Theses and Dissertations (All)

7-24-2015

Examining the Links Between Parental Meta-Emotion Philosophy and Mother-Adolescent Relationships as Assessed by the Structural Analysis of Social Behavior (SASB)

Yu Ding
Indiana University of Pennsylvania

Follow this and additional works at: http://knowledge.library.iup.edu/etd

EXAMINING THE LINKS BETWEEN PARENTAL META-EMOTION PHILOSOPHY AND

MOTHER-ADOLESCENT RELATIONSHIPS AS ASSESSED BY THE STRUCTURAL

ANALYSIS OF SOCIAL BEHAVIOR (SASB)

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Psychology

Yu Ding

Indiana University of Pennsylvania

August 2015

Indiana University of Pennsylvania
School of Graduate Studies and Research
Department of Psychology

We hereby approve the dissertation of

Yu Ding

Candidate for the degree of Doctor of Psychology

_____   _____
                                                    John A. Mills, Ph.D., ABPP
                                                    Professor of Psychology, Advisor

_____   _____
                                                    Dasen Luo, Ph.D.
                                                    Professor of Psychology

_____   _____
                                                    David LaPorte, Ph.D.
                                                    Professor of Psychology

ACCEPTED

_____   _____
Randy L. Martin, Ph.D.
Dean
School of Graduate Studies and Research

Title: Examining the Links Between Parental Meta-Emotion Philosophy and Mother-Adolescent Relationships as Assessed by the Structural Analysis of Social Behavior (SASB)

Author: Yu Ding

Dissertation Chair: Dr. John A. Mills

Dissertation Committee Members: Dr. Dasen Luo
                                 Dr. David LaPorte

The present study examines the links between parental meta-emotion philosophy and mother-adolescent relationships, as well as young adult intrapsychic relations. One hundred twenty two pairs of mother and young adult participated in the study. Mothers completed the Structural Analysis of Social Behavior (SASB) based on their behavior towards their child when he or she was 13 to 17 years old and an Emotion-Related Parenting Style questionnaire. Young adults completed the SASB based on their perception of their reactions to their mother when they were aged 13 to 17, and a SASB introject questionnaire at their current age. Mothers' emotion coaching style showed significant positive correlations with reciprocal affiliation in mother-adolescent relationships and young adult intrapsychic affiliation. Mothers' rejection of negative emotion style was positively correlated with reciprocal hostility in mother-adolescent relationships. Mothers' rejection of negative emotion style showed positive correlation with young adults' self-autonomy, and negative correlation with adolescents' reactive autonomy. Similarly, mothers' uncertainty/ineffectiveness in emotion socialization showed negative correlations with reciprocal affiliation, and positive correlations with reciprocal hostility. Moreover, multiple regression analysis suggested that adolescents' gender and mothers' education level are not strong predictors of emotion-related parenting styles. Findings indicated that parental meta-emotion philosophy has predictive value in parent-adolescent relationships

and young adults' self-affiliation. Future studies are necessary to determine the causal relations between parental meta-emotion philosophy and individuals interpersonal and intrapsychic relations.

ACKNOWLEDGEMENTS

I would like to express my deepest appreciation for Dr. Jay Mills, my committee chair, for his support throughout graduate school and for providing me helpful feedback during the dissertation process. Thank you so much for your vast knowledge, exceptional patience, and warm guidance.

I would also like to thank my committee members, Dr. Dasen Luo and Dr. David LaPorte for their advice on improving my research design and statistical analysis.

Special thanks to Kymn and Don Harrison, for fixing the scoring software and motivating me to continue working on this project. Without your help, my dissertation would probably take forever to finish.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

Background

The ways parents interact with their child in emotional situations may have strong impact

on the development of interpersonal and intrapsychic relations into the child's adolescence and

adulthood. Parents' awareness of their own and their child's emotion, as well as their reactions to

the emotion, may have predictive value for the way adolescents relate to themselves and others.

Adolescent years have long been considered as a period of "storm and stress," and are thought by

some to be caused by purely biological forces (Hall, 1904; Arnett, 1999). The "storm and stress"

period is typically characterized by conflict with parents, mood disruptions, and high risk

behaviors. Although contemporary researchers have reached consensus that the adolescent years

are a time that behavioral and emotional problems are likely to arise and evidence indeed

supports a various degree of "storm and stress" in some adolescents, it is important to note that

not all adolescents experience "storm and stress," and the speculation regarding its sole

biological cause has been refuted (Arnett, 1999). For example, it was found that hormonal

contributions to adolescents' mood disruptions is small and tend to exist only in interaction with

other factors (Brooks-Gunn, et al., 1994; Brooks-Gunn & Warren, 1989; Susman, 1997). Also,

the difference in interdependence between parents and adolescents amongst various cultures has

been found to play an important role in the occurrence and duration of "storm and stress"

(Schlegel & Barry, 1991). The shift of research focus from biological cause to an integration of

cultural contributions is in progress. However, broad cultural factors are only one of the sources

of environmental influence; another important source is the adolescents' home environment, and

in particular the parents' and adolescents' early social-emotional environment. The empirically-

based understanding on the impact of emotion socialization within familial context is burgeoning. The present review will highlight previous studies on the unique aspect of parenting, termed "emotion coaching", and their findings relating to child developmental outcomes. In addition, the review will provide rationale to expand current understanding of emotion coaching with respect to interpersonal and intrapsychic relations.

Parents and adolescents social-emotional interaction is a major component of the home environment. Parents' ability to be aware of, accept, and coach emotions was theorized to be significant and was conceptualized as "parental meta-emotion philosophy" (Gottman, 1996). Meta-emotion refers to one's feelings and thoughts about emotions, and including both one's own emotions and the emotions of others (Gottman, 1996). The term "parental meta-emotion philosophy" applies specifically to parents' interactions with the child in emotional situations. In order to coach a child during emotional or stressful events, parents themselves need to aware of and accept both their own and their child's emotions, validate the emotions, and thereafter assist the child for emotional coping and problem-solving (Gottman, Katz, & Hooven, 1996). These emotion-related parenting abilities differ from parents to parents, and are generally considered to emanate from and/or develop in the context of parents' past and present social-emotional experiences. Some parents are more aware of emotions and are able to assist their child in coping, while others can be dismissing or disapproving of emotion expression. To date, parental meta-emotion philosophy has been linked to a variety of child and adolescent developmental outcomes, such as their emotion regulation skills, social skills, academic achievement, child illness, and externalizing and internalizing behaviors (Gottman, 1996). Specifically, it was found that children of parents who are able to emotion coach recovered more quickly from physiological arousal (Gottman & Katz, 1996), were able to recognize emotional expressions

(Cassidy, Parke, & Butkovsky, 1992; Walden, 1988), develop empathy (Eisenberg & Fabes, 1990; Eisenberg & Strayer, 1987), improve social understanding (Denham, Zoller, & Couchoud, 1994; Dunn & Brown, 1994), and refine their theory of social mind (Harris & Kavanaugh, 1993; Thompson, 1991).

In addition to the aforementioned evidence on outcomes of parental emotional socialization, early social-emotional experiences also have been linked to the development of behaviors associated with attachment and exploration (Bowlby, 1977, 1988). Following the evolving theory of attachment and its effect, Benjamin (1993) posited social affiliation and attachment as one of the four primitive drives of human beings. Combined with sexuality, power, and the need to hold territory, social affiliation is considered to be critical for survival (Benjamin, 1993). These primitive drives are expressed in interpersonal and intrapsychic behaviors, and such significance that they have been assembled into a theoretical foundation of a *transactional* measure of interpersonal and intrapsychic relations - The Structural Analysis of Social Behavior (SASB) (Benjamin, 1974). The SASB model contains three dimensions, namely focus, affiliation, and interdependence. Each dimension represents an area of social or intrapsychic relating that is elemental in the development and expression of drives. The "focus" dimension represents to whom an action is directed; the "affiliation" dimension (manifested by a continuum of love-hate) represents the drive of affiliation; and the "interdependence" dimension is manifested by a continuum of enmeshment and differentiation that is associated with the drives of power and the need to hold territory. The healthy pattern of interpersonal behavior is defined as a balanced alternation in attachment seeking and exploratory behaviors. Caregivers not only offer affiliation and availability, but also support an appropriate degree of autonomy to

explore the environment (Henry, 1996). In practice, it is clear that families differ a great deal in how they express love or aggression and exert control or grant autonomy.

It is a reasonable concern that adolescents' growing independence may increase the likelihood of their participation in risky behavior (Pasley & Gecas, 1984) and, in turn, increase the potential for parent-adolescent conflict relating to control and autonomy. It is also reasonable to conclude that control and autonomy struggles are fertile substrate for mood disturbance in parents and adolescents. Nevertheless, the developmental outcomes of adolescents are likely a result of reciprocal interactions amongst multiple factors, such as parent-adolescent's past social emotional interactions, parent-adolescent relationship quality, parents' socioeconomic status, adolescents' peer relations, adolescents' motivation and involvement in academic and extra-curricular activities. In the context of a broad range of interrelated factors, the focus of this study is to further explore the links between parental meta-emotion philosophy and parent-adolescent interpersonal and intrapsychic relations. More specifically, the study examines how parental levels of emotion coaching and emotion disapproving relate to adolescents' levels of affiliation and interdependence. In addition, the project explores how well the level of parental emotion awareness and level of coaching predict parents' social behaviors toward their adolescents, adolescents' reactions to their parent, as well as their perceptions and reactions toward self in emerging adulthood.

Statement of the Problem

Early social-emotional experience has been demonstrated as having a strong impact on individuals' development in multiple respects. The theories of meta-emotion and parental meta-emotion philosophy have provided clear definitions and a theoretical framework to study early emotion socialization and its impact. In these theories, parents' awareness of their own and their

4

child's emotion, as well as the ability to coach child through emotional situation were particularly emphasized. Emotion coaching has been successfully linked to child's regulatory physiology, emotion regulation ability, attention, peer relation, physical illness, and academic achievement (Gottman, Katz, & Hooven, 1996). Furthermore, it has been found that emotion coaching was associated with less clinically significant problems in adolescents (Klimes-Dougan et al., 2007).

Although many developmental outcomes of childhood and adolescence have been associated with parental meta-emotion, its impact on parent-adolescent interpersonal relations and intrapsychic relations in their young adulthood phase has not been explored. The Structural Analysis of Social Behavior (SASB) is an optimal instrument to specifically measure transactional features of interpersonal and intrapsychic relations (Benjamin, 1974). From the psychoanalytic perspective, the child imitates parents through interactions, forms expectations from their abstract representations of parents' social behavior, and treats themselves as the way they have been treated by parents (Henry, 1996). Therefore, parent-adolescent interactions during emotional period would reflect parents' interpersonal style as well as placing influence on adolescents' interpersonal and intrapsychic relations.

The focus of current study is to examine the links between parental meta-emotion philosophy and parent-adolescent interpersonal relations as well as young adult intrapsychic relations. It is our interest to find out how emotion coaching and emotion disapproving parents show differences on the interpersonal behaviors using the SASB, particularly in the domains of affiliation, hostility, autonomy, and control. Moreover, it is predicted that the higher the level of emotion coaching is positively correlated with the level of self-affliction and negatively correlated with the level of self-hostility. It is also a goal to find out whether the gender of the

adolescent and certain parental characteristics help to predict their level of emotion awareness and ability on emotion coaching.

CHAPTER TWO

LITERATURE REVIEW

Theoretical Background of Parental Meta-Emotion Philosophy

The rationale for exploring the links between parental meta-emotion philosophy and parent-adolescent interpersonal relations, as well as young adulthood intrapsychic relations, is bolstered by two influential theoretical frameworks that have been developing in the past a few decades: the parental meta-emotion theory and the dynamic and behavioral underpinnings of the Structural Analysis of Social Behavior (SASB). In order to hypothesize the nature of potential links between the two theories, this review will first illustrate the significance of parental meta-emotion philosophy and its empirically established links to child outcomes. Second, the background and implications of the Structural Analysis of Social Behavior will be described in detail to show how parent-adolescent interactions are optimally and innovatively represented in three dimensions: affiliation, interdependence, and focus. Third, the goals for our attempt to link parents' emotion awareness and coaching to parent-adolescent interpersonal and young adult intrapsychic relations will be presented.

Our consideration of the background for the current study begins with John Gottman's (1996) work on parental meta-emotion philosophy. Gottman's research established a substantial empirical groundwork for our understanding of parent-child social-emotional interactions and their connections to child outcomes. To establish the theoretical framework, three closely related concepts need to be clarified. "Meta-emotion" refers to one's feelings and thoughts *related* to emotion. Additionally, "meta-emotion philosophy" refers to executive functions associated with of emotion. Executive functions are considered to be the array of attributes that are essential to managing and modulating emotions (Gottman, Katz & Hooven, 1996). Further consideration of

the significance of "meta-emotion" and "meta-emotion philosophy" led to a third concept associated with parent-child interactions- "parental meta-emotion philosophy." It was introduced as a key aspect of parenting, referring to "an organized set of feelings and thoughts about one's own emotions and one's children's emotions" (Gottman, Katz, & Hooven, 1996) (p. 243). These fundamental concepts emphasize (a) the elements of parents' awareness of their own emotions, (b) parental awareness and acceptance of emotions in their child, and (c) parental behavior that both validates and coaches emotions in their child. It is important to note that parents' awareness and acceptance of their own emotions is the core variable of parental meta-emotion studies. Parents' emotion functioning strongly influences their parenting style and impacts their ability and skills to engage in emotion coaching in emotional situations (e.g. Hooven, Gottman, & Katz, 1995).

Preliminary Evidence on Parental Meta-Emotion Philosophy

Research that examined the unique contributions of parental emotion coaching to child outcomes has supported the scientific and clinical relevance of parental meta-emotion philosophy as an important aspect of parenting. In Gottman's preliminary study (1996), emotion coaching was compared with the two then-most commonly studied parenting styles: parental derogation and scaffolding-praising. "Parental derogation" describes parental behaviors that are characterized as intrusive, critical, and mocking. On the contrary, "scaffolding-praising" describes parental behaviors that are characterized as positive structuring, responsiveness, enthusiasm, engaging, and affection (Gottman, Katz, & Hooven, 1996). In an early study in the area, child's regulatory physiology, peer relations, academic achievement, and physical illness were compared as a function of the three styles of parenting: parental derogation, scaffolding-praising, and emotion coaching. It was found that derogatory parenting is not equivalent to

8

parental expression of anger, and scaffolding-praising parenting is not equivalent to parental

expression of warmth (Gottman, Katz, & Hooven, 1996). This finding lent empirical support to

important distinctions in the impact of parental emotion expression. Although parental warmth

and limit setting shared partial variance with emotion coaching, Gottman (1996) and his

colleagues concluded that emotion coaching philosophy is different from parental warmth, and

that emotion coaching philosophy offers additional parenting components. More importantly,

emotion coaching was found to be not only related to the inhibition of parental negative affect

and the behaviors of derogation, but it also facilitates positive parenting (Gottman, Katz, &

Hooven, 1996).

The uniqueness of parental meta-emotion philosophy was further highlighted by

Gottman and his colleagues (1996). They explained that parent-child negative escalation is

avoided because emotion validation has a calming effect. When negative escalation is avoided,

the subsequent difficulty in frustration, disapproval, and emotional distance between parents and

children is less likely to occur (Gottman, 1996). During the process of reduction in high intensity

emotional and behavior responses in emotional situations, children's own regulatory physiology

is directly affected (Gottman, Katz, & Hooven, 1996). The reduced intensity in physical

reactivity of emotions is conducive to children's ability to regulate their emotions. Furthermore,

extensive empirical evidence has established that emotion regulation abilities underlie the

development of child's other abilities, such as social skills (Gottman, 1983; Gottman & Parker,

1986), adjustment (Chaplin, Cole, & Zahn-Waxler, 2005), and children's resiliency/popularity

(Spinrad et al., 2006). These fundamental abilities and skills in childhood, subsequently affect

child's academic achievement, peer relations, child illness, and externalizing and internalizing

behaviors (Gottman, 1996). Also, in longitudinal studies, emotion regulation ability is found to

be associated with life satisfaction, self-esteem, and psychological well-being in adulthood (Gross & John, 2003). Overall, emotion coaching has potentials to benefit children in a wide range of outcomes and the beneficial effects are likely to persist.

The significant findings regarding the unique contribution of emotion coaching behavior encouraged the development of measurement for meta-emotion philosophy such as the Meta-emotion Interview (MEI). The MEI is a semi-structured interview script that consists of questions regarding parents' past and present experience of two main emotions: anger and sadness (Gottman, Katz, & Hooven, 1997). In order to distinguish different styles of parental meta-emotion philosophy, two specific aspects of parental meta-emotion that impact child's outcomes were highlighted in Meta-emotion Interview: (a) emotional awareness, and (b) emotion coaching (Gottman, Katz, & Hooven, 1997). Parents differ in their levels of awareness and coaching, reflecting the variability suggested in the meta-emotion philosophy literature. Results from MEI-based study show that great variability exist in parents' reactions to their own and their child's negative emotions, specifically, anger and sadness (Gottman, Katz, & Hooven, 1997). In Gottman's conceptualization, anger is considered as an "approach" emotion, because angry response tends to engage people with the environment rather than leading to disengagement and withdrawal. In contrast, sadness is considered to have withdrawal effects, because sadness is an internalized reaction (Davidson et al, 1979; Davidson & Tomarken, 1989). Nonetheless, emotion coaching is an active approach for both anger and sadness. Discussing negative emotions requires individuals to be aware of emotions and to take initiative to cope with them. Emotion coaching is likely to help the child gain a greater parasympathetic control of autonomic reactions, as well as a greater sense of control over the negative emotions (Gottman, Katz, & Hooven, 1997).

Based on interviewing parents about their meta-emotion philosophy, three categories of parental meta-emotion philosophies were developed: emotion coaching philosophy, emotion dismissing philosophy, and emotion disapproving philosophy (Gottman, Katz, & Hooven, 1997). Parents with a high level of emotion coaching philosophy have a high level of awareness of their own emotion as well as that of their children. Emotion coaching parents view the child's negative emotion as "an opportunity for intimacy or teaching" (Gottman, Katz, & Hooven, 1996, p. 244). They tend to "validate their child's emotion, assist the child in verbally labeling the child's emotions, problem solve with the child, set behavioral limits, and discuss goals and strategies for dealing with the situation that led to the negative emotion" (Gottman, Katz, & Hooven, 1996, p. 244). Comparing to emotion coaching parents, parents of a dismissive philosophy may be aware of their child's emotion and may want to be helpful. However, the dismissive parents view negative emotions as harmful and try to alleviate negative emotions as quickly as possible. According to Gottman, Katz, and Hooven (1996), dismissive parents often describe their strategy in coping negative emotion as "get over", "ride out", "look beyond", and "not dwell on it" (Gottman, Katz, & Hooven, 1996, p. 245). They tend to ignore or deny negative emotions, or often attempt to distract the child or belittle the causes of the negative emotions. No insightful descriptions about emotional experience are made, and such parents are usually not helpful with problem solving. Compared to emotion coaching parents and emotion dismissing parents, parents of disapproving philosophy have the least amount of emotion awareness. They are characterized by reprimands for their children for any type of emotional expression, even if the child's reactions are appropriate. They may view "their child's negative emotions as a means by which the child is attempting to manipulate or control the parent" (Gottman, Katz, & Hooven, 1996, p. 245). By using Meta-emotion Interview and its coding system, parenting behavior in

situations that elicit child's emotions can be classified into one of the three aforementioned parental meta-emotion philosophy categories.

To compare the impact of emotion coaching with emotion dismissing and emotion disapproving on child outcomes and establish the beneficial effects resulting from emotion coaching, Gottman and his colleagues (1996) utilized a multimethod, multilevel, multisource approach that combined observing and coding naturalistic interactions of parents and children using the Meta-emotion Interview. The outcome measures included child intelligence, peer relations, physical illness, and child's physiological functioning. These outcome measures were administered repeatedly over the course of child development at age 5 to age 8. A path analysis was conducted to examine the links between parental meta-emotion philosophy and child outcome variables. Seven distinctive paths were tested to verify the relations between meta-emotion and child outcomes: (a) The path from the meta-emotion variables to the parenting variables; (b) The path from meta-emotion to the physiological variables; (c) The path from parenting to child physiology; (d) The path from child physiology to the child outcome variables; (e) The path from the physiological variables to the emotion regulation variable; (f) The path from parenting to child emotion regulation variable; and (g) The path from child physiology at age 5 to child physiology at age 8 (Gottman, Katz, & Hooven, 1996). The results of the path analysis model revealed that direct links exist between emotion coaching and child achievement, peer relations, and child physical health; between child physiology and child illness; between scaffolding-praising parenting and academic achievement; between derogatory parenting and child illness; and between child physiology at age 5 and later emotion regulation abilities (Gottman, Katz, & Hooven, 1996). It was also found that overall the structural models explained from 16% to 36% of the children's adaptation outcomes (Cowan, 1996).

The initial evidence on direct links between emotion coaching and child outcome variables is encouraging, yet a further exploration of specific outcome variables is critically important to enhancing our understanding of the mechanisms of emotion coaching and its implications. One of the main foci in Gottman's preliminary research is examining the links between emotion coaching and child regulatory physiology, such as regulating cardiovascular signs. He also linked child regulatory physiology with child outcomes. Evidence supports the notions that child's vagal tone is associated with sustained attention (Richards, 1985; Suess, Porges, & Plude, 1994), is related to both behavioral reactivity and soothability (DiPietro & Porges, 1991; Fox, 1989; Hofheimer & Lawson, 1988; Huffman, Bryan, Pederson, & Porges, 1988), and is related to ability to explore novel stimuli (Linnemeyer & Porges, 1986; Porter, Porges, & Marshall, 1988;, 1987; Stifter & Fox, 1990; Stifter, Fox, & Porges, 1989). Moreover, vagal tone is related to physical health as a consequence of the vagus nerve innervating the thymus gland, which is a central part of the immune system that is involved in the production and maturation of T-cells (Bulloch & Moore, 1981; Magni, Bruschi, & Kasti, 1987; Nance, Hopkins, & Bieger, 1987). The child's ability to invoke a transitory suppression of vagal tone in response to environmental and emotional demands is found to be a critical component of emotion regulation ability. In later analysis of 56 families and their children, it was confirmed that children with higher basal vagal tone have both a larger heart rate increase to stressful events as well as faster recovery than children with lower vagal tone (Gottman & Katz, 2002). Consistently, mother's emotional awareness and coaching were found to significantly predict child physical illness at age 8 (Gottman, Katz, & Hooven, 1997).

Beyond physiological recovery and physical illness, the effects of emotion coaching on vagal tone were also linked to emotion regulation abilities. It was found that child's ability to

suppress vagal tone at age 5 significantly predict child's emotion regulation ability at age 8 (Gottman, Katz, & Hooven, 1997). In relation to physiological regulations, it was illustrated previously that vagal tone is associated with a greater ability to focus and sustained attention (Suess, Porges, & Plude, 1994). The ability to concentrate and maintain attentional focus is critical for the levels of academic achievement. Findings suggest that after controlling for intelligence, meta-emotion variables were still able to predict some portion of attentional abilities and academic achievement (Gottman, Katz, & Hooven, 1997).

Another major indication of developmental outcome is child's peer relations and social abilities. The benefits of establishing and maintaining positive interpersonal relationships are tremendous. For children and adolescents, interacting with peers "provides valuable opportunities to learn about egalitarian relationships, to form friendships, to negotiate conflicts, to engage in cooperative and competitive activities, and to learn appropriate limits for aggressive impulses" (Gottman, Katz, & Hooven, 1996. p. 248). These skills are the core component of one's social intelligence, which has been linked to many other critical abilities. Previous research has found that social intelligence is related to child's developing ability to cope with stress (Saarni, 1993), the child's emotional competence (Denham, Renwick, & Hewes, 1994), the child's ability to recognize emotional expressions (Cassidy, Parke, & Butkovsky, 1992), the child's developing empathy (Eisenberg & Fabes, 1990; Eisenberg & Strayer, 1987), the child's developing social understanding (Denham, Zoller, & Couchoud, 1994), the child's developing social and emotional competence and regulation (Harris & Kavanaugh, 1993), and the child's developing theory of social mind (Thompson, 1991). In Gottman's preliminary study, they found that father's awareness of his own anger and mother's awareness of the child's anger predicted lower levels of observed negative affect of the child when the child was interacting with a best

14

friend (Gottman, Katz, & Hooven, 1997). In addition, they found that mother's coaching in child's sadness predicted better peer relations by teacher ratings (Gottman, Katz, & Hooven, 1997). Additional evidence from emotion socialization studies relating to child's social abilities provided further confirmation. For example, maternal help in labeling emotions has been associated to child's behavioral concerns for others (Garner, 2003); toddlers were found to have a high level of conscience development in their middle childhood after their mothers consistently discuss emotion-related concepts at home (Kochanska, 1991).   The mechanism of child having better peer relations with emotion coaching parents was proposed by Gottman. He explained that parents who have high awareness of emotion are able to model emotion regulation and coping to their child. This process provides opportunity for the child to learn emotions and adaptive ways to deal with emotions in social situation. Over time, the child become more aware of their own and others' emotions, a better ability to self-regulate their own negative emotions, a greater ability to notice key issues in challenging social situations, and a greater ability to respond flexibly in both inhibition of emotions and expression of emotions (Gottman, 1996). Gottman concluded that parental emotion socialization helps child become more "savvy" about social nuance and more likely to maintain positive relationships with peers.

Further Studies on Parental Emotion Socialization

In addition to robust empirical evidence of beneficial effects of emotion coaching in general population, the effects of parental emotion coaching were also studied in specified groups of children. These studies not only examined the difference in effects of meta-emotion philosophies in specified groups, but also explored the potential for clinical applications in emotion coaching. For example, maternal meta-emotion philosophy was compared between mothers of children with conduct problem and mothers of children without conduct problems

(Katz & Windecker-Nelson, 2004). Results indicated that mothers of children with conduct problems were less aware of their own emotions and less likely to coach their children's emotions than mothers of non-conduct problem children. Moreover, in both aggressive and nonaggressive children, the higher levels of mother awareness and coaching of emotion was associated with more positive and less negative peer play, although effects were stronger for families with nonaggressive children. This finding also suggests that children's level of aggression could moderate the relationship between mother's meta-emotion philosophy and children's peer play. Based on these results, the researchers concluded that both aggressive and nonaggressive children can benefit from parental awareness and coaching of emotion. Another similar study focusing on children with behavioral problem did not find a direct effect of emotion coaching, however, an effect of emotion dismissing was confirmed (Lunkenheimer, Shields & Cortina, 2007). In this study, emotion regulation and behavior problems in children at age 8 to11 were compared according to their parental level of emotion coaching and emotion dismissing. During the lab visit, parents were asked to engage in a conversation with the child about three emotional events, which is a positive family experience, a difficult family experience, and a time when the target child misbehaved. Emotion coaching and emotion dismissing were represented by the total number of respective coaching or dismissing statements or questions the parents posed to the child. The outcome measures on emotion regulation and behavior problems included reports from multiple informants: mother, father, and teacher. Results suggested that emotion dismissing was a risk factor, contributing to poorer emotion regulation and more behavioral problems. Although no direct effect of emotion coaching was detected in this study, the detrimental effects of emotion dismissing were reduced when emotion

16

coaching strategies were practiced. In summary, these studies support the clinical usage of emotion coaching training for parents who struggle with their child's behavioral problems.

The effects of emotion coaching were also examined by comparing physically maltreating and non-maltreating mother–child dyads (Shipman et al., 2007). It was found that maltreating mothers engaged in less validation and emotion coaching and more invalidation in response to children's emotion than non-maltreating mothers. Moreover, maltreated children demonstrated fewer adaptive emotion regulation skills and more emotion dysregulation than non-maltreated children. Similarly, it was notable that maternal emotion socialization behaviors mediated the relation between maltreatment status and children's adaptive emotion regulation skills. This study suggests that maternal emotion socialization is at least one of the key factors impacting children's adaptive emotion regulation skills.

Though prior work has primarily focused on younger children (e.g., Gottman, 1996; Eisenberg, Cumberland, & Spinrad, 1998), more recent studies suggest that parents' emotion-socialization behaviors continue to be important during adolescence. The impact of parental emotion socialization in adolescents who exhibit a range of emotional and behavioral problems has been studied (Klimes-Dougan et al., 2007). There were a series of findings presented by these authors. First, mothers were found to be more involved in the emotional lives of their children than were fathers. Second, mothers rewarded and magnified negative emotions more than fathers. Third, fathers were more likely to overlook or ignore their adolescent's expressions of negative emotions. Fourth, fathers were more likely than mothers to use dismissive or distracting strategies to respond to their child's expression of internalizing emotions; also fathers were more punitive than were mothers to their sons' expression of anger. Fifth, parents respond to sadness, anger and fear in their sons and daughters in remarkably similar ways. Sixth, parental

responses to emotion vary with the age and problem status of the adolescent. Specific to response to sadness, parents of adolescents who exhibited internalizing and/or externalizing problems used fewer supportive strategies (e.g., reward, override). In response to anger, parents of adolescents experiencing problems were more likely to respond by punishing, magnifying, or neglecting emotional expression. It was found that reward was used least often and neglect was used most often in socializing sadness and fear in youth with comorbid and externalizing problems relative to the control group. This study provides strong evidence that parental emotion dismissing is associated with clinically significant problems in adolescents.

Another study of adolescents examined the association between adolescents' ability to regulate anger and maternal meta-emotion philosophy (Shortt et al., 2010). The results were consistent with the conclusion that maternal coaching of anger was associated with adolescents' anger regulation, which in turn was associated with adolescent externalizing behavior. The unique contribution of this study results from the author's comparison of externalizing problems among siblings. It was found that older siblings' externalizing behavior is a risk factor for younger siblings' externalizing behavior as reported by teachers. With school-based externalizing behavior largely influenced by peer interaction, older siblings can be a negative impact by exposing and including younger siblings in antisocial activities and delinquent peer groups (Snyder, Bank, & Burraston, 2005). These findings parallel the theoretical hypothesis that parents who are dismissive of their children's feelings, particularly their vulnerable emotions, may predispose their child developing acting out problems (Gottman, Katz, & Hooven, 1997). In addition, children with an older sibling who displays behavioral problems may have higher risk and therefore may particularly in need and benefit from emotion coaching in anger and sadness.

As exploration of links among parental meta-emotion philosophy and child outcomes progress, cross-culture studies on the topic have emerged in recent years. Cunningham, Kliewer, and Garner (2009) investigated meta-emotion philosophy in urban African American mothers living in high violence areas. They found that meta-emotion philosophy predicted child emotion understanding and emotion regulation, which also were associated with their child's grades, internalizing behaviors, externalizing behaviors, and social skills after controlling for the initially measured adjustment level. Further analysis indicated that children's emotional understanding mediated the relationship between mothers' emotional socialization and boys' internalizing behaviors, as well as between mothers' emotional socialization and girls' social skills. Another cross-cultural study examined the differences between Korean American families and European American families with regard to parental meta-emotion philosophy and its application to parent-child interactions (Nahm, 2006). Clear differences between European American and Korean American families were detected, such as European American parents were more accepting and coaching of their children's emotions than Korean American parents. Moreover, Korean American parents were more neutral overall in their affect compared to European American parents, and Korean fathers in particular used more directives. In addition, European American parents showed higher levels of engagement with their children, and European American family members expressed more positive affect than in Korean American families. As related to these reported and observed differences, children in these Korean American families expressed more tension, and also rated themselves as feeling less happy overall than European American children. This study supports the speculation that emotion expression in family is, to a certain extent, culturally influenced. Nevertheless, three racial groups in parental emotion regulation and coaching- African American, European American, and multiracial group were compared (Bowie

19

et al., 2011). The researchers concluded that no significant difference in the level of parental emotion coaching was found among the three racial groups, except that African American parents were found to provide less coaching of sadness to their children compare to the other two groups of parents. Additionally, child's symptoms of anxiety and depression were compared among these three racial groups and were linked to the level of parental emotion coaching. A higher level of coaching on anger and sadness by African American mothers was linked with lower depressive symptoms in their children. Similarly, a higher level of anger coaching by fathers within the multiracial group was also associated with lower anxiety and depressive symptoms. In African American families, mothers' emotional response and coaching was found to strongly associate with children's anxiety and depressive symptoms, whereas in multiracial families, father's coaching in anger had the greatest association with child's mental health outcome. These findings support the effectiveness of emotion coaching among families of different cultural backgrounds; yet also highlight the possibility of mothers' and fathers' coaching behaviors in different racial groups having differential impacts on child's psychological outcomes. These studies emphasize the impact of understanding cultural belief systems on emotion expression.

In summary, evidence suggests that coaching the child's emotions has a soothing effect on the child that may change some key aspects of the child's parasympathetic nervous system; the child's ability to self-soothe, to regulate negative emotion, and to focus attention. In turn, these changes impact children's academic achievement, physical health, and peer relations. The mechanism behind these positive effects of emotion coaching is related to interpersonal and intrapersonal regulation of negative emotion by both parent and child (Cowan, 1996). Although it is difficult to separate the impact on child outcomes completely from child's temperament or

20

by the parents' meta-emotion philosophy, emotion awareness and coaching clearly have advantages over less emotionally attentive parenting behaviors.

The Structured Analysis of Social Behavior (SASB) literature review

One element necessary for continued investigation of the impact of parental Meta-emotion philosophy is the actual assessment of critical social interactions. Parent-adolescent interactions and its manifestations in interpersonal and intrapsychic relations can be optimally measured using the Structural Analysis of Social Behavior (SASB: Benjamin, 1974). According to Benjamin (2003), the SASB specifically measures perceived interpersonal and intrapsychic relations and captures the essence of transactional behaviors on three dimensions that are considered as fundamental aspects of interpersonal behaviors: (a) the focus (interpersonal behaviors focus on self or others, or intrapsychic behaviors), (b) the level of affiliation (love vs. hostility), and (c) the level of interdependence (autonomy vs. control) (Benjamin, Rothweiler, & Critchfield, 2006). Benjamin (1974) further elaborated that focus on others is conceptualized as "transitive actions," which relates to what is "going to be done to or for the other person" (p. 395). Correspondingly, focus on self is conceptualized as "intransitive behaviors" that relates to "what is going to be done to or for the self" (p. 395), and in reaction to others. In contrast, introject focus represents an individual's intrapsychic events, which is often characterized by internalization of self from past interpersonal experience. In terms of structure, the affiliation dimension is located on the horizontal axis, and the interdependence dimension is located on the vertical axis. The orthogonal structure allows each of the focus be defined separately on both of the affiliation and interdependence dimensions. Moreover, the octant or cluster version of SASB model consists of four additional points that are midway between the poles of the axes (Benjamin, Rothweiler, & Critchfield, 2006; See figure 1). For example, the midpoint of

21

"emancipate" and "active love" on the transitive focus is labeled as "affirm." The eight octants

on the "intransitive focus" and "introjected focus" are also labeled in the same circular order (the

definition for each octant label is presented in the Appendix E). When three dimensions are

combined, the timbre of interpersonal and intrapsychic relations can be computed within a

cluster of behaviors on the interpersonal circumplex.

Transitive: Intransitive: Introject:

Action Toward Other   Reaction to Other   Actions Toward Self
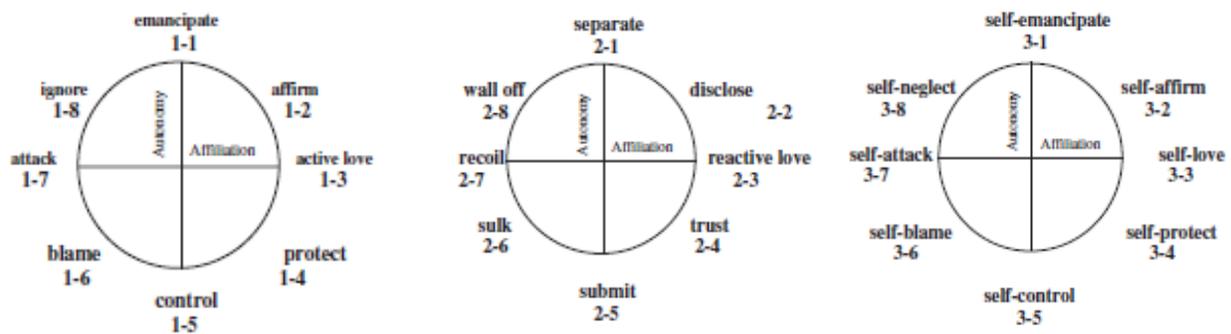
Figure 1. The Octant Version of Structural Analysis of Social Behavior (Reproduced by Erickson & Pincus, 2005).

The SASB model has clear advantages in assessing behaviors within multiple

dimensions. It helps researchers and clinicians to avoid the mistake of oversimplify complex

social behaviors. Meanwhile, it also has advantage of allowing researcher to disentangle

confounded behaviors when focusing on a single dimension (Beveridge & Berg, 2007). More

saliently, it has been empirically supported that individual behaviors "complement" one another

in interpersonal interactions in a predictable and theoretically meaningful way (Benjamin, 1974).

"Complementarity" is a phenomenon when one person is focused on the self and the other

person is focused on the other, and when their behaviors match one another to the same degree

on the affiliation and interdependence dimensions (Benjamin, 1974). The concept of

complementarity emphasizes both the context of the occurrence of certain behavior and the

degree of reciprocity in interpersonal interactions. For example, the complementary behavior of "control" on the transitive focus is "submit" on the intransitive focus. Another concept that is related to complementarity is antidote. Antidote occurs when "a given behavior is found at the point complementary to its opposite" (Benjamin, 1974. p. 398). For example, the antidote behavior of "control" on the transitive focus is "separate" on the intransitive focus. SASB is also suitable for study the level of autonomy in adolescent population. For adolescents, it was suggested that the most important developmental task of is forming self-identity, which entails adolescent to develop one's own beliefs and personal value through exploration (Erikson, 1982). The optimal adolescent-parent interaction was considered as parents encourage a moderate degree of autonomous behaviors of their adolescents, within the context of parental guidance and warmth (Allen et al., 1994; Barber, 1996; Conger et al., 2003).

Theoretical Background of SASB

The SASB model has its theoretical background in evolutionary, psychoanalytic and behavioral perspectives. This complex set of influences converge on a formulation that is theoretically elegant and psychometrically sound. In the broad context of psychoanalytic theory, object relations theorists view humans as fundamentally sociable, and that connections exist between the adult personality and their perceptions, experiences, and representations of early social educational experience (Sullivan, 1953). From the behavioral perspective, early social experiences provide learning opportunities that are the template for later behavioral patterns. The development of specific models and instrumentation that integrate these ideas has been challenging. The SASB is grounded in Leary's Interpersonal Circle (IPC: Leary, 1957) and the Interpersonal Adjective Scales (Wiggins, 1995). In an early attempt to assess manifestations of circumplex constructs, the Interpersonal Circle (IPC) attempted to examine how biological drives

interact with interpersonal experiences to create a "personality" (Freedman et. al., 1951).

Alternatively, the Interpersonal Adjective Scales is a 64-item self-report questionnaire that is designed to measures interpersonal traits based on the circumplex model of personality (Trapnell & Wiggins, 1990).

In addition to the range of attempts at assessment, there were a number of proposals for how circumplex constructs should be depicted. For example, in contrast to the structure of SASB, Leary's version of Interpersonal Circumplex placed "dominant" and "submit" on the vertical axis, and "love" and "hate" on the poles of the horizontal axis (Freedman, Leary, Ossorio, & Coffey, 1951). The IPC later was updated to a slight different version that is designed to adapt to parental behaviors specifically (Schaefer, 1965). The horizontal axis remained the same on Schaefer's version, but the vertical axis was changed to "control" and "autonomy" to reflect parental-like behaviors. By the mid-1970s, the SASB had solidified the advances to the structure and dimensions of IPC by including both the Leary and Schaefer versions of interpersonal circumplex while adding the additional dimension of focus (Benjamin, 1996).

Research and Clinical Utility of SASB

The SASB model and its measurement systems have received a wide variety of application in clinical and research contexts due to its versatility and complexity. Besides multiple dimensional structures, SASB also offers both self-report questionnaire format and observational behavioral coding format. The self-report form is named the SASB Intrex questionnaires, which provide options of the short form, the medium form, and the long form (Benjamin, 2000). In comparison, the observation format requires using a standardized coding system - The Composite Observational Coding Scheme (Benjamin, 1974).

Research using SASB range from therapy and outcome studies, such as therapy process (Constantino, 2000), cognitive behavioral therapy (Vittengl et al., 2004), emotion focused therapy (Greenberg & Malcomb 2002), couple therapy (Mundt et al., 1994), group therapy (Jansson & Ecklund, 2002), to its application in different fields of psychology, such as sports psychology (Conroy, 2003), health psychology (Brown & Smith 1992), behavioral genetics (Smith, McGonigle, & Benjamin, 1998). For Benjamin, SASB model has been used predominantly to infer specific early learning experience likely to be associated with the intrapersonal and intrapsychic patterns characteristic of personality disorders (Benjamin, 1996). The SASB model also facilitated the development of Interpersonal Reconstructive Therapy (IRT) by Benjamin. IRT is described as "a psychosocial approach that focuses mostly on the impact of leaning, current situation, and the consequences of choice" (Benjamin, 2003. p. 9), with the respect for the inherited traits in humans from the evolutionary perspective (Benjamin, 2003).

SASB has been used with both normal and psychiatric populations.For example, a study with a normal population examined the impact of parental self-criticism behavior on fifty-five college female's own self-criticism, depression, and perceptions of romantic partners (Amitay, Mongrain, & Fazaa, 2008). The results showed that self-critical parents reported being less loving and more controlling with their daughters. Also, parental self-criticism predicted similar behavior in their daughters, which is consistent with the theory of introjection as described previously by Benjamin (1974a). That is, caregivers with high levels of negative self-statements were more likely to foster negative self concepts in their children. Another finding is that college women reported perceiving their boyfriends as being less loving and more controlling, which is consistent with Benjamin's (1974a) theory of complementarity. In studies of

psychiatric populations, although typically the foci were on symptoms and traits, many studies

have emphasized the link between symptoms and interpersonal behaviors (Benjamin, 2003;

Henry, 1994; Horowitz & Vitkus, 1986). Based on the links between psychological symptoms

and interpersonal relationships, the SASB was used to examine the relational aspect of various

psychopathologies. For example, patients with borderline personality disorder were found to

have more negative images of themselves and their parents than did patients with psychotic

symptoms and participants without psychiatric diagnosis (Armelius & Granberg, 2000).

Furthermore, patients with psychotic symptoms reported poor separation from the mother and

poor differentiation between autonomy and control (Armelius & Granberg, 2000). Among

clinical population with anxiety symptoms, patients reported introjects of greater self-blame,

self-neglect, self-attack, and self-control, as well as less self-love, self-affirmation, self-

protection, and self-emancipation when compared to SASB introject profile of participants

without anxiety (Ericson & Pincus, 2005). Another example of a SASB study of a clinical

population was a consideration of the Dissociative Disorder. This clinical group was found to

have higher self-directed hostility and lower levels of intrapsychic conflict comparing to the non-

clinical control group (Alpher, 1996).

Some recent studies investigated the links between interpersonal process of adolescent

parents, their psychopathology, and their relationship outcomes (Moore, Florsheim, & Butner,

2007). Based on these dimensional scores of warmth, hostility, control, submission, autonomy

taking, and autonomy giving, adolescent couples were classified as two types: distinctively

hostile and distinctively warm. Results indicated that distinctively warm adolescent couples were

more likely to continue co-parenting even without the romantic liaison. In comparison,

distinctively hostile couples (based on SASB indices) were more likely to remain in a romantic

relationship compared to distinctively warm adolescent couples. Researchers noted that for hostile couples, remaining in romantic liaison is not necessarily representing a positive outcome. Some couples may be in an "on again/off again cycle." When considering the SASB links to psychopathology, findings from this study suggest that participants with a history of psychopathology were more likely to be classified as hostile and to experience relationship problems during their transition to parenthood.

Specific to the purpose of the current study, it is important to describe how early social-emotional experiences impact adolescents' internal representations and associated patterns of relating to self and others. In order to comprehend the process of such influence, three basic concepts and mechanisms were proposed by Henry (1996): (a) *Identification:* refers to the process of imitating significant others in interactions, (b) *Internalization:* refers to the process that interpersonal expectancies originate from the abstract representations of the others, (c) *Introjection* means that the child treat themselves as the way they have been treated by others. Introjection is a psychoanalytic term that a child's self-concept reflects the way others thought of him and treated him, starting in early infancy (Sullivan, 1953). Results associated with these three mechanisms support the rationale for the current study to explore the links between past and present emotion socialization and parents' actions toward their adolescents, as well as the ways adolescents identify and internalize parental behaviors. Despite the abundance of empirical evidence to support the effects of parental emotion-coaching on child's or adolescents' behavioral outcomes, its impact on interpersonal and intrapsychic relations between parents and adolescents has been so far unexplored empirically.

Hypotheses and Summary

To investigate parent-adolescent interactions, multiple directions may be explored. Although many previous studies have focused on measuring child outcomes, it is important to note that child characteristics and parenting strategies are a part of a bidirectional process. As such, manifestations of child/adolescents' temperament and parents' emotion coaching behaviors were seen to impact one another in a bidirectional fashion. Based on the notion of bidirectionality, the effects of emotion coaching could vary depending on child characteristics. It is common to observe that parents may coach the child and his or her siblings differently as a function of the child's temperament. It was speculated that a child with better self-soothing skills may be better able to focus their attention on parental input when they are emotionally aroused, and as a result make better use of parents' coaching efforts, and also consequently reinforce parents' emotion coaching behavior (Katz, 1996). Empirically, a significant interaction between emotion coaching and child persistence was found (Katz, Gottman, & Hooven, 1996). Persistent children of parents high on emotion coaching had higher academic achievement and better health at age 8 years than persistent children whose parents were not emotion coaching. Such evidence suggests that at least certain child temperamental qualities could interact with parental emotion coaching, and jointly influence child outcomes. In adolescent population, previous studies have also acknowledged the likelihood of bidirectional influence of adolescent and parent behavior, as well as reciprocal impact of parent's and adolescent's outcomes on the ways in which parents and adolescents interact (Florsheim et al.,1996; Ge, Best, Conger, & Simons, 1995; Grossman, Brink, & Hauser, 1987; Hauser et al., 1984). These findings are consistent with the "probabilistic epigenetic" model, which emphasizes the reciprocity of influences between gene and environment in the realization of all phenotypes (Gottlieb, 2007). For the current study, the

focus is not on adolescents' specific outcomes; rather, the focus is on establishing the links between early parental emotion socialization and transactional interactions of parents and adolescents. It is our interest to examine whether parents of high emotion awareness and coaching would link to parental behavior in exhibiting high level of affiliation and exercising moderate control, also in whether adolescents' behaviors are reciprocally and systematically relating to mothers, as in seeking autonomy and exhibiting love and trust. Since the SASB assessment incorporates the personal experience of the adolescent and an interactional approach, the utility of the SASB is further supported.

The following dimensions of the parent-adolescent relationships are highlighted to demonstrate the expected pattern between parental meta-emotion philosophy and parent-adolescent interpersonal and intrapsychic relations. To expand the scope of the existing literature, parental meta-emotion can be measured regarding the level of emotion coaching, emotion acceptance, and emotion disapproving. On the basis of these conceptualizations, a number of predictions may be forwarded. First, it is predicted that emotion coaching parents would demonstrate a high level of affiliation, given that the emotion awareness and the behavior of coaching is one of the essential acts of love and attend to children's psychological needs. Second, based on the theory of complementarity it is predicted that adolescents of emotion coaching parents would show higher level of reciprocal affiliation and lower level of hostility towards their parents. Third, a moderate level of autonomy is predicted to be related to parental emotion coaching. This hypothesis is based on the theory that a collaborative approach is the optimal interaction between parents and adolescents (Beveridge &Berg, 2007); such an approach involves exploring, negotiating, and making plans together. Fourth, according to attachment theory's concept of introjection, individuals will treat her/himself in a manner that is similar to

how they were treated when they were young (Benjamin, 1974); thus the intrapsychic relations in young adults whose parents have high emotion coaching philosophy are expected have higher levels of self-affiliation, and a lower level of hostility toward themselves when compared to young adults of parents with disapproving meta-emotion philosophy. Fifth, emotion disapproving parents are predicted to show a high level of control and a higher level of hostility toward their adolescents. In addition, emotion dismissing and disapproving parents are predicted to report having the higher level of hostility and higher levels of control toward their adolescents compared to parents with emotion coaching philosophies. Sixth, and similarly, the notion of complementarity supports the prediction that adolescents of emotion disapproving parents are predicted to show a higher level of hostility and a lower level of affiliation, both toward their parents and themselves. The act of disapproving negative emotion is an attempt to exert psychological control. As explained by previous research, adolescences of parents practice blame and attack is more likely to withdraw and submit (Beveridge &Berg, 2007). Seventh, adolescents of emotion disapproving parent are therefore predicted to show a higher level of "submit," and a higher level of "separate."

The current study examines the links between parental meta-emotion philosophy and parent-adolescent interpersonal and intrapsychic relations. On operationalized terms, parental meta-emotion philosophy is represented by participants' scores on the Emotion-Related Parenting Style (Paterson et.al, 2012). In addition to the Emotion-Related Parenting Style, parent-adolescent interpersonal and young adult intrapsychic relations are measured using the SASB Intrex Questionnaire-the Medium Form. On the basis of comparisons among parental meta-emotion philosophy and adolescents' level of affiliation and autonomy, it is hypothesized that: (a) Mothers' level of emotion-coaching will positively correlate with their levels of overall

affiliation towards their adolescents, and no significant correlation with the overall level in autonomy and control, (b) Among mothers' eight octant scales on SASB transitive focus, mothers' ability to provide emotion-coaching will positively correlate with mother's level of "affirm," "active love," and "protect," and (c) Mothers' level of emotion coaching is predicted to be negatively associated with parents' ratings on blame, attack, and ignore. Furthermore, the directions of correlations between emotion-coaching and adolescent's eight octant scales on SASB intransitive focus and introject focus are also hypothesized as following (see Appendix G for definitions of SASB cluster labels): (a) Adolescents of mothers with high levels of acceptance of negative emotions are predicted to be positively correlated with the child's level of "disclose." Mother's level of acceptance of negative emotions is predicted to be positively correlated with adolescents' level of "relative love" and "trust." It will also likely to show negative correlations with adolescents' level of "sulk", "recoil", and "wall off." (b) On the other hand, mothers' level of rejection of negative feelings predicted to be show significant negative correlations on the affiliation scale, and is likely show a significant positive correction on the autonomy and control scale. It will also be likely to be associated with positive correlations with adolescents' level of "sulk", "recoil", and "wall off". (c) Furthermore, Young adults of mothers with emotion-coaching philosophy will show significant positive correlations in "self-emancipate", "self-affirm", "self-love", and "self-protect." They are also predicted to show significant negative correlations in self-blame, self-ignore, and self-attack. Finally, (d) whether or not the gender of adolescent and mothers' education level play as significant predictors for the differences in parental meta-emotion philosophy is not clearly established by either theory or previous research, therefore it is also a goal for the present study to explore the predictive value of these two variables on parental meta-emotion philosophy.

CHAPTER THREE

METHODOLOGY

Participants

University students age 18-25 and their mothers are the target populations of the current study. The reason that only mothers were included in this study is that from the psychoanalytic perspective a stable sense of the self comes from a sequence of attaching and separating from the mother (Bowlby, 1977). Also previous studies suggest that mothers are more involved with their child's emotional lives than are fathers (Klimes-Dougan et. al., 2007). Study recruitment information was posted on the Psychology Research Participation System of Indiana University of Pennsylvania website following approval by the University's Institutional Review Board (IRB). All students were invited to participate in the study, however, data from students who were under 18 or over 25 years of age were excluded from data analysis. Only young adults who were 18 to 25 years of age were included in invitation for mothers' participation. Young adult participants were mostly students taking introductory level psychology courses and their participation in research provided opportunity to earn credit toward a class requirement. This recruiting procedure aims to ensure all students had equal opportunity to participate in research and earn credit for research participation in their psychology courses. Besides age range as an inclusion criterion for participation in the study, SASB Intrex Questionnaire Medium Form requires the ability to read and understand instructions and items on the questionnaire. It is suggested that participants' reading level be at or above grade 7.4 (Benjamin, Rothweiler, & Critchfield, 2006), therefore mothers whose reading level was self-reported to be below 8th grade were excluded from the study. Moreover, young adults were asked whether they identify their mother as one of their significant caregivers growing up. Young adults whose significant caregiver was not their mother were not contacted for further participation.

Procedure

An online survey system, Qualtrics, was used to collect participant responses. Once students signed up to participate, a link including a consent form, demographic questionnaire, the study instrument, and a debriefing form was sent to them following the IRB protocol. The email address of their mother was also obtained after these young adult college students agreed to participate. Two hundred twenty six young adults agreed to participate in the study. Two students were excluded from further participation because they were older than 25 years of age. In addition, eleven participants were not invited for further participation because they identified their significant caretaker as someone else other than their mother. The rest of 213 young adult participants' mothers were invited for participation via email. A different Qualtrics link for mothers containing a consent form, demographic questionnaire, measurement material, and a debriefing form was sent to mothers via email. Of those contacted, 122 mothers agreed to participate and completed the study. The 91 young adults whose mothers either did not respond to the invitation or disagreed with the consent form were also excluded from the final analysis due to the interest of matching young adult and mother pairs for data analysis. However, all of the 226 young adults who completed their portion of the study were rewarded with credit for research participation in their psychology course. After matching the young adults and their mothers' responses, their names and contact information was removed from the data file. At this point, all results became anonymous. Information was stored electronically on a secure drive to further ensure privacy. The final sample of young adults age 18 to 25 consisted of 48 (39.3%) male and 74 (60.7%) female. As displayed in Table 1, majority of young adult participants (85.2%) and their mothers (88.5%) are Caucasians. Mothers' education level was classified as two groups, specifically 35 (28.7%) mothers have completed between 8 to 12 years of formal

education, and 87 (71.3%) mothers have completed more than 12 years of formal education.

Among the 91 young adults whose mother did not respond to invitation, 36 (39.4%) are male,

and 55 (60.4%) are female. In addition, 9 (9.9%) of these 91 young adults are African American,

2 (2.2%) are Asian, 69 (75.8%) are Caucasian, 2 (2.2%) are Hispanic or Latino, 5 (5.5%) are

multiracial, 4 (4.4%) are other ethnicity. Overall, there is no significant difference in gender or

ethnicity between the group of the122 young adults who were included in the statistical analysis

and the group of the 91 young adults who were excluded from the statistical analysis.

Table 1

Demographic Characteristics of Participants (N=122)

	Young Adult N (%)	Mother N (%)
Gender		
Male	48 (39.3%)	n/a
Female	74 (60.7%)	122 (100%)
Ethnicity		
African American	10 (8.2%)	10 (8.2%)
Asian or Pacific Islander	2 (1.6%)	1 (.8%)
Caucasian	104 (85.2%)	108 (88.5%)
Hispanic	1 (.8%)	2 (1.6%)
Multiracial	3 (2.5%)	0 (0%)
Other	2 (1.6%)	1 (.8%)
Education		
Between 8-12 years	n/a	35 (28.7%)
More than 12 years	122	87(71.3%)

Measures

The Emotion-Related Parenting Style (ERPS)

The Emotional-Related Parenting styles (ERPS) is a self-report measure that was adapted

by Paterson and her research team in 2012 from the original Meta-emotion Interview and the 81-

item Emotion-Related Parenting Style Self-Test True/False version (ERPSST-T/F) developed by

Gottman (Paterson et. al., 2012). In comparison to the original semi-structured Meta-emotion

interview, which contains a series of open-ended questions regarding awareness and coaching of sadness and anger, the ERPS contains 20 self-report statements allowing respondents to select the degree of their agreement on a 5 point True/False Likert scale. The ERPS examines parental meta-emotion philosophy in four specific domains: (a) emotion coaching (EC), (b) parental rejection of negative emotion (PR), (c) parental acceptance of negative emotion (PA), and (d) feelings of uncertainty or ineffectiveness in emotion socialization (UI). The three negative emotions included in the measure are anger, fear, and sadness. An example of EC item states "when my child is sad, we sit down and talk over the sadness." An example PA item states "Children have a right to feel angry." Among the twenty statements, the UI subscale has five items. Within the five items, two of the statements represent the uncertainty construct, whereas three items represent the ineffectiveness construct. An example of uncertain in emotion socialization is "When my child is angry, I'm not quite sure what he or she wants me to do." An example of ineffectiveness in emotion socialization states "when my child gets angry with me, I think, "I don't want to hear this." The complete ERPS questionnaire and scoring guidelines are included in Appendix C.

The Emotion-Related Parenting Styles has many advantages comparing to other measures of parental meta-emotion philosophy. First, it is simple and convenient for respondents to complete. Second, it has sound psychometric properties. The psychometrics of the ERPS was examined by the Paterson (2012) research team. They compared two groups: a group of mothers of child with developmental disability and another group of mothers of typically developed child. The Cronbach Alpha Coeffients of the four subscales was found ranging from .71 to .80. In the present study, two items were inadvertently not included in the electronic survey administration, specifically one item on the scale of parental rejection of negative emotion and one item on the

scale of parental acceptance of negative emotion. The emotion coaching (EC) and the feelings of

uncertainty or ineffectiveness in emotion socialization (UI) were not affected. Based on this

scenario, the internal consistency (Cronbach's alpha) of ERPS in all four domains was

reexamined in the present study. The Cronbach's alpha indices of ERPS in the present study are

listed in Table 2.

Besides internal consistency, the convergent validity of the ERPS was also supported.

The subscales of ERPS were significantly correlated with the Emotion-Related Parenting Style

Self-Test True/False version (ERPSST-T/F) long form (Paterson et. al., 2012). Specifically, the

EC subscale was positively correlated with the emotion coaching subscale on the ERPSST-T/F,

as well as negatively correlated with the dismissing and disapproving subscale on the ERPSST-

T/F. The PA subscale is positively correlated with the emotion coaching subscale on the

ERPSST-T/F. In addition, the PR subscale positively correlated with the dismissing and

disapproving subscale on the ERPSST-T/F. The UI subscale correlated negatively correlated

with the emotion coaching subscale on the ERPSST-T/F, and positively correlated with the

dismissing, disapproving, and laissez-faire subscale on the ERPSST-T/F. Similar correlations

were found between ERPS and a few other related measures, such as the Coping with Children's

Negative Emotions Scale (Fabes, Eisenberg, & Bernzweig, 1990) and the Parent Attitude

Toward Children's Expressiveness Scale (Saarni, 1985).

The Structural Analysis of Social Behavior (SASB)

The SASB Intrex Questionnaire is a multidimensional, self-report measure that assesses

interpersonal and intrapsychic relations. The SASB Intrex Questionnaire has a short form (8

items per surface), a medium form (16 items per surface), and a long form (36 items per surface).

The current study selected the medium form for the purpose of capturing the eight octant

variables, meanwhile without being burdensome for the respondents. The medium form of the

Intrex has 2 items per each of eight octants (i.e., 16 items for Introject ratings at best and the

same items at the worst state, and 32 items for other-ratings at best and at worst), thereby

providing for assessment of all possible SASB parameters. Mothers were asked to complete a

transitive focus version (how typically mothers act toward their young adult child when he or she

was aged 13-17; a self-report of their retrospective perception) at best and at worst 32 items

each, therefore 64 items total. Young adults were asked to complete an intransitive form (rate

their reactions to their mothers' behavior when they were aged 13-17) and an introject form (how

they think of or treat themselves at their current age) both at best and at worst. For example, an

item for mother's transitive action toward her young adults when they were adolescent age is

stated as "I let him speak freely, and warmly try to understand him even if we disagree."

Whereas an item for young adults' perceptions of mother's action toward them when they were

adolescents is "She clearly and comfortably expressed her own thoughts and feelings to me." An

example of items of introjected action is "To become perfect, I force myself to do things

correctly." Participants rate each item on a scale from 0 (*never/not at all*) to 100 (*always/*

perfectly) with 10-point intervals. The sequence of all the items on each form was the same. The

raw data were processed using the SASB computer software (Benjamin, 2000). Cluster scores

representing unique combinations of autonomy and affiliation were calculated by the SASB

software, as well as indication of each eight octant score was included in data analysis.

Extensive evidence of the psychometric properties of the SASB Intrex Questionnaire is

available. Regarding reliability, the average internal consistency on the SASB Intrex

Questionnaire was found to be 0.82 for the medium form and 0.76 for the long form, whereas the

test-retest reliability was reported as 0.78 for the short form, 0.84 for the medium form, and 0.87 for the long form across a 6-week interval (Benjamin, Rothweiler, & Critchfield, 2006).

In considering the content validity, a small deviation between data and theory on the affiliation and the autonomy dimension was detected (Rothweiler, 2004) and participants were reported as typically agreeing with cluster scores generated from the computer software (Benjamin, Rothweiler, & Critchfield, 2006). Regarding construct validity, it was found that factor loadings correlated strongly with the theoretical structure (Benjamin, 1994). Moreover, the SASB was found to be useful in differentiating clinical groups, such as substance dependence and bulimia groups based on the assessed patterns of interpersonal relations between family members (Ratti, Humphrey, & Lyons, 1996). Their findings offer sufficient evidence in clinical utility of SASB. With regard to predictive validity, therapeutic outcomes were adequately predicted from patient-therapist complementarity on the SASB Intrex Questionnaire (Svartberg & Stiles, 1992; Jorgensen, 2000). Regarding concurrent validity, results from comparison between the SASB, IPC, and the Five Factor Model revealed convergent relations amongst the three measures, as well as unique aspects of personality only capturing by the autonomy dimension on SASB (Pincus, Gurtman, & Ruiz, 1998).

Data Analytic Strategy

Prior to matching the young adults with their mothers, all files were maintained electronically in the Psychology department hard drive and participants' confidentiality was ensured. After matching the pairs, all identifiable information was removed. The total subscale scores on the ERPS were computed in an EXCEL file. The total subscale scores then transferred into a Statistical Package for the Social Sciences (SPSS) file. Due to the missed items, the four subscale scores on the ERPS were transferred to standard z scores. SASB software output scores

were also entered in the same SPSS file. The final analysis was conducted using the SPSS software. The SASB surface scores were produced by taking the average from the best and the worst form. The rationale for this average computation is explained by Benjamin as a method of minimizing social desirability bias. Each surface of SASB has a weighted affiliation and autonomy score that was calculated based on the weighted average of all transitive and intransitive plane items (Benjamin, 1988). A series of bivariate correlations was conducted. The weighted average scores in affiliation and autonomy were then correlated with the standard z scores of the four subscales of ERPS. Similarly, the eight cluster scores of mothers' transitive focus, adolescents' intransitive focus, and young adults' introject focus were also correlated with the standard z scores of the four subscales of ERPS. Furthermore, to examine the predictive value of adolescents' gender and mothers' education level on maternal emotion coaching and uncertainty/ineffectiveness of emotion socialization, multiple regression analysis was conducted. Gender was coded as "female=1", and "male=2." Mothers' education was coded as "between 8-12 years"=1, and "more than 12 years"=2. Results of data analysis were summarized using SPSS output tables.

Summary of Method

The current study examines the links between parental meta-emotion philosophy and parent-adolescent interpersonal and young adult intrapsychic relations. The sample population was recruited from Indiana University of Pennsylvania campus. One hundred twenty two young adult college students and their mothers were included for the final data analysis. Mothers completed the Emotion-Related Parenting Style, and the SASB medium form transitive focus. Meanwhile, young adults completed the SASB medium form, both the intransitive version and the introject version. SASB vector scores and SASB cluster scores were computed using the

SASB software scoring program (Benjamin, 2000). Statistical analysis linking the parental meta-emotion philosophy and SASB ratings were conducted. Based on the attachment theory (Bowlby, 1977), it is hypothesized that parental emotion coaching is positive correlated with mother-adolescent reciprocal affiliation, and is negatively correlated with mother-adolescent reciprocal hostility. Given previous literature regarding the collaborative interactions between parents and adolescents being optimal (Beveridge &Berg, 2007), no significant link between parental emotion coaching and weighted autonomy is expected. Similarity, the attachment theory would be consistent with the hypothesis that parental feelings of uncertainty/ineffectiveness in emotion socialization has significant positive correlations with SASB hostility clusters scores, and has significant negative correlations with SASB affiliation cluster scores. Considering the theory of complementarity and reciprocal interpersonal actions, young adults' are predicted to show a lower level of affiliation, and likely a higher level of submit and separate. Given the theory of introjection, young adults' self-affiliation is expected to show a positive correlation with parental emotion coaching and a negative correlation with parental rejection of negative emotion and parental feelings of uncertainty/ineffectiveness in emotion socialization.

CHAPTER FOUR

RESULTS

Descriptive Data

The subscale scores of ERPS were computed by summing the responses of corresponding

scale items. The questionnaire and scoring algorithm is presented in Appendix B. The means and

standard deviations of the four subscales on the ERPS are shown in Table 2. Due to the fact that

the PR and PA scale each has a missing item, the reliability of all four subscales was reexamined

for the present study.

Table 2

The Means, SD, and Reliability Coefficients of the ERPS (N=122)

ERPS	*M*	*SD*	*Cronbach's α*
EC	21.15	3.04	.77
PR	9.71	2.99	.56
PA	13.69	2.96	.71
UI	13.39	3.81	.77

Note. EC=emotion coaching parenting style; PR=parental rejection of negative emotion;
PA=parental acceptance of negative emotion; UI=feelings of uncertainty / ineffectiveness in
emotion socialization.

The subscale score for the emotion coaching parenting style (M=21.15, SD=3.04) and the

feelings of uncertainty/ineffectiveness in emotion socialization (M=13.39, SD=3.81) were

computed including the same items as the original ERPS form. Their reliabilities were found to

be good given that the cut off of .70 is generally considered as acceptable (both EC and UI

$α=.77)$. This suggests that the further statistical analyses are based on reliable measures and

their results would be suitable for further interpretation and inference. The parental rejection of

negative emotion (M=9.71, SD=2.99) subscale included four out of the five items consisted in

the original subscale and its reliability was reduced to ($α=.56)$. The reliability index suggested

that the results from the PR scale were not a reliable indication of the parental emotion

disapproving style. Therefore, the results obtained from the PR scale should be interpreted with great caution. Despite that the parental acceptance of negative emotion scale (M=13.69, SD=2.96) also had a missing item, its internal consistence was still acceptable (α=.71). Based on these reliability analyses, it is warranted that EC and PA were reliable scales to represent parents' emotional coaching style. Moreover, the UI subscale was also found to be a reliable indication of parents' dismissing and disapproving style.

Bivariate Correlations Between ERPS and SASB Vectors

The bivariate correlations of each of the ERPS subscale score and the SASB vector score were computed. The vector scores of SASB included a weight affiliation and a weighted autonomy score, which were computed using the Scoring Software. The algorithm is based on the weighted sums of each cluster score relevant to their position on the horizontal affiliation axis and the vertical autonomy axis (Benjamin, 2000). The results of correlations between ERPS subscale scores and SASB vector scores were presented in Table 3. The pattern of correlations showed that mothers' emotion coaching style had significant positive correlations with the weighted affiliation for all three SASB surfaces. The strength of the significance was particular notable for adolescents' weighted affiliation in react to their mother (r= .318, p<.001). On the contrary, mothers' uncertainty or ineffectiveness in emotion socialization had significant negative correlations with the weighted affliction on both of the mother acting towards adolescent (r= -.415, p<.001) and the adolescent react to mother surfaces (r= -.325, p<.001). In addition, mother's rejection of negative emotion also negatively correlated with the weighted affiliation on the mother acting towards adolescent focus (r= -.313, p<.001). No other significant relationships among the ERPS subscale scores and SASB vector scores were detected.

On the autonomy dimension, only the level of parental rejection of negative emotion was significantly correlated with young adults' introject weighted autonomy score ($r= .230$, $p= .011$) and with the intransitive focus weighted autonomy score ($r= -.215$, $p= .017$). Since the internal consistency of the PR subscale was poor, this result should be interpreted with caution. No other significant correlations were observed among the EC, PA, UI, and the SASB weighted autonomy vector scores.

Table 3

Bivariate correlation between ERPS and Affiliation and Autonomy (N=122)

SASB Dimensions	EC	PR	PA	UI
Affiliation				
Introject	.188[*]	-.027	.004	-.097
Mother Acting Towards Adolescent	.259[**]	-.313[***]	-.038	-.415[***]
Adolescent React to Mother	.318[***]	-.135	-.030	-.325[***]
Autonomy				
Introject	-.066	.230[*]	-.077	.031
Mother Acting Towards Adolescent	-.002	-.060	.118	.109
Adolescent React to Mother	-.070	-.215[*]	-.155	.016

Note. *$p < .05$. **$p < .01$. ***$p < .001$. EC=emotion coaching parenting style; PR=parental rejection of negative emotion; PA=parental acceptance of negative emotion; UI=feelings of uncertainty / ineffectiveness in emotion socialization.

Bivariate Correlations Among ERPS and SASB Cluster Scores

Bivariate correlation of each specific SASB cluster score and ERPS subscale score was conducted. The four cluster score between the dimensional scores were computed by taking 50% of each of the two adjacent dimensional scores. For example, the score for affirm consist of 50% of the emancipate score and 50% of the active love score.

Bivariate Correlations Among ERPS and SASB Transitive Cluster Scores

Many significant relationships were demonstrated between emotion-related parental style and mother acting towards adolescent focus, as presented in Table 4. As expected, mother's emotion coaching ability showed significant positive correlations with mothers' acting toward their adolescent in ways that labeled as affirm (r= .288, p<.001), active love (r= .266, p= .003), and protect (r= .300, p<.001). Moreover, the mother's emancipate action toward their adolescent showed significant positive relation with the parental rejection of negative emotion(r= .229, p= .011), acceptance of negative emotion (r= .226, p= .012), as well as the uncertainty/ineffectiveness style (r= .192, p= .034). This may indicate that adolescents were more likely to be granted freedom to handle emotions on their own when mothers were not emotion coaching. In comparison, mother's uncertainty/ineffectiveness in emotion socialization style showed significant negative correlations with mothers' action towards their adolescent in affirm (r= -.292, p<.001), active love (r= -.197, p= .029), and protect (r= -.319, p<.001). In addition, mother' rejection of negative emotion and uncertainty/ineffectiveness in emotion socialization both showed significant positive correlations with mother's action towards their adolescent in blame (PR: r= .413, p<.001; UI: (r= .359, p<.001), attack (PR: r= .402, p<.001; UI: (r= .399, p<.001), and ignore (PR: r= .450, p<.001; UI: (r= .447, p<.001). These patterns of results were also consistent with the hypothesis that mothers with higher level of emotion coaching style are more likely to try to see their adolescent's point of view, to approach their adolescent with love and caring, and to help and guide their adolescent in a very loving way. It could also be inferred that mothers with these interpersonal traits are more able to provide emotion coaching to their adolescent. Furthermore, mothers with feelings of uncertain and ineffective emotion socialization were more likely to tell that their adolescents' ways are wrong,

rejecting and forgetting or leaving their adolescents out of important things. Respectively, mothers with these interpersonal traits could be speculated to have more uncertainty and ineffectiveness in emotion socialization.

Table 4

Bivariate Correlations Among ERPS and Mothers Acting Towards Adolescents (N=122)

SASB Code	EC	PR	PA	UI
Emancipate	.036	.229*	.226*	.192*
Affirm	.288***	-.057	-.068	-.292***
Active Love	.266**	-.109	.047	-.197*
Protect	.300***	-.028	-.097	-.319***
Control	.076	.333***	.012	.028
Blame	-.161	.413***	.086	.359***
Attack	-.085	.402***	.041	.399***
Ignore	-.174	.450***	-.022	.447***

*Note. *p < .05. **p < .01. ***p < .001*. EC=emotion coaching parenting style; PR=parental rejection of negative emotion; PA=parental acceptance of negative emotion; UI=feelings of uncertainty / ineffectiveness in emotion socialization.

Bivariate Correlations between ERPS and SASB Intransitive Cluster Scores

On the 'adolescents reacting to their mother' focus, a similar pattern was revealed. Mothers' emotion coaching style had significant positive correlation with their adolescents' interpersonal behavior in disclose (r= .233, p<.001) and reactive love (r= .347, p<.001). It also demonstrated significant negative correlation with adolescents' recoil (r= -.259, p= .004) and wall off (r= -.323, p<.001) behavior. On the contrary, mothers' level of uncertain/ineffective emotion socialization style had significant negative correlation with their adolescent's reactive love (r= -.200, p<.001) behavior. Moreover, mothers' feeling of uncertainty and ineffectiveness in emotion socialization showed significant positive correlations with adolescent's reactions to their mothers that characterized by sulk (r= .280, p= .002), recoil (r= .442, p<.001), and wall off

45

(r= .364, p<.001) behavior. As expected, parental rejection of negative emotion was also found to have significant positive correlations with adolescents' behavioral reactions to their mother that were characterized as submit (r= .309, p<.001), sulk (r= .341, p<.001), recoil (r= .220, p= .015), and wall off (r= .183, p=.044). On the other hand, parental acceptance of negative emotion only showed significant negative correlation with adolescents' reaction to mother in behavior of separate (r= -.249, p<.001) . These results illuminate some important findings in the current work: (a) Mothers' awareness and ability to coach emotion was positively linked to adolescents' higher likelihood to disclose and express their feelings to their mothers, as well as reporting more feelings of delight and joy to be with their mother. (b) The more awareness and ability to coaching emotion by mothers was also linked to adolescents' less likelihood to protest and withdraw from their mothers, as well as less likelihood to avoid or close off from their mother. (c) Mothers' higher level of uncertainty and ineffectiveness in emotion socialization was negatively correlated to adolescents' delight and joy to be with their mother, as well as more likelihood to be resentfully give in, withdraw and avoid their mothers. (d) The higher level mothers' rejection of negative emotion was positively linked to the higher degree of adolescents' deferring to their mothers, and more likelihood to be resentfully given in, withdraw and avoid their mothers. (e) The greater level of mothers' acceptance of negative emotion was link to adolescents' less clear sense of asserting themselves and choosing their own ways separating from mothers'.

Table 5

Bivariate Correlations Among ERPS and Adolescents Reacting to Mothers (N=122)

SASB Code	EC	PR	PA	UI
Separate	-.154	.077	-.249**	.175
Disclose	.233**	-.025	-.135	-.131
Reactive Love	.347***	-.005	.031	-.200*
Trust	.076	.132	-.037	.027
Submit	-.047	.309***	.007	.097
Sulk	-.084	.341***	.022	.280**
Recoil	-.259**	.220*	-.015	.442***
Wall off	-.323***	.183*	.042	.364***

*Note. *p < .05. **p < .01. ***p < .001*. EC=emotion coaching parenting style; PR=parental rejection of negative emotion; PA=parental acceptance of negative emotion; UI=feelings of uncertainty / ineffectiveness in emotion socialization.

Bivariate Correlations between ERPS and SASB Introject Scores

The links between young adults' intrapsychic relations and emotion-related parenting style was a particular interest of the present study. The results of bivariate correlations between ERPS styles and SASB introject cluster scores were presented in Table 6. Fewer significant correlations were evidenced compared to the number of links between emotion related parenting styles and the SASB interpersonal relations as reported above. Nonetheless, mothers' emotion awareness and coaching showed significant positive correlations with young adults' self-love (r= .205, p=.023) and self-protect (r= .179, p=.049). Moreover, parental rejection of negative emotion showed a significant positive correlation with self-emancipate (r= .240, p=.008). No significant correlations among other variables were revealed. These results demonstrate that mother's emotion coaching ability may have predictive value in young adults' behavior of appreciating and valuing self, as well as taking a good care of oneself. Furthermore, mother's

rejection of negative emotion was link to young adults' behavior in doing whatever they feel like doing and not worrying about tomorrow.

Table 6

Bivariate Correlations Among ERPS and Young Adult Intrapsychic Relations (N=122)

SASB Introject	EC	PR	PA	UI
Self-emancipate	.025	.240[**]	-.020	.036
Self-affirm	.166	.146	-.063	.031
Self-Love	.205[*]	.064	-.048	-.005
Self-protect	.179[*]	.035	-.013	-.050
Self-control	.054	-.018	.029	.027
Self-blame	-.029	.020	.013	.119
Self-Attack	-.112	.127	-.059	.137
Self-neglect	-.165	.142	-.053	.173

Note. $*p < .05.$ $**p < .01.$ EC=emotion coaching parenting style; PR=parental rejection of negative emotion; PA=parental acceptance of negative emotion; UI=feelings of uncertainty / ineffectiveness in emotion socialization.

Multiple Regression Analyses

Multiple regression analysis was used to examine if the gender of young adults and/or mothers' education level would significantly predict mothers' emotion coaching style and uncertainty/ineffectiveness in emotion socialization. Results show that neither of the predictors significantly contributed to mother's emotion coaching or uncertainty/ineffectiveness parenting style (Table 7). Specifically, the results of the multiple regression indicated that adolescents' gender and mothers' education level explained 1.6% of the variance ($R^2 = .016$, $F (2,119) = .953$), neither adolescents' gender ($p=.702$) or mothers' education level ($p=.191$) were significant predictors for mothers' emotion coaching style. Similarly, young adult's gender and mother's education level explained 1.2% of the variance ($R^2 = .012$, $F (2,119)=.708$) for mothers' feeling of uncertainty/ineffectiveness in emotion socialization. Adolescents' gender ($p=.237$) or

mothers' education level (p=.993) did not predict the level of mothers' feeling of

uncertainty/ineffectiveness in emotion socialization.

Table 7

Multiple Regression Analysis for Variables Predicting EC and UI

	b	$SE\ b$	β
EC			
Gender	-.216	.564	-.035
Education	.801	.609	.120
UI			
Gender	-.842	-.708	-.108
Education	-.007	-.764	-.001

Note. R^2=.016, ΔR=--.001 for EC. R^2=.012, ΔR=-.005 for UI. *$p < .05$. **$p < .01$*. EC=emotion coaching parenting style; UI=feelings of uncertainty / ineffectiveness in emotion socialization.

CHAPTER FIVE

DISCUSSION

Summary of Findings

The present study examined the links between parental meta-emotion philosophy and

parent-adolescent interpersonal relations, as well as young adult intrapsychic relations. It was

hypothesized that mothers' level of emotion awareness and coaching would positively correlate

with mothers' overall level of affiliation, adolescents' overall level of affiliation, and not be

significantly associated with adolescents' overall level of autonomy. With regard to SASB

cluster variables, mothers' level of emotion coaching is hypothesized to be positively correlated

with their behavior of affirm, active love, and protect towards their adolescents, and negatively

correlated with their behaviors labeled as blame, attack, and ignore towards their adolescents. On

the contrary, mothers' level of rejection of negative emotion was hypothesized to be negatively

correlated with mothers' behavior of affirm, active love, and protect towards their adolescents,

and positively correlated with their behavior of blame, attack, and ignore towards their

adolescents. Similarly, mothers' level of uncertainty and ineffectiveness of emotion socialization

was also hypothesized to be negatively correlated with mothers' behavior of affirm, active love,

and protect towards their adolescents, and positively correlated with their behavior of blame,

attack, and ignore towards their adolescent. With regard to adolescents reactions towards their

mother, we hypothesized that adolescents' behavior of reactive love, trust, and disclose would be

positively correlated with mothers' level of emotion coaching, and adolescents' behavior of sulk,

recoil, and wall-off are negatively correlated with mothers' level of emotion coaching.

Conversely, adolescents' behavior of reactive love, trust, and disclose were expected to be

negatively correlated with mothers' rejection of negative emotion and uncertain/ineffectiveness

of emotion socialization, and their behavior of sulk, recoil, and wall-off are positively correlated with mothers' rejection of negative emotion and uncertain/ineffectiveness of emotion socialization. Regarding young adults' intrapsychic relations, their overall level of self-affiliation, including behaviors of self-love, self-affirm, and self-protect was hypothesized to be positively correlated with their mothers' level of emotion coaching and negatively correlated with their mothers' rejection of negative emotion and uncertain/ineffectiveness of emotion socialization. Whereas young adults' level of self-blame, self-attack, and self-neglect is hypothesized to be negatively correlated with mothers' level of emotion coaching and positively correlated with mothers' rejection of negative emotion and uncertain/ineffectiveness of emotion socialization. Finally, we hypothesized that adolescents' gender and mothers' education level are not significant predictors of mothers' level of emotion coaching or mothers' level of uncertain/ineffectiveness of emotion socialization.

As expected, mothers' level of emotion coaching showed significant positive correlations with the overall affiliation in mothers' action towards adolescent, adolescents' reaction to their mothers, and young adults' action towards themselves. Whereas mothers' level of uncertain/ineffectiveness of emotion socialization showed significant negative correlations with the overall affiliation in mothers' action towards adolescents and adolescents' reaction to their mothers. Additionally, mothers' level of rejection of negative emotions showed significant negative correlation with the affiliation in mothers' action towards adolescent. These results reflect the loving nature of mothers' heightened emotional awareness in their children, their action of emotion validation, and guidance in emotion regulation. Consistent with existing literature on attachment theory, as children interact with their significant caregivers, their mental representations of those interactions inevitably impact children's expectations, as well as their

51

reactions in future interactions with their caregivers, which further influence their future

relationships with self and others (Pincus et. al., 1999). These findings are also consistent with

the reciprocal influence of interpersonal behavior. Although correlation analysis is limited in

demonstrating the direction of cause and effect, and the effects of parental emotion coaching on

interpersonal and intrapsychic affiliation is inconclusive, the significant links between parental

emotion coaching and reciprocal affiliation for the present study are clearly established. The

present study supports the prior evidence that mothers' emotion coaching behavior has predictive

value in adolescents' reciprocal affiliation to their mothers and to themselves in young

adulthood. Notably, a reciprocal lack of affliction is demonstrated when mother rejects or are

uncertain about their adolescents' negative emotions. Among those links, two of the correlations

were particularly strong, including the positive correlation between mothers' emotion coaching

and adolescents' reactive affiliation, and the negative correlation between mothers'

uncertainty/ineffectiveness in emotion socialization and mothers' transitive affiliation and

adolescents' reactive affiliation. Given that the nature of interpersonal behavior is more

accurately viewed using a reciprocal and transactional model than a linear model, the act of

emotion coaching is likely to benefit both mothers and adolescents in building mutual loving and

supportive relationships.

Besides the overall affiliation index, additional SASB cluster scores more specifically

represent the dimension of affiliation. Consistently, mothers' level of emotion coaching showed

significant positive correlation with mothers' behavior in active love, and adolescents' behavior

of reactive love. Mothers' level of uncertainty/ineffectiveness in emotion socialization

demonstrated significant negative correlations with mothers' behavior in active love, and

adolescents' behavior in reactive love. Moreover, Mothers' level of uncertainty/ineffectiveness

in emotion socialization revealed significant positive correlations with mothers' behavior in blame and attack, as well as adolescents' behavior of sulk and recoil. When mothers lack of ability to coach their adolescents' emotion, their relationships are more likely to be tumultuous, or when mother and adolescent are in conflict, mothers are more likely to be uncertain about how to deal with adolescents' emotions and ineffective in their intervention attempts. These findings are also consistent with previous studies suggesting that adolescents of emotion dismissing parents are more likely to have clinically significant externalizing problems (Shortt et al., 2010). Based on these results, it is reasonable to speculate that parenting behavior in emotion coaching is likely to strengthen parent-adolescent relationships. Considering the bidirectional approach, it is also reasonable to speculate that adolescents' affiliation towards their mothers helps mothers to be more aware of and coach their adolescents' difficult emotions. Since adolescent developmental phase is prone to have more challenges and stress in adjustment with self, others, and their unique environment, parental emotion coaching could potentially benefit adolescents' development in forming interpersonal relationships and personality, and assisting their transition into adulthood.

The results from the links between parental emotion coaching and the overall autonomy indices are also consistent with existing literature. Mothers' level of emotion coaching and acceptance of negative emotion did not show any significant links between parental granted autonomy to adolescent, adolescents reactive autonomy towards their mothers, or in young adults' self-autonomous behavior. A moderate level of autonomy is evidenced among mothers of emotion coaching, acceptance of negative emotion, and uncertainty/ineffectiveness emotion socialization. Theory states that adolescence is considered a critical time to develop a separate sense of self and to form their own beliefs and personal values (Erikson, 1982). During

adolescent years, the optimal autonomy processes that benefit both parents and adolescents have been described as the collaborative teamwork approach (Beveridge & Berg, 2007). This interdependence of mothers and adolescents relationship is further indicated by the two SASB transitive focus labels, affirm and protect, as well as the two SASB intransitive labels, disclose and trust. As expected, mothers of high emotion coaching had significant positive correlations on both affirm and protect. These mothers express more interests in seeing their adolescents' point of view and warmly helping and guiding their adolescents in problem-solving compared to mothers with lower level of emotion coaching awareness and ability. On the contrary, mothers' level of uncertainty/ineffectiveness in emotion socialization had significant negative correlations with affirm and protect. Unlike mothers with high level of emotion coaching, adolescents' perspective is more likely to be discounted by mothers of high uncertainty/ineffectiveness in emotion socialization and they are less likely to receive helpful suggestions in modulating emotion or problem-solving. Correspondingly, adolescents' reported disclosing behavior had a significant positive correlation with mothers' level of emotion coaching. It is intuitively satisfying to consider that adolescents are more likely to express their thoughts and feelings to their mother when there are fewer worries about being invalidated, dismissed, or disapproved. No significant links between parental acceptance of negative emotion, rejection of negative emotion, or uncertainty/ineffectiveness in emotion socialization and adolescents' behavior of disclose and trust are found in current study. These results further support the interpretation that adolescents are more likely to express their thoughts and feelings to mothers who have emotion coaching skills.

One possible explanation of the lack of significant findings on trust is that trust is probably influenced by mothers' credibility, rather than their ability to emotion coaching.

Nevertheless, these findings provide evidence to utilize emotion coaching in family therapy in efforts to promote a healthy level of interdependence, a balanced level of autonomy, as well as reduce barriers for open communication.

In contrast to parental emotion coaching, parental rejection of negative emotion had a negative correlation with adolescents' reactive autonomy – "Submit". This result could be interpreted as adolescents of parents who reject their negative emotions have overall less autonomy. The link also parallels with the significant positive correlation between parental rejection of negative emotion and mother exerting "control" over their adolescents on the SASB transitive focus. However, given that the reliability of the parental rejection of negative emotion is poor, further interpretations need to be made with caution. Despite this limitation, a more detailed analysis of problematic autonomy processes can be generated from specific SASB labels. The complementarity of "submit" and "control" suggest a dynamic interaction of of enmeshment (Beveridge &Berg, 2007). This type of parent-adolescent relationship is increasing detrimental as the adolescent transition to adulthood. Such individuals are less likely to develop a stable sense of self-identity and gain a direction of life goals. Moreover, a premature autonomy is represented by the two SASB transitive focus labels: emancipate and ignore. Both parental rejection of negative emotions and parental uncertainty/ineffectiveness in emotion socialization showed significant positive correlations with emancipate and ignore. These mothers are more likely to "give" freedom to their adolescents without much concern, and to leave their adolescents out of important things (Benjamin, 2002). Using a transactional framework, literature suggest that adolescents whose perspectives are being devalued by their parents are more likely to withdraw, especially in familial environment, and in turn impede their ability to explore interests, develop self-esteem and identity, and form healthy relationships (Allen et al.,

1994). Such apparent separation from the family will not prevent a deeper sense of isolation and other seemingly independent behavior that does not actually represent self-promoting autonomous behavior. Existing literature also provides evidence that adolescents who constrain their autonomous functioning are more likely to exhibit externalizing problems (Allen et al., 1994), withdrawal associating with eating disorders (Maharaj et al., 2001), and depression (Sheeber & Sorenson, 1998). The clinical implications of these findings suggest that parental training on emotion coaching may increase parents' awareness of their adolescents' emotion, and take a more active role in acknowledging their adolescents' point of view and providing guidance and options for problem-solving. The change of parental behavior, in turn, is likely to improve adolescents' adaptive adjustment and healthy development.

One of the unique contributions of the present study is to link parental meta-emotion philosophy with young adults' intrapsychic relations. It is found that mothers' level of emotion coaching had significant positive correlations with young adults' level of self-love and self-protect. These young adults of mothers with high emotion coaching are more likely to value self and provide good self-care. The construct of self-protect signifies a balanced level of behavior characterized as both self-love and self-control. This interpretation is consistent with the non-significant correlations between parental emotion coaching and young adults' self-emancipate and self-control. A moderate level of self-autonomy in young adult college population may be particularly crucial, given that many college students start experiencing independent living without supervision first time in their lives and it is not uncommon that young college students engage in high risk behaviors, such as experimenting with psychoactive substance use, driving while intoxicated, and risky sexual behaviors. Early parental emotion coaching may benefit individuals in developing a sense of self-love and self-protect, which is inductive in promoting

56

practice autonomy with caution. Additionally, literature has shown that positive self-image has numerous benefits. For example, self-affiliation clusters have been found to be a most important factor for adolescents' adjustment and for protection against adolescents' externalizing problems (Ybrandt, 2008). Another study has shown that increased level of self-love can predict psychotherapy outcome in reducing depression and anxiety related symptoms (Ryum, Vogel, Walderhaug, & Stiles, 2014). These findings further support the clinical utility of including parent training on emotion coaching, particularly for adolescents with adjustment and externalizing problems. These finding relating to intrapsychic relations suggest that parents' increased ability in emotion coaching is likely not only deescalating the intensity of interpersonal conflict, but may also facilitating the development of self-love and self-protect behaviors. The improved positive intrapsychic relations are likely to benefit individuals' global psychological well-being. Another significant positive correlation demonstrated from the data is between parental rejection of negative emotion and self-emancipate. Considering that the reliability of the index of parental rejection of negative emotion is low, the interpretation of this correlation is limited. However, it is still possible to speculate that the current findings are consistent with other work that supports that notion that parental rejection of negative emotion predicts young adults' exploration without careful consideration of potential consequences or vice versa. Further study may focus on the impulsivity and risk-taking behaviors of individual and link it with parenting style in emotion disapproving.

In contrast to the hypothesized associations among self-control, self-blame, self-attack, and self-neglect, there were no significant correlations among parental rejection of negative emotion or uncertainty/ineffectiveness in emotion socialization. This result suggests that parental uncertainty/ineffectiveness in emotion socialization does not have predictive value in young

adults' self-control, self-blame, self-attack, and self-neglect. However, because parental rejection of negative emotion had a missing item and poor reliability, the links between parental emotion disapproving style and poor self-image should be interpreted as tentative and a substantial argument for future work in the area. Nevertheless, it is possible that those negative intrapsychic behaviors are impacted by more than just parental emotion dismissing or disapproving, but also inevitably influenced by other aspects of poor parenting behavior, such as severe punishment, childhood maltreatment, or lack of overall warmth and guidance beyond emotion related situations. Several recent studies have explored the relationships between these negative intrapsychic traits and eating disorders, post-traumatic stress disorder (PTSD) symptoms, and the outcome of short and long-term psychotherapy. Findings suggested that self-attack contributed the most variance in predicting eating disorder treatment outcome (Björck, Clinton, Sohlberg, & Norring, 2007), negative self-images were found to related to PTSD symptoms in traumatized refugees (Holmqvist, Andersen, Anjum, & Alinder, 2006), and negative self-image strongly predict the need to achieve positive outcome for long-term psychotherapy compared to short-term therapy (Lindfors, Knekt, Heinonen, & Virtala, 2014). These studies provide the rationale to include the emotion coaching component in future studies to future examining the effect of parental emotion coaching in treating various psychological conditions, and measuring the potential impact of increasing self-love and self-protect on decreasing psychological symptoms.

The final findings from the present study focused on the predictors of emotion-related parenting style. As hypothesized, neither adolescents gender or mothers' education level are significant predictors of mothers' emotion coaching style or uncertainty/ineffectiveness in emotion socialization. Despite that previous studies found gender differences in emotion-related parent-child interactions, for example, it was found that parents mention emotion terms more

58

frequently and variety with daughter than sons (Adams, Kuebli, Boyle, & Fivush, 1995). Studies have also suggested that the conversation about emotional experience between parents and daughter related more to the interpersonal context compared to emotion-related conversations between parents and sons (Fivush, Brotman, Buckner, & Goodman, 2000). Our findings show that mothers' level of emotion coaching or uncertainty/ineffectiveness in emotion socialization does not depend significantly on the gender of adolescents. Moreover, limited studies have specifically examined the effect of maternal education level on their ability to coach emotion. Our results suggest that education level did not significantly predict emotion-related parenting style. These findings are consistent with the theoretical assumption that parents' own early experience in emotion socialization and their own meta-emotion philosophy forms the foundation for their parenting behavior in emotion coaching, regardless of the number of years of formal education they received or the gender of their child.

Strengths, Limitations, and Future Directions

The study has several strengths. First, although parental meta-emotion philosophy has been linked with children's outcome in better social skills and better peer relation, the specific association of interpersonal relations with the person's significant caregiver has not been explored. Our findings support the speculation that parental emotion coaching links significantly with the reciprocal influence of parent-adolescent affiliation. Furthermore, parental rejection of negative emotion or uncertainty/ineffectiveness in emotion socialization may be associated with parent-adolescent relationship problems. Moreover, our study is among the first to link young adult intrapsychic relations with parental emotion coaching, our findings confirm that parental emotion coaching predicts self-love and self-protection in young adults. This result provides

additional support to the existing literature that parent training in emotion coaching have long-lasting influence on children's positive outcome.

The present study has several limitations. First, the missed item on the parental rejection of negative emotion scale reduced the reliability of the scale, which limited the strength of the conclusion related to the construct of this particular emotion-related parenting style. Although the parental rejection of negative emotion scale correlates significantly with the parental feelings of uncertainty/ineffectiveness in emotion socialization scale (see Appendix E), the act of rejecting of emotion carries a unique feature of parental disapproval, whereas the uncertainty/ineffectivess in emotion socialization describes a lack of ideas on how to react during and after emotional situations. Future studies exploring the links between parental emotion disapproving and parent-adolescent interpersonal relations, as well as adolescents' intrapsychic relations are warranted. Such a study could separate the group of parents with high level of rejecting and disapproving of negative emotions from the group of parents with high level of emotion coaching, based on the results of their self-report and/or observational measures. The comparison of SASB profiles between these two groups of parents and their children could provide clear evidence on how various styles of parental emotion socialization differ in interpersonal/intrapsychic relations. Future studies could also focus on the gender differences in parental rejection of negative emotions, as previous research suggested that males and females express certain emotions in different frequency and intensity (Brebner, 2003).

Another limitation of the study is that both of the primary study measures are self-report instrument. The ratings are based solely on subjective views of their own experience. Also, the interpersonal relations surfaces of SASB asked participants to recall their behaviors back when they or their child were an adolescent. People's accuracy of self-report on retrospective

experience may affected by their distortion of memory. Adding sources of data from multi-method and multi-informant, such as observational interview, would likely to improve the validity of the data representing the construct of emotion-related parenting style. Third, the correlation analysis does not warrant the causal conclusions between maternal emotion-related parenting style and mother-adolescent interpersonal relationships, or the young adults' intrapsychic relations. Although many of the variables from both measures showed significant predictive value, it is still unclear that parental emotion coaching has effects on improving parent-adolescent interpersonal relationships, or parental emotion coaching lead to better self-image in young adults. Future studies could examine pre and post parent training on emotion coaching and compare the differences in parent-adolescent interpersonal and intrapsychic relations, and follow up the outcome overtime. This type of study design is likely to show the effect of parental emotion coaching. Finally, the present study is based on data collected from population with similar age, educational level, geographic location, and primarily Caucasian college students. The homogenous sample limits the generalizability of findings with population from diverse background. Future studies including participants from urban areas and diverse ethnic groups would increase the ability to generalize findings to a broader population.

Conclusion

The present study examined the links between parental meta-emotion philosophy and parent-adolescent interpersonal relations, as well as young adult intrapsychic relations. Findings supported that parental emotion coaching has positive correlations with mother-adolescent reciprocal affiliation, and a moderate level of interdependence. In addition, links are established between maternal emotion coaching and young adults' self-love and self-protect. Furthermore, links are also established between parental dismissing and disapproving style and parent-

adolescent reciprocal disaffiliation, as well as some evidence of parent-adolescent unbalanced

autotomy. These findings provide evidence to include emotion coaching training in parent

training programs, for the purpose of improving parent-adolescent interpersonal relationships.

Clinical implication of parental emotion coaching may also beneficial for a wide range of

psychological symptoms through the mechanism of increasing positive intrapsychic relations.

References

Adams, S., Kuebli, J., Boyle, P. A., & Fivush, R. (1995). Gender differences in parent-child conversations about past emotions: A longitudinal investigation. *Sex Roles*, 33(5-6), 309-323.

Allen, J. P., Hauser, S. T., Eickholt, C., Bell, K. L., and O'Connor, T. G. (1994). Autonomy and relatedness in family interactions as predictors of expressions of negative adolescent affect. *Journal of Research on Adolescence*, 4(4). 535–552.

Alpher, V. S. (1996) Identity and Introject in Dissociative Disorders. *Journal of Consulting and Clinical Psychology*, 64, 1238-1244.

Amitay, O. A., Mongrain, M. & Fazaa, N. (2008). Love and control: Self-criticism in parents and daughters and perceptions of relationship partners. *Personality and Individual Differences*, 44(1), 75-85.

Armelius, L., & Granberg, A. (2000). Self-image and perception of mother and father in borderline and psychotic patients. *Psychotherapy Research*, 10, 147-158.

Arnett, J. J. (1999). Adolescent Storm and Stress, Reconsidered. *American Psychologist*, 54 (5), 317-326.

Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development,* 67: 3296–3319.

Benjamin, L. S. (1974a). Structural analysis of social behavior (SASB). *Psychological Review*, 81, 1129-1133.

Benjamin, L. S. (1974b). Structural analysis of social behavior. *Psychological Review*, 81, 392-425.

Benjamin, L. S. (1981). A psychosocial competence classification system. In J. D. Wine & M. D. Smye (Eds.). *Social Competence* (pp. 189- 231). NY: Guilford Press.

Benjamin, L. S. (1982). Use of Structural Analysis of Social Behavior (SASB) to guide interventions in psychotherapy. In D. Kiesler & J. Anehin (Eds.), *Handbook of Interpersonal Psychotherapy* (pp. 190- 212). NY: Pergamon Press.

Benjamin, L. S. (1986). Adding social and intrapsychic descriptors to Axis 1 of DSM-III. In T. Millon & G. L. Klerman (Eds.), *Contemporary Issues in Psychopathology* (pp. 599-638). NY: Guilford.

Benjamin, L. S., & Wonderlich, S. (1986). *Using social variables to differentiate among DSM-III diagnostic groups: Major depression, bipolar depression, and borderline personality*. Unpublished manuscript, University of Wisconsin.

Benjamin, L. S. (1996). *Interpersonal Diagnosis and Treatment of Personality Disorders*. The Guilford Press.

Benjamin, L. S. (1994). SASB: A bridge between personality theory and clinical psychology. *Psychological Inquiry*, 5, 273–316.

Benjamin, L. S. (2000). *The Intrex user's manual*. Salt Lake City: University of Utah, Department of Psychology.

Benjamin, L. S. (2003). *Interpersonal reconstructive therapy: Promoting change in nonresponders*. New York: Guilford.

Benjamin, L. S., Rothweiler, J. C., & Critchfield, K. L. (2006). The Use of Structural Analysis of Social Behavior (SASB) as an Assessment Tool. *Annual Review of Clinical Psychology*, 2, 83–109. doi:10.1146/annurev.clinpsy.2.022305.095337

Beveridge, R. M., & Berg, C. A, (2007). Parent-Adolescent Collaboration: An Interpersonal

    Model for Understanding Optimal Interactions. *Clinical Child and Family Psychological*

    Review. Vol. 10. No. 1. 25-52.

Björck, C., Clinton, D., Sohlberg, S., & Norring, C. (2007). Negative self-image and outcome in

    eating disorders: Results at 3-year follow-up. *Eating Behaviors*, 8(3), 398-406.

Bowie, B. H., Carrère, S., Cooke, C., Valdivia, G., McAllister, B, & Doohan, E. (2011). The

    Role of Culture in Parents' Socialization of Children's Emotional Development. *Western*

    Journal of Nursing Research, 35(4), 514–533.

Bowlby, J. (1977). The making and breaking of affectional bonds: I. Aetiology and

    psychopathology in the light of attachment theory. *British Journal of Psychiatry*, 130,

    201-210.

Bowlby, J. (1988). *A secure base: Parent child attachment and healthy human development*. NY:

    Basic Books.

Brebner, J. (2003). Gender and Emotions. *Personality and Individual Differences*, 34(3), 387-

    394.

Brooks-Gunn, J., Graber, J. A., & Paikoff, R. L. (1994). Studying links between hormones and

    negative affect: Models and measures. *Journal of Research on Adolescence*, 4, 469-486.

Brooks-Gunn, J., & Warren, M. P. (1989). Biological and social contributions to negative affect

    in young adolescent girls. *Child Development*, 60, 40-55.

Brown, P. C, & Smith, T. W. (1992). Social influence, marriage, and the heart: cardiovascular

    consequences of interpersonal control in husbands and wives. *Health Psychology*, 11, 88–

    96.

Bulloch, K., & Moore, R. Y. (1981). Innervation of the thymus gland by brain stem and spinal

 cord in mouse and rat. *American Journal of Anatomy*, 162,157-66.

Cassidy, J., Parke, R. D., & Butkovsky, C. (1992). Family correlates of childhood peer relations.

 Child Development, 63, 603-618.

Chaplin, T. M., Cole, P. M., & Zahn-Waxler, C. (2005). Parental socialization of emotion

 expression: Gender differences and relations to child adjustment. *Emotion*, 5, 80-88.

Chiles, J. A., Stauss, E. S., & Benjamin, L. S. (1980). Marital conflict and sexual dysfunction in

 alcoholic and non-alcoholic couples. *British Journal of Psychiatry*, 137, 266-273., 137,

 266-273.

Conger, R. D., Neppi, T., Kim, K. J., & Scaramella, L. (2003). Angry and aggressive behavior

 across three generations: A prospective, longitudinal study of parents and children.

 Journal of Abnormal Child Psychology, 31(2): 143–160.

Conroy, D. E. (2003). Representational models associated with fear of failure in adolescents

 and young adults. *Journal of Personality*, 71:757–784.

Constantino, M, J. (2000). Interpersonal process in psychotherapy through the lens of the

 Structural Analysis of Social Behavior. *Apply Preventive Psychology, Current Science*

 Perspectives, 9:153–172.

Davidson, R. J., Schwartz, G. E., Saron, C., Bennett, J., & Goleman, D. (1979). Frontal versus

 parietal EEG asymmetry during positive and negative affect. *Psychophysiology*, 16, 202-

 203.

Davidson, R. J., & Tomarken, A. J. (1989). Laterality and emotion: An electrophysiological

 approach. In E Boiler & J. Grafman (Eds.). *Handbook of Neuropsychology,* 3, 419-441.

 Amsterdam: Elsevier.

Denham, S. A., Zoller, D., & Couchoud, E. A. (1994). Socialization of preschoolers' emotional and social competence. *Developmental Psychology*, 30, 928-936.

DiPietro, J. A., & Porges, S. W. (1991). Relations between neonatal states and 8-month developmental outcome in preterm infants. *Infant Behavior & Development*, 14, 441-450.

Doohan, E., Carrère, S., & Taylor, M. (2004). *The meta-emotion interviews and coding systems. In V. Manusov (Ed.),* Nonverbal Communication: A Sourcebook of Methods. Hillsdale, NJ: Lawrence Erlbaum.

Dunsmore, J. C., Booker, J. A. & Ollendick, T. H. (2012). Parental Emotion Coaching and Child Emotion Regulation as Protective Factors for Children with Oppositional Defiant Disorder. *Social Development*, doi:10.1111/j.1467-9507.2011.00652.x

Eisenberg, N. (1996). Meta-emotion and socialization of emotion in the family—A topic whose time has come: Comment on Gottman et al. (1996). *Journal of Family Psychology*, 10, 269-276.

Erikson, E. H., & Erikson, J. M. (1998). *The life Cycle Completed (extended version)*. WW Norton & Company.

Erickson, T. M., & Pincus, A. L. (2005). Using Structural Analysis of Social Behavior (SASB) Measures of Self- and Social Perception to Give Interpersonal Meaning to Symptoms-Anxiety as an Exemplar. *Assessment*, 12(3), 243-254.

Fabes, R. A., Eisenberg, N., & Bernzweig, J. (1990). C*oping with Children's Negative Emotions Scale (CCNES): Description and Scoring*. Tempe, AZ: Arizona State University.

Fivush, R., Brotman, M. A., Buckner, J. P., & Goodman, S. H. (2000). Gender differences in parent–child emotion narratives. *Sex Roles*, 42(3-4), 233-253.

Florsheim, P., Tolan, P., & Gorman-Smith, D. (1996). Family process and risk for externalizing behavior problems among African American and Hispanic Boys. *Journal of Consulting and Clinical Psychology*, 64(6):1222–1230.

Florsheim, P., & Smith, A. (2005). Expectant adolescent couples' relations and subsequent parenting behavior. *Infant Mental Health Journal*, 26(6), 533-548.

Fox, N. A. (1989). The psychophysiological correlates of emotional reactivity during the first year of life. *Developmental Psychology*, 25, 364-372.

Fox, N. A., & Calkins, S. D. (2003). The development of self-control of emotion: Intrinsic and extrinsic influences. *Motivation and Emotion*, 27(1), 7–26.

Freedman, M. B., Leary, T. F., Ossorio, A.G., & Coffey, H. S. (1951). The interpersonal dimension of personality. *Journey of Personality*, 20, 143-161.

Garner, P. W. (2003). Child and family correlates of toddler's emotional and behavioral response to a mishap. *Infant Mental Health Journal*, 24, 580-596.

Ge, X., Best, K. M., Conger, R. D., & Simons, R. L. (1996). Parenting behaviors and the occurrence and co-occurrence of adolescent depressive symptoms and conduct problems. *Developmental Psychology*, 32: 717–731.

Gottman, J. M. (1983). How children become friends. *Monographs of the Society for Research in Child Development*, 48 (2).

Gottman, J. M., & Parker, J. (Eds.) (1986). *Conversations of Friends*. NY: Cambridge University Press.

Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental Meta-Emotion Philosophy and the Emotional Life of Families: Theoretical Models and Preliminary Data. *Journal of Family Psychology*, 10(3), 243-268.

Gottman, J. M., Katz, L. F., & Hooven, C. (1997). *Meta Emotion: How families Communicate Emotionally*. NJ, Lawrence Erlbaum Associates.

Gottman, J. M, & Katz, L. F. (2002). Children's Emotional Reactions to Stressful Parent-Child Interactions: The Link Between Emotion Regulation and Vagal Tone. *Marriage & Family Review*, Vol. 34, 265-283.

Gohm, C. L. (2003). Mood regulation and emotional intelligence: Individual differences. *Journal of Personality and Social Psychology*, 84, 594–607.

Gottlieb, G. (2007). Probabilistic Epigenes. *Developmental Science*, 10(1), 1-11.

Greenberg, L., & Malcolm, W. (2002). Resolving unfinished business: relating process to outcome. *Journal of Consulting Clinical Psychology*, 70, 406–416.

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85, 348–362.

Grossman, H. Y., Brink, S., & Hauser, S. T. (1987). Self-efficacy in adolescent girls and boys with insulin-dependent diabetes mellitus. *Diabetes Care*, 10: 324–329.

Hall, G. S. (1904). *Adolescence: Its psychology and its relation to physiology, anthropology, sociology, sex, crime, religion, and education (Vols. I & II)*. Englewood Cliffs, NJ: Prentice-Hall.

Harris, P. L., & Kavanaugh, R. D. (1993). Young children's understanding of pretense. *Monographs of the Society for Research in Child Development*, 58(1). 231.

Hauser, S. T., Powers, S. I., Noam, G., Jacobson, A., Weiss, B., & Follansbee, D. (1984). Familial contexts of adolescent ego development. *Child Development,* 55: 195–213.

Havighurst, S. S., Wilson, K. R., Harley, A. E. Kehoe, C., Efron, D., & Prior, M.R. (2012). "Tuning into Kids": Reducing Young Children's Behavior Problems Using an Emotion Coaching Parenting Program. *Child Psychiatry & Human Development*, 10.1007/s10578-012-0322-1.

Hofheimer, J. A., & Lawson, N. (1988). Neurophysiological correlates of interactive behavior in preterm newborns. *Infant Behavior and Development*, 11, 143.

Holmqvist, R., Andersen, K., Anjum, T., & Alinder, B. (2006). Change in Self-image and PTSD Symptoms in Short-term Therapies with Traumatized Refugees. *Psychoanalytic Psychotherapy*, 20(4), 251-265.

Hooven, C., Gottman, J. M., & Katz, L. F. (1995). Parental meta-emotion structure predicts family and child outcomes. *Cognitions and Emotion*, 9, 229–264.

Horowitz, L. M., &Vitkus, J. (1986). The interpersonal basis of psychiatric symptoms. *Clinical Psychology Review*, 6, 443-469.

Huffman, L. C., Bryan, Y. E., Pederson, F. A., & Porges, S. W. (1988). *Infant temperament: Relationships with heart rate variability*. Unpublished manuscript, National Institute of Mental Health, Rockville, MD.

Jansson, J. A., & Eklund, M. (2002). How the inner world is reflected in relation to perceived ward atmosphere among patients with psychosis. *Social Psychiatry and Psychiatric Epidemiology*, 37:519–926.

Jorgensen, C. R. (2000). The dynamic assessment interview (DAI), interpersonal process measured by Structural Analysis of Social Behavior (SASB) and therapeutic outcome. *Psychotherapy Research*, 10,181–195.

Katz, L. F., Gottman, J. M, & Hooven, C. (1996). Meta-Emotion Philosophy and Family

    Functioning: Reply to Cowan (1996) and Eisenberg (1996). *Journal of Family*

    Psychology.10 (3), 284-291.

Katz, L. F. & Carrere, S. (2002). *The revised parental meta-emotion interview*. Unpublished

    manuscript. University of Washing at Seattle.

Katz, L., & Windecker-Nelson, B. (2004). Parental meta-emotion philosophy in families with

    conduct-problem children: links with peer relations. *Journal of Abnormal Child*

    Psychology, 32(4), 385-398.

Kochanska, G. (1991). Socialization and temperament in the development of guilt and

    conscience. *Child Development*, 62, 1379-1392.

Leary T. (1957). *Interpersonal Diagnosis of Personality: A Functional Theory and Methodology*

    for Personality Evaluation. NY: Ronald Press.

Lindfors, O., Knekt, P., Heinonen, E., & Virtala, E. (2014). Self-concept and quality of object

    relations as predictors of outcome in short-and long-term psychotherapy. *Journal of*

    Affective Disorders, 152, 202-211.

Linnemeyer, S. A., & Porges, S. W. (1986). Recognition memory and cardiac vagal tone in 6-

    month old infants. *Infant Behavior and Development*, 9, 43-56.

Lunkenheimer, E. S., Shields, A. M., & Cortina, K. S. (2007). Parental Emotion Coaching and

    Dismissing in Family Interaction. *Social Development*, 16(2), 232-248.

Maharaj, S., Rodin, G., Connolly, J., Olmsted, M., & Daneman, D. (2001). Eating problems and

    the observed quality of mother–daughter interactions among girls with type 1

    diabetes. *Journal of Consulting and Clinical Psychology*, 69(6), 950.

Mahler, M. (1968). *On human symbiosis and the vicissitudes of individuation*. NY: International

University Press.

Magni, F., Bruschi, F., & Kasti, M. (1987). The afferent innervation of the thymus gland in the

rat. *Brain Research*, 424, 379-385.

Moore, D. R., Florsheim, P., & Butner, J. (2007). Interpersonal Behavior, Psychopathology, and

Relationship Outcomes among Adolescent Mothers and Their Partners. *Journal of*

Clinical Child & Adolescent Psychology, 36:4, 541-556.

Mundt, C., Fiedler, P., Ernst, S., & Kohlhoff, A. (1994). Premorbid personality and observed

marital interaction of endogenous depressive patients: first results. *Neurology,*

Psychiatry, and Brain Research, 2, 81–86.

Nance, D. M., Hopkins, D. A., & Bieger, D. (1987). Re-investigation of the innervation of the

thymus gland in mice and rats. *Brain, Behavior, and Immunity*, 1, 134-47.

Pasley, K., & Gecas, V. (1984). Stresses and satisfactions of the parental role. *Personnel and*

Guidance Journal, 2, 400-404.

Paterson, A.D., Babb, K. A., Camodeca, A., Goodwin, J., Hakim-Larson, J., Voelker, S. &

Gragg, M. (2012): Emotion-Related Parenting Styles (ERPS): A Short Form for

Measuring Parental Meta-Emotion Philosophy. *Early Education & Development*, 23:4,

583-602.

Pincus, A. L., Dickinson, K. A., Schut, A. J., Castonguay, L. G., & Bedics, J. (1999). Integrating

interpersonal assessment and adult attachment using SASB. *European Journal of*

Psychological Assessment, 15(3), 206.

Pincus, A. L, Gurtman, M. B, & Ruiz, M. A. (1998). Structural Analysis of Social Behavior

(SASB): circumplex analyses and structural relations with the interpersonal circle and the

five-factor model of personality. *Journal of Personality and Social Psychology*, 74, 1629–1645.

Porter, F. L., Porges, S. W., & Marshall, R. E. (1988). Newborn pain cries and vagal tone: Parallel changes in response to circumcision. *Child Development*, 59, 495-505.

Ratti, L. A, Humphrey, L. L, & Lyons, J. S. (1996). Structural analysis of families with a polydrug dependent, bulimic, or normal adolescent daughter. *Journal of Consulting and Clinical Psychology*, 64, 1255–1262.

Richards, J. E. (1985). The development of sustained visual attention in infants from 14 to 26 weeks of age. *Psychophysiology*, 22, 409-416.

Rothweiler, J. C. (2004). *An evaluation of the internal and external validity of the Intrex and Interpersonal Adjective Scales*. PhD thesis. University of Utah, Salt Lake City. 188pp.

Ryum, T., Vogel, P. A., Walderhaug, E. P., & Stiles, T. C. (2014). The role of self-image as a predictor of psychotherapy outcome. *Scandinavian Journal of Psychology*, 56(1), 62-68.

Saarni, C. (1985). Indirect processes in affect socialization. In M. Lewis, & C. Saarni (Eds.). *The socialization of emotions*, (pp. 187–209).NY, Plenum Press.

Saarni, C. (1993). *The socialization of emotion. In M. Lewis & J. M. Haviland (Eds.), Handbook of emotions* (pp. 435-446). NY: Guilford Press.

Schaefer, E. S. (1965). A configurational analysis of children's reports of parent behavior. *Journal of Consulting Psychology*, 29, 552-557.

Sheeber, L., & Sorensen, E. (1998). Family relationships of depressed adolescents: A multimethod assessment. *Journal of clinical child psychology*, 27(3), 268-277.

Schlegel, A., & Barry, H., III. (1991). *Adolescence: An anthropological inquiry*. NY: Free Press.

Shortt, J., Stoolmiller, M., Smith-Shine, J., Mark Eddy, J., & Sheeber, L. (2010). Maternal emotion coaching, adolescent anger regulation, and siblings' externalizing symptoms. *Journal of Child Psychology and Psychiatry, and Allied Disciplines,* 51(7), 799-808.

Smith, T. W, McGonigle, M. A, & Benjamin, L. S. (1998). Sibling interactions, self-regulation, and cynical hostility in adult male twins. *Journal of Behavioral Medicine*, 21, 337–49

Spinrad, T. L., Eisenberg, N., Cumberland, A., Fabes, R. A., Valiente, C., Shepard, S. A., et al. (2006). Relation of emotion-related regulation to children's social competence: A longitudinal study. *Emotion*, 6, 498–510.

Stifter, C. A., & Fox, N. A. (1990). Infant reactivity: Physiological correlates of newborn and 5-month temperament. *Developmental Psychology*, 26, 582-588.

Stifter, C. A., Fox, N. A., & Porges, S. W. (1989). Facial expressivity and vagal tone in 5- and 10-month-old infants. *Infant Behavior and Development*, 12, 127-137.

Suess, P. E., Porges, S. W., & Plude, D. J. (1994). Cardiac vagal tone and sustained attention in school-age children. *Psychophysiology*, 31(1), 17-22.

Sullivan, H. S. (1953). *The Interpersonal Theory of Psychiatry*. NY: Norton.

Susman, E. J. (1997). Modeling developmental complexity in adolescence: Hormones and behavior in context. *Journal of Research on Adolescence*, 7, 283-306.

Svartberg, M. & Stiles, T. C. (1992). Predicting patient change from therapist competence and patient-therapist complementarity in short term anxiety-provoking psychotherapy: a pilot study. *Journal of Consulting and Clinical Psychology*, 60, 304–307.

Thompson, R. A. (1991). Emotional regulation and emotional behavior. *Educational Psychology Review*, 3, 269-307.

Trapnell, P. D., & Wiggins, J. S. (1990). Extension of the Interpersonal Adjective Scales to include the Big Five dimensions of personality. *Journal of Personality and Social Psychology*, 59, 781-790.

Vittengl, J. R, Clark, L. A, & Jarrett, R. B. (2004). Self-directed affiliation and autonomy across acute and continuation phase cognitive therapy for recurrent depression. *Journal of Personality Assessment*, 83(3):235–247.

Wiggins, J. S. (1995). *The Interpersonal Adjective Scales (IAS) Professional Manual*. Odessa, FL: Psychological Association Resource.

Ybrandt, H. (2008). The relation between self-concept and social functioning in adolescence. *Journal of adolescence*, 31(1), 1-16.

STATEMENT OF INFORMED CONSENT
(Young Adult Version)

You are invited to participate in a research study that explores the links between the way that young adults and parents communicate about emotions and mother-young adult relations. Please read this form carefully and contact the researcher to ask any questions you may have before agreeing to take part in the study.

The purpose of this study is to learn about the possible links between emotion interaction and mother-young adult relations. If you agree to participate in this study, you will be asked to complete some questionnaires after this consent procedure. The questions will include basic information about your background as well as questions about the nature of your relationship with your mother (or other major caregiver). The questions will take about 30 minutes to complete, and there are no highly sensitive topics.

We do not anticipate any risks to you participating in this study other than those encountered in day-to-day life. You may find some of the questions to be personal. You will earn credit for research participation for your psychology course upon completion of the questionnaire. You will receive one hour of credit for your participation, though it not expected that your responses will take an hour.

The records of this study will be kept confidential. In any sort of report we make public we will not include any information that will make it possible to identify you. Research records will be stored in password protected drives. Once parent-student data is matched, you and your caregiver's names will be removed and <u>no one can know the identity of people who responded or the responses that anyone gave</u>. Only the researchers will have access to the records, and there will be no way for anyone to know your responses. Also, since the matching numbers are removed, there is no way to compare the responses of a student and parent. All data will be retained by the researchers for at least three years beyond the end of the study.

Participation in this study is completely voluntary. Although you should not skip any questions, you are free to withdraw at any time by closing your browser. If you decide not to take part in the study, it will not affect your grades or current or future relationship with your class instructor.

If you have questions: The researchers conducting this study are Yu Ding, M. A. and Dr. John Mills of the Department of Psychology. You may contact Yu Ding at fjpr@iup.edu. You can also email Dr. Mills at jamills@iup.edu.

Statement of Consent: I have read the above information, and have received answers to any questions I asked. By clicking the "Continue to the Questions" button and responding to the study, I am indicating my consent to participate. Otherwise, I will close my browser. If I want a copy of this consent form, I will email the researcher and request a copy of consent form by mail.

This project has been approved by the Institutional Review Board for the Protection of Human Subjects (IRB). If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) at 724-357-7730.

_____   _____
Participant Name   Date

_____
Participant Signature

STATEMENT OF INFORMED CONSENT
(Mother Version)

You are invited to participate in a research study of exploring the links between the way that parents communicate about emotions and mother-young adult relations. We have contacted you because your child/college student identified you as a significant caregiver. Please read this form carefully and contact the researcher to ask any questions you may have before agreeing to take part in the study.

The purpose of this study is to learn the links between emotion interaction and mother-young adult relations. If you agree to participate in this study, you will be asked to complete some questionnaires after this consent procedure. The questions will include basic information about your background as well as questions about the nature of your relationship with your young adult child. The questions will take about 30 minutes to complete, and there are no highly sensitive topics.

We do not anticipate any risks to you participating in this study other than those encountered in day-to-day life. You may find some of the questions to be personal. The student will earn credit for research participation in his or her psychology course upon completion of the questionnaire, and the class instructor will assign credit according to psychology department policy.

The records of this study will be kept confidential. In any sort of report we make public we will not include any information that will make it possible to identify you. Research records will be stored in password protected drives. Once parent-student data is matched,
Your identification will be removed and no one can know the identity of people who responded or the responses that anyone gave. Only the researchers will have access to the records, and there will be no way for anyone to know your responses. Also, since the names are removed, there is no way to compare the responses of a student and parent. All data will be retained by the researchers for at least three years beyond the end of the study as required by the federal government.

Participation in this study is completely voluntary. Although you should not skip any questions, you are free to withdraw at any time by closing your browser. If you decide not to take part in the study, it will not affect your child's grades or current or future relationship with his or her class instructor.

If you have questions: The researchers conducting this study are Yu Ding, M. A. and Dr. John Mills of the IUP Department of Psychology. You may contact Yu Ding at fjpr@iup.edu. You can also email Dr. Mills at jamills@iup.edu. This project has been approved by the Institutional Review Board for the Protection of Human Subjects (IRB). If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) at 724-357-7730.

Statement of Consent: I have read the above information. I understand that by clicking the "Continue to the Questions" button and responding to the study, I am indicating my consent to

participate. Otherwise, I will close my browser. If I want a hard copy of this consent form, I will email the researcher and request a copy of consent form by mail.

_____   _____

Participant Name   Date

_____

Participant Signature

Demographic Form

(Young Adult Version)

1. What is your age?

○ Less than 18
○ Between 18 and 25
○ More than 25

2. What is your gender?
○ Male
○ Female

3. What is your ethnicity?
○ African American
○ Asian or Pacific Islander
○ Caucasian
○ Hispanic
○ Multiracial
○ Other

4. How many years of education have you completed?
○ Less than 8 years
○ More than 8 years

5. Would you identify your mother as your significant caretaker growing up?
○ Yes
○ If no, Please specify who was your significant caretaker growing up? [   ]

Demographic Form

(Mother Version)

1. What is your ethnicity?

○ African American

○ Asian or Pacific Islander

○ Caucasian

○ Hispanic

○ Multiracial

○ Other

2. How many years of education have you completed?

○ Less than 8 years

○ Between 8 to 12 years

○ More than 12 years

3. What is the gender of your child who attends IUP and has signed up for this study?

○ Male

○ Female

[APPENDIX C]

Emotion-Related Parenting Styles (ERPS)

Emotion-Related Parenting Styles (ERPS). (Adapted with the permission of Simon & Schuster, Inc., from The Heart of Parenting: Raising an Emotionally Intelligent Child by John Gottman, Ph.D. Copyright # 1997 by John Gottman, Ph.D. All rights reserved.)

This questionnaire asks questions about your feelings regarding sadness, fear and anger both in yourself and in your children. For each item, please circle the choice that best fits how you feel. If you are not sure, go with the answer that seems the closest. (Rating is on a 5 point Always False to Always True Likert Scale)

1. Children acting sad are usually just trying to get adults to feel sorry for them.
2. I want my child to experience anger.
3. When my child is sad, we sit down and talk over the sadness.
4. Children often act sad to get their way.
5. I want my child to experience sadness.
6. It's important to help the child find out what caused the child's anger.
7. When my child is angry, I'm not quite sure what he or she wants me to do.
8. When my child is sad, I try to help the child explore what is making him or her sad.
9. Children have a right to feel angry.
10. I don't mind dealing with a child's sadness, so long as it doesn't last too long.
11. When my child gets sad, I warn him or her about not developing a bad character.
12. A child's anger is important.
13. When my child gets angry, I think, ''If only he or she could just learn to roll with the punches.''
14. When my child gets angry, my goal is to get him or her to stop.
15. When my child is sad, I try to help him or her figure out why the feeling is there.
16. I think it's good for kids to feel angry sometimes.
17. When my child is sad, I'm not quite sure what he or she wants me to do.
18. When my child gets angry with me, I think, ''I don't want to hear this.''
19. When my child is angry, it's time to solve a problem.
20. When my child gets angry, I think, ''Why can't he or she accept things as they are.''

Scoring: Emotion coaching parenting style (EC): 3, 6, 8, 15, 19; parental rejection of negative emotion (PR): 1, 4, 10, 11, 14; parental acceptance of negative emotion (PA): 2, 5, 9, 12, 16; feelings of uncertainty=ineffectiveness in emotion socialization (UI): 7, 13, 17, 18, 20.

INTREX Medium Form A /Introject. Copyright 1995, University of Utah
----
Please use an answer sheet marked "introject" and indicate how well each question describes YOURSELF.

Rate yourself twice: at your best, and at your worst. First, try to remember a specific time a few days/weeks/months ago when you were at your best, and while thinking of that time, rate the best version. Then think of a specific time a few days/weeks/months ago when you were at your worst, and rate the worst version. Please do not go back in time further than one year.

Use the scale that appears at the top of the answer sheet.
----
1. Without concern or thought, I let myself do and be whatever I feel like.
2. Without considering what might happen, I hatefully reject and destroy myself.
3. I tenderly, lovingly cherish myself.
4. I put energy into providing for, looking after, developing myself.
----
5. I punish myself by blaming myself and putting myself down.
6. Aware of my personal shortcomings as well as my good points, I comfortably let myself be "as is".
7. I am recklessly neglectful of myself, sometimes completely "spacing out".
8. To make sure I do things right, I tightly control and watch over myself.
----
9. I let myself do whatever I feel like and don't worry about tomorrow.
10. Without thought about what might happen, I recklessly attack and angrily reject myself.
11. I very tenderly and lovingly appreciate and value myself.
12. I take good care of myself and work hard on making the most of myself.
----
13. I accuse and blame myself for being wrong or inferior.
14. With awareness of weaknesses as well as strengths, I like and accept myself "as is."
15. I carelessly let go of myself, and often get lost in an unrealistic dream world.
16. To become perfect, I force myself to do things correctly.

Intrex Medium Form B/She Past. Copyright 1995, University of Utah.

Please use an answer sheet marked "interpersonal" and indicate how well each question describes:

YOUR SIGNIFICANT OTHER PERSON (Young adult were asked to rate how they react to their mother when aged 13-17, at their best and worst)

Use the scale that appears at the top of the answer sheet.

----

1. She lets me speak freely, and warmly tries to understand me even if we disagree.
2. She walls himself off from me and doesn't react much.
3. She puts me down, blames me, punishes me.
4. Without giving it a second thought, she uncaringly ignores, neglects, abandons me.

----

5. She learns from me, relies upon me, accepts what I offer.
6. She happily, gently, very lovingly approaches me, and warmly invites me to be as close as I would like.
7. With much sulking and fuming, she scurries to do what I want.
8. She clearly and comfortably expresses her own thoughts and feelings to me.

----

9. To keep things in good order, she takes charge of everything and makes me follow her rules.
10. She thinks, does, becomes whatever I want.
11. She knows her own mind and "does her own thing" separately from me.
12. Without worrying about the effect on me, she wildly, hatefully, destructively attacks me.

----

13. With much kindness, she teaches, protects, and takes care of me.
14. Without much worry, she leaves me free to do and be whatever I want.
15. She relaxes, freely plays, and enjoys being with me as often as possible.
16. With much fear and hate, she tries to hide from or get away from me.

----

17. She likes me and tries to see my point of view even if we disagree.
18. She closes off from me and mostly stays alone in her own world.
19. She tells me my ways are wrong and I deserve to be punished.
20. Without giving it a thought, she carelessly forgets me, leaves me out of important things.

----

21. She trustingly depends on me, willingly takes in what I offer.
22. With much love and caring, she tenderly approaches if I seem to want it.
23. She bitterly, resentfully gives in, and hurries to do what I want.
24. She peacefully and plainly states her own thoughts and feelings to me.

----

25. To make sure things turn out right, she tells me exactly what to do and how to do it.
26. She defers to me and conforms to my wishes.
27. She has a clear sense of what she thinks, and chooses her own ways separately from me.
28. Without caring what happens to me, she murderously attacks in the worst way possible.

84

----

29. In a very loving way, she helps, guides, shows me how to do things.

30. Without much concern, she gives me the freedom to do things on my own.

31. She is joyful and comfortable, altogether delighted to be with me.

32. Filled with disgust and fear, she tried to disappear, to break loose from me.

YOURSELF IN THIS RELATIONSHIP (Mothers were asked to rate their actions towards their young adult child when they were aged 13-17, at their best and worst)

----

1. I let him speak freely, and warmly try to understand him even if we disagree.

2. I wall myself off from him and don't react much.

3. I put him down, blame him, punish him.

4. Without giving it a second thought, I uncaringly ignore, neglect, abandon him.

----

5. I learn from him, rely upon him, accept what he offers.

6. I happily, gently, very lovingly approach him, and warmly invite him to be as close as he would like.

7. With much sulking and fuming, I scurry to do what he wants.

8. I clearly and comfortably express my own thoughts and feelings to him.

----

9. To keep things in good order, I take charge of everything and make him follow my rules.

10. I think, do, become whatever he wants.

11. I know my own mind and "do my own thing" separately from him.

12. Without worrying about the effect on him, I wildly, hatefully, destructively attack him.

----

13. With much kindness, I teach, protect, and take care of him.

14. Without much worry, I leave him free to do and be whatever he wants.

15. I relax, freely play, and enjoy being with him as often as possible.

16. With much fear and hate, I try to hide from or get away from him.

----

17. I like him and try to see his point of view even if we disagree.

18. I close off from him and mostly stay alone in my own world.

19. I tell him his ways are wrong and he deserves to be punished.

20. Without giving it a thought, I carelessly forget him, leave him out of important things.

----

21. I trustingly depend on him, willingly take in what he offers.

22. With much love and caring, I tenderly approach if he seems to want it.

23. I bitterly, resentfully give in, and hurry to do what he wants.

24. I peacefully and plainly state my own thoughts and feelings to him.

----

25. To make sure things turn out right, I tell him exactly what to do and how to do it.

26. I defer to him and conform to his wishes.

27. I have a clear sense of what I think, and choose my own separate ways.

28. Without caring what happens to him, I murderously attack him in the worst way possible.

----

29. In a very loving way, I help, guide, show him how to do things.

30. Without much concern, I give him the freedom to do things on his own.

31. I am joyful and comfortable, altogether delighted to be with him.

32. Filled with disgust and fear, I try to disappear, to break loose from him.

Table 8

Bivariate Correlations Among ERPS Subscales (N=122)

Subscales	EC	PR	PA	UI
EC	1	.033	.048	-.200[*]
PR	.033	1	-.006	.341[**]
PA	.048	-.006	1	.091
UI	-.200[*]	.341[**]	.091	1

*Note. *p < .05. **p < .01.* EC=emotion coaching parenting style; PR=parental rejection of negative emotion; PA=parental acceptance of negative emotion; UI=feelings of uncertainty / ineffectiveness in emotion socialization.

Table 9

Bivariate Correlations Among Young Adults' Intransitive Cluster Scores (N=122)

SASB Intransitive	Separate	Disclose	Reactive Love	Trust	Submit	Sulk	Recoil	Wall off
Separate	1	-.006	-.163	.030	-.041	.274**	.341**	.302**
Disclose	-.006	1	.669**	.595**	.120	-.109	-.367**	-.465**
Reactive Love	-.163	.669**	1	.464**	.115	-.188*	-.574**	-.635**
Trust	.030	.595**	.464**	1	.255**	.122	-.153	-.250**
Submit	-.041	.120	.115	.255**	1	.611**	.184*	.111
Sulk	.274**	-.109	-.188*	.122	.611**	1	.505**	.421**
Recoil	.341**	-.367**	-.574**	-.153	.184*	.505**	1	.872**
Wall off	.302**	-.465**	-.635**	-.250**	.111	.421**	.872**	1

*Note. *p < .05. **p < .01.*

Table 10

Bivariate Correlations among Mothers' Transitive Cluster Scores (N=122)

SASB Transitive	Emancipate	Affirm	Active Love	Protect	Control	Blame	Attack	Ignore
Emancipate	1	.050	.183*	.050	.146	-.024	.061	.068
Affirm	.050	1	.718**	.684**	-.003	-.425**	-.332**	-.426**
Active Love	.183*	.718**	1	.772**	-.030	-.369**	-.405**	-.522**
Protect	.050	.684**	.772**	1	.073	-.355**	-.436**	-.514**
Control	.146	-.003	-.030	.073	1	.428**	.253**	.208*
Blame	-.024	-.425**	-.396**	-.355**	.428**	1	.727**	.693**
Attack	.061	-.332**	-.405**	-.436**	.253**	.727**	1	.844**
Ignore	.068	-.426**	-.522**	-.514**	.208*	.693**	.844**	1

Note. *p < .05. **p < .01.

Table 11

Bivariate Correlations among Young Adult Intrapsychic Relation Cluster Scores (N=122)

SASB Introject	Self-emancipate	Self-affirm	Self-love	Self-protect	Self-control	Self-blame	Self-attack	Self-neglect
Self-emancipate	1	.314**	.104	.128	.202**	.141	.194*	.299**
Self-affirm	.314**	1	.740**	.577**	.310**	-.371**	-.299**	-.169
Self-love	.104	.740**	1	.762**	.404**	-.507**	-.486**	-.304**
Self-protect	.128	.577**	.762**	1	.435**	-.390**	-.484**	-.430**
Self-control	.202*	.310**	.404**	.435**	1	.101	.045	.040
Self-blame	.141	-.371**	-.507**	-.390**	.101	1	.780**	.480**
Self-attack	.194	-.299**	-.486**	-.484**	.045	.780**	1	.671**
Self-neglect	.299**	-.169	-.304**	-.430**	.040	.480**	.671**	1

Note. *p < .05. **p < .01.

The Definitions of SASB Clusters

All of the following definitions are provided by Benjamin (1996) (p. 388)

1. The eight octant labels on the INTRANSITIVE (reaction to other) version of SASB include:
(1) Separate (asserting & separating): self has a clear sense of what he or she thinks, and chooses his or her own ways separately from others.
(2) Disclose (disclosing & expressing): self peacefully and plainly states his or her own thoughts and feelings to others.
(3) Reactive love (approaching & enjoying): self is joyful and comfortable, altogether delighted to be with others.
(4) Trust (trusting & relying): trustingly depends on others, willingly takes in what other offers.
(5) Submit (deferring & submitting): self defers to others and conforms to others' wishes.
(6) Sulk (sulking & appeasing): self bitterly and resentfully gives in, and hurries to do what other wants.
(7) Recoil (protesting & withdrawing): filled with disgust and fear, self tries to disappear, to break loose from the other.
(8) Wall off (walling off & avoiding): self is closed off from other and mostly stays alone in his or her own world.

2. The eight octant scales on the TRANSITIVE (action toward other) version of SASB include:
(1) Emancipate (freeing & forgetting): without much concern, self gives other the freedom to do things on his or her own.
(2) Affirm (affirming & understanding): self likes other and tries to see his/her point of view even if they disagree.
(3) Active love (nurturing & comforting): with much love and caring, self tenderly approaches if other seems to want it.
(4) Protect (helping & protecting): in a very loving way, self helps, guides, shows other how to do things.
(5) Control (watching & managing): to make sure things turn out right, self tells other exactly what to do and how to do it.
(6) Blame (belittling & blaming): self tells other his or her ways are wrong and he or she deserves to be punished.
(7) Attack (attacking & rejecting): without caring what happens to other, self murderously attacks on the worst way possible.
(8) Ignore (ignoring & neglecting): without giving it a thought, self carelessly forgets other, leaves him or her out of important things.

3. The eight octant scales on the INTROJECT version of SASB include:
(1) Self-emancipate (spontaneous self): I let myself do whatever I feel like and don't worry about tomorrow.
(2) Self-affirm (self-accepting & self-exploring): with awareness of weaknesses and strengths, I like and accept myself "as is."

(3) Active self-love (self-nourishing & cherishing): I very tenderly and lovingly appreciate and value myself.
(4) Self-protect (self-protecting & enhancing): I take good care of myself and work hard on making the most of myself,
(5) Self-control (self-monitoring & restraining): to become perfect, I force myself to do things correctly.
(6) Self-blame (self-indicting & oppression): I accuse and blame myself for being wrong or inferior.
(7) Self-attack (self-rejecting & destroying): without thought about what might happen, I recklessly attack and angrily reject myself.
(8) Self-neglect (daydreaming & neglecting of self): I carelessly let go of myself, and often get lost in an unrealistic dream world.

[APPENDIX H]

Debriefing
(Young Adult Version)

Dear Participant,

During this study, you were asked to fill out questionnaires regarding your relationship with your mother on areas such as love, hostility, control, and independence. If you are a parent participant, you were asked to fill out questionnaires regarding to your relationship with your son or daughter, and with yourself, on the same domains mentioned above. In addition, you were asked to fill out a questionnaire relate to your thoughts and behaviors about emotions. The purpose of the study was to examine the links between early emotion interactions and parent-child relationships. If you have further questions relate to the theoretical background of this study, please reference the articles by Gottman (1997) and Benjamin (2006). These are available from Dr. Mills in pdf. format by request (jamills@iup.edu)

You are reminded that your original consent document included the following information:
1. Your answers will be kept confidential.
2. Your identification will be removed after matching a student with his or her caregiver, at which point the results become anonymous and there is no way to compare the responses of a student and parent. If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us.

We will be happy to provide any information we can to help answer questions you have about this study. If your concerns are such that you would now like to have your data withdrawn, and the data is identifiable, we will do so.

If you have questions about your participation in the study, please contact Yu Ding at fjpr@iup.edu, or her dissertation chair Dr. Mills at jamills@iup.edu.

If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) at 724-357-7730.

If you have experiences distress as a result of your participation in this study, please contact the Counseling Center 724-357-2621 if you are an IUP student for free services. Or you may contact the researcher to ask for a referral list of mental health providers if you are a parent. The cost in seeking medical assistance is at your own expense.

Please again accept our appreciation for your participation in this study.

Debriefing
(Mother Version)

Dear Participant,

During this study, you were asked to fill out questionnaires regarding your relationship with yourself and your son/daughter, on areas such as love, hostility, control, and independence. In addition, you were asked to fill out a questionnaire relate to your thoughts and behaviors about emotions. The purpose of the study was to examine the links between early emotion interactions and parent-teens relationships. If you have further questions relate to the theoretical background of this study, please reference the articles by Gottman (1997) and Benjamin (2006). These are also available from Yu Ding in pdf. format by request (fjpr@iup.edu)

You are reminded that your original consent document included the following information:
1. Your answers will be kept confidential.
2. The names will be removed after matching a student with his or her mother, at which point the results become anonymous and there is no way to compare the responses of a student and parent. If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us.

We will be happy to provide any information we can to help answer questions you have about this study. If your concerns are such that you would now like to have your data withdrawn, and the data is identifiable, we will do so.

If you have questions about your participation in the study, please contact Yu Ding at fjpr@iup.edu, or her dissertation chair Dr. Mills at jamills@iup.edu.

If you have any questions or concerns regarding your rights as a participant in this study, you may contact the Institutional Review Board (IRB) at 724-357-7730.

If you experience distress as a result of your participation in this study, please contact the Counseling Center 724-357-2621 if you are an IUP student for free services. Or you may contact the researcher to ask for a referral list of mental health providers if you are a parent. The cost in seeking medical assistance is at your own expense.

Please again accept our appreciation for your participation in this study.

References:

Gottman, J. M., Katz, L. F., & Hooven, C. (1997). *Meta Emotion: How families Communicate Emotionally*. New Jersey, Lawrence Erlbaum Associates.

Benjamin, L.S., Rothweiler, J. C., & Critchfield, K. L. (2006). The Use of Structural Analysis of Social Behavior (SASB) as an Assessment Tool. Annual Review of Clinical Psychology, 2, 83–109.