberg, Cumberland, et al., 1998) have posited that other factors related to child characteristics (e.g., child temperament) also are associated with parenting behaviour, this study focused in on one direction of this relation, in order to specifically examine the role of parent characteristics, attitudes and behaviours on children’s social skills. To assess these variables, mothers of children between the ages of 3 and 12 completed self-report measures that assessed their Big Five personality dimensions, emotion-related parenting styles, reactions to children’s negative emotions, perceived parental stress and children’s social skills. In Belsky’s (1984) process model of parenting and Eisenberg, Cumberland, et al.’s (1998) heuristic model of emotion socialization, parent characteristics, such as personality, play an important role in general parenting and emotion socialization behaviours. These characteristics and parenting behaviours have implications for a variety of outcomes for children, including emotional regulation and understanding, coping skills and social skills (Eisenberg, Cumberland et al., 1998). Therefore, this study added to the current parenting and emotion socialization literature by examining the links between these constructs.

Hypothesis 1: Correlations between personality dimensions and emotion coaching. Four dimensions of personality (i.e., openness to experience, agreeableness, conscientiousness and extraversion) have been found to be positively associated with various positive parenting practices (e.g., warmth, behavioural control; Belsky, 1984; de
Haan et al., 2009; Kochanska, Clark, & Goldman, 1997; Prinzie et al., 2009); therefore, it was predicted that mothers’ emotion coaching scores would be positively associated with these personality dimensions. In contrast, the fifth personality dimension, neuroticism, has been found to be associated with negative parenting outcomes, such as decreased warmth, decreased behavioural control and increased intrusiveness (Prinzie et al., 2009; Smith et al., 2007). Thus, it was predicted that neuroticism would be negatively associated with mother’s emotion coaching scores.

Hypothesis 2: Indirect effects between positive personality factors, emotion coaching and coping socialization. An individual’s personality can impact on several aspects of behaviour, including parenting attitudes and behaviours (Vermaes et al., 2008). Four dimensions of personality (openness to experience, conscientiousness, extraversion and agreeableness) have been found to be associated with several positive parenting behaviours, such as warmth, appropriate limit setting and sensitivity, behaviours associated with emotion coaching (Gottman, 1997; Prinzie et al., 2009; Smith et al., 2007). In addition, emotion coaching is likely to influence coping socialization, as parental reactions towards their children’s negative emotions are influenced by their attitudes and beliefs about emotions (Parke, 1994; Power, 2004). Thus, considering the relations between personality and emotion coaching and emotion coaching and coping socialization, it was predicted that each personality dimension would have an indirect effect on mothers’ self-reported supportive coping socialization behaviours (i.e., supportive reactions to their children’s negative emotions), through an emotion coaching parenting style. Specifically, higher levels of each personality dimension will be
associated with higher levels of emotion coaching, which will be associated with higher levels of supportive reactions to children’s negative emotions.

**Hypothesis 3: Direct and indirect effects between neuroticism, emotion coaching and coping socialization.** In contrast to the other four personality dimensions, neuroticism typically shows a different, negative pattern of associations with parenting behaviours (e.g., decreased parental warmth; Prinzie et al., 2009), in addition to associations with other emotional variables, such as higher anxiety, fear and negative emotionality. Furthermore, Fabes et al. (2001) found that parents who were distressed (a characteristic of the neuroticism dimension) tended to use more harsh coping socialization strategies. Thus, unlike the other four personality dimensions, higher levels of neuroticism are likely to have a direct effect on coping socialization, being associated with lower levels of supportive reactions to children’s negative emotions.

Evidence also supports an indirect pathway between neuroticism and coping socialization. Higher levels of neuroticism have been associated with lower levels of emotion coaching-related behaviours, such as warmth and sensitivity (Prinzie et al., 2009, Smith et al., 2007). Therefore, as high levels of neuroticism are associated with lower levels of emotion coaching and emotion coaching is positively associated with coping socialization, it was predicted that neuroticism also would have an indirect effect on coping socialization through emotion coaching. Specifically, higher levels of neuroticism will be associated with lower levels of emotion coaching, which will be associated with less supportive coping socialization.

**Hypothesis 4: Emotion coaching, coping socialization and children’s social skills.** Emotion coaching has been shown to be associated with better social outcomes in
typically-developing children. Furthermore, children’s emotion regulation is an important factor in the development of peer relations (Baker et al., 2007; Gottman, 1997). One important way in which children’s emotional regulation develops is via parental coping socialization, that is, by parents expressing supportive or non-supportive reactions to their children’s negative emotions (Fabes et al., 2002). Research also has shown that parents who have an emotion-coaching meta-emotion philosophy have children who can better regulate their emotions (Gottman et al., 1996). Therefore, emotion coaching was expected to have an indirect effect on social skills through coping socialization. That is, greater emotion coaching should be correlated with more adaptive coping socialization and this should be associated with better child social skills.

**Hypothesis 5: Effects of perceived parental stress.** Parental stress has been shown to be associated with some of the Big Five personality factors, such as negative associations with agreeableness and extraversion and positive associations with neuroticism (Belsky et al., 1995; Bornstein et al., 2007; Vermaes et al., 2008). In addition, other studies have noted associations between lower levels of stress and higher levels of supportive reactions and children’s social skills (Neece & Baker, 2008; Nelson et al., 2009). Therefore, it was expected that perceived parental stress would be negatively associated with the positively oriented personality factors (openness to experience, extraversion, agreeableness and conscientiousness), supportive coping socialization and children’s social skills. In addition, it was expected that higher levels of stress would be associated with higher levels of neuroticism. However, as little research exists regarding the effects of parental stress on the relations between the main study
variables, as stated in hypotheses 1 through 4, hypotheses about the effect of parental stress on these relations were exploratory.
CHAPTER III
DESIGN AND METHODOLOGY

Participants

Twenty-six mothers (\(M_{age} = 36.23\) years, \(SD = 4.78\), range: 27-47 years) of children between the ages of 3 and 12 were recruited through the Psychology Participant Pool at the University of Windsor and the Friendly Families Database (see Table 1 for sample demographics). The majority of the mothers (69.2%) indicated that they were White/Caucasian. As reported by the mothers, the mean age for the children was 5.73 years (\(SD = 2.84\), range: 3-12 years) and 46.2% were girls. One mother indicated that she had a psychological disorder and no mothers indicated that their child had a developmental disability.

Measures

Demographic questionnaire. A short demographic questionnaire (see Appendix A) was given to each mother, asking for basic demographic information about her and her family, such as age, child age and gender, mother and child ethnicity, family income, first language spoken in the home, education and occupation level of herself and her partner (if applicable) and if the child was diagnosed with a developmental disability.

Parental Stress Scale. The Parental Stress Scale (PSS; Berry & Jones, 1995) is an 18-item questionnaire measuring parents’ level of stress about parenting. For example, one statement is, “Caring for my child(ren) sometimes takes more time and energy than I have to give.” Each item is rated on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating greater stress. The PSS has shown very good reliability, with a coefficient alpha of .83 and test-retest
Table 1

Demographics for the Study Sample (n = 26)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ethnicity</strong></td>
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</tr>
<tr>
<td>Black</td>
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<tr>
<td>White/Caucasian</td>
<td>18</td>
<td>69.2%</td>
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<tr>
<td>Asian</td>
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</tr>
<tr>
<td>Multi-Ethnic</td>
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<td>7.7%</td>
</tr>
<tr>
<td>Other</td>
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<td>7.7%</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
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<tr>
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</tr>
<tr>
<td>Common-Law</td>
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<td>3.8%</td>
</tr>
<tr>
<td>Married</td>
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<td>42.3%</td>
</tr>
<tr>
<td>Separated</td>
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</tr>
<tr>
<td>Divorced</td>
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<td>7.7%</td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Less than $10,000</td>
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<td>26.9%</td>
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<tr>
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<td>$90,000 to $99,999</td>
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<tr>
<td>$100,000 or more</td>
<td>7</td>
<td>26.9%</td>
</tr>
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<td>Prefer not to answer</td>
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<td>11.5%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
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<td>High School Certificate or equivalent</td>
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<td>University Degree (Bachelor's)</td>
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<tr>
<td>Post-Bachelor's degree</td>
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<td>15.4%</td>
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<tr>
<td>Other</td>
<td>1</td>
<td>3.8%</td>
</tr>
<tr>
<td>Variable</td>
<td>Frequency</td>
<td>Percentage of Sample</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------</td>
<td>----------------------</td>
</tr>
<tr>
<td>First Language Spoken In Home</td>
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<td></td>
</tr>
<tr>
<td>English</td>
<td>23</td>
<td>88.5%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>11.5%</td>
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<tr>
<td>Other Languages Spoken In Home</td>
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<td></td>
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<td>French</td>
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<tr>
<td>Spanish</td>
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<td>3.8%</td>
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<tr>
<td>Serbian</td>
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<td>3.8%</td>
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<tr>
<td>ASL</td>
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<tr>
<td>Child Gender</td>
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<tr>
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<tr>
<td>Female</td>
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</tr>
<tr>
<td>Child Ethnicity</td>
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<td></td>
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<tr>
<td>Black</td>
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<td>7.7%</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>15</td>
<td>57.7%</td>
</tr>
<tr>
<td>Latin American</td>
<td>2</td>
<td>7.7%</td>
</tr>
<tr>
<td>Multi-Ethnic</td>
<td>6</td>
<td>23.1%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>3.8%</td>
</tr>
</tbody>
</table>
reliability of .81 (Berry & Jones, 1995; Lessenberry & Rehfeldt, 2004). The PSS has been found to correlate moderately ($r = .46$ for mothers with typically-developing children, $r = .41$ for mothers of children with psychiatric or behavioural problems) with the Perceived Stress Scale and is highly correlated with other measures of parental stress (e.g., Parental Stress Index, $r = .75$). In the present study, this measure was used as a measure of parental stress. For the study sample, parental stress scores ranged from 23 to 54, with a relative low level of parental stress ($M = 33.91$) and very good internal consistency, $\alpha = .82$.

**Big Five Inventory.** The Big Five Inventory (BFI; John, Donahue, & Kentle, 1991; John, Nauman, & Soto, 2008) is a 44-item self-report measure of the Big Five personality traits. Sample items for each trait include: “I see myself as someone who is curious about many different things” (openness to experience; 10 items), “I see myself as someone who perseveres until the task is finished” (conscientiousness; 9 items), “I see myself as someone who is outgoing, sociable” (extraversion; 8 items), “I see myself as someone who is considerate and kind to almost everyone” (agreeableness; 9 items) and “I see myself as someone who worries a lot” (neuroticism; 8 items). Each item is rated on a 5-point Likert scale, ranging from 1 (disagree strongly) to 5 (agree strongly). Responses are totaled and averaged and each respondent receives a score for each personality trait, with higher scores indicating a higher level of that trait. The BFI has shown very good test-retest reliability ($r = .84$) and convergent validity with the NEO Personality Inventory (Rammstedt & John, 2007). In this ample, mothers had relatively high levels of conscientiousness and agreeableness and low levels of neuroticism, showing good to very good reliability ($\alpha = .73$ to .89).
**Emotion-Related Parenting Styles questionnaire.** The Emotion-Related Parenting Styles questionnaire (ERPS; Paterson et al., in press) is a 20-item shortened version of the Emotion-Related Parenting Styles Self Test-Likert (ERPSST-L; Hakim-Larson et al., 2006). The items assess parents’ four meta-emotion philosophy parenting styles, with five items in each parenting style: emotion coaching (EC; e.g., “When my child is angry, it’s time to solve a problem”), parental acceptance of negative emotion (PA; e.g., “I want my child to experience anger”), parental rejection of negative emotion (PR; e.g., “Children acting sad are usually just trying to get adults to feel sorry for them”) and uncertainty/ineffectiveness (UI; e.g., “When my child is angry, I’m not sure what he or she wants me to do”). Parents rate each item on a 5-point Likert-type scale, ranging from 1 (*always false*) to 5 (*always true*). Parents receive an average score on each subscale, in which higher scores indicate a greater endorsement of that parenting style. The ERPS has shown good reliability (α = .71 to .80) and is highly correlated with the original ERPSST-L (Paterson et al., in press). In this study, the mothers’ emotion coaching score was used. The current sample had high levels of emotion coaching and showed good reliability on this subscale (α = .75).

**Coping with Children’s Negative Emotions Scale.** The Coping with Children’s Negative Emotions Scale (CCNES; Fabes, Eisenberg, & Bernzweig, 1990; Fabes et al., 2002) is a self-report questionnaire measuring how parents react to their children’s negative emotions in stressful situations. Parents read 12 hypothetical stressful scenarios that their child may face and then rated the likelihood that they would use six different types of reactions on a 7-point Likert-type scale, ranging from 1 (*very unlikely*) to 7 (*very likely*). For example, one question asks, “If my child loses some prized possession and
reacts with tears, I would…” Parents then rate each of the following types of reactions: distress reaction (“get upset with him/her for being so careless and then crying about it”), minimization reaction (“tell my child that he/she is over-reacting”), problem-focused reaction (“help my child think of places he/she hasn’t looked yet”), emotion-focused reaction (“distract my child by talking about happy things”), expressive encouragement (“tell him/her it’s OK to cry when you feel unhappy”) and punitive reaction (“tell him/her that’s what happens when you’re not careful”). These six reactions can be grouped into two categories of reactions: supportive (problem-focused, emotion-focused and expressive encouragement) and non-supportive (punitive, minimizing and distress). The CCNES has shown good to very good internal consistency (α = .69 to .85) and test-retest reliability (rs ranging from .56 to .83, Fabes et al., 2002). In addition, the CCNES has shown good validity, with an expected pattern of correlations with the Interpersonal Reactivity Index and the Parental Control Scale (Fabes et al., 2002). In this study, the supportive reactions score on the CCNES was used as a measure of coping socialization. The current sample had high levels of supportive reactions and excellent reliability (α = .92).

Social Skills Rating System-Parent Form. The Social Skills Rating System-Parent Form (SSRS-PF; Gresham & Elliot, 1990; Van Horn et al., 2007) is a standardized parent-report measure of children’s social skills. Mothers completed the version of this form appropriate to the age of her child. The preschool form for ages 3 to 5 consists of 49 items: 39 items assessing social skills and 10 items assessing problem behaviours. The elementary form rates children in Kindergarten through Grade 6 and has 55 items: 38 items assessing social skills and 17 items assessing problem behaviours. As this study
focused on social skills, the problem behaviours scale will not be discussed. Parents rated social skills items in four domains: cooperation (e.g., “Keeps room clean and neat without being reminded”), assertion (e.g., “Makes friends easily”), responsibility (e.g., “Reports accidents to appropriate persons”) and self-control (e.g., “Controls temper when arguing with other children”). Each item is rated on a 3-point Likert-type scale for frequency of the behaviours, ranging from 0 (never) to 2 (very often). Frequency scores for each domain and totals for social skills are obtained and are converted to standard scores. The SSRS-PF has shown good internal consistency (α = .65 to .95) and test-retest reliability (rs = .65 to .87). Additionally, the social skills scale has shown good convergent validity with the Child Behavior Checklist (r = .58; Gresham & Elliot, 1990; Van Horn et al., 2007). In this study, the total social skills standard score was used as the measure of children’s social skills. For the current sample, mother mostly rated their children to have average to above average social skills and there was good reliability for both the preschool form (α = .70) and excellent reliability for the elementary form (α = .94).

**Marlowe-Crowne Social Desirability Scale-Short Form X1.** The Marlowe-Crowne Social Desirability Scale-Short Form X1 (SDS-X1; Straham & Gerbasi, 1972) is a 10-item, shortened version of the original 33-item SDS (Crowne & Marlowe, 1960). The SDS-X1 is a self-report measure of how an individual responds to low instance, culturally-approved behaviours. Respondents rate each item as true or false as it pertains to themselves, with higher frequencies of socially desirable answers indicating a tendency to answer in a way that makes the respondent look more socially acceptable. For example, one item is, “I like to gossip at times” (socially desirable answer is false). The
SDS-X1 has shown good internal consistency ($\alpha = .88$) and has been shown to be highly correlated with the original 33-item SDS ($r = .96$; Fischer & Fick, 1993). In this study, the SDS-X1 was used as a potential control variable (Cook & Campbell, 1979, King & King, 1991). This sample showed adequate reliability, $\alpha = .69$.

**Parenting Sense of Competence Scale.** The Parenting Sense of Competence Scale (PSOC; Johnston & Mash, 1989) is a 17-item questionnaire measuring two aspects of perceived parenting competence: parenting satisfaction (e.g., “Being a parent makes me tense and anxious”) and parenting efficacy (e.g., “If anyone can find the answer to what is troubling my child, I am the one.”). Each item is rated on a 6-point Likert-type scale, from 1 (*strongly agree*) to 6 (*strongly disagree*). Items are summed for each scale, with higher scores indicating higher levels of satisfaction or efficacy. This measure has shown good internal consistency for both satisfaction ($\alpha = .75$), efficacy ($\alpha = .86$) and the total scale ($\alpha = .79$; Johnston & Mash, 1989). In this study, parenting competence was used as a variable in supplementary analyses to look for associations with parental stress and showed good reliability in this sample, $\alpha = .74$ to .81.

**Procedure**

Ethics approval was obtained from the University of Windsor Research Ethics Board. Participants were recruited by signing up for the study through the University of Windsor Participant Pool website. In addition, eligible families from the Friendly Families database were emailed and/or phoned to ask if they were interested in participating in this study. Snowball sampling also was used by encouraging study participants to pass on information about the study to other people they know using a poster.
Questionnaires were available in online and print forms (note: only one participant completed print versions of the questionnaires). In the online questionnaire, mothers first saw the consent form (Appendix B) and then the demographic questionnaire (see Appendix A). The remaining questionnaires were presented in a randomized order. For the one mother who completed the print version, the questionnaires were presented in the same order as in the Measures section above. After completing the questionnaires, mothers were thanked for their participation, given a letter of information (see Appendix C) and given information about community resources for parents. Mothers recruited through the Participant Pool received bonus course credit and mothers recruited from the community were given the opportunity to enter a draw for a gift certificate to a local bookstore.
CHAPTER IV
ANALYSIS OF RESULTS

First, preliminary analyses were conducted to assess missing data, outliers, assumptions of univariate and multivariate analyses and covariates. Then, analyses were conducted for each hypothesis. Correlations were conducted for the first hypothesis between each personality factor (i.e., openness, conscientiousness, extraversion and agreeableness) and emotion coaching. For the second and third hypotheses, mediational analyses using hierarchical regression and Bootstrapping were conducted to assess the relation between each personality factor and supportive reactions to children’s negative emotions, with emotion coaching as a mediating variable. For the fourth hypothesis, mediational analyses also were conducted to assess the relation between emotion coaching and children’s social skills, with supportive reactions as a mediating variable. Then, the effects of parental stress on the main study variables were examined using partial correlations and hierarchical regression.

Preliminary Analyses

Descriptive statistics for each variable, including means and standard deviations, can be found in Table 2. Prior to statistical analysis, all variables were assessed for missing data, outliers and assumptions of univariate and multivariate parametric statistics. First, data were inspected for missing values. For all measures, the measure author’s guidelines were used for missing data. If no specific instructions were available, mean substitution using the total measure mean or scale mean for the item was used, provided that less than five percent of the items for the measure were missing and the
Table 2

*Descriptive Statistics for the Main Study Variables (n = 26)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M (SD)</th>
<th>Range</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td>3.75 (0.55)</td>
<td>2.70-4.70</td>
<td>-0.17</td>
<td>-0.92</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>4.03 (0.54)</td>
<td>2.67-5.00</td>
<td>-0.21</td>
<td>-0.51</td>
</tr>
<tr>
<td>Extraversion</td>
<td>3.58 (0.73)</td>
<td>1.50-4.50</td>
<td>-0.96</td>
<td>1.22</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>4.03 (0.54)</td>
<td>3.00-5.00</td>
<td>-0.05</td>
<td>-0.69</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>2.68 (0.86)</td>
<td>1.25-4.63</td>
<td>0.29</td>
<td>-0.22</td>
</tr>
<tr>
<td>Emotion Coaching</td>
<td>21.54 (2.30)</td>
<td>15.00-25.00</td>
<td>-0.89</td>
<td>-0.13</td>
</tr>
<tr>
<td>Supportive Reactions</td>
<td>17.17 (2.16)</td>
<td>12.25-19.83</td>
<td>-0.75</td>
<td>-0.33</td>
</tr>
<tr>
<td>Social Skills</td>
<td>105.25 (15.63)</td>
<td>78.00-130.00</td>
<td>0.02</td>
<td>-0.68</td>
</tr>
<tr>
<td>Parental Stress</td>
<td>33.91 (8.26)</td>
<td>23.00-54.00</td>
<td>0.58</td>
<td>-0.07</td>
</tr>
</tbody>
</table>
points were missing at random (Tabachnick & Fidell, 2007). Then, one participant had one item missing on the Social Desirability Scale (SDS). Because the SDS was a true/false measure and there were no author guidelines available, that participant’s SDS responses were omitted from any analysis.

All variables were then screened for potential univariate and multivariate outliers and influential cases. If a case had a standardized score of greater than ±3.29, it was considered a potential univariate outlier (Tabachnick & Fidell, 2007). All cases were inspected on each variable for outliers and no outliers were found (\( z = -2.84 \) to 2.25).

Multivariate outliers for each analysis were determined using Leverage values less than 0.14 and influential cases were determined using a Cooks Distance of less than 1. Inspection of the data revealed three multivariate outliers (Leverage = .15 to .35) and no influential cases. To determine the effect of the multivariate outliers, analyses were run both with and without these cases and yielded the same results. Thus, these three cases were retained.

Next, each main variable was inspected for univariate normality. Normality was determined using the Shapiro-Wilk test. If the Shapiro-Wilk test was significant \( (p < .05) \), skewness and kurtosis were examined to determine if parametric tests would be robust to the degree of violation in normality. Dividing the skewness or kurtosis value by its standard error yields a \( z \)-score, with a score greater than 1.96 considered problematic (Tabachnick & Fidell, 2007). All personality factors and the SSRS had non-significant Shapiro-Wilk tests \( (W = .92 \) to .97, \( p > .05) \) and were determined to be normal. Skewness and kurtosis were examined for the remaining variables and no variables had
significant $z$-scores (skewness $z = -1.59$ to $0.73$, kurtosis $z = -0.84$ to $1.54$). Thus, analyses used in this study were robust to the degree of violation of normality.

Next, the data were inspected for other assumptions, including linearity, independence of errors, normally distributed residuals and homoscedasticity, if applicable (Field, 2009; Tabachnick & Fidell, 2007). For linearity, all scatterplots indicated linear relations for each pair of variables in each analysis, with no observations of curvilinear relations. For independence of errors, Durbin-Watson statistics indicated independence of errors (Durbin-Watson = 1.44 to 2.34; a value outside the range of 1 and 3 was considered non-independent; Field, 2009). For residual distributions, histograms of the residuals for each dependent variable appeared normal. For homoscedasticity, residual plots for each analysis showed no evidence of funnelling. Thus, all variables and analyses met the assumptions for univariate analyses and multiple regression, according to the standards of Tabachnick and Fidell (2007).

Several analyses were conducted to determine if there were any covariates. First, independent samples $t$-tests were conducted to determine if there were differences between scores on each variable depending on child gender. Analyses revealed that there were no differences in any variable score between mothers who had sons and those who had daughters. Correlations between the potential covariates of social desirability and child age in the relation to the main study variables were conducted to determine if there were any significant correlations (see Table 3). Higher levels of social desirability were associated with lower levels of openness, $r(21) = -.44$, $p = .04$. Child age was positively associated with conscientiousness ($r(22) = .43$, $p = .04$) and children’s social skills ($r(18) = .72$, $p < .001$) and negatively associated with neuroticism ($r(22) = -.63$, $p = .001$).
Table 3

*Correlations Between Main Study Variables, Children’s Social Skills, Child Age and Social Desirability (n = 26)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Child Age</th>
<th>Social Desirability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td>.09</td>
<td>-.44*</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.43*</td>
<td>-.01</td>
</tr>
<tr>
<td>Extraversion</td>
<td>.21</td>
<td>-.35^</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>.33</td>
<td>-.09</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-.63**</td>
<td>.15</td>
</tr>
<tr>
<td>Emotion Coaching</td>
<td>.04</td>
<td>-.30</td>
</tr>
<tr>
<td>Supportive Reactions</td>
<td>-.13</td>
<td>-.31</td>
</tr>
<tr>
<td>Social Skills</td>
<td>.72***</td>
<td>-.03</td>
</tr>
</tbody>
</table>

*Note.* ^p < .10, *p < .05, **p < .01, ***p < .001
These variables were used as covariates when doing analyses with the variables with which they were correlated. However, as the total score on the SSRS was a standard score, comparing children to a normative group of their same-aged peers, analyses involving the SSRS were not conducted controlling for child age.

**Relations Between Personality Factors and Emotion Coaching**

To assess the first hypothesis, bivariate and partial correlations were used to determine if there were any significant associations between the five personality factors and emotion coaching (see Table 4). Higher levels of agreeableness were positively associated with higher levels of emotion coaching, $r(22) = .58, p = .003$. In addition, higher levels of conscientiousness, controlling for child age, were positively correlated with emotion coaching, $pr(21) = .65, p = .001$. No other significant correlations were found. Thus, higher levels of agreeableness and conscientiousness were related to higher levels of emotion coaching.

**Relations Between Positive Personality Factors, Emotion Coaching and Supportive Reactions to Children’s Negative Emotions**

The second hypothesis addressed the links between the four positive personality factors (agreeableness, conscientiousness, openness and extraversion), emotion coaching and supportive reactions to children’s negative emotions. Mediational analyses using hierarchical regressions, as outlined by Baron and Kenny (1986), were used to examine whether each of these personality dimensions predicted supportive coping socialization, with mothers’ emotion coaching score on the Emotion-Related Parenting Styles questionnaire (ERPS) as a potential mediating variable. As recommended by Preacher and Hayes (2008), Bootstrapping was used to test the significance of any indirect effects found in the mediation analyses. A Bias Corrected and Accelerated 95%
Table 4

*Correlations Between Maternal Personality, Emotion Coaching, Supportive Reactions to Children’s Negative Emotions and Children’s Social Skills*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Openness</td>
<td>-</td>
<td>.35^</td>
<td>.31</td>
<td>.52**</td>
<td>-.19</td>
<td>.35^</td>
<td>.14</td>
<td>.09</td>
</tr>
<tr>
<td>2. Conscientiousness</td>
<td>-</td>
<td>.36^</td>
<td>.57**</td>
<td>-.38^</td>
<td>.60**</td>
<td>.35^</td>
<td>.50*</td>
<td></td>
</tr>
<tr>
<td>3. Extraversion</td>
<td>-</td>
<td>.26</td>
<td>-.33</td>
<td>.21</td>
<td>.10</td>
<td>.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Agreeableness</td>
<td>-</td>
<td>-.33</td>
<td>.58**</td>
<td>.44*</td>
<td>.47*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Neuroticism</td>
<td>-</td>
<td>-.01</td>
<td>.22</td>
<td>-.42^</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Emotion Coaching</td>
<td>-</td>
<td>.60**</td>
<td>.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Supportive Reactions</td>
<td>-</td>
<td>.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Social Skills</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Note: ^ p < .10, * p < .05, ** p < .01*
confidence interval was used to indicate whether the mediational effect was significant (i.e., if the confidence interval did not encompass a value of zero, the mediation is significant). For all analyses, the path between higher levels of emotion coaching (the potential mediator) and greater supportive reactions (the outcome variable) was found to be significant, \( \beta = .60, t = 3.48, p = .002 \).

**Agreeableness.** The relation between agreeableness and supportive reactions to children’s negative emotions was found to be mediated by emotion coaching. As illustrated in Figure 1, results suggested that higher levels of agreeableness predicted greater supportive reactions, \( \beta = .44, t = 2.25, p = .04 \). In addition, higher levels of agreeableness predicted higher levels of emotion coaching, \( \beta = .58, t = 3.34, p = .003 \). Finally, when emotion coaching was added to the regression analysis for the relation between agreeableness and supportive reactions, this relation became non-significant, \( \beta = .14, t = 0.64, p = .53 \). Results using Preacher and Hayes’s (2008) recommendations for Bootstrapping indicated that emotion coaching fully mediated the relation between agreeableness and supportive reactions, Bootstrap data = 1.55, \( SE = .68 \), Bias Corrected and Accelerated 95% confidence interval = 0.22 to 3.01. When mothers had higher levels of agreeableness, their supportive reactions to children’s negative emotions was mediated by an emotion coaching parenting style.

**Conscientiousness.** The relation between conscientiousness and supportive reactions to children’s negative emotions, controlling for child age, was found to be mediated by emotion coaching. As illustrated in Figure 2, results suggested that higher levels of conscientiousness predicted greater supportive reactions, \( \beta = .51, t = 2.32, \)
Figure 1. Mediation model of emotion coaching mediating the positive relation between agreeableness and supportive reactions to children’s negative emotions. Part A illustrates the positive relation between maternal agreeableness and supportive reactions to children’s negative emotions. In part B, emotion coaching mediated the relation between higher levels of maternal agreeableness and higher levels of supportive reactions to children’s negative emotions. *$p < .05$, **$p < .01$. 

**a) Direct Pathway**

**b) Indirect or Mediated Pathway**
Figure 1. Mediation model of emotion coaching mediating the positive relation between conscientiousness and supportive reactions to children’s negative emotions. Part A illustrates the positive relation between maternal conscientiousness and supportive reactions to children’s negative emotions. In part B, emotion coaching mediated the relation between higher levels of maternal conscientiousness and higher levels of supportive reactions to children’s negative emotions. *$p < .05$, **$p < .01$. 
In addition, higher levels of conscientiousness predicted higher levels of emotion coaching, $\beta = .71$, $t = 3.87$, $p = .001$. Then, when controlling for child age, higher levels of emotion coaching predicted higher levels of supportive reactions, $\beta = .61$, $t = 3.50$, $p = .002$. Finally, when emotion coaching was added to the regression analysis for the relation between conscientiousness and supportive reactions, this relation became non-significant, $\beta = .10$, $t = 0.39$, $p = .70$. Results using Preacher and Hayes’s (2008) recommendations for Bootstrapping indicated that emotion coaching fully mediated the relation between conscientiousness and supportive reactions, Bootstrap data = 1.35, $SE = .83$, Bias Corrected and Accelerated 95% confidence interval = 0.07 to 3.28. Thus, when mothers had higher levels of conscientiousness, their supportive reactions to children’s negative emotions was mediated by an emotion coaching parenting style.

**Extraversion and Openness.** These analyses did not meet the requirements for mediation. The relation between extraversion and supportive reactions was not significant, $\beta = .10$, $t = 0.46$, $p = .65$. In addition, the relation between openness and supportive reactions was not significant, $\beta = .14$, $t = 0.66$, $p = .53$. Therefore, because no association existed between the predictors and outcome variable, no further tests of mediation were performed.

**Relations Between Neuroticism, Emotion Coaching and Supportive Reactions to Children’s Negative Emotions**

The third hypothesis addressed the links between neuroticism, emotion coaching and supportive reactions to children’s negative emotions. Using the same procedure as hypothesis 2, hierarchical regressions were used to examine whether neuroticism negatively predicted supportive coping socialization, with mothers’ emotion coaching
score as a potential mediating variable. The relation between neuroticism and supportive reactions was not significant, $\beta = .22, t = 1.05, p = .31$. As the relation between neuroticism and supportive reactions was not significant, no further tests of mediation were performed.

**Relations Between Emotion Coaching, Supportive Reactions and Children’s Social Skills**

The fourth hypothesis addressed the links between emotion coaching, supportive reactions to children’s negative emotions and children’s social skills (measured by the total standard score on the SSRS). Similar to hypotheses 2 and 3, the Baron and Kenny (1986) mediational analysis procedure also was used to examine whether emotion coaching predicted children’s social skills, with mothers’ supportive reactions to children’s negative emotions as a potential mediating variable. Results suggested that emotion coaching did not significantly predict children’s social skills, $\beta = .26, t = 1.15, p = .26$. As the relation between the predictor and outcome variable was not significant, this analysis did not meet the requirements for mediation.

Given that hypothesized associations were not found between emotion coaching, supportive reactions and children’s social skills, additional relations were explored with the variables of maternal personality, parental stress and parenting competence variables (parental efficacy and satisfaction) to determine if there could be other factors that are related to children’s social skills. In addition, past research has suggested that non-supportive reactions to children’s negative emotions (e.g., distress reactions) are related to parental stress variables (Nelson et al., 2009). Therefore, other variables related to stress (e.g., specific reactions to children’s negative emotions) also were examined.
Children’s social skills were positively related to agreeableness ($r(18) = .47$, $p = .04$), conscientiousness ($r(18) = .50$, $p = .03$), parenting satisfaction levels ($r(17) = .61$, $p = .006$) and a trend association with parenting efficacy ($r(17) = .43$, $p = .06$). In addition, children’s social skills were negatively associated with levels of parental stress ($r(17) = -.58$, $p = .009$), distress reactions to children’s negative emotions ($r(17) = -.53$, $p = .02$) and a trend negative association emerged with lower levels of maternal neuroticism ($r(18) = -.41$, $p = .07$). Thus, children with higher levels of social skills had mothers who had higher levels of agreeableness, conscientiousness, parenting competence and lower levels of parental stress and distress reactions to children’s negative emotions.

**Perceived Parental Stress**

For the fifth hypothesis, bivariate correlations were conducted to examine the associations between perceived parental stress and the main study variables. Greater parental stress was associated with lower levels of agreeableness ($r(21) = -.54$, $p = .008$) and conscientiousness ($r(21) = -.77$, $p < .001$). A positive trend association also was found between parental stress and neuroticism, $r(21) = .35$, $p = .11$. Furthermore, lower levels of parental stress were associated with higher levels of emotion coaching ($r(21) = -.55$, $p = .007$) and children’s social skills ($r(17) = -.58$, $p = .009$). Thus, parental stress was significantly associated to several key variables, including agreeableness, conscientiousness, emotion coaching and children’s social skills.

Considering these significant correlations, main analyses with significant results were repeated controlling for parental stress, to determine the effect of parental stress on these relations. For the first hypothesis, analyses were repeated using partial correlations (see Table 5). Conscientiousness was no longer positively correlated with emotion
Table 5

*Partial Correlations Between Maternal Personality, Emotion Coaching, Supportive Reactions to Children’s Negative Emotions and Children’s Social Skills, Controlling for Parental Stress*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Openness</td>
<td>-</td>
<td>.16</td>
<td>.23</td>
<td>.44*</td>
<td>-.09</td>
<td>.22</td>
<td>.10</td>
<td>-.13</td>
</tr>
<tr>
<td>2. Conscientiousness</td>
<td>-</td>
<td>.21</td>
<td>.28</td>
<td>-.19</td>
<td>.33</td>
<td>.37^</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>3. Extraversion</td>
<td>-</td>
<td>.12</td>
<td>-.25</td>
<td>.05</td>
<td>.06</td>
<td>.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Agreeableness</td>
<td>-</td>
<td>-.19</td>
<td>.40^</td>
<td>.43*</td>
<td>.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Neuroticism</td>
<td>-</td>
<td>-.24</td>
<td>.30</td>
<td>-.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Emotion Coaching</td>
<td>-</td>
<td>.63**</td>
<td>-</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Supportive Reactions</td>
<td>-</td>
<td>.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Social Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

*Note.* ^ p < .10, * p < .05, ** p < .01
coaching, \( pr(20) = .33, p = .13 \). The positive relation between agreeableness and emotion coaching was reduced and showed a trend towards a positive association, \( pr(20) = .40, p = .06 \). Thus, the addition of parental stress reduced the relations between emotion coaching and each of the variables of agreeableness and conscientiousness.

For hypotheses 2 and 3, significant mediational analyses were repeated, controlling parental stress by entering it into the first step of the regression analyses. For each significant mediational analysis, when controlling for parental stress, higher levels of emotion coaching still predicted higher levels of supportive reactions, \( \beta = .76, t = 3.62, p = .002 \). For agreeableness, previously emotion coaching was found to mediate the relation between agreeableness and supportive reactions. When controlling for parental stress, the relation between agreeableness and supportive reactions to children’s negative emotions was not found to be mediated by emotion coaching. Results suggested that, when controlling for parental stress, higher levels of agreeableness predicted greater supportive reactions, \( \beta = .52, t = 1.15, p = .05 \). However, agreeableness no longer significantly predicted emotion coaching, \( \beta = .41, t = 2.00, p = .06 \). As the relation between agreeableness and emotion coaching was not significant, this analysis no longer met the requirements for mediation.

Additionally, emotion coaching also was previously found to mediate the relation between conscientiousness and supportive reactions. When controlling for parental stress, the relation between conscientiousness and supportive reactions to children’s negative emotions was not found to be mediated by emotion coaching. Results suggested that, when controlling for parental stress, higher levels of conscientiousness showed a trend towards predicting greater supportive reactions, \( \beta = .61, t = 1.93, p = .07 \). Higher levels
of conscientiousness also significantly predicted emotion coaching, $\beta = .61$, $t = 2.47$, $p = .02$. However, as the relation between conscientiousness and supportive reactions was not significant, this analysis no longer met the requirements for mediation.

Although the mediational analysis for the fourth hypothesis was not significant, there was a significant negative correlation between parental stress and children’s social skills. Thus, analyses involving correlations between children’s social skills and other main study variables were repeated, controlling for parental stress. Results indicated that when parental stress was controlled for in the positive correlations between children’s social skills and conscientiousness ($pr(16) = .09$, $p = .71$) and agreeableness ($pr(16) = .22$, $p = .37$), the relations became non-significant. Also, when parental stress was controlled for in the negative association between children’s social skills and distress reactions to children’s negative emotions, the relation became non-significant, $pr(16) = -.41$, $p = .21$. Furthermore, when parental stress was controlled for in the trend negative associations between maternal neuroticism and children’s social skills, this association was no longer apparent, $pr(16) = -.29$, $p = .26$. Thus, parental stress accounts for many of the relations seen between children’s social skills, conscientiousness, agreeableness, neuroticism and distress reactions.

Considering these findings, the Parental Stress Scale (PSS) items also were examined for possible factors that could contribute to parental stress. Several themes emerged, including parenting competence variables, such as efficacy (e.g., “I sometimes worry whether I am doing enough for my child(ren)”) and satisfaction (e.g., “I am happy in my role as a parent”) and demographic variables, such as finances (e.g., “Having child(ren) has been a financial burden”). Thus, additional analyses were done
investigating the relations between parental stress, parenting competence (i.e., parenting satisfaction and parenting efficacy) and demographic variables (i.e., family income, marital status and the number of children in the family).

Higher parental stress levels were significantly associated with lower levels of both parenting satisfaction ($r(23) = -.54, p = .006$) and parenting efficacy ($r(23) = -.84, p < .001$). Considering these large, negative correlations and past research indicating that parental stress is associated with non-supportive coping socialization reactions (Nelson et al., 2009), other associations between satisfaction, efficacy and other main study variables that were associated with parental stress were conducted, including emotion coaching and the different coping socialization reactions (e.g., distress reactions). Correlational results indicated that higher levels of parenting efficacy were associated with higher levels of emotion coaching ($r(21) = .55, p = .007$) and lower levels of distress reactions ($r(23) = -.59, p = .003$) and punitive reactions ($r(23) = -.47, p = .03$).

Furthermore, higher levels of parenting satisfaction were associated with lower levels of distress reactions ($r(23) = -.57, p = .005$) and trended towards higher levels of emotion coaching ($r(21) = .38, p = .07$). Thus, higher levels of parenting competence variables were positively related to emotion coaching and negatively related to non-supportive reactions to children’s negative emotions.

With regards to demographic variables, levels of parental stress were examined in relation to total family income, marital status and the number of children in the home. Total family income for each participant was determined by adding together the mother’s and partner’s income (if applicable). Then, three groups were created based on the Canada Revenue Agency income tax brackets for 2011 (Canada Revenue Agency, 2011).
The three groups included income less than $39,999, income between $40,000 and $79,999 and income greater than $80,000. A one-way analysis of variance (ANOVA) indicated no significant differences between groups, $F(2,19) = 1.45, p = .26$.

Demographic variables related to family structure also were examined, including marital status and number of children in the family. First, due to the small sample size for each marital status listed on the demographic questionnaire, categories were combined to create three groups: single/never married, common-law/married and separated/divorced (note: no participants indicated that they were widowed). A one-way ANOVA was conducted to determine if there were differences between these three groups and results indicated no significant differences, $F(2,22) = 2.19, p = .14$. As the separated/divorced group had only three participants, an independent samples $t$-test was conducted to explore the difference in parental stress between the single/never-married group and common-law/married group. Results indicated a trend towards significance, $t(20) = 1.94, p = .07$. These results suggested a trend that mothers who were single had more parental stress ($M = 37.90, SD = 8.10$) than mothers who were in a common-law relationship or married ($M = 31.67, SD = 7.00$). Next, a bivariate correlation analysis examining parental stress and number of children in the family indicated that the association was not significant, $r(23) = .08, p = .67$. Although there was trend indicating that single/never married mothers had higher levels of parental stress than common-law/married mothers, there were no differences in stress based on the other demographic variables.
CHAPTER V
DISCUSSION AND RECOMMENDATIONS

The purpose of this study was to examine the links between the Big Five personality factors (openness, conscientiousness, extraversion, agreeableness and neuroticism), emotion coaching, supportive reactions to children’s negative emotions and children’s social skills. Consistent with hypotheses, higher levels of maternal agreeableness and conscientiousness were associated with higher levels of emotion coaching. Furthermore, higher levels of maternal agreeableness and conscientiousness were associated with higher levels of supportive reactions to children’s negative emotions and these relations were mediated by mother’s levels of emotion coaching. Openness, extraversion and neuroticism were not found to be significantly related to emotion coaching or supportive reactions, contrary to the study hypotheses. Emotion coaching and supportive reactions also were not significantly related to children’s social skills, contrary to the study hypotheses.

Parental stress was found to be an important variable, with higher levels of parental stress associated with lower levels of agreeableness, conscientiousness, emotion coaching and children’s social skills. When parental stress was controlled for in the main analyses, the mediational effect of emotion coaching on the relations of agreeableness and conscientiousness with supportive reactions disappeared. Furthermore, parental stress was related to poorer social skills and parenting competence variables.

Personality, Emotion Coaching, Coping Socialization and Perceived Parental Stress

Consistent with the first and second hypotheses, this study found that emotion coaching was related to higher levels of two personality factors—agreeableness and
conscientiousness. Furthermore, emotion coaching was found to mediate the relation between higher levels of these two personality factors and supportive reactions to children’s negative emotions, indicating an indirect relation between personality and positive parenting behaviours. These results are consistent with past literature indicating that these personality factors and emotion coaching are associated with positive parenting behaviours, such as warmth and sensitivity (Bornstein et al., 2007; Coplan, Reichel, & Rowan, 2009; Prinzie et al., 2009; Smith et al., 2007). Each of these personality factors also has been associated with specific aspects of emotion coaching. Agreeableness encompasses characteristics with an emotional component, with characteristics such as empathy, kindness and compassion (Belsky & Barrends, 2002, Coplan et al., 2009; John & Srivastava, 1999; McCrae & John, 1992; Prinzie et al., 2009). These traits, in turn, may lead to positive parenting behaviours, such as responsiveness, understanding children’s needs, warmth and making more positive attributions about a child, key aspects of emotion coaching (Coplan et al., 2009; Prinzie et al., 2009). Conscientiousness is often described as having an organizational component. People with higher levels of conscientiousness have traits such as good organizational skills and holding high standards (Belsky & Barends, 2002; Coplan et al., 2009; John & Srivastava, 1999; McCrae & John, 1992; Prinzie et al., 2009). These traits, in turn, may lead to a parent being better able to set behavioural limits and goals for children, which is also a key aspect of emotion coaching.

Prior research also has indicated that personality affects the way a person thinks and behaves and this influence is more indirect rather than direct (Oliver, Guerin, & Coffman, 2009; Prinzie et al., 2009). Belsky (1984) also posited that one of the most
important contributors to parenting was parent characteristics, especially personality. However, when researchers have examined these relations, the effect of personality specifically on parenting behaviours was not large, indicating that personality may not directly influence parenting behaviours (Prinzie et al., 2009). Suggested by the mediational findings in this study, one indirect way in which personality can influence parenting behaviours may be through emotion coaching. According to Gottman and colleagues (1996), while emotion coaching involves positive parenting behaviours, such as warmth and limit-setting, it is also a separate dimension of parenting that includes thought (e.g., a parent’s attitude towards emotions) and behavioural components (e.g., limit setting). Thus, agreeableness and conscientiousness appear to be related to a type of parenting behaviour, (i.e., supportive reactions to children’s negative emotions) through an emotion coaching philosophy, as personality may be more amenable to influencing a parent’s thoughts and actions in this indirect way (Prinzie et al., 2009).

However, these findings are tempered by the analyses that included perceived parental stress. Consistent with the fifth hypothesis, higher levels of parental stress were significantly associated with most of the main study variables, including lower levels of agreeableness, conscientiousness and emotion coaching. When controlling for parental stress, higher levels of agreeableness and conscientiousness no longer significantly predicted higher levels of emotion coaching, leading to no mediated effects between these two personality factors and supportive reactions to children’s emotions. Furthermore, the relation between agreeableness and supportive reactions to children’s negative emotions, as well as the relation between conscientiousness and supportive reactions, became non-significant. One reason for the reduction in significant results
could be that with the addition of another variable in the analysis with a small sample size, the analysis may have lacked the power to detect significant results. But, these analyses still indicated a reduction in the relations between these variables; thus, the effect of parental stress on parenting behaviour in this study is still in question.

Of the research that has focused on the relation between parental stress and personality factors, results indicate that personality factors are associated with levels of stress. For example, Vermaes et al. (2008) found that lower levels of neuroticism and higher levels of agreeableness were associated with lower levels of parental stress. Indeed, certain personality characteristics could indirectly influence how a parent is able to deal with stress, in much the same way that personality can indirectly affect a person’s thoughts and behaviours (Belsky & Barrends, 2002; Prinzie et al, 2009). Furthermore, in this study, higher levels of parenting competence variables (efficacy and satisfaction) also were related to higher levels of agreeableness and conscientiousness, but lower levels of parental stress. For instance, previous findings about agreeableness, which encompasses traits related to emotional awareness (John & Srivastava, 1999; McCrae & John, 1992), suggest that a person high in agreeableness could be more emotionally aware, better able to cope with their own feelings and feel more efficacious. Similarly, previous findings about conscientiousness, which encompasses traits such as organizational skills (John & Srivastava, 1999; McCrae & John, 1992), suggest that a person high in conscientiousness could be better able to manage life responsibilities better, leading to decreased stress and increased feelings of satisfaction and efficacy. Thus, by possessing higher levels of these personality traits, parents may be able to feel more competent, handle stress that they encounter in the parenting role and focus on and engage more readily in an emotion
coaching parenting style. Belsky (1984) posited relations between parent characteristics (e.g., personality) and contextual factors (e.g., stress) and this study found significant relations between personality, emotion coaching and parental stress. Therefore, future research should address the specific role of parental stress in the relations between parent characteristics and positive parenting behaviours.

Higher levels of stress also have been associated with lower levels of supportive reactions to children’s negative emotions. For example, Nelson and colleagues (2009) found that stress, such as home chaos and marital dissatisfaction, can affect parents’ emotion and coping socialization behaviours. However, the results of this study are inconsistent with these findings, as parental stress was not significantly associated with lower levels of supportive reactions. Reasons for this inconsistency could be that past research has examined stress in general, whereas this study specifically looked at stress related to the parenting role. In addition, previous research (e.g., Nelson et al., 2009) has explored other reactions to children’s negative emotions (e.g., non-supportive reactions), whereas this study focused mostly on supportive reactions. Thus, future research should explore the relations between parental stress and different types of reactions to children’s negative emotions.

It is important to note that regardless of parental stress, higher levels of emotion coaching still predicted higher levels of supportive reactions to children’s negative emotions. The reasons for this result could be linked to the parent-centred characteristics of emotion coaching. Past research has indicated that a key characteristic of emotion coaching is that parents are able to not only recognize their children’s emotions, but also their own—even at lower levels of these emotions (Gottman, 1997; Gottman et al., 1996).
Furthermore, emotion coaching entails being able to view children’s negative emotions as opportunities for teaching and intimacy and helping children problem solve (Gottman, 1997; Gottman et al., 1996). These characteristics of emotion coaching reflect a problem-focused coping style, a style of coping that is adaptive in the face of stressful events over which a person has control (Folkman & Lazarus, 1988). Thus, this research suggests parents who have higher levels of emotion coaching may also have higher levels of adaptive coping skills and an ability to better handle parental stress. Being able to handle stress can allow parents to allocate more resources to support their children’s coping efforts.

Of the other three personality factors, no relations were found with emotion coaching, supportive reactions to children’s negative emotions, or parental stress. With regards to extraversion, contrary to the first and second hypothesis, extraversion was not significantly associated with emotion coaching, supportive reactions to children’s negative emotions, or parental stress. The reasons for this result could be explained by some of the mixed results regarding extraversion in other research. For example, Bornstein and colleagues (2007) found that higher levels of extraversion were associated with less parental competence, knowledge and satisfaction—variables that reflect a parent’s internal cognitive and affective processes. On the other hand, extraversion has been linked to positive parenting behaviours, such as warmth and behavioural control, reflecting more outward behavioural indicators (Metsäpelto & Pulkkinen, 2003; Prinzie et al., 2009). Emotion coaching is defined by both internal processes (e.g., attitudes towards emotion) and outward behavioural indicators (e.g., limit-setting; Gottman, 2007);
therefore, the combination of these factors could explain why extraversion was not significantly associated with emotion coaching.

Another potential explanation is that high levels of extraversion do not necessarily translate to specific thoughts and behaviours related to emotion coaching or supportive reactions. Extraversion is often associated with traits such as being outgoing and sociable (John & Srivastava, 1999; McCrae & John, 1992). These traits may translate to engagement with a child, providing stimulating activities and being assertive in providing discipline and setting limits, but may also lead parents to divide their time between their children and their own social life (Bornstein et al., 2007; Oliver et al., 2009; Prinzie et al., 2009). If parents do not spend as much time with their child because of their own social life, these traits may work against positive parenting behaviours (Bornstein et al., 2007; Oliver et al., 2009). Thus, while extraversion has been found to be related to some positive parenting behaviours, these behaviours may reflect general outward parenting behaviours that this study did not specifically measure, leading to non-significant correlations with emotion coaching and supportive reactions to children’s negative emotions.

Also contrary the first and second hypotheses, higher levels of openness to experience were not significantly associated with emotion coaching or supportive reactions to children’s negative emotions, but showed a trend relation with higher levels of emotion coaching. Openness is often associated with traits such as willingness to experience new things and curiosity, which has been proposed to lead to parenting behaviours including more involvement with their children and providing stimulating activities (John & Srivastava, 1999; McCrae & John, 1992; Prinzie et al., 2009). Past
research has indicated that openness is associated with warmth, behavioural control, nurturance, parenting competence, knowledge and authoritative parenting; however, openness is not associated with or considered to have an emotional component (Bornstein et al., 2007; Metsäpelto & Pulkkinen, 2003; Prinzie et al., 2009). Thus, these characteristics may not translate specifically to key aspects of emotion coaching and coping socialization behaviours, but rather, more general positive parenting behaviours. Additionally, the trend association found in this study indicates that there may be a relation present, but that this study did not have enough power to detect a significant effect.

Contrary to the first and third hypotheses, lower levels of neuroticism were not significantly related to higher levels of emotion coaching or supportive reactions to children’s negative emotions. Past research has indicated that neuroticism has been linked to lower levels of positive parenting behaviours, such as warmth and behavioural control and less parenting competence, satisfaction and knowledge (Bornstein et al., 2007; Prinzie et al., 2009). Neuroticism is often associated with traits such as emotional instability, fearfulness and anxiety, that translates to parenting behaviours such as fewer positive interactions with children and more intrusive, overprotective parenting behaviours due to the anxiety that the parent feels regarding their child’s skills and abilities (Coplan et al., 2009; John & Srivastava, 1999; Lindhout et al., 2006; McCrae & John, 1992; Prinzie et al., 2009). Thus, because of the anxiety that parents feel regarding their children, they may not provide their child with many opportunities to experience negative emotions and learn emotion regulation skills (Coplan et al., 2009). These mothers may not have the opportunity to engage in an emotion coaching parenting style.
Thus, while past research has shown that neuroticism is broadly related to less positive parenting behaviours, this study may not have found a significant relation with emotion coaching due to the effect of neuroticism on other parenting behaviours (e.g., an overprotective parenting style).

**Children’s Social Skills**

Contrary to the fourth hypothesis, emotion coaching and supportive reactions were not significantly associated with children’s social skills. This result was inconsistent with prior research indicating that emotion coaching and coping socialization behaviours are positively associated with children’s adaptive peer interactions and social skills (Garner & Estep, 2001; Gottman, 1997; Katz & Windecker-Nelson, 2004). Reasons for this finding could be due to how social skills were measured in this study. Previous research has measured social skills in relation to peer interactions, specifically (Gottman et al., 1996; Katz & Windecker-Nelson, 2004). However, peer interaction is only one aspect of social skills. The Social Skills Rating System (SSRS) used in this study has four social skills domains, including cooperation, assertion, responsibility and self-control, broader indicators of social skills that go beyond peer interaction. Thus, children may have strengths in social skills that are not related specifically to peer interactions that would impact the overall level of social skills as measured by the SSRS and lead to non-significant findings.

Additionally, emotion coaching may not directly relate to social skills and social competence; rather, it may influence processes which allow for better social skills. For example, Gottman et al. (1996) indicated that children who have parents with higher levels of emotion coaching were more “emotion-savvy.” Specifically, these children were more aware of their own and others’ emotions and were able to regulate their own
emotions better, which led to better responses to their peers in interactions. Thus, this research suggested that children’s ability to regulate their emotions may be the key to more adaptive peer interactions and this study did not examine the relation between emotion regulation and social skills. Because the relation between emotion coaching and children’s emotion regulation appears to be significant in the development of adaptive peer interactions, the relation between emotion coaching and social skills in this study could have been non-significant due to not having measured children’s emotion regulation skills. Future research should examine how parent’s emotion-related beliefs and behaviours lead to children’s emotion regulation skills to better understand how children’s social skills are affected.

While children’s social skills were not related to supportive reactions to children’s negative emotions or emotion coaching, higher levels of parental stress were related to poorer social skills. When looking more closely at other variables related to parental stress, results indicated that higher levels of distress reactions to children’s negative emotions and higher levels of neuroticism were also related to poorer social skills. Thus, how parents express their stress to their children could have a negative effect on their children’s social skills. However, once parental stress was controlled for in these analyses, the relations between distress reactions, neuroticism and children’s social skills became non-significant. Thus, these findings indicate that parental stress has a negative effect on children’s social skills, but the mechanisms of this effect are unclear. Therefore, consistent with past research (e.g., Neece & Baker, 2008) future research should examine the relation between parental stress, distress reactions to children’s
negative emotions and other variables that may affect children’s social skills (e.g., children’s emotional regulation).

**Limitations of the Current Study**

The current study had several limitations. First, this study had a small sample size. According to Cohen (1992), this study had sufficient power to detect a large effect size and less than sufficient power for analyses which included covariates (e.g., when controlling for parental stress). Thus, many of the non-significant and trend results could be explained by not having enough power to be able to detect a significant effect. However, despite low power, this study still detected several significant associations, including two mediational effects. These results indicate that the relations between those variables were large and robust. In addition, limited sample size also posed a problem of restriction of range with some variables (e.g., neuroticism), possibly leading to attenuation. Having a limited sample size reduced the variability of scores on some of the study measures, resulting in a smaller range of scores with which to detect an effect.

Another limitation of this study was sample selection. This study was done using a convenience sample, in which people volunteered to participate and were not selected at random. Furthermore, as this study was conducted primarily online, participation was partially dependent on access to a computer and the internet. Mothers in this study also had relatively low levels of neuroticism and relatively high levels of agreeableness and conscientiousness. Additionally, they had higher levels of emotion coaching compared to other emotion-related parenting styles and high levels of supportive reactions to their children’s negative emotions. Mothers also reported that most children in this sample had average to above average social skills compared to a normative group of their peers.
Thus, this sample may not be representative of all mothers, limiting the ability to generalize the findings.

Finally, all of the measures in this study were self-report. This method raises the concern of measurement bias. As all the measures are a similar type (i.e., self-report) and there was no variance in the type of measure (i.e., this study did not use observational or performance measures), some results could be affected or inflated. Also, the use of self-report measures also raises the concern of response bias. As the measures were based on the participant’s perception, there could be a discrepancy between their perception and the true state of affairs. For example, when rating children’s social skills, mothers may report lower levels of social skills than the children actually have, depending on their perception of the children’s behaviour. However, social skills scores mostly fell in the average range, indicating that there may not have been a bias towards negative responses. Additionally, this study controlled for social desirability, which was not associated with most of the study variables, indicating that participants did not respond in ways that made themselves look favourable.

**Directions for Future Research**

One possibility for future research includes exploring these variables in transactional relations. For instance, many researchers have recognized that child behaviours and traits can influence parenting behaviours and attitudes, but few studies examine this direction of relation (Belsky, 1984; Eisenberg, Cumberland, et al., 1998; Neece & Baker, 2008). Additionally, some past research has supported the notion of a transactional relation, such as between parental stress and children’s social skills, indicating that early parental stress could be a risk factor for problems in the development of children’s social skills (Neece & Baker, 2008). Thus, as this study did not examine
any bidirectional effect with regard to parent emotion and coping socialization behaviours, future research should explore transactional models that explore the relations between variables related to parent characteristics (e.g., personality), parent emotion and coping socialization techniques and parenting competence variables, in relation to children’s characteristics (e.g., temperament, emotional regulation) and other variables that may influence parenting behaviours (e.g., contextual factors such as stress).

Comparison with other groups, such as mothers of children with developmental disabilities (DD) also would be warranted. These groups often face unique stressors and challenges in the parenting role. Because parental stress was associated with various emotion-related parenting variables, it would be beneficial to compare this group to families with typically-developing children in order to determine if there are differences and to highlight possible assessment and intervention outcomes with these families.

It also will be important to consider how other caregivers and family members (e.g., fathers, siblings) socialize emotion and coping skills and their influences on children’s emotional and social development (e.g., children’s emotional regulation, social skills). Most research has focused on mothers because, traditionally, mothers have been children’s primary caregivers (Nelson et al., 2009). However, fathers are frequently playing a more active role in their children’s development (e.g., by being the primary caregiver) and other family members (e.g., grandparents) often play a significant role in children’s lives. Thus, researchers should consider the role of other caregivers and family members in the emotion and coping socialization of the children.

**Practical Implications**

The current study highlights several key associations that have practical implications for the promotion of positive parenting behaviours (e.g., emotion coaching).
Knowing the possible effects that parental stress can have on parenting attitudes and behaviours because parental stress is a contextual factor that may interact with parents’ own characteristics and affect parenting behaviours (Belsky, 1984). Thus, practitioners who work with parents should be aware of the amount of parental stress as it could affect intervention outcomes. For instance, if a parent is facing a high amount of stress, they may not be able to implement positive parenting behaviours (e.g., empathizing with their children) effectively. In addition, knowing parents’ personality profiles and level of parental stress, practitioners can identify and work with parents to improve their parenting skills in a way that allows interventions to be tailored to the unique needs of parents’ and their families. For example, knowing that a parent is facing a high level of stress but also is conscientiousness, a practitioner can work with parents to improve their stress management skills using the skills (e.g., organization) that come natural to them, which in turn allows parents to focus more on implementing more positive parenting behaviours and model appropriate coping behaviours for their children.

This study also highlighted the importance of emotional variables in children’s development, such as the effect of parental stress on children’s social skills and the need for more research into other emotional variables (e.g., children’s emotion regulation). Often, emotional development is overlooked, compared to other types of development such as cognitive or academic development (Baker & Crnic, 2009; Baker et al., 2007; Kim & Mahoney, 2004). Parents can be encouraged to teach their children about emotions, with an emotion coaching philosophy and become more aware of the importance of their children’s emotional development to other developmental outcomes, such as social and coping skills.
**Conclusion**

Parents play an important role in the development of their children’s emotion understanding, coping and social skills (Thompson & Meyer, 2007). This study provided some insight about how maternal characteristics, such as personality, are related to positive parenting attitudes and behaviours. Overall, these findings suggest that possessing higher levels of agreeableness and conscientiousness may contribute to being able to implement specific, positive parenting behaviours, such as supportive reactions to children’s negative emotions. However, the effects of parental stress also cannot be overlooked because of its importance in understanding how parents are able to engage in more positive parenting behaviours (e.g., emotion coaching) and the effect parental stress may have on children’s outcomes (e.g., social skills). Therefore, by considering all of these factors in the development and implementation of positive parenting behaviours, there is a better understanding of the parental contributions to positive parent-child relationships.
REFERENCES


APPENDICIS

APPENDIX A

Demographic Questionnaire

Please answer the following questions about yourself by selecting the appropriate choice and/or using the space provided:

Year of Birth: ____________  Month of Birth: ____________

Initial of First Name: ____________  Initial of Last Name: ____________

Today’s Date: Year: ____________  Month: ____________  Day: ____________

Gender (specify): ______________________

Marital Status (Select one):
- Single, never married
- Common-law
- Married
- Separated
- Divorced
- Widowed

Occupation: ______________________

Culture/Ethnicity (select all that apply):
- Aboriginal
- Arab/West Asian
- Black
- White/Caucasian
- Latin American
- Asian
- Other (please specify): ______________________

Education Level (select one):
- No certificate, diploma or degree
- High School certificate or equivalent
- Apprenticeship/Trades certificate
- College/CEGEP certificate or diploma
- University certificate or diploma
- University Degree (Bachelor’s)
- Post-Bachelor’s degree (e.g., Master’s, Ph.D.)
- Other (please specify): ______________________

Income (select one):
- Less than $10,000
- $10,000 to $19,999
- $20,000 to $29,999
- $30,000 to $39,999
- $40,000 to $49,999
- $50,000 to $59,999
- $60,000 to $69,999
- $70,000 to $79,999
- $80,000 to $89,999
- $90,000 to $99,999
- $100,000 or more
- Prefer not to answer
Have you been formally diagnosed by a psychologist or psychiatrist with any of the following psychological disorders? Please check all that apply:

☐ Bipolar Disorder
☐ Schizophrenia
☐ Major Depression or Depression
☐ Generalized Anxiety Disorder (GAD)
☐ Obsessive Compulsive Disorder (OCD)
☐ Social Anxiety/Social Phobia
☐ Specific Phobia
☐ Other (please list): ________________________________
☐ None

Have you ever been involved with the Children’s Aid Society regarding concerns for your child’s welfare? (Select one)
☐ Yes  ☐ No

1st Language Spoken in home:

☐ English  ☐ French  ☐ Other (please specify): ________________________________

Other languages spoken in home (please specify):

________________________________________________________________________

________________________________________________________________________

Please answer the following questions about your spouse or partner (if applicable) by selecting the appropriate choice and/or using the space provided:

☐ Check here if this section is not applicable

Age: __________

Gender (specify): ________________

Occupation:

Culture/Ethnicity (select all that apply):

☐ Aboriginal
☐ Arab/West Asian
☐ Black
☐ White-Caucasian
☐ Latin American
☐ Asian
☐ Other (please specify): ________________________________

Education Level (select one):

☐ No certificate, diploma or degree
☐ High School certificate or equivalent
☐ Apprenticeship/Trades certificate
☐ College/CEGEP certificate or diploma
☐ University certificate or diploma
☐ University Degree (Bachelor’s)
☐ Post-Bachelor’s degree (e.g., Master’s, Ph.D.)
☐ Other (please specify): ________________________________
Income (select one):

- Less than $10,000
- $10,000 to $19,999
- $20,000 to $29,999
- $30,000 to $39,999
- $40,000 to $49,999
- $50,000 to $59,999
- $60,000 to $69,999
- $70,000 to $79,999
- $80,000 to $89,999
- $90,000 to $99,999
- $100,000 or more
- Prefer not to answer

Do any of your children (between the ages of 3 and 12) have a developmental disability?

- Yes
- No

A developmental disability is defined by any of the following:

A. Any ‘exceptionality’ (except Giftedness) as defined by the Ontario Ministry of Education domains of exceptionality as according to your child’s Individual Education Plan. These domains include:
   a. Behaviour (a learning disorder characterized by specific behaviour problems that affect interpersonal interaction and performance in the classroom)
   b. Communication (e.g., autism, Asperger’s disorder, language impairment, speech impairment, learning disability)
   c. Intellectual (e.g., intellectual disability, developmental disability)
   d. Physical (a disorder affects motor skills or that limits physical participation in day to day living, e.g., cerebral palsy, developmental coordination disorder)
   e. Multiple (more than one of the above)

B. A genetic disorder that affects your child’s physical or mental functioning of any sort (e.g., Down syndrome, tubersclerosis, neurofibromatosis, Angelman’s syndrome, Fragile X syndrome, etc.)

C. Any disorder that affects your child’s physical or mental functioning (e.g., intellectual disability, learning disability, global developmental delay, fetal alcohol syndrome, etc.)

If mother answers ‘Yes’ to the above question, they will be directed to the following question:

You have indicated that you have a child with a developmental disability. Please answer the following questions about this child.

If you have more than one child with a developmental disability, please answer the following questions about the youngest child over the age of 3.
Age: ___________  Gender (specify): ___________

Birthdate: Year: ___________  Month: ___________  Day: ___________

Initial of Child’s First Name: ___________  Initial of Child’s Last Name: ___________

Current Grade Level: ____________________________________________

Your Relationship to Child (Select one):
☐ Mother  ☐ Step-Mother  ☐ Other (specify): ___________

Your Spouse/Partner’s Relationship to Child (Select one, if applicable):
☐ Mother  ☐ Father  ☐ Step-Mother  ☐ Step-Father  ☐ Other: ___________  ☐ Not Applicable

Ethnicity (check all that apply):
☐ Same as Parent(s)  ☐ Aboriginal  ☐ Arab/ West Asian
☐ Black  ☐ White/Caucasian  ☐ Latin American
☐ Asian  ☐ Other (please specify): ________________________

Diagnosis (check all that apply):
☐ Autism  ☐ Intellectual Disability
☐ Asperger’s Disorder  ☐ Global Developmental Delay
☐ Pervasive Developmental Disorder-Not Otherwise Specified
☐ Learning Disorder, (please specify: ________________________)
☐ Communication Disorder, (please specify: ________________________)
☐ Motor Skills Disorder, (please specify: ________________________)
☐ Other (please specify): ________________________

Services received (check all that apply):
☐ Occupational Therapy  ☐ Speech Therapy
☐ Physiotherapy  ☐ Intensive Behavioural Intervention (IBI)
☐ Resource Worker  ☐ Psychologist/Psychiatrist/Counsellor
☐ Other (please specify): ________________________

How many siblings does this child have? (fill in a number. If none, enter ‘0’)
☐ older brother(s)/step-brother(s)
☐ older sister(s)/step-sister(s)
☐ younger brother(s)/step-brother(s)
☐ younger sister(s)/step-sister(s)

As part of this study, we would like to request a copy of your child’s diagnostic report outlining the nature of their diagnosis.
Please enter your name and mailing address in the form below.

Your Name:
Address:

A letter and consent form will be sent to you soon. Please fill out the consent form with the name of your child’s diagnosing clinician (e.g., physician, psychologist, etc), your child’s name, date of birth, and your signature. Then, mail back the form using the addressed stamped envelope provided. We will use this consent form to contact your child’s diagnosing clinician and obtain the report. Alternatively, you may also send us a copy of the report yourself using the envelope provided.

All information you provide will be kept confidential and will only be used as a part of this study. It will not be shared with anyone other than the researchers involved in this study and will not be linked to other studies). After your child’s diagnosis has been verified, the report will be destroyed.

[If mother answers ‘No’ to the above question about whether their child has a developmental disability, they will be directed to the following question]

Please answer the following questions about your youngest male child between the ages of 3 and 12.
If you do not have a male child, please answer the following questions about your youngest female child between the ages of 3 and 12.

Age: ____________ Gender (specify): ____________

Birthdate: Year: ____________ Month: ____________ Day: ____________

Initial of Child’s First Name: ____________ Initial of Child’s Last Name: ____________

Current Grade Level: ____________

Your Relationship to Child (Select one):
☐ Mother ☐ Step-Mother ☐ Other (specify): ____________

Your Spouse/Partner’s Relationship to Child (Select one, if applicable):
☐ Mother ☐ Father ☐ Step-Mother ☐ Step-Father ☐ Other: ____________ ☐ Not Applicable

Ethnicity (check all that apply):
☐ Same as Parent(s) ☐ Aboriginal ☐ Arab/ West Asian
☐ Black        ☐ White/Caucasian        ☐ Latin American
☐ Asian        ☐ Other (please specify): __________________________

How many siblings does this child have? (fill in a number. If none, enter ‘0’)
☐ older brother(s)/step-brother(s)
☐ older sister(s)/step-sister(s)
☐ younger brother(s)/step-brother(s)
☐ younger sister(s)/step-sister(s)
APPENDIX B

Consent Form

CONSENT TO PARTICIPATE IN RESEARCH

Title of Study: Maternal Personality and Socialization Factors: Relations with Social Skills in Children with and without Developmental Disabilities

You are asked to participate in a research study conducted by Jennifer Scammell for her Master’s Thesis, under the supervision of Dr. Kimberley Babb, from the Psychology Department at the University of Windsor.

If you have any questions or concerns about the research, please feel to contact Jennifer Scammell at scammel@uwindsor.ca or Kimberley Babb at kbabel@uwindsor.ca or phone at 519-253-3000 ext. 4716.

Purpose of the study: The purpose of this study is to examine how mothers’ personality traits are associated with attitudes about emotions, reactions to their children’s negative emotions, and their children’s social skills. This study is exploring if there are differences in these associations between mothers who have children with developmental disabilities and mothers who have children without developmental disabilities.

Procedures: If you volunteer to participate in this study, we would ask you to complete several questionnaires related to personality, parental stress and satisfaction, emotional attitudes, what you would do if your child was experiencing negative emotions, and your child’s social skills. The questionnaires are expected to take no more than 60 minutes to complete and will be completed through an online survey.

If you would prefer a paper version of the questionnaire, please contact Jennifer Scammell at scammel@uwindsor.ca.

Potential Risks and Discomforts: There are no known risks from participating in this study, and it is unlikely that you will experience distress resulting from your participation in this research, but it is possible that you may feel uncomfortable answering some questions. If you have a child with a developmental disability, you also will be asked to provide consent for the researchers to obtain your child’s diagnostic report to confirm your child’s diagnosis. This report contains some medical information about your child. If you do not feel comfortable answering any question or providing this information, you may choose not to do so.

Potential Benefits: Participating in this research may lead to a greater understanding of your own beliefs and attitudes about emotions and your own parenting style. The results of this research will be used to inform psychologists and other professionals who work with families about the role of emotional development in children with and without developmental disabilities.
Compensation for Participation: If you are enrolled in a Department of Psychology course that offers bonus points for participating in psychology research studies, you will receive 1.0 bonus credit point for completing this 60-minute survey. You must be signed up for a timeslot in order to receive compensation. Credit will be assigned within 48 hours of the completion of the last questionnaire. However, to obtain these credits, you must complete at least 90% of the online questions. If you do not complete at least 90% of the questions and you do not formally withdraw from the study by clicking the “withdraw from this study” link located on each webpage, you will forfeit your bonus points.

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. The information collected from the survey will be stored in an electronic database. This data will be stored in a password-protected file, which only the researchers involved in this study can access. When downloaded for analysis, the data will be stored electronically on password-protected computers. Other information, such as diagnostic reports, will be stored in a locked filing cabinet, of which only the investigators will have access. In accordance with the guidelines of the American Psychological Association, your data will be kept for five years following the last publication of the data.

Participation and Withdrawal: You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don’t want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. In order to be eligible for Psychology Participant Pool credit, you must formally withdraw using the “withdraw from this study” button located at the bottom of each page of the survey and complete at least 90% of the survey. After eligible bonus credit is awarded, the responses provided before withdrawing from the study will be deleted. If, at a later time, you decide you want your data withdrawn from the study, you must notify the principal researcher by September 1, 2011. After this date, the file with participant numbers and email addresses will be destroyed and it will not be possible to withdraw your responses.

Feedback of the results of this study: Research findings will be available to participants at the completion of the project at www.uwindsor.ca/reb under “Study Results”. Findings will be available by October 31st, 2011.

Subsequent use of data

May we contact you for subsequent studies?

Yes _____

No _____

If yes, please provide your email address or telephone number: ________________________
agree to have your data used in these projects, your date of birth and initials may be used to
match your responses in this study with responses in other separate studies done by this research
group that you may have already participated in or may participate in the future. If you answer
“yes” to the question below, you will not need to complete any additional questionnaires, other
than the ones completed as part of the separate studies, and all of your information will be kept
confidential.

May we match your responses in this study with the other studies?

Yes ___
No. ___

Rights of Research Participants: 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

CONSENT OF RESEARCH PARTICIPANT

I understand the information provided for the study Maternal Personality and Socialization
Factors: Relations with Social Skills in Children with and without Developmental Disabilities as
described herein. My questions have been answered to my satisfaction, and I agree to participate
in this study. I have been given an opportunity to print this form for my records.

PRINT THIS DOCUMENT FOR YOUR RECORDS

I AGREE TO PARTICIPATE

I DO NOT AGREE TO PARTICIPATE

SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

Signature of Investigator ____________________________ Date ___________
APPENDIX C

Letter of Information

1. Letter of Information for all Participant Pool Participants

LETTER OF INFORMATION

Title of Study: Maternal Personality and Socialization Factors: Relations with Social Skills in Children with and without Developmental Disabilities

You participated in a research study conducted by Jennifer Scammell for her Master’s Thesis, under the supervision of Dr. Kimberley Babb, from the Psychology Department at the University of Windsor.

If you have any questions or concerns about the research, please feel to contact Jennifer Scammell at scammel@uwindsor.ca or Kimberley Babb at kbbab@uwindsor.ca or phone at 519-253-3000 ext. 4716.

Purpose of the study: The purpose of this study is to examine how mothers’ personality traits are associated with attitudes about emotions, reactions to their children’s negative emotions, and their children’s social skills. This study is exploring if there are differences in these associations between mothers who have children with developmental disabilities and mothers who have children without developmental disabilities.

Procedures: By volunteering to participate in this study, completed several questionnaires related to personality, parental stress and satisfaction, emotional attitudes, what you would do if your child was experiencing negative emotions, and your child’s social skills, taking no longer than 60 minutes to complete.

Potential Risks and Discomforts: There were no known risks from participating in this study, but if it is possible that you may feel uncomfortable from answering some questions. A list of mental health and family resources are provided at the end of this document for your reference. Also, if you have a child with a developmental disability, you were also asked to provide consent for the researchers to obtain your child’s diagnostic report to confirm your child’s diagnosis, which contains some medical information about your child. At a later time, if you do not feel comfortable providing this information, you may contact the researchers to withdraw this information.

Potential Benefits: Participating in research may lead to a greater understanding of your own beliefs and attitudes about emotions and your own parenting style. The results of this research will be used to inform psychologists and other professionals who work with families about the role of emotional development in children with and without developmental disabilities.

Compensation for Participation: If you are enrolled in a Department of Psychology course that offers bonus points for participating in psychology research studies, you will receive 1.0 bonus credit point for completing this 60-minute survey. You must be signed up for a timeslot in order
to receive compensation. If eligible, credit will be assigned within 48 hours of the completion of the last questionnaire.

Confidentiality: Any information that was obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. The information collected from the survey will be stored in an electronic database. This data will be stored in a password-protected file, which only the researchers involved in this study can access. When downloaded for analysis, the data will be stored electronically on password-protected computers. Other information, such as diagnostic reports, will be stored in a locked filing cabinet, of which only the investigators will have access. In accordance with the guidelines of the American Psychological Association, your data will be kept for five years following the last publication of the data.

Participation and Withdrawal: You can choose whether to be in this study or not. If, at a later time, you decide you want your data withdrawn from the study, you must notify the principal researcher by September 1, 2011. After this date, the files with participant numbers and email addresses will be destroyed and it will not be possible to withdraw your responses.

Feedback of the results of this study: Research findings will be available to participants at the completion of the project at www.uwindsor.ca/reb under ‘Study Results’. Findings will be available by October 31st, 2011.

Subsequent use of data: This data may be used in subsequent studies if you agreed to have your data matched with other studies. If used in subsequent studies, your date of birth and initials will be used to match the data from the current study with that in the other studies. All information will be kept confidential.

Rights of Research Participants: You may withdraw your consent and discontinue participation without penalty if you contact the researcher by September 1, 2011. 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

Feel free to pass the email or flyer you received to access this survey, or the principal investigator’s email (scammel@uwindsor.ca) onto others in Windsor-Essex County who may be interested in participating in this study!

SIGNATURE OF INVESTIGATOR

These are the terms under which I conducted research.

Signature of Investigator: ___________________________ Date: ___________________________
Mental Health and Family Resources in Windsor-Essex County

<table>
<thead>
<tr>
<th>Children First</th>
<th>Windsor Regional Children’s Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>3285 Quality Way Suite 102</td>
<td>309 Connaught Ave</td>
</tr>
<tr>
<td><a href="http://www.children-first.ca">www.children-first.ca</a></td>
<td><a href="http://www.wrchildrenscentre.org">www.wrchildrenscentre.org</a></td>
</tr>
<tr>
<td>519-250-1850</td>
<td><a href="mailto:rccadmin@wrth.on.ca">rccadmin@wrth.on.ca</a></td>
</tr>
<tr>
<td>Provides assessment and intervention services to families with children ages 0 to 6</td>
<td>Assessment and treatment services for families with children 6 and up experiencing behavioural, emotional, social or developmental problems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Canadian Mental Health Association</th>
<th>Essex Community Services-Community Information Essex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1400 Windsor Ave</td>
<td>Victoria Place, 35 Victoria Ave Unit 7, Essex, ON</td>
</tr>
<tr>
<td><a href="http://www.cmha-web.on.ca">www.cmha-web.on.ca</a>, <a href="mailto:infor@cmha-web.on.ca">infor@cmha-web.on.ca</a></td>
<td><a href="http://www.essexcs.on.ca">www.essexcs.on.ca</a>, <a href="mailto:pcs@essexcs.on.ca">pcs@essexcs.on.ca</a></td>
</tr>
<tr>
<td>(519) 255-7440</td>
<td>519-776-4231</td>
</tr>
<tr>
<td>Mental health services for people 16 years and up</td>
<td>Community information centre providing referrals and community information about services in Essex</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community Living Essex County</th>
<th>For other general information about community services and resources in communities across Ontario, dial ‘211’ or go to <a href="http://www.211ontario.ca">www.211ontario.ca</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>372 Talbot Street North</td>
<td></td>
</tr>
<tr>
<td>Essex, ON N8M 2W4</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.communitylivingessex.org">www.communitylivingessex.org</a></td>
<td></td>
</tr>
<tr>
<td><a href="mailto:mainmail@communitylivingessex.org">mainmail@communitylivingessex.org</a></td>
<td></td>
</tr>
<tr>
<td>519-776-6483, 1-800-265-5820</td>
<td></td>
</tr>
<tr>
<td>Supports families of children, youth, and adults with intellectual disabilities</td>
<td></td>
</tr>
</tbody>
</table>

Internet Security Measures

Here are Internet security steps that can be taken if you wish to prevent others who have access to your computer from seeing that you viewed this study’s website. These instructions were taken directly from The Broken Spirits Network, which can be accessed at: http://www.brokenspirits.com/security/web_security.asp

Clearing the Internet cache

Risk: Low

Possible Repercussions: Any other user shouldn’t notice a difference. However, if they check the temporary internet files folder it will be empty, which might seem unusual. The probability that anyone would look in this folder is very small. Less than 1% of internet users even know where this folder is.

The Internet cache is designed to help pages load faster by storing images and web pages locally on your machine. This can result in a security risk if an unwanted viewer decides to poke through
the cache folder. To prevent unwanted security risks please follow the following directions to clear your internet cache.

**PC USERS:**
1. From the menu bar select “Tools” 
2. Select the option “Internet Options” 
3. Under the “General” Tab look for “Temporary Internet Files” 
4. Click on the “Delete Files” button 
5. Select the “Delete All Offline Content” checkbox and click “Ok” 
6. Click “Ok” once more to return to your browser.

**MAC USERS:**
1. From the menu bar select “Edit” 
2. Select the option “Preferences...” 
3. Select the “Advanced” item in the left menu 
4. Under “Cache” Click “Empty Now” 
5. Click “Ok” to return to your browser.

**Removing sites from your browser history**

**Risk:** Moderate

Possible Repercussions: If this is done properly there will be no obvious sign that anything has been changed. However if you delete the entire history there is a large possibility that other users may notice that their history has been cleared.

The browser history is designed to store previous visits in an area that is easily accessible at the click of a button. This is useful when you forget to bookmark a site and remember visiting it last week and wish to return. Unfortunately, in the case that you are researching sensitive material that you do not wish others to see, this can be a security risk. To prevent unwanted security risks please follow the following directions to remove particular sites from your browser's history.

**PC USERS:**
1. From the menu bar select “View” 
2. Highlight “Explorer Bar” 
3. Select “History” 
4. A bar will show up on the left of your browser. Select the item you wish to delete. 
5. Right Click on the selected Folder and select ”Delete”.

**MAC USERS:**
1. From the menu bar select “Window” 
2. Select “History” 
3. Select the item you wish to delete.
4. Press the "Delete" key.
5. Click "Ok"

Removing cookies from your hard drive

Risk: High

Possible Repercussions: If this is done properly there will be no sign that anything has been changed. However if you delete ALL of the cookie files there is a very large possibility that other users may notice the change.

Cookies are small pieces of code left behind by web pages to store information frequently requested. For example if I clicked on a checkbox to say "save my login information" it would then write a cookie onto my hard drive that I can call next time you visit the site, preventing you from having to login again. This is why it can be very dangerous to delete all of the cookie files. If you delete all of them, all of the stored passwords, user information, and preferences from various sites will be forgotten and you will have to re-enter this information. This will be an obvious change. However, if you follow the directions below, we will instruct you how to delete only the cookies from sites which are high risk. In addition not all browsers will allow you to delete a single item.

PC USERS:
1. From the menu bar select "Tools"
2. Select the option "Internet Options"
3. Under the "General" Tab look for "Temporary Internet Files"
4. Click on the "Settings" button
5. Click on the "View Files" button
6. A list of cookies will appear. Most of the filenames will be in this format:
   username@domain [i.e., user@cnet]
7. Select the cookie you wish to delete
8. Right mouse click & Select "Delete"

MAC USERS:
1. From the menu bar select "Edit"
2. Select the option "Preferences..."
3. Select the "Advanced" item in the left menu
4. Under "Cache" Click "Empty Now"
5. Click "Ok" to return to your browser.

Please print this page for your records.
VITA AUCTORIS

Name: Jennifer L. Scammell

Year of Birth: 1984

Place of Birth: Campbell River, B. C.

Education:


University of Northern British Columbia, Prince George, B. C. 2002-2007

B. Sc. (Honours)-Psychology

University of Windsor, Windsor, ON 2009-present

M. A.-Clinical Psychology