Running Head: TEMPERAMENT AND COPING SKILLS IN ADOLESCENTS

The Association between Parental Meta-Emotion, Child Temperament and the Development of Coping Skills in Middle School Children

Angela Gionet, B.A.

Mount Saint Vincent University

A thesis submitted to the Department of Education,

Mount Saint Vincent University

in partial fulfillment of the degree of

Master of Arts in School Psychology

©Copyright Angela Gionet,

June, 2007

Abstract

The purpose of the current study was to examine how adolescent temperament and parental meta-emotion influence the development of coping skills in middle school children. A number of different findings regarding the relationship between temperament and coping skills have been found in past studies (e.g., Ebata & Moos, 1994; Connor-Smith, and Jaser, 2004). Similarly, previous research studies have shown significant correlations between parenting styles and their influence on child development including the ability to regulate emotions and cope with stressful situations (Eisenberg, Valiente, Morris, Fabes, Cumberland, Reiser, Gershoff, Shepard, & Losoya, 2003; Dusek & Danko, 1994). However, within the context of parental meta-emotion, previous research has not directly focused on how parental meta-emotion influences or predicts coping skills in children. Past studies have also not examined how temperament and parental meta-emotion interact together to influence coping skills developed by middle school children. In the current study, 37 students and their parents completed a number of questionnaires to assess parental meta-emotion style, adolescent temperament, and coping skills. Significant interactions were found between emotion-coaching parenting and each of the four temperament dimensions in the prediction of distraction coping strategies. Two more significant interactions were found between emotion-coaching and emotion-dismissing (separately) and affiliation in the prediction of supportive coping.

Acknowledgements

I would like to take this opportunity to acknowledge and thank those who have supported and encouraged me throughout my Masters program. To my supervisor, Daniel Lagacé-Séguin, whose enthusiasm and dedication never faltered even when the situation appeared bleak. Throughout countless obstacles Dan always managed to stay positive and provide invaluable insights, knowledge, and inspiration to keep going even when I felt like giving up. Dan, I feel privileged to have had the opportunity to work with you.

I would also like to thank Dave Kent for participating as a member of my committee. The time Dave spent to read and comment on my thesis was greatly appreciated and extremely helpful. In addition, I would like to thank the principals, teachers, students and parents who participated in this study. Without their cooperation this study would not have been possible.

To my parents, who have stood by me through all of my endeavors, I am forever grateful. You have always encouraged me to pursue my dreams and have always had confidence in my abilities. Thank you for providing me with the tools necessary to navigate life and for everything you have done for me to ensure I have had the best opportunities. One of the most important goals in my life is to be a good parent to Luke, and you have both served as amazing models of what a parent should provide to their child.

I would also like to thank my husband who quietly encouraged and supported me throughout this research project. Completing this thesis has been the most difficult academic task thus far and there were many times I struggled with whether or not I would

ever finish. I will never be able to thank you enough or express to you how much your love and support over the years has meant to me. You have made many sacrifices for my academic endeavors over the years but through it all you have always believed in me. Thank you for encouraging me to reach my goals. Having you as my partner in life makes anything seem possible.

In addition, I would like to acknowledge my friend Melissa Burgess Moser who was the one person in my life who truly understood the challenges I faced throughout this research project. Melissa, you are like family to me and your support during this process has meant more to me than you will ever know. From your help with my research to your motivational comments, you have been there for me every step of the way. I am unsure about how I would have gotten through this without you. I am thankful everyday for your friendship.

Finally, a big thank you to my son Luke whose smile and sweet giggles made even the toughest days seem brighter. Although you are not yet old enough to understand this, you are my biggest inspiration. You make me want to be a better mother and everyday you remind me of what is truly important in life.

Contents

LIST OF FIGURES

List of Tables

The Association between Parental Meta-Emotion, Child Temperament and the Development of Coping Skills in Middle School Children

This is an extremely difficult and demanding time for children and adolescents. With each generation many new influences and obstacles entice and challenge our youth into situations most adults would find difficult. Furthermore, they are bombarded with information well beyond their years and this situation has lead to the significant amount of research focused on the coping skills of children and adolescents (e.g., Donaldson, Prinstein, Danovsky, & Spirito, 2000; Lewis & Frydenberg, 2002).

In 1995, Daniel Goleman's book "Emotional Intelligence; Why it can matter more than IQ", popularized the notion of emotional intelligence. One of the challenges with emotional intelligence research is that the term itself has had vast and varying definitions. However, in almost all of the models and definitions that have been offered within the literature, the ability to cope with both external and internal stressors has most often been included as a key component of emotional intelligence. As Goleman (1995) has suggested, emotional awareness and the ability to cope with a multitude of feelings can have a far greater impact than academic intelligence on the level of happiness and success a person experiences in their life.

It has therefore become clear that further knowledge about the development of coping mechanisms in children and adolescents is essential to understanding and helping the youth in our schools. Theories of coping have greatly evolved in the past two decades, yet there is still a somewhat limited understanding of how coping skills develop and change in children and adolescent populations. Until recently, the conceptualization of how children and adolescents coped with challenging situations was largely based on models of coping in adults (Compas, Connor-Smith, Saltzman, Harding Thomsen, &

Wadsworth, 2001). However, current researchers have begun to understand the developmental, personality, and contextual factors that have implications in child and adolescent coping skills.

The purpose of this study, therefore, is to elucidate many of the factors influencing adolescent coping skills. This study will examine: (1) how an adolescent's temperament may be associated with coping skills; (2) the role of parental meta-emotion in the development of coping skills; (3) and the interaction between temperament and parental meta-emotion in the prediction of coping skills. The findings from this study will contribute to the already burgeoning field of coping research and may be used in the development of psychological interventions, which aim to increase effective coping skills.

Temperament

In a longitudinal study, initiated by Thomas and Chess in 1956, individuals were assessed from infancy to adulthood to investigate the idea of temperament and how an individual's temperament can influence later development. Based on information from this study, Thomas and Chess (1977) identified nine dimensions of temperament (i.e., activity level, rythmicity, distractibility, approach/withdrawal, adaptability, attention span and persistence, intensity of reaction, threshold of responsiveness, and quality of mood) which clustered together to form three types of children; 1) the easy child, 2) the difficult child, and the slow-to-warm-up child. It was also postulated by Thomas and Chess (1977) that temperament is not fixed and unchangeable but rather that environmental circumstances had the potential to alter children's emotional styles considerably. This was further explained through their "goodness-of-fit" model, which

described how a child's temperament combines with environmental pressures to affect future development. There has been a long-standing debate about the bi-directionality of the parent-child relationship. The goodness of fit theory is one example that has been used to describe how well a parent's behaviors relate to a child's temperament (Thomas & Chess, 1977). Several studies have found that parents of difficult children are more likely to react negatively towards their child, unlike parents of easy children who tend to be more positive and responsive (Lee & Bates, 1985, Patterson, 1986). According to Thomas and Chess (1977) the temperament of a child is likely to evoke particular responses from parents that can create "self-fulfilling reinforcements" which can therefore further increase particular temperamental characteristics of a child.

The work of Thomas, Chess, and other colleagues (Thomas and Chess, 1977, Thomas, Chess, & Birch, 1968) also highlighted the associations of temperament on future behavior. They found that temperament is one of the most significant factors that predict whether a child will experience psychological or behavioral difficulties or will be protected from environmental stressors. In one study (Thomas, et al., 1968), using the sample of children from the original longitudinal study, it was found that 70% of the preschoolers identified as "difficult children" went on to develop behavioral difficulties by the time they were school age. However, only 18% of the children classified as "easy children" went on to develop future behavioral problems.

With respect to the relationship between temperament and the ability to cope in stressful situations, it is believed by some researchers that some children may be biologically predisposed to have a low threshold for stress (e.g., Kagen, Reznick, & Snidman, 1988; Miyake, Chen, & Campos, 1985). It has also been shown through

studies on resiliency in children exposed to significant stressors that temperament is an important factor in how well a child is able to cope (Wertlieb, Weigel, Springer, & Feldstein, 1987). Wyman, Cowen, Work, & Parker (1991) found that stress resilient children were more likely to be described by their parents as easy going rather than difficult children.

For the purpose of this study Rothbart & Derryberry's (1981) definition of temperament will be utilized. Accordingly, temperament is defined as "constitutionally based individual differences in reactivity and self-regulation, influenced over time by heredity and experience" (Rothbart & Derryberry, 1981). As Rothbart, Ellis, and Posner (2004) go on to explain, this definition includes three major components of what is meant by the term temperament. First, the term constitutional refers to the biological underpinnings that are influenced by genes, the environment, and an individual's personal experiences. Secondly, the term reactivity is important in defining temperament in terms of the onset, intensity, and duration of emotional, motor, and attentional reactions. Lastly, Rothbart and colleagues (2004) explain that self-regulation, an important aspect of their definition, refers to the processes that regulate instances of reactivity.

Research projects conducted by Rothbart and colleagues (Capaldi & Rothbart, 1992; Ellis & Rothbart, 2001) have been used to create and revise a measure designed to assess aspects of temperament related to self-regulation in adolescents. These studies have revealed ten aspects of temperament that load onto four main factors according to exploratory factor analyses (see Table 1).

Table 1

Dimensions of temperament included in the Eealy Adolescent Temperament Questionnaire –Revised (EATQ) categorized by four factors. (Ellis & Rothbart, 2001)

Dimension	**Definition**
Effortful Control	
Attention	The capacity to focus attention as well as to shift attention when desired.
Activation Control	The capacity to perform an action when there is a strong tendency to avoid it.
Inhibitory Control	The capacity to plan, and to suppress inappropriate responses.
Surgency	
High Intensity Pleasure	The pleasure derived from activities involving high intensity or novelty.
Shyness (low levels)	Behavioral inhibition to novelty and challenge, especially social.
Fear (low levels)	Unpleasant affect related to anticipation of distress.
Negative Affectivity	
Frustration	Negative affect related to interruption of ongoing tasks or goal blocking.
Affiliativeness	
Affiliation	The desire for warmth or closeness with others, independent of shyness or extraversion.
Perceptual Sensitivity	Detection of perceptual awareness of slight, low intensity stimulation in the environment.
Pleasure Sensitivity	Amount of pleasure related to activities or stimuli involving low intensity, rate, complexity, novelty, and incongruity.

This four factor model consists of effortful control, negative affectivity, surgency and affiliativeness. Effortful control includes the aspects of attention, activation control, and inhibitory control. In adolescents, this factor relates to the individual's voluntary basis for self-regulation (Rothbart, et al., 2004) and the "ability to act or withhold action now, in the pursuit of future outcomes" (Rothbart & Hwang, 2005). The negative affectivity factor includes the aspect of frustration in adolescents (Ellis & Rothbart, 2001). High intensity pleasure, low levels of shyness, and low levels of fear are all included in a factor measuring surgency. According to Putnam, Ellis, and Rothbart (2001) the broad construct of surgency is similar to measures of extraversion on other assessments of personality. Affiliativeness relates to an individual's "desire for closeness with others that is independent of shyness or extraversion" (Putnam, et al., 2001) and also includes aspects of perceptual sensitivity and pleasure sensitivity. Of course temperament is not the only factor that influences child development. In this next section, parenting practices, specifically parental meta-emotion, will be presented as an influential factor in childhood development.

Parenting Styles

For many decades researchers in the field of child development have explored the influence of parenting styles, beliefs, and goals on childhood adjustment (Baumrind, 1967, 1971; Dix, 1992; Hastings, 1995). It has been found that variations in parenting behavior and cognitions can have an adverse or beneficial impact on childhood outcomes. More recently, researchers have begun to investigate the importance of parental emotional styles on childhood development, and although this research is somewhat limited, it is an important contribution to the literature (e.g., Gottman, Fainsilber-Katz, &

Hooven, 1996; Lagacé-Séguin and Coplan, 2005). Research in the area of parental meta-emotion has described how variations in parental emotional styles can affect childhood development just as previous findings indicate that variations in parenting styles, beliefs, and goals are associated with childhood outcomes (Gottman, Fainsilber-Katz, & Hooven, 1997; Gottman & Declaire, 1997).

Parental Meta-Emotion Philosophy

Before the theory of parental meta-emotion was developed, Haim Ginott (1965, 1971, 1975) theorized that parents who react to their children' emotions in a positive manner would be providing validation for their child's feelings and therefore creating an atmosphere in which all emotions are "allowed" to be expressed. By creating this type of atmosphere, Ginott suggested that a close emotional bond between parent and child can be created and children will be more likely to have successful emotional and social development. In contrast, when parents dismiss their child's emotions, children learn to distrust their emotions (Ginott, 1965).

Ginott (1965) also stressed the importance of parents being cognizant and accepting of their own emotions. For example, Ginott explains that it is ineffective for parents to resolve to never become angry. He suggests that parents need to express their anger to release tension and to teach children, but that this anger should never be harmful to either the child or the parent (Ginott, 1965). According to Ginott (1965) successful emotional parenting is reliant on two basic concepts: (1) the self-respect of the parent or child should never be compromised; and (2) during emotional moments parents should give statements of understanding before attempting to give their child advice.

Based on influential work of Haim Ginott (1965, 1971, 1975) parental meta-emotion philosophy was developed. According to Gottman et al. (1996) parental meta-emotion philosophy refers to "an organized set of feelings and thought about one's own emotions and one's children's emotions" (pp. 243). Gottman and colleagues have postulated that parental meta-emotion (a) impedes parental negative affect and cultivates positive parenting, (b) directly influences children's regulatory physiology, (c) influences children's emotion regulation, and (d) influences children's academic and social achievement (Gottman, et al., 1996).

Meta-emotion philosophy is the basis of at least two types of parental emotional styles: emotion-coaching and emotion-dismissing (Gottman, et al., 1996). Parents who act as emotion coaches are individuals who: 1) are aware of their own and their child's positive and negative emotions; 2) accept emotions as tools to promote learning; 3) are good emotion regulators; and 4) can verbally express their emotional states. In this respect, these parents accept the negative emotions of their children and perceive these instances as an opportunity for intimacy or teaching their child. When a child is experiencing negative emotions, these parents will help their child verbally label what they are feeling, validate their child's emotions, and participate in problem solving with the child regarding the situation that led to the negative emotion (Gottman, et al., 1996). Emotion-coached children have been found to have high levels of self-esteem and to be successful in both social and academic situations (Gottman & Declaire, 1997; Katz, Wilson, & Gottman, 1999). In terms of emotions, these children are able to trust their feelings, regulate their emotions, and are also able to effectively employ adaptive problem-solving skills (Gottman, et al., 1997). These children have also been found to be

superior, as compared to their peers, in their ability to successfully socialize with peers (Gottman, et al., 1996). Gottman and colleagues (1996) theorized that children of emotion-coaching parents may have "acquired the tools to learn how to learn in emotionally challenging situations" (pp.262) as opposed to only using skills learned through modeling, thus enabling the child to skillfully navigate their way through, sometimes challenging, peer interactions.

It is necessary to note that many parents can display a wide array of constructive parenting skills such as warmth, positive attitude, and limit setting but at the same time be unaware of, or overlook, their own, and their children's emotions (Gottman, et al., 1996). For some individuals, the experience of negative emotions is intimidating, uncomfortable, and to be avoided at all costs. These individuals believe it is important to prevent and change their child's negative emotions as quickly as possible. Known as emotion-dismissers, these parents are quick to ignore or deny negative emotions and unlikely to engage in problem solving with their child or perceive the incident as an opportunity to relate to and validate their child's emotions (Gottman, et al., 1996). Children of emotion-dismissing parents are taught to believe that their negative feelings are unwarranted and inappropriate (Gottman & Declaire, 1997). Furthermore, these children are likely to have diminished problem-solving abilities due to their parent's inability to teach these skills (Gottman et al., 1997). In other words, being brought up in an environment where emotions are minimized, denied, and ignored can potentially lead to poor social and emotional development (Lagacé-Séguin & Coplan, 2005).

How parents deal with their own emotions and their children's emotions will clearly have an impact on the coping strategies an individual will learn and utilize in

future stressful situations throughout their lives. Therefore, theories of coping mechanisms are reviewed in this next section.

Coping Theories

How individuals cope with stressful situations has become a rapidly increasing area of interest for many researchers (e.g., Connor-Smith, Compas, Wadsworth, Harding Thomsen, & Saltzman, 2000; Frydenberg & Lewis, 2004). This research is important to further understand the basic developmental processes in children and adolescents and provides information on the nature and development of self-regulatory processes (Compas, 1998). Information obtained through this field of research also has significant potential for usefulness in an applied context. Understanding how an individual's ability to adapt to stressful situations can influence future psychological adjustment and psychopathology, can guide interventions designed to enhance coping skills as protective factors (Compas, et al., 2001).

Despite the obvious potential and relevance of this research, it has not been without its criticism. One of the most common criticisms within the coping research has been the lack of agreement on a single definition or conceptualization (Compas, et al., 2001). In this vein, the following section is a review of some of the most pertinent models and dimensions of coping.

Models and Dimensions of Coping

One of the most widely cited models of coping can be attributed to Lazarus & Folkman (1984, as cited in Compas, et al., 2001) who defined coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (pp.141).

This model includes two dimensions, which have been commonly cited within the research. The first dimension, problem-focused coping, refers to purposeful responses put forth by the individual with the intention of resolving the stressful event. Emotion-focused coping refers to the individual's attempt to find ways to moderate the intensity of emotions that arise due to a particular stressor. This model is seen as being goal oriented in that the thoughts and behaviors of the individual are directed at resolving the source of the stress and managing emotions that occur because of the stressor (Compas, et al., 2001).

A model of coping discussed by Eisenberg, Fabes, Guthrie, Murphy, Maszk, Holmgren, & Suh (1996) viewed coping as part of the larger concept of self-regulation. They recognized that humans are constantly regulating their emotions and suggested that coping is just one aspect of self-regulation. Coping was referred to as the self-regulating response when faced with a stressor. The dimensions of coping described within this model map closely onto the concepts of problem and emotion-focused coping discussed by Lazarus and Folkman (1984). However, a third dimension, behavior regulation, was also included which describes how an individual attempts to regulate emotionally driven behavior. This refers to overt actions towards other individuals. It is suggested that individuals who are low in behavioral regulation are likely to resort to negative responses such as aggression when faced with a stressor. In contrast, those high in behavioral regulation are expected to respond to stress in a more productive manner (Losoya, Eisenberg, & Fabes, 1998). This model also differed from the Lazarus and Folkman model in that both volitional and automatic responses to stress were included. Eisenberg

and colleagues (1996) noted that although coping and emotion regulation usually involve significant effort, coping is not always a conscious and intentional process.

Another two-dimensional model of coping was put forth by Ebata & Moos (1994) which described two distinct styles of coping skills. The first dimension, active-approach coping, refers to an individual's ability to recognize how a stressor may affect them and understanding that they have the internal resources to cope with the problem. These individuals then take action to cope with the problem (e.g., thinking of ways to solve the problem, using positive self-talk, etc). In turn, by actively coping with the problem these individuals have a greater sense of control and are able to create opportunities for satisfying relationships through the use of their support network, and ultimately promote resiliency.

In comparison, individuals who invoke an avoidant coping style, the second dimension of this model, are unable to take action to cope with a problem. These individuals, who are less adept at approaching the problem and/or their feelings about the stressor, are at a greater risk of exacerbating the negative effects of stress. In turn, this can often lead to greater feelings of hopelessness and helplessness (D'Imperio, Dubow, Ippolito, 2000). These individuals may use cognitive and/or behavioral attempts to deny, minimize, withdraw from, and avoid the stressor (Ebata & Moos, 1994).

One of the criticisms of past research has been the dichotomous approach to the conceptualization for coping (Compas, et al., 2001). Coping is a complex human behavior that is influenced by a number of different factors such as temperament, environment, situational factors, learned behaviors, and level of perceived control to name a few. There is overlap in many of the two factor models as to what constitutes

effective and ineffective coping, which has lead to confusion. In more recent models, (Ayers, Sandler, Twohey, 1998, Connor-Smith, et al., 2000) past research has been taken into account and some of the most influential dimensions of coping have been linked together to create more inclusive definitions of coping. Recent theorists have used confirmatory factor analysis to gain necessary statistical information that will assist in ensuring that scales used in the assessment of coping strategies are unidimensional and that the items are actually measuring the construct of coping (Ayers, Sandler, West, & Roosa, 1996). The development of scales based on confirmatory factor analysis has led to the development of more appropriate categories of coping strategies. According to Ayers and colleagues (1996) previous research in coping theories had made use of exploratory methods such as content analysis of children's coping responses or simply developing items and categories based on the theoretical literature. Although this research has greatly benefited the field, these methods have often resulted in models of coping that are ambiguous and overlapping and result in measures that are difficult to interpret (Ayers, 1996). As Ayers, et al (1996) have pointed out, confirmatory factor analysis also has strengths and limitations. For example, this approach is beneficial in that constructs are conceptually clearer; however, this method also has a greater likelihood of resulting in higher intercorrelations between constructs (Ayers, 1996).

Using the confirmatory factor analytic approach, Ayers and colleagues (1996) developed a four-dimensional model of coping consisting of active coping strategies, distraction strategies, avoidance strategies, and support seeking strategies. A number of categories of specific coping behavior are included within each of these dimensions (see Table 2).

Table 2

Dimensions of coping included in the Children's Coping Strategies Checklist (CCSC) categorized by four factors. (Program for Prevention Research, 1991)

Coping Dimension	**Definition**
Active Coping Strategies	
Cognitive Decision Making	This refers to all planning or thinking about ways to solve the problem. It includes thinking about choices, thinking about future consequences, and thinking of ways to solve the problem. It is not simply thinking about the problem but thinking about how to solve it. It involves the planning and *not* the execution of actions to solve the problem.
Direct Problem Solving	This refers to efforts to change the problem situation by changing the self or by changing the environment. It involves what one does, *not* what one thinks.
Seeking Understanding	This includes cognitive effort to find meaning in a stressful situation or to understand it better. It involves seeking understanding of the situation and *not* seeking to put a positive interpretation on the situation.
Positive Cognitive Restructuring	This refers to thinking about the situation in a more positive way. It includes thoughts that minimize the problem or the consequences of the problem. Acceptance that one can live with the situation the way it is, is optimistic thinking and an example of positive cognitive restructuring.
Distraction Strategies	
Distracting Actions	This includes efforts to avoid thinking about the problem situation by using distracting stimuli, entertainment, or some

	distracting activity. If the distracting activity involves more than moderate physical exertion it should not be included here.
Physical Release of Emotions	This includes efforts to physically work off feelings with physical exercise, play, or efforts to physically relax. There needs to be at least a moderate amount of physical exertion involved, so that very light physical activity for a child (e.g., walking) would not be included here.
Avoidance Strategies	
Cognitive Avoidance	This includes efforts to avoid thinking about the problem. It includes the use of fantasy or wishful thinking, or imagining that the situation was better. It refers to cognitive activity and *not* behaviors one does to avoid thinking about the problem.
Avoidant Actions	This includes behavioral efforts to avoid the stressful situation by staying away from it or leaving it.
Support Seeking Strategies	
Problem-Focused Support	This involves the use of other people as resources to assist in seeking solutions to the problem situation. This includes seeking advice or information or direct task assistance and *not* emotional support.
Emotion-Focused Support	This involves other people in listening to feelings or providing understanding to help the person be less upset.

Based on this research, Ayers and colleagues (1996) developed the Children's Coping Strategies Checklist, which will be used in this study to examine the coping strategies of middle school students.

It is obvious that the research on coping is multifaceted with researchers examining numerous variables and influences on the development of coping strategies in children and adolescents. The purpose of this study is to examine the association between parental meta-emotion, child temperament, and the development of coping skills in middle school children.

Parental Meta-emotion and Coping

Previous research studies have shown significant correlations between parenting styles and their influence on child development including the ability to regulate emotions and cope with stressful situations (Eisenberg, Valiente, Morris, Fabes, Cumberland, Reiser, Gershoff, Shepard, & Losoya, 2003; Dusek & Danko, 1994). As was noted by Eisenberg and colleagues (2003), "family is the primary context in which children first learn about how emotions are typically expressed, the messages they convey, and various ways to manage them". Furthermore, parental rearing practices may influence adolescent coping behaviors in at least two ways (Dusek & Danko, 1994). First, parental behaviors may encourage or discourage the use of specific coping resources (e.g., seeking social support from friends or parents), and secondly may have an impact on whether or not a child feels competent in dealing with problems.

In the context of parental meta-emotion, previous research has not directly focused on how parental meta-emotion influences or predicts coping skills in children. However, children of emotion coaching parents are more likely to have a greater number

of opportunities to learn about emotions, how to appropriately deal with a range of different feelings, and how to problem solve (Gottman et al., 1996). Gottman and colleagues (1996) indicated that emotion coaching parents help their children to label emotions, validate their children's feelings, and participate in problem solving with their child. Therefore, it was hypothesized that children of emotion coaching parents would be more likely to use support seeking and active coping strategies when faced with stressful situations.

In contrast, children of emotion dismissing parents may not have the opportunity to discuss their feelings or to observe parental modeling of effective coping strategies. As discussed previously, emotion dismissing parents may be unaware of, or overlook, their own, and their children's emotions (Gottman et al., 1996). As noted by Gottman and colleagues (1997), children of emotion dismissing parents are likely to have poor problem-solving abilities due to the fact that their parents were unable to teach the necessary skills. In a study by Eisenberg, Fabes, & Murphy (1996) it was found that maternal minimizing reactions were related to lower levels of social competence and higher levels of avoidant coping strategies. In other words, if parents dismiss and avoid dealing with negative emotions their children are likely to do the same and it was therefore hypothesized that these children will display higher levels of avoidant and distraction coping strategies.

Temperament and Coping

A child's individual temperament will also have an impact on how they will cope in stressful situations. For example, individual differences in reactivity and self-regulation will influence the methods of coping in children (Compas, et al., 2001).

Similarly, the individual temperament of a child is likely to have some influence on the types of coping responses that can be learned or acquired (Compas, 1998). For example, it has been postulated (Kagan, Snidman, & Arcus, 1995 as cited in Compas, 1998) that children who are behaviorally inhibited are less likely to develop engagement coping responses such as information seeking and problem solving. Whereas children who are less inhibited may have difficulty acquiring coping skills that regulate emotion and behavior (e.g., distraction and delay). In one study (Ebata & Moos, 1994) it was found that adolescents who were easily distressed were more likely to utilize avoidant coping mechanisms compared to individuals who viewed stressors as controllable and made greater use of active coping responses. According to Compas, Connor-Smith, and Jaser (2004) children who have a high level of attentional control are more likely to utilize coping mechanisms that involve the controlled shifting of attention (e.g., engaging in distracting tasks to reduce levels of distress). In contrast, they suggest that children high in negative affectivity are more likely to have difficulty making use of coping efforts that would help to regulate emotional arousal.

Based on these past findings and Ellis and Rothbart's (2001) model of temperament, the following hypotheses were put forth;

1) Children high in effortful control and/surgency will be more likely to use active coping strategies and a positive relationship between these variables and emotion coaching parenting style is also expected.
2) Children high in affiliativeness will be more likely to engage in support seeking when dealing with stressful situations and a positive relationship between these variables and emotion coaching parenting style is also expected.

3) Children high in negative affectivity will be more likely to use distraction and avoidant coping behaviors to deal with stressful situations and a positive relationship between these variables and emotion dismissing parenting style is also expected.

Temperament and Meta-Emotion in the Prediction of Coping

As in many other areas of child development research the debate between nature versus nurture is plentiful. It is important to explore how a child's temperament interacts with parental behaviors to influence coping skills. According to Ruchkin, Eisemann, & Hägglöf (1999), coping skills have both a biological and social basis for their development. These researchers postulate that easy children are more likely to elicit emotional warmth from their parents as opposed to difficult children, which may be more likely to receive negative responses from parents. Furthermore, they go on to explain that increased positive and warm feedback from parents has a greater likelihood of resulting in children with productive coping skills whereas children who receive greater levels of negative reactions may be more likely to develop more avoidant coping behaviors

However, for children who are temperamentally well-regulated, emotion-focused parenting practices could result in, what Lagacé-Séguin and Coplan (2005) refer to as, emotionally over-solicitous parenting. Lagacé-Séguin and Coplan (2005) indicate that in this situation, parents "tend to over manage situations for their children, restrict their children's behavior, be overly affectionate, discourage their children's independence, and direct their children's activities" (pp.630), therefore possibly leading to poor development of appropriate coping strategies. For the purpose of this study, it is hypothesized that differing levels of parental meta-emotion will interact with child

temperament in the prediction of coping styles in adolescence. For example, it is possible that emotion coaching style may not be associated with positive aspects of coping among children who possess "better" temperamental dispositions.

Method

Participants

Participants included 37 students aged 10-13, and their parents, recruited from three middle schools within School District 6 in Rothesay, New Brunswick.

Procedures and Methods

Ethical approval from both the University Research Ethics Board at Mount Saint Vincent University and from the Director of Education and Superintendent of School District 6 in Rothesay, New Brunswick were obtained before beginning this study. Also, a letter was given to the principals of each of the participating schools outlining the details of the study (see Appendix A).

During visits to individual classrooms, students were given a brief description of the study. Interested students were given a package to take home to their parents which consisted of a comprehensive written description of the study (see Appendix B), a consent form (see Appendix C), a demographic questionnaire (see Appendix D), and the Parental Emotional Styles Questionnaire (see Appendix E). Students were asked to return the signed consent form by a specified date if they, and their parents, chose to participate in the study. An incentive for participation in this study was described to students and outlined in the written notice sent home to parents. All families participating in the study had their name entered into a draw to win a $50.00 gift certificate to a local shopping mall.

After the consent form was returned, students were notified of a specific time and location during which a small group administration of student questionnaires was given. These group administrations were given during noon hours or silent reading periods and consisted of groups ranging in size from three to sixteen students.

During each group administration students were first asked to complete a demographic questionnaire (see Appendix F). Students were then given the Children's Coping Strategies Checklist (see Appendix G) and the Early Adolescent Temperament Questionnaire – Revised, Short Form (see Appendix H) in alternating order. Finally, at the completion of this study, families and schools who indicated an interest in the results were sent a general summary of the study conclusions.

Measures

Coping Skills

The Children's Coping Strategies Checklist (CCSC, Program for Prevention Research, 1991) was used as a general measure of children's self-reported coping styles. This 54-item questionnaire has been designed for children ages 9-13 and consists of a four dimensional model of coping: 1) active coping strategies, 2) distraction strategies, 3) avoidance strategies and 4) support seeking strategies. Sample questions, answered on a 4-point Likert scale, include: "When you had problems in the past month, you thought about what you could do before you did something" and "when you had problems in the past month, you tried to ignore it". This scale has been found to have adequate to good internal consistency for each subscale (active coping strategies $\alpha = .88$, avoidance strategies $\alpha = .65$, and support seeking strategies $\alpha = .86$).

Temperament

The Early Adolescent Temperament Questionnaire – Revised, Short form (EATQ-R, Capaldi & Rothbart, 1992, Ellis & Rothbart, 2001) was used to assess aspects of temperament related to self-regulation. This is a 65-item questionnaire consisting of statements that are rated on a 5-point Likert scale. This scale consists of four main factors of temperament: 1) negative affectivity, 2) surgency, 3) affiliativeness, and 4) effortful control. Each of these factors consisted of one or more of the 10 scales (see table 2) included in the questionnaire. Each of these scales was found to have moderate to high internal consistency (coefficient alphas ranging from .64 - .81). The EAT-Q also has scales measuring aggression and depressive mood embedded within the questionnaire which were also found to have adequate internal consistency (α =.80 and α = .69, respectively). Sample questions include, "I tend to get in the middle of one thing and then go off and do something else" and "I get really frustrated when I make a mistake in my school work".

Parental Emotional Styles

Parental Emotional Styles were assessed using the 14-item Maternal Emotional Styles Questionnaire (MESQ, Lagacé-Séguin and Coplan, 2005) which consists of subscales measuring emotion-coaching and emotion-dismissing parental emotional styles. Sample questions include "when my child gets sad, it's a time to get close" and "when my child gets angry my goal is to get him/her to stop". This scale has been found to have good internal consistency for each subscale (emotion-dismissing α = .92, emotion-coaching α = .90) and adequate test-retest reliability for each of the subscales (emotion-coaching r = .58, emotion-dismissing r = .53).

Results

The primary goal of this study was to examine how individual temperament and parental meta-emotion influence the development of coping skills in middle school students. The results section is presented as follows. First, preliminary analyses are explored followed by correlations between temperament, parental meta-emotion, and coping skills. Finally, interactions between parental emotional styles and temperament in the prediction of coping skills are examined through the use of Cohen's Partialled Products Technique. Where interactions were found, follow-up analyses using a median split were conducted.

Preliminary Analyses

Data Screening. All data were examined for outliers and normality and, since no assumptions were violated, there was no need to transform the data. Sex differences were explored and significant differences were found with respect to affiliativeness and also in the use of supportive coping skills with females being higher than males on each (see Table 3).

Correlations between Coping Skills and Temperament. Correlations were completed between each of the four coping skills (active, avoidant, support seeking, and distraction) and the four temperament dimensions (affiliativeness, effortful control, surgency, and negative affect) (see Table 4). Significant correlations were found between negative affect and avoidant coping ($r = .42$, $p<.01$) and affiliativeness and support seeking coping ($r = .49$, $p<.01$).

Table 3

Sex differences in levels of affiliation and support-seeking coping

	Females		Males	
	Mean	SD	Mean	SD
Affiliation	3.83	.50	3.11	.36
Support-Seeking	2.92	.72	1.91	.63

Table 4

Correlations between Coping Skills and Temperament

	Coping Skills			
	Active	Avoidant	Distraction	Support Seeking
Neg. Affect	-.09	.42**	.23	.02
Effortful Control	.25	.06	.09	.27
Affiliativeness	.33	.07	.29	.49**
Surgency	-.07	.03	.14	.10

**p<.01

Correlations between Coping Skills and Parental Meta-Emotion. Correlations were completed between each of the four coping skills and both emotion-coaching and emotion dismissing parenting (see Table 5). A significant correlation was found between emotion-coaching and distraction coping ($r = .49$, $p<.01$).

Correlations between Parental Meta-Emotion and Temperament. Correlations were completed between each of the four temperament dimensions and both emotion-coaching and emotion dismissing parenting (see Table 6). No significant correlations were found.

Correlations between Emotion-Coaching and Emotion-Dismissing Parenting. Correlations were completed between the two parental meta-emotion styles. A significant correlation was found between emotion-coaching and emotion-dismissing ($r = .39$, $p<.05$).

Moderated Regression Analyses

Overview. To examine moderated (interactive) pathways in the prediction of coping skills, interactions between predictor variables (temperament and parental meta-emotion) were explored using multiple regression analyses (see Figure 1). Cohen's partialled products technique (Cohen, 1978; Cohen & Cohen, 1983) was employed where independent variables are first entered into the regression equation as a block, followed by the interaction terms (as represented by their multiplicative products). At each step, the significance in R^2 change was assessed to determine if each main effect or interaction added to the productiveness of the overall equation.

Table 5

Correlations between Coping Skills and Parental Meta-Emotion

	Coping Skills			
	Active	Avoidant	Distraction	Support Seeking
Emotion-coaching	.01	-.21	-.49**	.10
Emotion-dismissing	-.08	-.11	-.08	-..04

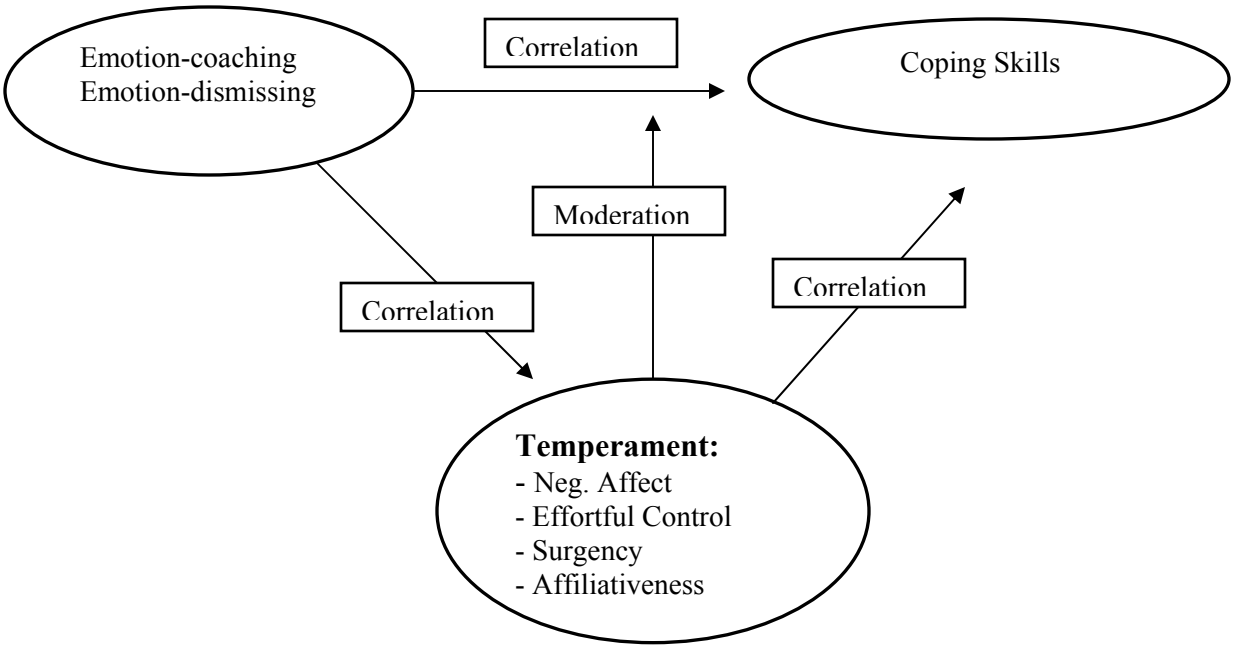
**p<.01

Table 6

Correlations between Parental Meta-Emotion and Temperament

	Parental Meta-Emotion	
	Emotion-coaching	Emotion-dismissing
Neg. Affect	-.18	.10
Effortful Control	-.09	-.34
Affiliativeness	-.09	-.32
Surgency	.07	.17

Figure 1. Overview of Conceptual Model



As such, standardized interaction terms were created by combining the temperament dimensions (i.e., negative affect, effortful control, affiliativeness, and surgency) with each parental meta-emotion style (i.e., emotion-coaching and emotion-dismissing). Once the interaction terms were created they were then re-standardized and these interactions (i.e., eight interactions representing each dimension of temperament x each type of parental meta-emotion) were tested in the prediction of coping skills.

In order to assess the moderating effects (i.e., each of these interaction terms), specific blocks of variables were entered into the hierarchical regression analyses. The first block included the specific temperament dimension. The second block included the one of the styles of parental meta-emotion. The third block included the interaction term (the combination of the specific temperament dimension and parental meta-emotion style).

Where significant interactions were detected (i.e., a significance in R^2 change), follow-up analyses were conducted.

Temperament and Emotion-coaching to Predict Coping Skills. Results from the regression analyses revealed several significant interactions between temperament and emotion-coaching in the prediction of coping skills. A significant interaction was found between emotion-coaching and negative affect in the prediction of distractive coping skills ($F(3, 36) = 4.50$, $p < .05$, $R^2adj = .23$).

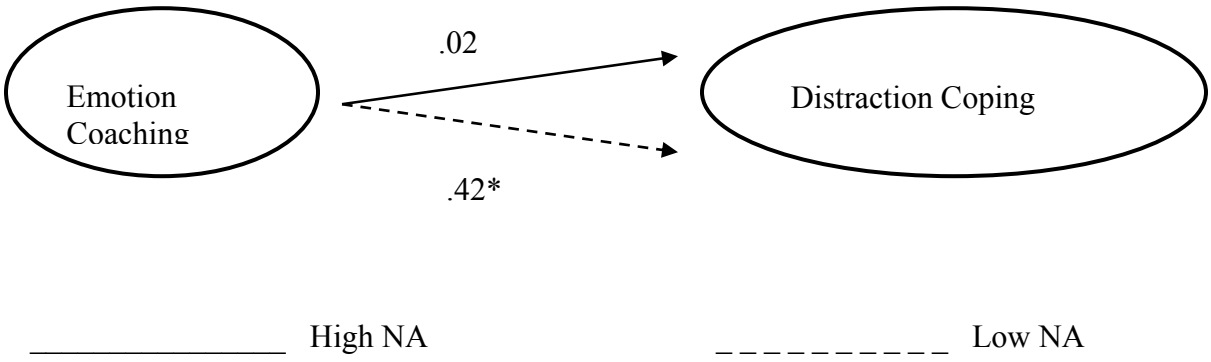
Interactions were explored by re-computing the regression analyses separately for participants scoring above and below the median in terms of negative affect (i.e., high negative affect and low negative affect). Similar procedures to examine interactions and simple effects have been outlined by many different researchers (e.g. Aiken & West,

1991; Calkins, Gill, Johnson & Smith, 1999; Gottman, Fainsilber & Hoovan, 1997; Rubin, Cheah & Fox, 2001). The first interaction was between emotion-coaching parenting and negative affect to predict distractive coping skills. Results from follow-up analyses indicated that emotion-coaching parenting was not associated with distractive coping skills for those individuals with high negative affect ($r = .02$, ns). Further, emotion-coaching was significantly and positively related to distractive coping skills for participants with low negative affect ($r = .42$, $p<.05$) (see Figure 2).

A second significant interaction was found between emotion-coaching and surgency in the predication of distractive coping skills ($F (3, 36) =5.02$, $p<.05$, $R^2adj=.25$). Results from the follow-up analyses indicated that emotion-coaching parenting was not associated with distractive coping skills for those individuals with low surgency ($r = -.21$, ns). Further, emotion-coaching parenting was significantly and positively related to distractive coping skills for participants with high surgency ($r = .55$, $p<.05$) (see Figure 3).

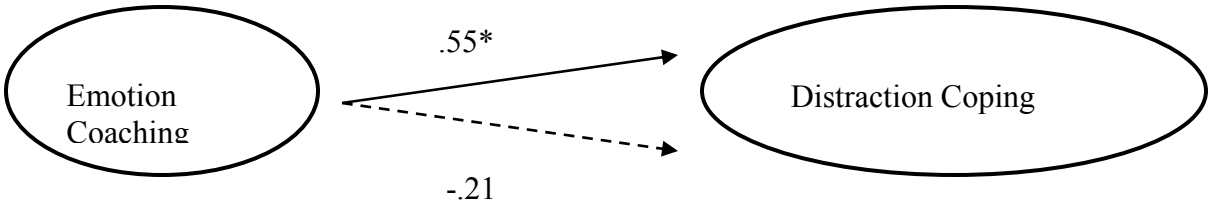
A third significant interaction was found between emotion-coaching and effortful control in the prediction of distractive coping skills ($F (3, 36) =3.83$, $p<.05$, $R^2adj=.19$). Results from the follow-up analyses indicated that emotion-coaching parenting was not associated with distractive coping skills for those individuals with high effortful control ($r = -12$, ns). However, emotion-coaching parenting was significantly and negatively related to distractive coping skills for participants with low effortful control ($r = -.49$, $p<.05$) (see Figure 4).

Figure 2. Simple Effects Testing of Moderated Relations between Emotion Coaching and Negative Affectivity in the Prediction of Distraction Coping Strategy



* p< .05

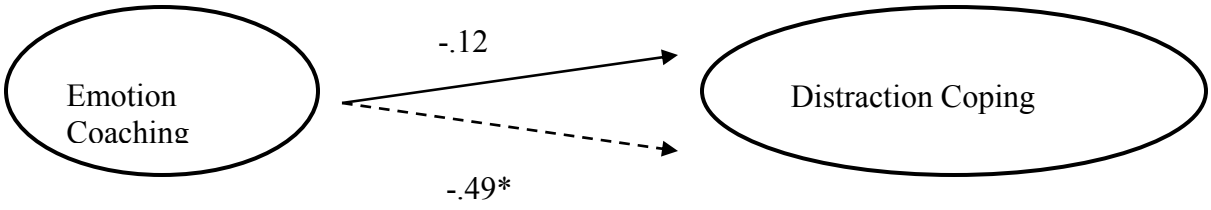
Figure 3. Simple Effects Testing of Moderated Relations between Emotion Coaching and Surgency in the Prediction of Distraction Coping Strategy



_____ High Surgency _ _ _ _ _ _ _ _ _ _ Low Surgency

* p< .05

Figure 4. Simple Effects Testing of Moderated Relations between Emotion Coaching and Effortful Control in the Prediction of Distraction Coping Strategy



_____ High Effortful Control _ _ _ _ _ _ _ _ _ _ Low Effortful Control

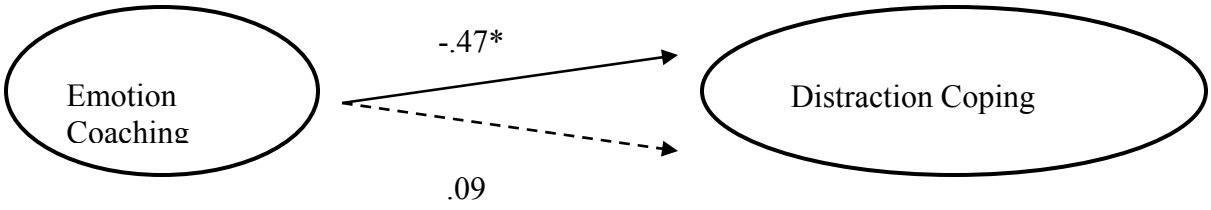
* p< .05

A significant interaction was also found between emotion-coaching and affiliativeness in the prediction of distractive coping skills ($F(3, 36) = 5.11$, $p < .05$, $R^2adj = .26$). Results from the follow-up analyses indicated that emotion-coaching parenting was not associated with distractive coping skills for those individuals with low affiliativeness ($r = .09$, ns). Furthermore, emotion-coaching parenting was significantly and negatively related to distractive coping skills for participants with high affiliation ($r = -.47$, $p < .05$) (see Figure 5).

Lastly, a significant interaction was found between emotion-coaching and affiliativeness in the prediction of support seeking coping skills ($F(3, 36) = 4.74$, $p < .05$, $R^2adj = .29$). Results from the follow-up analyses indicated that emotion-coaching parenting was not associated with support seeking coping skills for those individuals with low affiliation ($r = .19$, ns). Further, emotion-coaching parenting was significantly and negatively related to support seeking coping skills for participants with high affiliation ($r = -.31$, $p < .05$) (see Figure 6).

Temperament and Emotion-dismissing to Predict Coping Skills. Results from the regression analyses revealed a significant interaction between affiliativeness and emotion-dismissing parenting in the prediction of support-seeking coping skills ($F(3, 36) = 4.02$, $p < .05$, $R^2adj = .20$). Results from the follow-up analyses indicated that emotion-dismissing parenting was not associated with support seeking coping skills for those individuals with low affiliation ($r = .14$, ns). Further, emotion-dismissing parenting

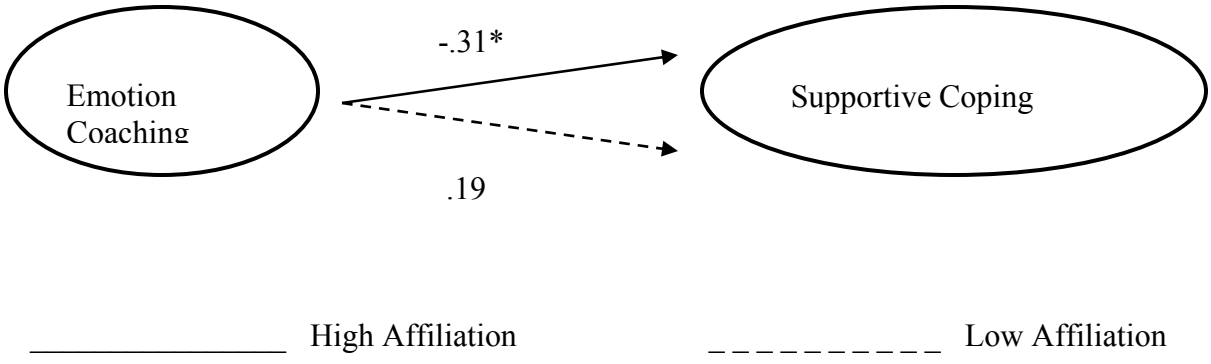
Figure 5. Simple Effects Testing of Moderated Relations between Emotion Coaching and Affiliation in the Prediction of Distraction Coping Strategy



_____ High Affiliation _ _ _ _ _ _ _ _ _ _ Low Affiliation

* p< .05

Figure 6. Simple Effects Testing of Moderated Relations between Emotion Coaching and Affiliation in the Prediction of Support-Seeking Coping Strategy

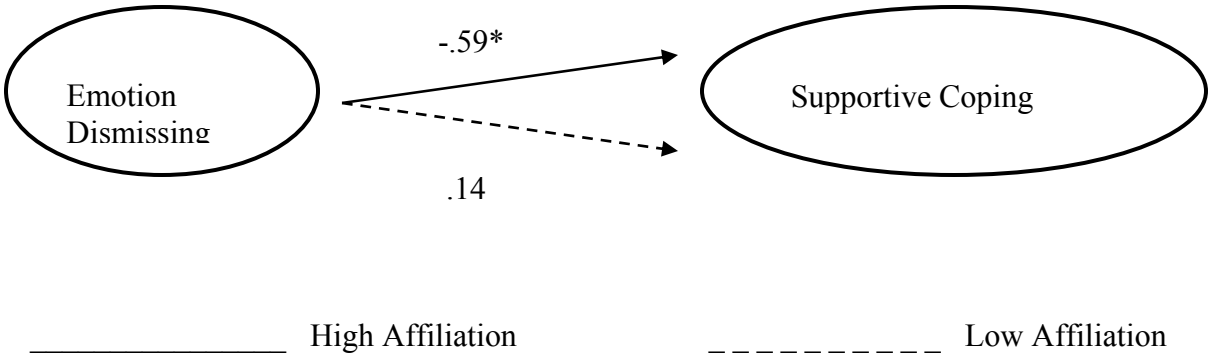


* p< .05

was significantly and negatively related to support seeking coping skills for individuals with high affiliation ($r = -.59$, $p<.05$) (see Figure 7).

There were no other significant interactions between any of the four temperament dimensions and emotion-dismissing in the prediction of coping skills.

Figure 7. Simple Effects Testing of Moderated Relations between Emotion Dismissing and Affiliation in the Prediction of Support-Seeking Coping Strategy



* p< .05

Discussion

The purpose of this study was to explore how parental meta-emotion and individual temperament influence the development of coping strategies amongst middle school students. Associations between temperament, parental meta-emotion, and coping skills were explored. First, simple correlations between all variables were examined followed by an exploration of the interactive relationships between temperament and parental meta-emotion in the prediction of coping skills.

Sex Differences

Results from the current study revealed significant sex differences between affiliativeness and support-seeking with females being higher in each area. Ellis and Rothbart (2001) also found significant differences between males and females in the level of affiliativeness with females being higher than males. This finding is to be expected given the fact that in our culture girls are often socialized to be more emotionally open and to value close relationships, whereas males are sometimes inadvertently, or sometimes explicitly, taught to keep their emotions to themselves (Barsow & Rubenfeld, 2003). Similarly, females were found to be higher in support-seeking coping skills which would appear to go hand-in-hand with high affiliativeness. In other words, given the fact that females are socialized to seek out and develop close, emotionally-open relationships, they are more likely to engage the people in their lives in emotion-focused and problem-focused support-seeking coping. Females will be more likely to ask for help in solving a problem and also more likely to talk to friends or other loved ones about their feelings regarding the problem. Alternately, males who may have been socialized to not ask for

help or not talk about their feelings with others would be less likely to engage in support-seeking coping skills.

Coping Skills and Temperament

A significant positive correlation was found between negative affect and avoidant coping which supports the aforementioned hypothesis. According to Ellis and Rothbart (2001), negative affectivity refers to levels of frustration related to the interruption of ongoing tasks or goal blocking. Given the fact that individuals who are frustrated more easily are likely to be frustrated by the problems they encounter, it would seem logical that these individuals would use skills that would help them to avoid dealing with the problem and therefore decrease their immediate feelings of frustration. In other words, these individuals would rather avoid the problem and the frustration associated with the problem.

A significant positive correlation was also found between affiliativeness and support-seeking coping which also supports the abovementioned hypothesis. Support-seeking coping includes two separate dimensions; problem-focused support and emotion-focused support. According to Ellis and Rothbart (2001) a key component of affiliativeness includes having a desire to be close with others. It seems obvious that individuals showing high levels of affiliativeness will therefore likely make great use of emotion-focused support seeking as a way to partially fulfill their need to be close with someone. Also, Putnam, Ellis, and Rothbart (2001) further described the dimension of affiliativeness as including how sociable or assertive an individual may be. Individuals high in affiliativeness, and therefore higher in assertiveness, would likely make use of

problem-focused support seeking as a way of taking charge of the problem and looking for solutions.

Coping Skills and Parental Meta-Emotion

A significant negative correlation was found between emotion-coaching parenting and the use of distraction coping skills in middle school students therefore supporting the hypotheses stated above. As Dusek and Danko (1994) noted, parenting behaviors may influence adolescent coping skills by encouraging or discouraging the use of certain coping strategies. These researchers also noted that parental rearing practices impact on whether or not a child feels competent in dealing with problems. Therefore, given the fact that parents who employ an emotion-coaching parenting style are more likely to help their child label their emotions and engage in problem-solving it would make sense that these children would be less likely to utilize strategies that would distract them from the current stressor since this is not what has been modeled for them. Children of emotion-coaching parents have been found to be skillful in their use of problem-solving skills (Gottman, et al., 1997), since these skills have been taught and modeled; therefore they are likely to feel more competent in their ability to deal with problems head-on.

Emotion Coaching and Emotion Dismissing Parenting

A significant positive correlation was found between emotion-coaching and emotion-dismissing parenting. This finding was interesting especially given the fact that previous studies have not produced similar findings. Previous studies using the Parental Emotional Styles Questionnaire (e.g., Lagacé-Séguin & Coplan, 2005) have only administered this measure to parents of preschool children whereas the current study focused on the parents of middle school children. It is possible, that this may have

contributed to the significant correlation. Parents of middle school children may bring a different perspective to this questionnaire given that they are dealing with different types of situations as compared to parents of preschool children. Also, as with any research utilizing a categorical approach to describing participants, consideration must be given to the fact that no individual will fit perfectly into one category or the other. In other words, no parent will display only emotion-coaching or emotion dismissing behavior all the time and in every situation. Although a parent will likely be higher in one area there will inevitably be some overlap.

Parental Meta-Emotion, Temperament, and Coping Skills

Significant interactions were found between emotion-coaching parenting and each of the four dimensions of temperament in relation to distraction coping strategies. Follow-up analyses were conducted for each of these significant interactions to further explore the interactive effects. In the examination of each of the first four interactions it is important to keep in mind that differing levels of parental meta-emotion could be at play and therefore influencing the individual's responses to stress. Secondly, as Compas (1998) pointed out "the efficacy of coping responses depend on the nature of the response and the context in which it is used" (pp. 234).

A significant interaction was found between emotion-coaching and negative affectivity in the prediction of distraction coping strategies. Specifically, a significant positive relationship was found between emotion coaching parenting and distraction coping strategies for children lower in negative affect. Therefore, these findings do not support the abovementioned hypothesis. Perhaps individuals who are low in negative affect are less likely to become easily frustrated by their problems and therefore more

able to use distraction strategies when appropriate. Since they are able to control their levels of frustration they may be better able to shift their attention to something else. These individuals may have learned from their parents modeling what types of situations are controllable and which are not. For example, Compas (1998) notes that the actual or perceived controllability of the situation is important in the type of coping skill that is utilized. In other words, if the individual is in a situation that does not have a controllable solution it may be more beneficial to utilize a distraction coping strategy.

This may also be the case in the second significant interaction where it was found that emotion coaching parenting was significantly and positively related to distraction coping for children high in surgency. However, this second interaction was somewhat surprising when considering the definitions used in describing the construct of surgency. According to Ellis and Rothbart (2001), individuals high in surgency derive pleasure from activities involving high intensity or novelty and have low levels of shyness (behavioral inhibition to novelty and challenging social situations) and fear (unpleasant affect related to the anticipation of distress). Intuitively, it would seem that these children would have been unlikely to use distraction strategies and more likely to deal with problems in a direct manner as was stated in the above hypothesis. Perhaps these individuals show higher levels of distraction coping strategies when their parents are emotion-coachers simply because they do not want to sit and discuss the problem and possible solutions as an emotion-coaching parent would be likely to want to do. These students may use distraction strategies to remove themselves from this process as they would rather be the center of attention and return to social situations and other high intensity and novel tasks.

A third significant interaction was found between emotion-coaching parenting and effortful control in the prediction of distraction coping skills. Follow-up analyses revealed that there was a negative relationship between emotion coaching parenting and distraction coping for children low in effortful control which supports the previously stated hypothesis. Perhaps, since emotion-coaching parents may model problem-solving skills so efficiently, these children tend to face problems head on and try to use other coping strategies even when an event is uncontrollable. They may have learned from their emotion-coaching parents that distracting oneself from the problem is not beneficial. A second explanation could also be considered. Compas, et al (2004) suggested that individuals who are high in effortful control may be more capable of complex cognitive coping strategies such as shifting their attention away from the situation. Intuitively, it would seem that those low in effortful control would therefore find shifting their attention difficult.

A fourth significant interaction was found between emotion-coaching parenting and affiliativeness in the prediction of distraction coping. Upon teasing apart the interaction it was determined that a negative correlation existed between emotion coaching parenting and distraction coping strategies for children high in affiliativeness which again supports the hypothesis noted above. This finding appears logical considering that individuals who are high in affiliativeness have a desire to be close with others and also tend to have high levels of assertiveness therefore resulting in a need to ask others for both emotional and problem focused support. Children high in affiliativeness would be well-suited to emotion-coaching parenting since these parents would often label and validate how a child is feeling and then engage the child in

problem-solving conversations. Therefore these children have been taught that seeking both emotional and problem focused support from others is a constructive approach to dealing with problems.

Two more significant interactions were found in the prediction of support seeking coping skills. First, interactions were discovered between emotion coaching and emotion dismissing (separately) and affiliation in the prediction of supportive coping. Follow-up analyses revealed that the two parenting styles were negatively related to support seeking coping for children higher in affiliation which does not support the abovementioned hypotheses. A number of different explanations could be used to explain these seemingly contradictory findings. First, in a paper by Losoya, et al (1998) it was explained that many studies have found age changes in support-seeking coping skills. It was found that as children got older they utilized these coping skills less and less. This could explain these findings given the ages of the students included in this study. Secondly, when the items measuring affiliativeness in the Early Adolescent Temperament Questionnaire are examined, it could be possible that students who score high on this dimension do so because they are nurturing towards others, enjoying making others feel good, or feel making a good impression on others is important. Other than one question (i.e., "I want to be able to share my private thoughts with someone else") the items in this scale do not necessarily tap into whether or not the individual leans on others for emotional or problem focused support.

Also, looking at these results in tandem, one could speculate that there are other emotional parenting styles at play that could be influencing these findings. For example, Gottman and DeClaire (1997) discuss another style of parental meta-emotion referred to

as disapproving. Disapproving parents tend to reprimand or punish their children for their emotional expressions regardless of whether or not there actions are inappropriate (Gottman & DeClaire, 1997). Gottman and DeClaire (1997) go on to explain that children of disapproving parents tend to have difficulty regulating their emotions and grow up learning that their emotions are inappropriate or not valid. Since children high in affiliativeness desire to be close with others, they likely would not make use of support-seeking strategies if their parents are disapproving of their emotions since asking for help or talking about emotions could be ridiculed or punished. These children may feel that in order to be close to their parent they need to ignore their feelings and problems rather than try to cope with them.

Caveats, Future Directions, and Implications

Coping research, especially within the area of adolescent coping skills, has been steadily increasing over the last decade. However, past studies have not examined how parental meta-emotion and adolescent temperament interact together in the development of coping skills in an adolescent population. This study has contributed to this area of research by helping to elucidate some of the factors that influence the type of coping skills adolescents develop. The findings from this study have not only contributed to empirical research but also have practical implications as well. For many children, programs that explicitly teach specific coping strategies may be necessary and the current research lends itself well to better understanding how a child's temperament may influence the type of coping strategies a student may gravitate towards. Also, as Compas (1998) suggests, individual temperament may limit how well a student is able to utilize certain coping strategies. Therefore, practitioners would be well advised to take an

individual's temperament into consideration when planning programs and interventions. Secondly, having a better understanding of how parenting behaviors influence coping skills in adolescents can be used in the development of more complete parenting programs. To date, pre-packaged parenting programs do not directly include aspects of parental meta-emotion research. The current study provided more evidence as to why future programs should contain a component that addresses this significant area of parenting. By better understanding how parental meta-emotion influences coping skills, especially in relation to each child's individual temperament, more complete parenting programs could be developed. Since many children's issues relate back to how well they are able to cope with problematic situations and the emotions that accompany these incidents, research and programming within this field is extremely important. Interventions that help adolescents increase their use of effective coping skills will have a significant impact on the prevention and treatment of psychopathology (Compas, 1998).

There are however, several caveats that should be discussed. First, this was the first study to use the Parental Emotional Styles Questionnaire with parents of an adolescent population. Therefore, future research utilizing this scale with older populations is needed to further examine the influence of parental meta-emotion on adolescent development. Also, as with past research utilizing the PESQ, very few responses from fathers were obtained. In the current study only two of the respondents were fathers therefore it is still unknown what, if any, difference there is on the impact of fathers' parental emotional styles versus mothers'. As well, only one parent of each child completed the PESQ, therefore, one might wonder what would occur if both parents completed the PESQ. It could be interesting for future studies to examine how each

parent's meta-emotional style influences coping behaviors. For example, how would an adolescent's coping strategies be influenced if one parent was more of an emotion-coacher and one parent displayed more emotion-dismissing behaviors?

Another limitation of the current study was the reliance on self-report measures to examine coping skills. As Compas et al (2001) noted, self-report measures can be limited by the respondents' readiness to endorse items they do not believe to be socially desirable or "correct" and items describing coping strategies that they may have tried but that did not work for them. These researchers emphasized the importance of utilizing observational techniques and reports from multiple informants coupled with self-report measures in gaining a more complete and detailed report of coping strategies. This may be an interesting approach for future researchers and could help to further fill in some of the gaps within the literature.

In addition, researchers using the Children's Coping Strategies Checklist must ask students to think about how they have dealt with problems they have had in the past month rather than asking them to report on how they responded to a specific stressor. It would be beneficial for future research to include a measure in which students would describe how they responded to a particular stressor. Within this type of study, it may also be interesting to examine the types of coping strategies children used in a similar stressful situation (e.g., divorce of parents) and how parental meta-emotion and temperament influenced which coping strategies were used. This type of research could be very useful in the development of practical therapeutic programs dealing with specific stressful life events.

This research study has revealed several significant findings regarding how parental meta-emotion and temperament influence the development of coping skills in middle school students and contributes to the empirical literature in the field of coping research. As was mentioned above, the conceptualization of how children and adolescents coped with challenging situations has been largely based on models of coping in adults (Compas, Connor-Smith, Saltzman, Harding Thomsen, & Wadsworth, 2001). This research has contributed to the developmental, personality, and contextual factors that have implications in adolescent coping behaviors and ultimately school psychology.

References

Ayers, T.S., Sandler, I.N., & Twohey, J. L. (1998). Conceptualization and measurement of coping in children and adolescents. In T. H. Ollendick & R. J. Prinz (Eds.), *Advances in Clinical Child Psychology* (Vol. 20, pp. 243-301). New York: Plenum Press.

Ayers, T.S., Sandler, I.N., West, S.G., & Roosa, M.W. (1996). A dispositional and situational assessment of children's coping: Testing alternative models of coping. *Journal of Personality, 64*(4), 925-958.

Barsow, S.A., & Rubenfeld, K. (2003). "Troubles talk": Effects of gender and gender typing. *Sex Roles: A Journal of Research, 48* (3&4), 183-187.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behaviour. *Genetic Psychology Monographs, 75*, 43-48.

Baumrind, D., (1971). Current patterns of parental authority. *Developmental Psychology Monographs, 4* (no.1, pt.2).

Capaldi, D.M., & Rothbart, M.K. (1992). Development and validation of an early adolescent temperament measure. *Journal of Early Adolescence, 12*(2), 153-173.

Compas, B.E. (1998). An agenda for coping research and theory: Basic and applied developmental issues. *International Journal of Behavioral Development, 22*(2), 231-237.

Compas, B.E., Connor-Smith, J.K., & Jaser, S.S. (2004). Temperament, stress reactivity, and coping: Implications for depression in childhood and adolescence. *Journal of Clinical Child and Adolescent Psychology, 33*(1), 21-31.

Compas, B.E., Connor-Smith, J.K., Saltzman, H., Harding Thomsen, A., & Wadsworth,

M.E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127*(1), 87-127.

Connor-Smith, J.K., Compas, B.E.,Wadsworth, M.E., Harding Thomsen, A., & Saltzman, H. (2001). Responses to stress in adolescence: Measurement of coping and involuntary stress responses. *Journal of Consulting and Clinical Psychology, 68*(6), 976-992.

D'Imperio, R.L., Dubow, E., & Ippolito, M. F. (2000). Resilient and stress-affected adolescents in an urban setting. *Journal of Child Psychology, 29*(1), 129-148.

Dix, T. (1992). Parenting on behalf of the child: Empathic goals in the regulation of responsive parenting. In I.Sigel, A. McGillicuddy-DeLisi, & J. Goodnow, (Eds.), *Parental belief systems: The psychological consequences for children* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Donaldson, D., Prinstein, M.J., Danovsky, M., & Spirito, A. (2000). Patterns of children's coping with life stress: Implications for clinicians. *American Journal of Orthopsychiatry, 70*(3), 351-359.

Dusek, J.B., & Danko, M. (1994). Adolescent coping styles and perceptions of parental child rearing. *Journal of Adolescent Research, 9*(4), 412-426.

Ebata, A.T., & Moos, R. H. (1994). Personal, situational, and contextual correlates of coping in adolescence. *Journal of Research on Adolescence, 4*(1), 99-125,

Eisenberg, N., Fabes, R.A., Guthrie, I.K., Murphy, B.C., Maszk, P., Homgren, R., & Suh, K. (1996). The relations of regulation and emotionality to problem behavior in elementary school children. *Development and Psychopathology, 8,* 141-162.

Eisenberg, N., Fabes, R.A., & Murphy, B.C. (1996). Parent's reactions to children's negative emotions: Relations to children's social competence and comforting behavior. *Child Development, 67,* 2227-2247.

Eisenberg, N., Valiente, C., Sheffield Morris, A., Fabes, R. A., Cumberland, A., Reiser, M., Thompson Gershoff, E., Shepard, S. A., & Losoya, S. (2003). Longitudinal relations among parental emotional expressivity, children's regulation, and quality of socioemotional functioning. *Developmental Psychology, 39*(1), 3-19.

Ellis, L.K., & Rothbart, M.K. (2001). Revision of the Early Adolescent Temperament Questionnaire. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Minneapolis, Minnesota.

Frydenberg, E., & Lewis, R. (2004). Adolescents least able to cope: How do they respond to their stresses? *British Journal of Guidance and Counselling, 32*(1), 25-37.

Ginott, H. (1965). *Between parent and child.* New York: Avon Books.

Ginott, H. (1971). *Between parent and teenager.* New York: Avon Books.

Ginott, H. (1975). *Teacher and child.* New York: Avon Books.

Goleman, D. (1995). *Emotional Intelligence.* New York: Bantam.

Gottman, J., & Declaire, J. (1997). *Raising and emotionally intelligent child: The heart of parenting.* New York: Fireside.

Gottman, J., Fainsilber-Katz, L., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology, 10*(3), 243-268.

Gottman, J., Fainsilber-Katz, L., & Hooven, C. (1997). *Meta-emotion: How families*

communicate. New Jersey: Lawrence Erlbaum.

Hastings, P. (1995). *The nature and functions of parents goals during parent-child conflict.* Poster session presented at the 1995 SRCD Conference, Indianapolis.

Kagen, J., Reznick, S., & Snidman, N. (1987). The physiology and psychology of behavioral inhibition in children. *Child Development, 58*, 1459-1473.

Katz, L.F., Wilson, B., & Gottman, J. M. (1999). Meta-emotion philosophy and family adjustment: Making an emotional connection. In M.J. Cox, & J. Brooks-Gunn (Eds.), *Conflict and cohesion in families: Causes and consequences* (pp.131-165). Mahwah, NJ: Lawrence Erlbaum.

Lagacé-Séguin, D.G., & Coplan, R. (2005). Maternal Emotional Styles and Child Social Adjustment: Assessment, Correlates, Outcomes and Goodness of Fit in Early Childhood. *Social Development, 14* (4), 613-636.

Lee, C.L., & Bates, J.E. (1985). Mother-child interaction at age two years and perceived difficult temperament. *Child Development, 56*(5), 1314-1325.

Lewis, R., & Frydenberg, E. (2002). Concomitants of failure to cope: What we should teach adolescents about coping. *British Journal of Educational Psychology, 72*, 419-431.

Losoya, S., Eisenberg, N., & Fabes, R.A. (1998). Developmental issues in the study of coping. *International Journal of Behavioral Development, 22*(2), 287-313.

Miyake, K., Chen, S.-J., & Campos, J.J. (1985). Infant temperament, mother's mode of interaction, and attachment in Japan: An interim report. *Monographs of the Society for Research in Child Development, 50*(1/2), 276-297.

Patterson, G.R. (1986). Performance models for antisocial boys. *American Psychologist,*

41, 432-444.

Program for Prevention Research (1999). *Manual for the Children's Coping Strategies Checklist and the How I Coped Under Pressure Scale.* Arizona: Arizona State University.

Putnam, S.P., Ellis, L.K., & Rothbart, M.K. (2001). The structure of temperament from infancy through adolescence. In A.Eliasz & A. Angleitner (Eds.), *Advances in Research on Temperament* (pp. 165-182). Eichengrund: Pabst Science Publishers.

Rothbart, M.K., & Derryberry, D. (1981). Development of individual differences in temperament. In M.E. Lamb & A.L. Brown (Eds.), *Advances in developmental psychology* (Vol.1, pp. 37-86). Hillsdale, NJ: Erlbaum.

Rothbart, M.K., Ellis, L.K., & Posner, M.I. (2004). Temperament and self-regulation. In R.F. Baumeister & K.D. Vohs (Eds.), *Handbook of self-regulation: research, theory, and applications* (pp.357-370). New York: Guilford Press.

Rothbart, M.K., & Hwang, J. (2005). Temperament and the development of competence and motivation. In A.J. Elliot & C.S. Dweck (Eds.), *Handbook of competence & motivation* (pp. 167-184). New York: Guilford Press.

Ruchkin, V.V., Eisemann, M., & Hägglöf, B. (1999). Coping styles in delinquent adolescents and controls: The role of personality and parental rearing. *Journal of Youth and Adolescence, 28*(6), 705-717.

Thomas, A., & Chess, S. (1977). *Temperament and development.* New York: Brunner/Mazel.

Thomas, A., Chess, S., & Birch, H. G., (1968). *Temperament and behavior disorders in children.* New York: New York University Press.

Wyman, P.A., Cowen, E.L., Work, W.C., & Parker, G.R. (1991). Developmental and family milieu correlates of resilience in urban children who have experienced major life stress. *American Journal of Community Psychology, 19*(3), 405-426.

Appendix A

Letter to Schools

The Association between Parental Meta-Emotion, Child Temperament and the Development of Coping Skills in Middle School Children

Dear Principal and Teacher,

In partial fulfillment of my graduate degree in School Psychology, at Mount Saint Vincent University, I am conducting research under the supervision of Dr. Daniel Lagacé-Séguin, and I am inviting you to participate in my study. I am examining coping skills in middle school students and the influence of internal and external variables on these skills.

If you should decide to participate, teachers will be asked to provide time for me to come into the classroom to briefly discuss this study and recruit participants. During these short visits (10-15 minutes) to individual classrooms, students will be given a brief description of the study and any interested students will be given a written description of the study along with a consent form and questionnaire package to take home to their parents. Students who have parental consent would then be asked to complete two short questionnaires, which would take approximately 30 minutes and will be administered by me in a group format. These questionnaires would be completed during noon hours so as not to take away from classroom time. Also, classroom teachers would be asked to collect the consent form and questionnaire packages that are returned by your students' parents. Your participation in this study would be greatly appreciated and, if interested, you will be provided with a summary of the results of this study at its completion. Research on the coping skills of our youth is extremely important in helping us find ways to better understand the development of these skills and creating new methods for strengthening our students' abilities to effectively cope with difficult situations.

Your participation in this study is completely voluntary and you may withdraw at any time without penalty. Also, a*ll information collected for this study is completely confidential*. Study results will be reported in ways to ensure complete confidentiality of all participants. Also, we will not be analyzing the data on any one individual; instead we are focusing on average responses from all participants.

If you have any questions about this study, please contact Angela Gionet by phone at [redacted], or by e-mail at [redacted], or Dr. Daniel Lagacé-Séguin by phone at (902) 457-6460, or by e-mail at daniel.lagace-seguin@msvu.ca. This research activity has met the ethical standards of the University Research Ethics Board at Mount Saint Vincent University and also has the approval of the Director of Education and Superintendent of School District 6. If you have any questions or concerns about this

study and wish to speak with someone who is not directly involved with this study, you may contact the University Research Ethics Board, by phone at 902-457-6350 or by e-mail at research@msvu.ca. If you would like a summary of the results of this study please provide the necessary information at the bottom of this letter.

Thank you for your consideration.

Sincerely,

Angela Gionet

Please check one:

_____ I do not require a summary of the results

_____ I would like a summary of the results at the end of the study

Name:_____

Email address: _____

Or

Mailing address: _____

Appendix B

Letter to Parents

Dear Parents:

One of the most important sets of skills we can teach our children is learning healthy strategies for coping with difficult and stressful situations. For some children, these skills appear to develop quite naturally while for others these skills may need to be directly taught. Currently, researchers at Mount Saint Vincent University are conducting a research project to gain more information regarding what factors influence the development of coping skills. It is hoped that this information will assist future researchers in finding practical ways to ensure our children gain these important skills. The purpose of this letter is to ask if you would be interested in participating in this study.

If you should decide to participate, you would be asked to complete the attached questionnaires, which would take approximately 5-10 minutes. One questionnaire asks you to complete general questions regarding marital status and occupation and the other questionnaire asks you to rate the extent you agree or disagree with statements regarding certain emotions and behaviors in relation to parenting styles. Also, your written permission would be required to allow your child to complete questionnaires within the school setting during the noon hour. These questionnaires would ask your child to rate the extent certain statements best describe their personality and the coping skills they generally use in stressful situations. If you would like to participate, please complete the attached consent form and questionnaires and return to your child's teacher in the provided envelope care of Angela Gionet. Please return this envelope by (date). *Remember, there are no right or wrong answers; we are only looking for your honest opinions. Also, please be assured that your individual responses will be kept confidential and that all information will be destroyed at the completion of this project.*

This research project has been approved by the University Review Ethics Board at Mount Saint Vincent University as well as by the Director of Education and Superintendent of School District 6. All information collected for this study is completely confidential. Questionnaires will be reviewed by only the researchers named at the end of this letter and will be used only for data analysis. Study results will be reported in ways to ensure complete confidentiality of all participants. Also, we will not be analyzing the data on any one parent's or child's ratings. Instead, we are focusing on average responses of all participants. Should you be interested in receiving a summary of the results please complete the contact information on the following page.

Participation in this study is completely voluntary and you may choose to withdraw at any time. Please be assured that choosing not to participate will not affect your child academically or in any other way. Your cooperation in this study would be greatly appreciated. To thank you for your participation in this study, each participating family's name will be entered into a draw to win a $50.00 gift certificate to McAllister Place Mall. If you have any questions, please feel free to contact Angela Gionet ([redacted]) or Dr. Daniel Lagacé-Séguin (902-457-6460 If you have any questions or concerns about this study and wish to speak with someone who is not directly involved with this study, you may contact the University Research Ethics Board, by phone at 902-457-6350 or by e-mail at research@msvu.ca. Again, if you would like a summary of the results of this study please provide the necessary information at the bottom of this letter.

If you would like to participate in this study please fill out the attached form and return it to your child's classroom teacher.

Thank you for your assistance.

Sincerely,

_____	_____
Angela Gionet, B.A., M.A. (Candidate)	Daniel Lagacé-Séguin, Ph.D.

Appendix C

Consent Form

I have read and understood the request for my participation in this study regarding coping skills in middle school children. I have been given an opportunity to ask questions about mine and my child's participation in this study and my questions have been answered to my satisfaction. I understand that my participation in the study would include completing questionnaires regarding demographic information and emotions and behaviors relating to parenting styles which will take approximately 5-10 minutes to complete. I also understand that my child will be asked to complete questionnaires during the noon hour relating to personality and coping strategies. I understand that these questionnaires will require approximately 30-40 minutes of my child's time and may be conducted over one or two noon hour sessions. I understand that all information provided by myself or by my child will be kept strictly confidential. I understand that my child and/or myself are free to withdraw from this study at any time without penalty. I also understand that choosing not to participate will not affect my child academically or in any other way. By signing this consent form, I am agreeing to voluntarily participate in this study and to allowing my child to complete questionnaires within the school setting. I understand that my child is also required to sign this consent form in order for him/her to participate.

If you have any questions, please feel free to contact Angela Gionet ([redacted]) or Dr. Daniel Lagacé-Séguin (902-457-6460). If you have any questions or concerns about this study and wish to speak with someone who is not directly involved with this study, you may contact the University Research Ethics Board, by phone at 902-457-6350 or by e-mail at research@msvu.ca.

Parent/Legal Guardian

Date: _____

Name: _____

Signature: _____

Child

Date: _____

Name: _____

Signature: _____

Please check one:

_____ I do not require a summary of the results
_____ I would like a summary of the results at the end of the study

Name:_____

Email address or mailing address: _____

Appendix D

Parental Demographic Questionnaire

ID Number: _____

Occupation: _____

Marital Status:

Single	_____
Married	_____
Common Law	_____
Divorced	_____
Separated	_____
Widowed	_____
Other	_____

Education:

Elementary School	_____
Junior High School	_____
High School	_____
College	_____
University	_____
Graduate School	_____
Other	_____

Number of children and ages of children:

Appendix E

Parental Emotional Styles Questionnaire

ID Number: _____

On this page you will see statements that describe feelings in yourself and your child. We would like to know your opinions about each of these statements. For each statement please describe to what extent you agree or disagree and circle your choice. Please remember that there are no right or wrong answers. Please use the following scale to indicate the extent to which you agree with the statements.

1 = Strongly Disagree **2** = Disagree **3** = Neutral **4** = Agree **5** = Strongly Agree

1.When my child is sad, it's time to problem solve.	1	2	3	4	5
2. Anger is an emotion worth exploring.	1	2	3	4	5
3. When my child is sad I am expected to fix the world and make it perfect.	1	2	3	4	5
4. When my child gets sad, it's a time to get close.	1	2	3	4	5
5. Sadness is something that one has to get over, to ride out, not to dwell on.	1	2	3	4	5
6. I prefer my child to be happy rather than overly emotional.	1	2	3	4	5
7. I help my child get over sadness quickly so he/she can move onto other things.	1	2	3	4	5
8. When my child is angry, it's an opportunity for getting close.	1	2	3	4	5
9. When my child is angry, I take some time to try to experience this feeling with him/her.	1	2	3	4	5
10. I try to change my child's angry moods into cheerful ones.	1	2	3	4	5
11. Childhood is a happy-go-lucky time, not a time for feeling sad or angry	1	2	3	4	5

1 = Strongly Disagree	**2** = Disagree	**3** = Neutral	**4** = Agree	**5** = Strongly Agree
12. When my child gets angry my goal is to get him/her to stop.	1	2	3	4	5
13. When my child is angry I want to know what he/she is thinking.	1	2	3	4	5
14. When my child is angry, it's time to solve a problem.	1	2	3	4	5

Appendix F

Student's Demographic Questionnaire

ID Number: _____

Grade: _____

Age: _____

Date of Birth: _____

Appendix G

Children's Coping Strategies Checklist

ID Number: _____

Sometimes kids have problems or feel upset about things. When this happens, they may do different things to solve the problem or to make themselves feel better. For each item below, choose the answer that BEST describes how often you usually did this to solve your problems or make yourself feel better during the past month. There are no right or wrong answers, just indicate how often YOU USUALLY did each thing in order to solve your problems or make yourself feel better during the past month.

1 = Never **2** = Sometimes **3** = Often **4** = Most of the time

When you had problems in the past month,				
1. You thought about what you could do before you did something.	1	2	3	4
2. You tried to notice or think about only the good things in your life.	1	2	3	4
3. You tried to ignore it.	1	2	3	4
4. You told people how you felt about the problem.	1	2	3	4
5. You tried to stay away from the problem.	1	2	3	4
6. You did something to make things better.	1	2	3	4
7. You talked to someone who could help you figure out what to do.	1	2	3	4
8. You told yourself that things would get better.	1	2	3	4
9. You listened to music	1	2	3	4
10. You reminded yourself that you are better off than a lot of other kids.	1	2	3	4
When you had problems in the past month,				
11. You daydreamed that everything was ok.	1	2	3	4

12. You went bicycle riding.	1	2	3	4
13. You talked about your feelings to someone who really understood.	1	2	3	4
14. You told other people what you wanted them to do.	1	2	3	4
15. You tried to put it out of your mind.	1	2	3	4
16. You thought about what would happen before you decided what to do.	1	2	3	4
17. You told yourself that it would be ok.	1	2	3	4
18. You told other people what made you feel the way you did.	1	2	3	4
When you had problems in the past month,				
19. You told yourself that you could handle this problem.	1	2	3	4
20. You went for a walk.	1	2	3	4
21. You tried to stay away from things that made you feel upset.	1	2	3	4
22. You told others how you would like to solve the problem.	1	2	3	4
When you had problems in the past month,				
23. You tried to make things better by changing what you did.	1	2	3	4
24. You told yourself you have taken care of things like this before.	1	2	3	4
25. You played sports.	1	2	3	4
26. You thought about why it happened.	1	2	3	4
27. You didn't think about it.	1	2	3	4
28. You let other people know how you felt.	1	2	3	4

29. You told yourself you could handle what ever happens.	1	2	3	4
30. You told other people what you would like to happen.	1	2	3	4
31. You told yourself that in the long run, things would work out of the best.	1	2	3	4
32. You read a book or magazine.	1	2	3	4
When you had problems in the past month,				
33. You imagined how you'd like things to be.	1	2	3	4
34. You reminded yourself that you knew what to do.	1	2	3	4
35. You thought about which things are best to do to handle the problem.	1	2	3	4
36. You just forgot about it.	1	2	3	4
37. You told yourself that it would work itself out.	1	2	3	4
When you had problems in the past month,				
38. You talked to someone who could help you solve the problem.	1	2	3	4
39. You went skateboarding or roller skating.	1	2	3	4
40. You avoided the people who made you feel bad.	1	2	3	4
41. You reminded yourself that overall things are pretty good for you.	1	2	3	4
42. You did something like video games or a hobby.	1	2	3	4

43. You did something to solve the problem.	1	2	3	4
When you had problems in the last month,				
44. You tried to understand it better by thinking more about it.	1	2	3	4
45. You reminded yourself about all the things you have going for you.	1	2	3	4
46. You wished that bad things wouldn't happen.	1	2	3	4
47. You thought about what you needed to know so you could solve the problem.	1	2	3	4
When you had problems in the last month,				
48. You avoided it by going to your room.	1	2	3	4
49. You did something in order to get the most you could out of the situation.	1	2	3	4
50. You thought about what you could learn from the problem.	1	2	3	4
51. You wished that things were better.	1	2	3	4
52. You watched TV.	1	2	3	4
53. You did some exercise.	1	2	3	4
54. You tried to figure out why things like this happen.	1	2	3	4

Appendix H

Early Adolescent Temperament Questionnaire – Revised, Short Form

ID Number:_____

On the following page you will find a series of statements that people might use describe themselves. The statements refer to a wide number of activities and attitudes.

For each statement, please circle the answer that best describes how true each statement is **for you.** There are no best answers. People are very different in how they feel about these statements. Please circle the first answer that comes to you.

You will use the following scale to describe how true or false a statement is about you:

Circle number:	**If the statement is:**
1	Almost always untrue of you
2	Usually untrue of you
3	Sometimes true, sometimes untrue of you
4	Usually true of you
5	Almost always true of you

NOTE: Please make certain to answer all questions on BOTH SIDES of the page.

How true is each statement for you?	Almost always untrue	Usually untrue	Sometimes true, sometimes untrue	Usually true	Almost always true
1. It is easy for me to really concentrate on homework problems.	1	2	3	4	5
2. I feel pretty happy most of the day.	1	2	3	4	5
3. I think it would be exciting to move to a new city.	1	2	3	4	5
4. I like to feel a warm breeze blowing on my face.	1	2	3	4	5
5. If I'm mad at somebody, I tend to say things that I know will hurt their feelings.	1	2	3	4	5
6. I notice even little changes taking place around me, like lights getting brighter in a room.	1	2	3	4	5
7. I have a hard time finishing things on time.	1	2	3	4	5
8. I feel shy with kids of the opposite sex.	1	2	3	4	5
9. When I am angry, I throw or break things.	1	2	3	4	5
10. It's hard for me not to open presents before I am supposed to.	1	2	3	4	5
11. My friends seem to enjoy themselves more than I do.	1	2	3	4	5
12. I tend to notice little changes that other people do not notice.	1	2	3	4	5
13. If I get really mad at someone, I might hit them.	1	2	3	4	5
14. When someone tells me to stop doing something, it is easy for me to stop.	1	2	3	4	5
15. I feel shy about meeting new people.	1	2	3	4	5
16. I enjoy listening to the birds sing.	1	2	3	4	5
17. I want to be able to share my private thoughts with someone else.	1	2	3	4	5
18. I do something fun for awhile before starting my homework, even when I'm not supposed to.	1	2	3	4	5
19. I wouldn't like living in a really big city, even if it was safe.	1	2	3	4	5
20. It often takes very little to make me feel like crying.	1	2	3	4	5
21. I am very aware of noises.	1	2	3	4	5
22. I tend to be rude to people I don't like.	1	2	3	4	5

How true is each statement for you?	Almost always untrue	Usually untrue	Sometimes true, sometimes untrue	Usually true	Almost always true
23. I like to look at the pattern of clouds in the sky.	1	2	3	4	5
24. I can tell if another person is angry by their expression.	1	2	3	4	5
25. It bothers me when I try to make a phone call and the line is busy.	1	2	3	4	5
26. The more I try to stop myself from doing something I shouldn't, the more likely I am to do it.	1	2	3	4	5
27. I enjoy exchanging hugs with people I like.	1	2	3	4	5
28. Skiing fast down a steep slope sounds scary to me.	1	2	3	4	5
29. I get sad more than other people realize.	1	2	3	4	5
30. If I have a hard assignment to do, I get started right away.	1	2	3	4	5
31. I will do most anything to help someone I care about.	1	2	3	4	5
32. I get frightened driving with a person who likes to speed.	1	2	3	4	5
33. I like to look at trees and walk amongst them.	1	2	3	4	5
34. I find it hard to shift gears when I go from one class to another at school.	1	2	3	4	5
35. I worry about my family when I'm not with them.	1	2	3	4	5
36. I get very upset if I want to do something and my parents won't let me.	1	2	3	4	5
37. I get sad when a lot of things are going wrong.	1	2	3	4	5
38. When trying to study, I have difficulty tuning out background noise and concentrating.	1	2	3	4	5
39. I finish my homework before the due date.	1	2	3	4	5
40. I worry about getting into trouble.	1	2	3	4	5
41. I am good at keeping track of several different things that are happening around me.	1	2	3	4	5
42. I would not be afraid to try a risky sport, like deep-sea diving.	1	2	3	4	5
43. It's easy for me to keep a secret.	1	2	3	4	5
44. It is important to me to have close relationships with other people.	1	2	3	4	5

How true is each statement for you?	Almost always untrue	Usually untrue	Sometimes true, sometimes untrue	Usually true	Almost always true
45. I am shy.	1	2	3	4	5
46. I am nervous of some of the kids at school who push people into lockers and throw your books around.	1	2	3	4	5
47. I get irritated when I have to stop doing something that I am enjoying.	1	2	3	4	5
48. I wouldn't be afraid to try something like mountain climbing.	1	2	3	4	5
49. I put off working on projects until right before they are due.	1	2	3	4	5
50. When I'm really mad at a friend, I tend to explode at them.	1	2	3	4	5
51. I worry about my parent(s) dying or leaving me.	1	2	3	4	5
52. I enjoy going places where there are big crowds and lots of excitement.	1	2	3	4	5
53. I am not shy.	1	2	3	4	5
54. I am quite a warm and friendly person.	1	2	3	4	5
55. I feel sad even when I should be enjoying myself, like at Christmas or on a trip.	1	2	3	4	5
56. It really annoys me to wait in long lines.	1	2	3	4	5
57. I feel scared when I enter a darkened room at home.	1	2	3	4	5
58. I pick on people for no real reason.	1	2	3	4	5
59. I pay close attention when someone tells me how to do something.	1	2	3	4	5
60. I get very frustrated when I make a mistake in my school work.	1	2	3	4	5
61. I tend to get in the middle of one thing, then go off and do something else.	1	2	3	4	5
62. It frustrates me if people interrupt me when I'm talking.	1	2	3	4	5
63. I can stick with my plans and goals.	1	2	3	4	5
64. I get upset if I'm not able to do a task really well.	1	2	3	4	5
65. I like the crunching sound of autumn leaves.	1	2	3	4	5