Maternal and Paternal Emotion Socialization: Relations to Expressive Flexibility in American and South Korean Children

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Maternal and Paternal Emotion Socialization: Relations to Expressive Flexibility in American and South Korean Children

A Dissertation Presented

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Heimi Son

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Maternal and Paternal Emotion Socialization: Relations to Expressive Flexibility in American
and South Korean Children

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Ph.D. Educational Studies
Human Development and Learning Specialization

Approvals

In the judgment of the following signatories, this Dissertation meets the academic standards that
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Abstract

The purpose of this study is to investigate the associations between parental emotion socialization and children’s expressive flexibility (EF) during middle childhood in a cross-cultural context. American ($N = 69$) and South Korean children ($N = 77$) participated with their fathers and mothers. Children’s EF ability was assessed using a quantitative lab-based observational measure. Fathers and mothers completed questionnaires ascertaining several emotion socialization factors, including beliefs about children’s emotions, emotion control values, and their own emotion regulation strategies. Results showed that the relation between parental socialization factors and children’s EF was moderated by culture. Parental beliefs about danger of emotions and emotion control values were associated with decreased EF ability for American children, whereas they were not significantly associated with EF ability for Korean children. Regardless of cultural background, fathers’ emotion-related beliefs (e.g., emotions are dangerous) and mothers’ use of emotional suppression as regulation strategies predicted children’s EF. The findings suggest that mothers’ and fathers’ socialization practices may uniquely contribute to emotional outcomes in children. The study sheds light on the importance of examining parental socialization practices related to children’s emotional abilities from a culturally-informed perspective.

*Keywords*: parental emotion socialization, expressive flexibility, middle childhood, cross-cultural differences
Dedication

To my daughter, Gianne and husband, Chanwoo, my greatest of blessings
Acknowledgements

I wish to thank all the family participants in this study who were willing to volunteer their time to share their thoughts and experiences with me. I would like to acknowledge my committee members, Dr. Dalia Llera, Dr. William Stokes, and Dr. Stacey Doan for their constructive feedback and encouragement regarding this study. I send a special thanks to Dr. Stephen Gould.

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CHAPTER ONE: INTRODUCTION

I have always felt that the action most worth watching is not at the center of things but where edges meet. I like shorelines, weather fronts, international borders. There are interesting frictions and incongruities in these places, and often, if you stand at the point of tangency, you can see both sides better than if you were in the middle of either one.

This is especially true, I think, when the apposition is cultural.

Anne Fadiman (1997)

Personal Background Statement

My initial exposure and interest in parent-child relationships and children’s emotional well-being are connected to my clinical experiences as a psychotherapist at psychiatric hospitals in South Korea. That work gave me the opportunity to meet many children and adolescents with various emotional problems. Those problems involved emotional dysregulation resulting in suffering and conflicts for both parents and children. That experience led me to recognize a need for further study that could enhance knowledge related to parent-child emotional socialization and its impact on emotional expression in children.

My experience working with parents and children in South Korea also exposed me to cultural differences involving diverse populations, specifically multicultural families and children from Japan, China, and America. As a result, I became curious about how children in different cultures may socialize their emotions in relation to culture-specific parent-child relationships. These encounters were eye opening and relevant to cultural changes taking place in South Korean society. South Korea was transitioning from being a single-race country with limited understanding of cross-cultural differences to a country with an influx of foreign workers.
and rise in intercultural marriages, which changed the cultural landscape\(^1\). I began to consider the importance of cross-cultural understanding and its relevance to the emotional development of children.

Due to limited exposure to diversity in South Korea, I had rarely considered culture as an essential factor in the study of human development, let alone as significant to child rearing and the expression and suppression of emotions in children. It was during my work as a graduate student at Boston University where I received a Master’s Degree in Psychology that I truly realized the importance and impact of culture in this area. This realization was evident while working as research assistant at the Advanced Cultural and Emotional Intelligence Lab at Boston University. I assisted in a project designed to examine how parenting and children’s emotion response interact to predict mental health outcomes in children across cultures. This invaluable experience motivated me to focus my dissertation research on socialization and children’s emotion regulation from a cross-cultural perspective. Born and educated in Korea and later living and studying in the United States, I found myself in the unique position to not only broaden my perspective on child development, family, society, and the world but also to expand that knowledge through my present theses which offers a comparison between South Korean and American parents and their children. I am aware that this study is only a beginning step in addressing the gaps connected to discerning specific differences between South Korean and American cultures. Yet, it provides a model for understanding and enhancing knowledge beneficial to families and children influenced by culture and manifesting that influence in more-or-less functional forms of emotional expression.

Owing to my individual, cultural, professional and academic trajectory, I proceed with

---

\(^1\) The number of multicultural families is expected to soar from the current 743,400 in 2020 to 1.21 million in 2030 and 2.16 million in 2050, according to the Korea Institute for Health and Social Affairs (Lee, Choi, & Park, 2009).
documenting my dissertation research in this introductory chapter where I address the following: (a) Personal Background Statement; (b) Statement of the Problem; (c) Purpose of the Study; (d) Guiding Research Questions; (e) Definition of Terms; (f) Significance of the Study; (g) Delimitation and Limitation of the Study; (h) Review of the Literature; (i) Method; and (j) Chapter Outline.

**Statement of the Problem**

As a child psychotherapist in South Korea, I became aware of some significant problems involving emotional challenges in children. I observed that far too many children have suffered from emotion regulation difficulties at school or at home. Their poor regulation skills negatively impacted their peer relationships, school adjustment, academic achievement, and parent-child relationships. Some children failed to regulate their emotions and had little opportunity to receive good modeling from their parents. Enlightened by research literature consistently reporting that children’s emotional abilities are strongly influenced by parenting (Eisenberg et al., 1998), I became aware that these children were not being provided with adequate supportive emotion coaching from their home environment. My experiences with these children prompted me to consider the impact of parenting practices on children’s emotional competence and made me wonder about the influence of culture on parenting practices and their effect on children’s emotion regulation abilities. The beginning steps necessitated an expansion of my knowledge through an exploration of the research literature on emotion flexibility and parental emotion socialization. Aware of a relative gap regarding the role of culture in emotion regulation and emotion flexibility, I furthered my research to include the influence of culture on parental practices and emotion socialization of children.
Expressive Flexibility (EF)

Past research has suggested that the expression of emotion serves adaptive functions, such as signaling behavioral intentions (Izard, 1991; Plutchik, 1980, 1982; Scherer, 1982), developing and maintaining social interactions (Ekman, 1993; Keltner, 1995), and regulating and communicating internal states (Ekman & Davidson, 1993; Izard, 1990; Zajonc, Murphy, & Inglehart, 1989). Contrary to the positive effects of expression of emotion, there is also some evidence suggesting that expressing emotion could be harmful. For example, it has been suggested that chronic expression of negative emotion (e.g., anger) is a risk factor in cardiovascular disease (Adler & Matthews, 1994). Similarly, the research on suppression of emotion also suggests mixed evidence. Habitual use of expressive suppression has been associated with negative emotion and decreased well-being (Gross & John, 2003), weakened memory for emotional details (Richards & Gross, 2000), increased blood pressure, and inhibited relationship formation (Butler et al., 2003). There is also evidence, however, for the beneficial effects of suppressing or down-regulating expression of emotion (Kennedy-Moore & Watson, 2001). For example, hiding emotion is useful in some social situations (e.g., suppression of anger to preserve interpersonal harmony during conflict mediation) (Bonanno et al., 2004). Therefore, findings between expression and suppression of emotion and their connection to adaptive functioning have not always been consistent. Emotion theorists have increasingly argued that whether expression or suppression of emotion (i.e., one regulatory process) is more adaptive is not important. Rather, a large body of literature has supported the view that the ability to flexibly express or suppress emotion in accordance with situational demands is considered most critical. (Bonanno et al., 2004).
Children’s EF and Parental Emotion Socialization

Within a longitudinal framework, one recent experimental test of expressive flexibility has shown that the ability to both suppress and enhance emotions is related to children’s positive peer relations in late childhood and early adolescence (Wang & Hawk, 2019). Researchers have also argued that college students who are high on expressive flexibility reported lower levels of stress (Bonanno et al., 2004). These findings suggest that higher levels of regulatory flexibility are associated with better socio-emotional outcomes and psychological adjustment. Interestingly, most of the literature has focused on college students and the adult population. While there is evidence for relationships between EF construct and mental or physical health outcomes in adult samples, investigating the antecedents of EF in children has not been established in an experimental manner. Therefore, investigating precursors to greater EF within a developmental frame may be important in learning how to promote children’s EF abilities to improve their emotional well-being.

The role of parents during interactions with their children plays a key factor in shaping children’s emotional trajectories. Among potential parental influences, one factor important to investigate in this study with regard to children’s EF is parental emotion socialization. Children’s EF may be substantially and uniquely affected by diverse parental socialization factors such as emotion-related beliefs, emotion control values, and emotion regulation strategies. For example, one study demonstrated that parental socialization factors such as maternal valuing of children’s emotions and lack of suppression use as a regulatory strategy predicted greater emotion regulation in children (Rogers, Halberstadt, Castro, MacCormack, & Garrett-Peters, 2016). However, few studies have examined how multiple forms of parental socialization jointly predict children’s EF abilities.
Paternal and Maternal Effects on Child’s Emotions

The literature supports the significance of gender in parental emotional regulation and emotional expression. Indeed, historically, literature on parenting has often focused exclusively on mothers (Larson & Richards, 1994). The need for examination of unique and different contribution of fathers is vital for children’s emotion regulation development (Lamb, 2004). Recently, there is growing recognition that children may experience emotion socialization through paternal and maternal influences separately. Although the trend focusing on the mother-child relationship has been justified due to more likely involvement between mother and child compared to father and child (Fivush, Brotman, Buckner, & Goodman, 2000; McDowell, Kim, O’neil, & Parke, 2002; Smollar & Youniss, 1985), looking at each paternal and maternal influence on children separately and jointly is needed. For this study, I am interested in identifying the unique predictive variance related to specific maternal and paternal socialization factors contributing to children’s EF abilities. Because findings indicate that both maternal and paternal influences are important in understanding a child’s emotion socialization, it is therefore necessary to identify how mothers and fathers use different approaches to socializing emotion in their children.

Emotion Socialization and Parenting Practices in Cultural Context

Research on traditional theories of the development of ER has focused mostly on Western literature. Each country, however, has its distinct cultural values with respect to self and the world (Rothbaum & Wang, 2010). The culture-specific self and world views determine how parents view their children and how they perceive their role as caretakers (Trommsdorff, Cole, & Heikamp, 2012). More specifically, culture is defined as “a frame of reference that consists of patterns of traditions, beliefs, values, norms, symbols, and meanings that are shared to varying
degrees by interacting members of a community” (Ting-Toomey, 1999, p. 10). In this way, culture plays an important role in determining individual differences in parental socialization goals and behaviors. For example, Eisenberg and colleagues (1998) proposed culture as one of the predictors of emotion-related parenting practices. Since cultural values are connected to the ways in which parents respond to children’s emotions (Bornstein, Putnick, & Lansford, 2011), it is likely that cultural contexts could influence socialization conditions of emotion regulation in children (e.g., interdependent self-regulation versus independent self-regulation). Taken together, cross-cultural literature on child emotional competencies in relation to parenting has focused on comparing those with Western/Individualistic and Eastern/Collectivistic values (Greenfield, Keller, Fuligni, & Maynard, 2003; Miyamoto, Ma, & Petermann, 2014).

**Purpose of the Study**

The purpose of this study was to examine 1) children’s expressive flexibility and parental emotion socialization in American and South Korean families, 2) the relationship of paternal and maternal socialization practices to children’s EF, and 3) the moderating effect of culture (e.g., individualism and collectivism) on the relationship between parental emotion socialization and children’s EF. According to Eisenberg et al (1998), the general processes of socialization of children’s emotions are influenced by child characteristics (e.g., age and sex of the child). I saw a need to question this finding by asking: What other factors may be associated with children’s emotion-related socialization behaviors? This led me to consider parental characteristics (e.g., childrearing philosophy) or characteristics of the culture (e.g., cultural values about the expression of emotion or the rule of parental childrearing practices in development). Further research influenced my understanding that parental beliefs and practices regarding emotional
expression may shape the emotional responses of children. Additionally, these parental beliefs, values, and practices vary depending on the cultural values and beliefs of particular cultures.

Using Eisenberg et al.’s (1998) conceptual framework as a starting point, I proceeded to examine the role of culture and parental emotion socialization and their effect on children’s expressive flexibility in middle childhood. By considering the idea that different cultures have different beliefs and values regarding emotions (Lillard, 1998), I compared the effects of socialization practices (e.g., parents’ emotion-related beliefs, emotion control values, and emotion regulation strategies) of individualistic American culture with those of collectivistic Korean culture on children’s expressive flexibility.

**Guiding Research Questions**

The following research questions framed the scope of this study:

1. Are there cross-cultural differences in child expressive flexibility (EF) and parental emotion socialization (i.e., emotion-related beliefs, emotion control values, emotion regulation strategies) in American and South Korean families?
   a) Are there differences reflected in children’s expressive enhancement, suppression, and flexibility within cultures?
   b) Are there cultural differences in parental emotion socialization and child EF between American and Korean samples?
2. How is expressive flexibility in children related to parental socialization variables and demographic variables (e.g., parents’ education and family income)?
   a) Is there a relationship between children’s EF and parental emotion socialization?
   b) Is there a relationship between children’s EF and demographic variables (e.g., parents’ education and family income)?
3. How does parental emotion socialization influence their children’s expressive flexibility?
   a) How does maternal emotion socialization (emotion-related beliefs, emotion control values, emotion regulation strategies) predict children’s expressive flexibility?
   b) How does paternal emotion socialization (emotion-related beliefs, emotion control values, emotion regulation strategies) predict children’s expressive flexibility?

4. Does culture (Individualistic American culture and Collectivistic Korean culture) have a moderating effect on the relationship between parental emotion socialization (emotion-related beliefs, emotion control values, emotion regulation strategies) and children’s EF?

The questions were based on prior research findings (e.g., Bonanno et al., 2004) and suggestions (e.g., Wang & Hawk, 2019). The hypotheses for the study were informed by relevant contemporary research and were designed to address each question. The first question was to examine whether there are cultural differences in children’s EF abilities and parental emotion socialization across American and Korean families. It was hypothesized that American children characterized by Western European values would report greater EF abilities than Korean children holding Asian values. Regarding parental socialization factors, it was hypothesized that Korean parents would more strongly believe the expression of emotions as dangerous compared to American parents. In addition, it was hypothesized that American parents would more strongly believe it is important for parents to teach children’s emotions compared to their Korean counterparts. For regulatory strategies, it was hypothesized that American participants would report greater use of cognitive reappraisal than Korean participants. It was hypothesized that levels of suppression and emotion control values would be higher in the Korean sample than the American sample.
The second question called for an analysis of the relationship between EF abilities and demographic variables. Specifically, socioeconomic status (SES) such as parents’ education or family income was hypothesized to be associated with EF abilities in children. This was important since past research has demonstrated that there are positive linkages between SES and individuals’ ability to regulate emotions (Côté, Gyurak, & Levenson, 2010).

The third question was to investigate how paternal and maternal socialization factors influence children’s EF abilities, regardless of cultural background. It was hypothesized that maternal and paternal socialization practices would contribute differently to their child’s EF and both maternal and paternal influences may be important in understanding child’s emotion socialization process.

The fourth question was to test if culture would have moderating effects on the relationship between parental socialization and child EF. Since Individualistic American culture and Collectivistic Korean culture hold distinctly different views about emotions, it was hypothesized that the association between parental emotion socialization and child EF would be moderated by cultural context, particularly parental socialization across cultures would have different effects on children’s regulatory skills.

**Definition of Terms**

The following terms used in this study were defined as follows:

**Cultural Differences**

The study sample consists of an ethnically diverse group of parents and their children in American culture and South Korean culture. In this study, cultural differences are defined as the variations evident between American families holding Western individualistic values and South Korean families holding East Asian collectivistic values.
Children

For the purposes of this study, children are defined as any person who are between the ages of 6 and 12 in middle childhood.

Expressive Flexibility (EF)

An ability to flexibly enhance and suppress emotional expression (i.e., up-regulating and down-regulating emotion) in accordance with situational demands.

Emotion Regulation (ER)

The capacity to effectively respond to emotional experience and manage emotional expression.

Parental Emotion Socialization

Parents’ guidance and assistance to socialize children’s emotional competence. It is measured in this study through three parental socialization factors such as parents’ beliefs about children’s emotions (e.g., emotions as dangerous and guidance of children’s emotions), emotion control values, and parents’ emotion regulation strategies (e.g., cognitive reappraisal and expressive suppression).

Significance of the Study

The significance of this study is multifaceted. In ER research, there has been a shift of emphasis from adaptiveness of specific regulatory strategies (i.e., one regulatory process) to regulatory flexibility in accordance with contextual demands. As a result of relatively minimal research available regarding the construct of EF, this study provides a framework for future researchers in studying emotion flexibility that may be more important than any one regulation skill alone. Second, this study leads to a better understanding of the unique and collective contributions of multiple parental socialization processes to children’s EF ability. Few researchers have sought to combine multiple forms of parental socialization which affect
children’s emotion regulation abilities. This study, however, seeks to identify five different forms of parental emotion socialization (e.g., parents’ belief about the danger of emotions, parents’ role in guiding children’s emotions, parents’ emotion control values, parents’ cognitive reappraisal, and suppression) that uniquely predict children’s emotional outcomes in middle childhood. Third, this study provides insight into how fathers and mothers contribute jointly to their children’s developmental outcomes in the family context. Past literature on parenting has often focused exclusively on mothers. This study, however, seeks to also consider unique fathers’ impact on their children’s emotional capacities. Finally, this study provides educators and practitioners with a culturally-informed perspective in socialization practices and EF between Western culture and East Asian/Korean culture in order to reveal how EF ability appears differently across cultural boundaries. There is a relatively small but growing appreciation of ethnic differences in emotion socialization practices between American and Korean cultures. This study, therefore, provides a more complete and culturally sensitive understanding of the emotion socialization process and how this may differ for American and Korean families.

**Delimitations and Limitations of the Study**

This study had three delimitations. First, all American participants spoke fluent English and South Korean participants spoke fluent Korean. Native language speakers were purposefully selected (i.e., native-born Americans and Koreans) in each country because all materials were written in English and Korean as a primary language. Second, the sample population for this study consisted of children in middle childhood and not those in early childhood or adolescence. This was based on the notion that middle childhood is characterized by the emergence of mastery of emotion regulation via higher cognitive processing (Zimmer-Gembeck & Skinner, 2011).
Only the attitudes and actions of parents and caregivers of children in middle childhood were considered because emotionally socializing children tend to be strongly influenced by their families especially parents (Eisenberg et al., 1998). Third, all American participants lived in Boston, Massachusetts, United States, and all Korean participants lived in the city of Seoul, South Korea.

There were three limitations to this study. First, the study may be limited in its generalizability due to its small sample size. A second potential limitation of the study was that the study participants were upper-middle class families (e.g., high SES and educational level) who live in a metropolitan setting (i.e., Boston and Seoul). The families participating in the current study, therefore, are not representative of all Americans or South Koreans. The last potential limitation of the study was that parents’ variables were measured by several self-reported questionnaires. In essence, the subjects may have chosen a socially acceptable answer rather than a truthful answer.

Review of the Literature

A large body of emotional development research indicates that emotions play a vital role in all aspects of human experience. From birth through late adolescence, children develop their abilities to express emotions, learn to discriminate between them, and acquire capacities to cope and manage emotions (Saarni, Mumme, & Campos, 1998; Thompson, 1994; Thompson & Lagattuta, 2006). Emotional development in children is strongly linked with mental health (Mavroveli, Petrides, Rieffe, & Bakker, 2007; Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007), and a growing field of research is devoted to the promotion of healthy emotional development, and, consequently, prevention of mental health problems.
In recent years, numerous empirical studies have demonstrated the relationship between emotion regulation (ER), defined as the capacity to effectively respond to emotional experience and manage emotional expression (English & John, 2013), and children’s developmental outcomes. Several empirical studies on emotion regulation have shown that children who score higher on ER tend to have better emotional adjustment (Alessandri et al., 2014; Kim-Spoon, Cicchetti, & Rogosch, 2013) and social competence (Eisenberg et al., 2016), whereas children with poor ER demonstrate higher risk of experiencing peer rejection and academic difficulties (McClelland & Tominey, 2011). Recently, ER research has focused on the dynamic nature of regulatory processes and regulatory flexibility in line with situational demands rather than the uniform adaptiveness or maladaptiveness of particular regulation strategies in general. In particular, Bonanno and colleagues launched a paradigm that looked at enhancement and suppression of emotional expressions in accordance with contextual demands, which they coined expressive flexibility (EF) (Bonanno et al., 2004). The majority of research on EF, defined as the ability to flexibly regulate emotional expressions both upward and downward (i.e., expressing and suppressing emotion) has focused mainly on Western European adult samples. Although there is evidence for connections between the role of EF and mental health consequences in adults (Bonanno et al., 2004; Chen, Chen, & Bonanno, 2018; Westphal, Seivert, & Bonanno, 2010), an experimental approach to examine the relations between EF as a construct and its antecedents (e.g., parent characteristics) in child samples has not been directly investigated.

In order to better understand the socialization of children’s emotion like expressive flexibility, Eisenberg and colleagues (1998) proposed that culture along with parent characteristics are important determinants of socialization processes in a heuristic model of emotion socialization. In this model, a child’s emotion-related behavior perceived as emotionally
competent in one culture may be viewed as inappropriate in another cultural context. Thus, there is a need for a cross-cultural approach in examining the antecedents (e.g., parent characteristics) of regulatory flexibility in children.

A comprehensive review of the literature provided both a historical and theoretical foundation for this study. An extensive literature review was included as Chapter Two. The bodies of literature studied were organized into six sections that provide the theoretical underpinnings for this study: expressive flexibility (EF); expressive flexibility in children; parental emotion socialization; maternal and paternal effects of child’s emotion; importance of studying emotion socialization within cultural contexts; and cultural differences in emotion socialization between individualistic American families and collectivistic Korean families.

The first section considered the definition of expressive flexibility, a review of past literature on expressive flexibility, and the historical measurement and significance of EF as a construct. The second section presented the importance of studying the development of expressive flexibility in middle childhood. The next section included an investigation into parental emotion socialization factors, such as parental beliefs about children’s emotions (e.g., danger of emotions and guidance of children’s emotions), emotion regulation strategies (cognitive reappraisal and expressive suppression), and emotion control values. Research on how multiple forms of parental emotion socialization theoretically relate to children’s expressive flexibility was also presented. The following section focused on parent-gender differences in emotion socialization beliefs and behaviors of mothers and fathers, including how the different roles of maternal and paternal socialization and emotion expression uniquely contribute to children’s emotion regulation and emotional development in a family context. The fifth section examined the theory of emotion socialization that served as a conceptual framework for this
study. As well, literature regarding the interaction of culture and parent characteristics as a predictor of emotional outcomes in children from a cross-cultural perspective was reviewed. Lastly, the sixth section of the literature review explored Western American culture and East Asian Korean culture as two groups holding different culture-specific values in parenting practices. The literature and research collected for this section was derived from the cross-cultural studies with West-East distinctions. Cultural differences in emotion regulation and parental socialization practices between American families and South Korean families and how they may relate to children’s outcomes were examined.

**Method**

The chosen methodology for the study was quantitative in nature and used questionnaires (paper-and-pencil measure) as well as an experimental approach where child participants completed emotion regulation tasks at a computer screen. The data collected was analyzed by considering the results of the observational measure (e.g., expressive flexibility task) and the parent questionnaire. The interpretation of data involved the analysis for quantitative measures such as questionnaires and experimental methods. These were used to examine the effect of parental emotional socialization on children’s up and down regulation of emotion within and between ethnic groups (e.g., American and Korean families).

**Selection of Participants and Setting**

Participants were 69 American parent-child dyads and 77 South Korean parent-child dyads with school-aged children. Parents were told that participation is voluntary and that their children would be asked to engage in some emotion regulation tasks. Children participated with their parents’ consent. To recruit Korean participants, the researcher visited South Korea and contacted by telephone and email randomly selected schools from a list of elementary schools in
Seoul, the capital of South Korea. American participants were recruited through flyers posted on apartments and churches in the Boston area, Massachusetts in the United States. Electronic recruitment notices were also distributed to online message boards, Facebook groups, and parenting forums.

South Korean children were instructed to perform the expressive flexibility task in a private room at their school. Participants in Boston took part in the experimental task in the Advanced Cultural and Emotional Intelligence Lab at Boston University. Child participants were assessed at one of the two experimental sites (e.g., school setting in South Korea and lab setting in the U.S.). These different types of locations may present limitations to the study because children’s EF task scores may be affected by dissimilar experimental environmental conditions.

Data Collection

Instrumentation

The expressive flexibility task developed by Bonanno and colleagues (2004) was used to assess children’s expressive regulation (i.e., expressive flexibility). Children were presented with a series of pictures from the International Affective Picture System (IAPS) (Lang, Bradley, & Cuthbert, 1995) and asked to enhance or suppress their facial expressions in response to the emotion-evoking picture stimuli at a computer screen. During these tasks, children’s facial expressions were video-taped.

Questionnaire

Parents were asked to complete several questionnaires regarding their personal information, beliefs about children’s emotions, emotion control values, and emotion regulation skills. The questionnaire was expected to take 30 minutes to complete. The first page of the questionnaire included an informed consent form that parents signed if they wished to participate.
in the study with their child. Continuing to the second page implied participants’ consent to the study. Father and mothers in America and South Korea completed the same set of questionnaires in the same order. Since some parents chose to discontinue participation in the study without completing the questionnaires, their data is not included in the data analysis.

**Data Analysis**

First, the data collected included demographic information on the child’s age, gender, and ethnic background, as well as the means, modes, range, and standard deviations for the study variables. Second, Pearson correlation coefficients were performed to examine the relationships between variables. Third, an Independent Sample t-test was used to compare the differences between the two ethnic groups (American and Korean families) for expressive flexibility and parental emotion socialization. The Independent Sample t-test demonstrated whether there were differences between the means of the two groups. Fourth, hierarchical regression analysis was used to examine the effects of parental emotion socialization on children’s EF. By using the hierarchical regression analyses, which maternal and paternal emotion socialization factors (e.g., parents’ beliefs about children’s emotion, emotion control values, and emotion regulation strategies) were identified as contributing uniquely and collectively to their children’s EF. In addition, hierarchical regression analyses were performed to investigate whether culture (i.e., individualism and collectivism) moderates the relationship between parental emotion socialization and children’s EF abilities.

**Chapter Outline**

**CHAPTER ONE: INTRODUCTION**

Chapter One was divided into the following sections: (a) Personal Background Statement; (b) Statement of the Problem; (c) Purpose of the Study; (d) Guiding Research
Questions; (e) Definition of Terms; (f) Significance of the Study; (g) Delimitations and Limitations of the Study; (h) Review of the Literature; (i) Method; and (j) Chapter Outline.

CHAPTER TWO: REVIEW OF LITERATURE

Chapter Two provided a review of literature relevant to the expressive flexibility in children, parental emotion socialization, maternal and paternal effects on child’s emotion, the importance of studying emotion socialization within cultural contexts, and the cultural differences in emotion socialization between American families and South Korean families. Sectioned headings included (a) Expressive Flexibility; (b) Expressive Flexibility in Children; (c) Parental Emotion Socialization; (d) Maternal and Paternal Effects on Child’s Emotion; (e) Cultural Approach: Importance of Studying Emotion Socialization within Cultural Contexts; (f) Cultural Differences in Emotion Socialization: Focus on Individualistic American Families and Collectivistic Korean Families; and (g) Summary.

CHAPTER THREE: METHOD

Chapter Three included a detailed description of the methodology of the study and a rationale for the selected approach. Sectioned headings included (a) Methodology Summary; (b) Participants; (c) Procedure; (d) Data Collection Methods; (e) Data Analysis; and (f) Summary.

CHAPTER FOUR: FINDINGS

Chapter Four included a description of the findings of the study and an analysis of the data collected from experiments and questionnaires. The chapter is divided into the following sections: (a) Questionnaires for Parents; (b) Observations for Child Experiment; (c) Findings for Research Question 1; (d) Findings for Research Question 2; (e) Findings for Research Question 3; (f) Findings for Research Question 4; and (g) Summary of Findings.
CHAPTER FIVE: SUMMARY, DISCUSSION, FUTURE RESEARCH, AND FINAL REFLECTIONS

Chapter Five was comprised of a summary of the study, discussion of the research findings with theoretical implications. Recommendations for future studies are delineated, and the chapter concluded with my reflections. Sectioned subheadings include (a) Summary; (b) Differences in Children’s EF and Parental Emotion Socialization across American and Korean Cultures; (c) Relation of Parental and Demographic Variables to Children’s EF; (d) Differences in the Links between Parental Emotion Socialization and Children’s EF; (e) Moderating Role of Culture on Relationship between Parental Socialization and Children’s EF; (f) Strengths, Limitations, and Future Directions; and (g) Final Reflections.
CHAPTER TWO: REVIEW OF LITERATURE

Given the importance of the cultural context and the relationship between parental emotion socialization and children’s emotional development, it is necessary to fully understand how parental socialization in different cultural contexts have different effects on children’s EF abilities. This chapter reviews the literature on expressive flexibility and the historical measurement and significance of EF construct. It also reviews the literature on the theory associated with emotion socialization, multiple forms of parental emotion socialization, and parent-gender differences in socialization practices. Finally, the chapter examines the distinctions in the literature with regard to East (Koreans)-West (Americans) holding different culture-specific values in emotion regulation and parenting practices. Reviewing the bodies of literature in each section helped to support the importance of this study. It enhances its potential for a deeper understanding of the socialization of emotion in different cultural contexts and its implications for developmental outcomes in middle childhood.

Expressive Flexibility (EF)

Definition

Expressive flexibility first emerged from self-regulation theory. Self-regulation, as a broader concept under which emotion regulation is subsumed, focuses on the ability to control one’s levels of arousal, emotions, and behaviors (Kopp, 1982). The definition of emotion regulation adhered to in this study comes from Thompson (1994). That is, “emotion regulation consists of the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one’s goals” (Thompson, 1994, p. 27-28). In measuring emotion regulation in children, researchers have employed self-report (e.g., Gullone & Taffe, 2012) and behavioral methods in
the laboratory by watching pictures of film clips and grading a child’s expression (e.g., Lejuez, Daughters, Danielson, & Ruggiero, 2006). This body of work has generally conceived of ER as a trait-like construct, associated with a wide range of outcomes, including less anxiety, better social skills, improved academic success (Graziano, Keane, & Calkins, 2007), less externalizing symptoms (Blandon, Calkins, Grimm, Keane, & O’Brien, 2010), and improved psychological adjustment (Southam-Gerow & Kendall, 2002).

In recent years, however, research on ER has shifted from an emphasis on adaptiveness of specific emotion regulatory strategies to focus on individuals flexibly regulating their emotions to meet contextual demands, with a particular emphasis on expression (i.e., expressive flexibility). EF was first empirically coined by Bonanno and colleagues (2004), emphasizing that “successful adaptation depends on the ability to both enhance and suppress emotional expression and to do so flexibly in accord with situational demands” (p. 483). In addition, Bonnano and Burton (2013) defined EF as having three transactional components: context sensitivity, repertoire, and responsiveness to feedback. According to Bonanno and Burton, greater EF was conceptualized as a higher sensitivity to emotion-eliciting scenarios in contextual demands, a wider repertoire of ER strategies, and a greater willingness to adjust ER strategies based on feedback about the efficacy of the enacted regulatory strategy. More recently, Aldao, Sheppes, and Gross (2015) defined emotion regulation flexibility as “the degree of covariation between ER variability and changes in the environment, where the environment might consist of external events and/or appraisals of emotional reactions to such events” (p. 268).

**Emotion Regulation Flexibility Research**

Expressive Flexibility (EF) has been studied among adults in a variety of ways. Bonanno et al. (2004) demonstrated that expressive flexibility, which is the ability to up- or down-regulate
emotions on command, is an important predictor of adjustment in college students. The experimental results showed that higher EF scores are consistently associated with better adjustment in confronting stressful situations. In addition to expressive flexibility, Aldao and Nolen-Hoeksema (2012) found that the variability with which putatively adaptive ER strategies (e.g., positive reframing, acceptance) were implemented in various situations was more predictive of psychopathology than the putatively maladaptive Emotion Regulation (ER) strategies (e.g., rumination, suppression, behavioral disengagement, denial) alone. Their findings suggest that individuals with a rich repertoire of ER strategies are likely to know how to be flexibly adaptive in response to various contextual demands.

Specifically, higher scores on EF correlate positively with greater psychological adjustment (Galatzer-Levy, Burton, & Bonanno, 2010; Westphal et al., 2010), fewer complicated grief symptoms after the death of a spouse (Burton et al., 2012; Gupta & Bonanno, 2011), lower overall levels of posttraumatic stress at higher levels of trauma exposure (Bonanno, Pat-Horenczyk, & Noll, 2011), and greater peer relations in children (Wang & Hawk, 2019). Overall, this growing literature has largely supported the idea that individuals’ regulatory flexibility tends to be related to resilience, higher effectiveness in problem solving, and lower current and prospective levels of distress (Blanchard-Fields, 2007; Bonanno et al., 2004).

**Measurement**

The EF construct has been measured through self-report instruments (e.g., ER Flexibility Questionnaire; ERFQ), as well as in observational experimental paradigms. As one example, to test expressive flexibility, Bonanno and colleagues (2004) developed an experimental paradigm in which participants were asked to enhance or suppress their facial expressions in response to emotion-evoking picture stimuli at a computer screen. At certain points, the participants were
instructed to flexibly regulate emotional expression both upward and downward (i.e., enhancement condition and suppression condition), and at other points to behave normally while viewing the pictures (i.e., control condition). The control condition served as a baseline measure of expressive regulation and allowed within-subjects comparisons across conditions (Bonanno et al., 2004). Researchers then calculated each participant’s expressive-enhancement ability and expressive-suppression ability separately as well as a measure of overall flexibility that reflects participants’ enhancement and suppression ability scores. Expressive flexibility scores in this task indicate the ability to both enhance and suppress expression of emotion in accord with situational demands. Greater ability to perform this task has been correlated with better long-term adjustment and less distress following a potentially stressful life transition (e.g., Bonanno et al., 2004; Gupta & Bonanno, 2011; Westphal et al., 2010). Additionally, in an EF research on children (Wang & Hawk, 2019), EF was measured by modifying the original task of Bonanno et al. (2004). The findings of Wang and Hawk (2019) have suggested that this task is suitable for use with younger populations. Therefore, for the purposes of this study, the laboratory paradigm developed by Bonanno et al. (2004) to measure children’s expressive flexibility was adopted.

**Significance**

Investigating EF may be particularly important because it might help us identify individuals at potential risk for maladaptive behaviors after experiencing adverse events. Research examining the role of EF and psychological adjustment suggests that the ability to flexibly regulate emotional expression appears especially important in the aftermath of highly stressful life experiences (Bonanno et al., 2011). For instance, Bonanno and colleagues (2004) tested EF among New York City undergraduate students who began college in the immediate aftermath of the 9/11 terrorist attack. The results showed that students who were better able to
both enhance and suppress their expression of emotion reported less distress two years later. In their extension of this research, Westphal and colleagues (2010) found that individuals who were higher in EF had better adjustment, such as psychological well-being, physical health, coping ability, and quality of social interactions. Moreover, some studies showed that high EF played an important role in buffering against complicated grief among bereaved adults (Gupta & Bonanno, 2011) and depression and posttraumatic stress in combat-exposed veterans (Rodin et al., 2017). Therefore, it is important to investigate the EF as a construct because high EF may serve as a protective factor against the negative impact of life stress, trauma, and loss.

**Expressive Flexibility in Children**

Middle childhood (usually defined as ages 6 through 12) is an important time to study EF because children’s metacognitive skills allow them to use more sophisticated emotion regulation strategies; thus, their use of suppression as a regulatory strategy becomes part of their larger repertoire (Zimmer-Gembeck & Skinner, 2011). There is no direct empirical evidence, however, examining the basic characteristics of EF on children specifically in a laboratory paradigm. Despite recent empirical research demonstrating positive associations between children’s EF abilities and peer relationships in a Chinese sample (Wang & Hawk, 2019), past research examining EF has been limited to studies on college students or adults who had experienced adverse events (e.g., terrorist attack, bereavement). My focus on children, especially middle childhood, would help to explain the following: 1) the extent to which EF is present during this age; 2) the extent to which it is associated with outcomes; and 3) the antecedents of these EF abilities. The middle childhood period was chosen because, at this age children have mastered basic emotional knowledge such as recognizing the meaning of different facial expressions, and they begin to identify external causes and consequences of emotions (Pons, Harris, & de Rosnay,
In addition, children in this period are characterized by the emergence of nonverbal accuracy (Feldman, Coats, & Spielman, 1996; Nowicki & Duke, 1992, 1994; Philippot & Feldman, 1990) and understanding of the mixed nature of emotions (e.g., psychological aspects of emotions) (DePaulo & Rosenthal, 1979; Pons et al., 2004). Specifically, most children master regulating emotion via cognition and develop an understanding of masking emotions in middle childhood (Pons et al., 2004). The understanding of masked emotions may connect with the ability to flexibly express or conceal emotion in relation to contextual demands.

Compared with earlier periods of development, middle childhood is a period of time during which parents actively manage their children’s emotional experiences in order to socialize appropriate behaviors as well as to foster better self-sufficiency in children’s use of emotional skills (Cassano, Perry-Parish, & Zeman, 2007). Due to the above reasons, children in this age group are of particular importance and interest to study. Specifically, it is necessary to understand the influence of parental characteristics on children’s EF abilities within the family context, and how the EF construct may develop differently according to diverse parental socialization practices.

**Parental Emotion Socialization**

**Parents’ Beliefs About Children’s Emotions**

Researchers exploring parents’ beliefs about children’s emotions have documented their effects on a variety of child outcomes. There is evidence that parental emotion-related beliefs correlate with emotion regulation abilities in children. For example, Gottman, Katz, and Hooven (1996) found that parents’ beliefs about children’s emotions was an important predictor of development of children’s abilities in the regulation of emotion. Their findings indicate that children who were better able to regulate their negative emotions (e.g., anger and sadness) are
associated with parental emotion-related feelings and thoughts. This study focused on two broad dimensions of parents’ emotion-related beliefs: (a) beliefs about the danger of children’s emotions and (b) beliefs about parents’ role in guiding children’s emotions.

**Danger of Emotions.** Parents who see emotions as valuable may believe that children benefit from the experience and expression of emotions and that these emotions provide opportunities for children to learn how to express and identify their own and others’ emotions (Gottman et al., 1996; Stelter & Halberstadt, 2011). In contrast, parents who believe emotions can be dangerous or potentially harmful may dismiss the emotions and ignore their child’s emotional experiences. Such parents are likely to hide or mask their own emotions, which may, consequently, decrease opportunities for children to develop and learn about emotions (Dunsmore, Her, Halberstadt, & Perez-Rivera, 2009; Halberstadt, Thompson, Parker, & Dunsmore, 2008b). Indeed, when parents with elementary-school-aged children believed that emotions are dangerous, their children reported greater use of avoidance and distraction as coping mechanisms (Halberstadt et al., 2008b). Similarly, parents’ belief about the danger of children’s emotions was correlated negatively with children’s emotion regulation (Lunkenheimer, Shields, & Cortina, 2007). Although past research has not investigated relations between parents’ belief about the danger of emotions and children’s EF abilities, parents who believe emotions are dangerous may reduce expressive flexibility in children by masking their own emotions. Consequently, parents’ beliefs about the danger of emotions were hypothesized to be negatively related to children’s flexible regulation in this study.

**Guidance of Children’s Emotions.** Parents’ beliefs in teaching children how to deal with emotional experience and expression may also affect the way in which they emotionally socialize their children. Parents who believe they are responsible for playing an active role in
their child’s emotional development emphasize their own agency in children’s emotional socialization (Denham & Kochanoff, 2002; Dunsmore & Karn, 2004). Thus, parents who believe that their socialization role is important are less likely to believe that children can actively learn about emotions on their own and, therefore, may engage in various socialization practices that promote more explicit guidance regarding emotional experience and expression to their children.

Conversely, parents who believe that guidance is not important are less likely to participate in emotion talk with their child and to teach their child how to deal with emotional experiences (Castro, Halberstadt, Lozada, & Craig, 2015). Although no previous studies have explored the impact of the belief in parental guidance on children’s EF abilities, parents’ beliefs in the importance of guiding children have predicted similar signs of healthy development, such as greater increases in emotion knowledge, greater ability in focusing attention, decreased physiological stress, and less negative play with peers (Dunsmore & Karn, 2004; Hooven, Gottman, & Katz, 1995). Moreover, Wilson and colleagues (2012) showed that parents who are high in emotion coaching tend to have children with greater self-regulation and attention skills. Although no research has explored how parents’ beliefs about their responsibility in children’s emotion predict children’s EF, parental guidance was hypothesized to be positively associated with children’ EF abilities in this study.

**Parents’ Emotion Regulation Strategies**

Research on the influence of parental emotion regulation on child outcomes has shown that parents’ use of ER strategies is associated with youth emotional understanding and regulation (e.g. Remmes & Ehrenreich, 2014). Emotion dysregulation in parents, however, has shown to be correlated with children’s higher levels of impatience-aggression (Sweda, Sines, Lauer, & Clarke, 1986) as well as increased internalizing and externalizing behaviors (Kane &
Garber, 2004). With regard to the use of ER strategies (e.g., reappraisal and suppression), some parents may see reappraisal strategies as adaptive, and thus may be more likely to believe that they can reframe a negative emotion-eliciting situation to lessen the emotional impact. Other parents, though, may see suppression strategies as adaptive and, therefore, may not display their affective expression or discuss emotions with their children. Thompson and Lagattuta (2006) found that parental emotion socialization strategies are likely to have a significant effect on children’s developing emotion knowledge. Specifically, these parenting practices and emotion regulatory strategies influence their children’s emotion regulation abilities (Díaz & Eisenberg, 2015). Thus, there is evidence to suggest that the EF construct may be related to parental socialization factors, especially parents’ emotion regulation strategies. Because ER strategies can be distinguished between cognitive reappraisal and expressive suppression at the broadest level (Gross & John, 2003), this study focused on these two common types of emotion regulation strategies.

**Cognitive Reappraisal.** Cognitive reappraisal is described as an *antecedent-focused* emotion regulation strategy (Gross & John, 2003). It is thought to operate relatively early in an individual’s emotion generative process, before the emotional response has fully arisen and has changed one’s behavior. This means that reappraisal can alter the subsequent emotion trajectory by reframing or recontextualizing a negative stimulus (Gross & John, 2003). Experimental findings from numerous studies have shown that the use of cognitive reappraisal leads to greater affective and interpersonal functioning and well-being (John & Gross, 2004; Richards, Butler, & Gross, 2003). Similarly, Hughes and colleagues (2010) found that less use of reappraisal strategies and greater use of suppression strategies in children were linked with anxiety disorders and depressive symptomatology. These findings demonstrate the potential of cognitive
reappraisal in mitigating potentially detrimental consequences of negative emotional experiences through the mechanistic reframing of negative emotions.

**Expressive Suppression.** Expressive suppression is described as a *response-focused* emotion regulation strategy (Gross, 1998). It is thought to operate relatively late in the emotion generative process and takes place after the emotional response has already been generated. Past research regarding expressive suppression has demonstrated that using suppression strategies may extract social, affective, or cognitive costs on an individual’s well-being (Richards & Gross, 2000; Westphal et al., 2010). For example, individuals who habitually use these strategies are likely to have lower social support and peer-rated likeability (Gross & John, 2003) as well as reduced sharing of emotions and relationship closeness (Butler et al., 2003). Similarly, individuals using suppression tend to have memory deficits for emotional stimuli presented while they regulate emotions (Richards & Gross, 2000). In their comparison of reappraisal and suppression strategies, Gross and John (2003) found that compared to people who more often use reappraisal, people who use suppression reported less positive emotion, lower self-esteem, lower life satisfaction, and greater depressive symptoms. Consistent with previous findings, therefore, children’s EF abilities were hypothesized to be positively related to parental cognitive reappraisal and negatively related to parents’ suppression in this study.

**Parents’ Emotion Control Values**

Direct assessments of parental emotion control values have not focused on children’s developmental outcomes but have often addressed parents’ own stress-related psychological and physical problems (Kaiser, Hinton, Krohne, Stewart & Burton, 1995; Lok & Bishop, 1999). Recently, several studies have suggested that individuals’ values about emotion control (i.e., modulating one’s own emotional experiences and expressions) may have different meanings
depending on their cultural context. In particular, interdependent Asian culture and independent European culture have been frequently compared since these two cultural groups hold distinct views about emotions (Mauss, Butler, Roberts, & Chu, 2010). For example, Asian culture is described as viewing the emotion control or moderation of emotional expression as necessary, especially when emotions may disrupt social cohesion (Russell & Yik, 1996; Wang, 2006). In contrast, in European culture, individuals who are high in valuing emotion control may conflict with prevailing norms of emotion expression, and thus be related to less effective emotion control in emotional situations (Mauss & Butler, 2010). Therefore, measurement of parental values regarding emotion control would be useful in examining the relationship between emotion control values and children’s EF across Individualistic American and Collectivistic Korean cultures.

**Maternal and Paternal Effects on Child’s Emotion**

In terms of gender stereotypes concerning emotional processing, females and males are assigned different societal roles regarding the ways in which they should express and experience emotions (Kring & Gordon, 1998). For example, females experience and express emotion more often than do males (Sprecher & Sedikides, 1993) and more frequently engage in emotion talk in conversations with others (Dosser, Balswick, & Halverson, 1983). Studying both fathers’ as well as mothers’ socialization practices is critical in understanding the relations between parental emotion socialization and children’s developmental outcomes. Several studies examining gender-specific emotion socialization behaviors have indicated differences in the ways mothers and fathers exhibit emotion-related parenting (Baker, Fenning, & Crnic, 2011; Gottman et al., 1996; McElwain, Halberstadt, & Volling, 2007). For example, mothers indicate more involvement in the emotion socialization of their children than do fathers (Garside & Klimes-
Dougan, 2002), whereas fathers report greater use of punitive parenting toward their children’s emotional expression. This is especially true for fathers with sons who display negative emotions, such as sadness and fear (Eisenberg et al., 1998). Mothers, however, were perceived by children as more accepting and less rejecting than fathers (Dwairy, 2010; Gamble, Ramakumar & Diaz, 2007).

Although the literature on parenting has focused mainly on mothers, more recent work suggests that fathers and mothers contribute uniquely and differently to the development of emotion regulation in children (Cassano et al., 2007). Because fathers uniquely play important roles in their children’s psychological well-being, it is important to include fathers in developmental research to understand how the role of the father is related to child development. For instance, Lamb (2004) found that fathers appear to play a more influential role in child emotional socialization during infancy and early childhood because fathers are more frequently engaged in physical play with children at this period. Therefore, it is necessary to identify how mothers and fathers use different approaches to socializing emotion in their children. Because it is reasonable that mothers and fathers play different roles in shaping children’s emotion socialization, this study would test whether mothers and fathers exert differential influences on flexible regulation abilities in children. Attention is focused on how mothers’ and fathers’ beliefs about emotions, emotion control values, and use of regulation strategies differentially influence children’s EF.

**Cultural Approach: Importance of Studying Emotion Socialization within Cultural Contexts**

Eisenberg and colleagues (1998) proposed a useful heuristic model that demonstrates four types of factors contributing to children’s emotion socialization—specifically, child
characteristics (e.g., age and sex), parental characteristics (e.g., values, childrearing philosophy, beliefs about emotions, parental regulation), characteristics of the culture (e.g., cultural values about the expression of emotions, the role of parental childrearing practices), and specific context (e.g., the current situation). The heuristic model suggests that culture may characterize how parents emotionally socialize their children. There is some evidence that American culture and Asian culture have different beliefs and theories regarding emotions (Bastian et al., 2012; Chentsova-Dutton et al., 2007; Eid & Diener, 2001; Mesquita, 2001; Tsai, Knutson, & Fung, 2006; Uchida & Kitayama, 2009). For example, Asian cultures tend to hold a view of emotions as dangerous, and highly value emotion balance and emotion control to maintain social harmony over individuals’ expression of emotions (Kim & Sherman, 2007). In this cultural context, the desired socialization would be to teach children not to express their strong emotions in public. In contrast, American individuals generally describe emotions and their expression as signs of psychological health and an individual’s appropriate self-assertion (Eid & Diener, 2001). Since these two cultural groups hold distinct views about emotions, studying the differences in children’s regulatory flexibility between American and Asian cultures will reveal how cultural values of emotions would be related to socialization of children’s emotion and parental socialization practices. Overall, within the heuristic model’s framework, an investigation into how parental emotion-related beliefs, emotion control values, and regulatory strategies (i.e., parent characteristics) are linked to children’s expressive flexibility (i.e., child outcome) across American culture and Korean culture, one prominent ethnic group within the makeup of Asian ethnicities (i.e., cultural factors) would be useful.
Cultural Differences in Emotion Socialization: Focus on Individualistic American families and Collectivistic Korean families

Culture and Emotion Regulation

In recent years, the importance of emotion regulation focusing on cultural context has emerged theoretically and empirically (Cheung & Park, 2010). Research examining the impact of cultural context on emotion regulation has been increasingly emphasized, particularly in consideration of the differences in the meaning of the self and social relations. Under the theoretical framework of individualistic and collectivistic cultural models, the cultural differences in how to manage or regulate one’s emotions can be explained (Markus & Kitayama, 1991). Individualistic cultures (e.g., Western Europe and North America) place great value on independent self-construal, autonomy, and open emotion expression (Hofstede, 2001), whereas collectivistic cultures (e.g., East Asia and North Africa) emphasize interdependent self-construal, a close bond within the family, and social order (Gil & Drewes, 2005). In addition, individuals from individualistic cultures are respected as distinct members of the society and seen as separate from one another, whereas individuals from collectivistic cultures are considered members of a family unit or kinship unit that includes the sum of all generations of their family (McGoldrick, Giordano, & Garcia-Preto, 2005). These cultural differences in the notion of self imply a strong possibility that there might be cultural differences in emotion regulation styles as a result of different cultural values. While people with individualistic values may express personal wishes and desires, people with collectivistic values may be more likely to consider social group norms by fitting themselves into the group or society (Oyserman & Lee, 2008). Researchers in the emotion regulation literature have argued that emotion suppression in collectivistic cultures may be more often encouraged in order to fulfill prosocial goals compared to that in individualistic
cultures (Hui, Triandis, & Yee, 1991). In this collectivistic cultural context, strong expression of emotions could be thought to disrupt intragroup relations and harmonious social functioning; further, individuals might even benefit from the use of suppression (Barnow & Balkir, 2012). According to Keltner, Gruenfeld, and Anderson (2003), cultural differences in suppression can be observed between European Americans (i.e., majority) and ethnic minorities in the United States. The authors suggested that minority individuals tend to monitor and conceal their emotions in order to avoid disadvantage when becoming absorbed into a national culture and interacting with majority individuals. Therefore, it follows that ethnic minority groups (e.g., Asian and African Americans) may use suppression more frequently than would the dominant majority group (e.g., European Americans).

Nevertheless, while a number of studies examining expression of emotions have focused on positive consequences, such as psychological well-being, self-discovery, individuality, and success, many studies on the suppression of emotions have shown negative physical and mental health consequences of this accumulation of negative feelings (Hofmann, Heering, Sawyer, & Asnaani, 2009; Szasz, Szentagotai, & Hofmann, 2011). From the perspective of Western theories of emotion regulation, personality, and health, suppression is likely to aggregate more costs than benefits in general (Greenberg & Stone, 1992; Gross & Levenson, 1993; Pennebaker & Seagal, 1999). Despite the maladaptive factors associated with suppression, suppressing emotions may be positively used by collectivistic individuals in some situations as stated above. Evidence of this notion was found by Butler and colleagues, who demonstrated that suppression was applied more frequently and automatically in Eastern cultures than in Western cultures and was associated with less negative emotion and social consequences and better health (Butler, Lee, & Gross, 2007). For example, Turkish immigrants in Germany with higher levels of emotional
suppression displayed better mental well-being when compared to their German counterparts (Arens, Balkir, & Barnow, 2013). Specifically, the study tested whether there were differences in frequency of expressive suppression and cognitive reappraisal as well as their implications for subjective well-being between Turkish immigrants living in Germany and native-born German women. The results from the study suggested that Turkish women used suppression strategies more frequently and reported lower negative affectivity, fewer feelings of loneliness, and fewer dysfunctional attitudes than their German counterparts, who showed positive outcomes when using expressive suppression. Similarly, Soto, Perez, Kim, Lee, and Minnick (2011) found that among Chinese and European American participants, in terms of emotional suppression, individuals holding Eastern values showed fewer negative consequences of suppression, whereas individuals with Western values were associated with adverse psychological functioning. Due to such different cultural values connected to suppression, individuals with a collectivistic background (e.g., Chinese) might utilize emotional suppression more frequently in order to reap benefits. This enables them to flexibly move between expression and suppression of emotions in comparison to those from individualistic cultures (e.g., USA) (Bonanno, 2005; Bonanno, Papa, Lalande, Nanping, & Noll, 2005). Based on the literature reviewed above, parents’ suppression was hypothesized to be positively related to Korean children’s EF and negatively related to American children’s EF in this study.

**Culture and Parental Socialization Practices**

Parental beliefs about emotions and their knowledge on how to emotionally socialize their children determine parenting practices. These parenting beliefs and practices can be influenced by cultural factors such as norms, beliefs, and values that control thoughts, the perception of the self, and the environment influencing the emotion appraisal processes.
In discussing the culture-specific aspects of emotions and emotion regulation, it is crucial to understand how cultural context affects the parent-child relationship or parental socialization practices in Western and Eastern cultures differently. Children’s emotional growth happens largely in the context of the relationship between the child and parents. Since both parental and child characteristics play a major role in socialization of children’s emotion (Eisenberg et al., 1998), it is necessary to examine parental emotion socialization as an antecedent of EF abilities in children within the cultural context.

Due to the fact that Asian versus American cultural groups have their own unique cultural norms with respect to factors related to emotions (e.g., independent versus interdependent notions of self, emotional display rules) (Markus & Kitayama, 1991; Matsumoto, Takeuchi, Andayani, Kouznetsova, & Krupp, 2002; Triandis, 1994), a comparison of the socialization practices of Americans holding Western European values with those of Koreans whose values are guided by Asian cultural norms is indicated. These cultural differences in emotions are likely to lead to how parents socialize their children’s emotion regulation. Some studies regarding emotion regulation have reported that European American parents guided by independence-oriented parenting practices are likely to focus on promoting children’s emotional expressions (e.g., socially disengaging emotions such as pride and anger) because they value individuality, authentic expression of emotions, and self-assertiveness of children and make them recognize their own needs (i.e., promotion focus) (Miyamoto et al., 2014). In contrast, Asian parents are guided by interdependence-oriented parenting practices and tend to emphasize encouraging expression of socially engaging emotions (e.g., positive emotions to others such as empathy) as a way to help meet social expectations (i.e., prevention focus) (Miyamoto et al., 2014).
In demonstrations of such different parenting practices, researchers found that when speaking to their children after they are unsuccessful in a task, American mothers reported making more positive comments to their children compared to Chinese mothers who reported making negative and task-relevant comments to their children (Ng, Pomerantz, & Lam, 2007). Similarly, cross-cultural studies showed that North American parents tend to focus on positive feedback and opportunities for their children because their socialization practices emphasize promoting children’s self-esteem and striving for positive emotions. In contrast, East Asian parental practices tend to value correcting and disciplining their children because their cultural context emphasizes fostering children’s obedience and adapting to social expectations and obligations (Miller, Wang, Sandel, & Cho, 2002; Trommsdorff & Rothbaum, 2008).

Accordingly, American parenting practices are likely to make children reflect on themselves, find their unique self, and express themselves to others by encouraging autonomy and self-expression, whereas Asian children are likely to experience “parental control” which encourages the suppression of emotional expression in relating with others (Chao, 1994, 2001). More specifically, Rohner and Pettengill (1985) have found two different nuances of parental control in Western and Eastern countries. For example, there is some evidence that Easterners (e.g., Korean and Japanese) are more likely than Westerners (e.g., American and German) to feel neglected by their parents when they experience low control. In contrast, children in individualistic cultures are less likely to accept parental control and experience more negative effects than Asian children in collectivistic cultures (Barber, 2002; Trommsdorff, 1985). European American children tend to regard parental control as non-supportive because Western cultures highly value independence and autonomy, whereas children in Asian cultures, where interdependence and social order are highly emphasized, regard their parental control as aspects
of positive parenting such as training, guidance, warmth, and support (Chao & Tseng, 2002). These differences in socialization practices (e.g., the meaning of support and control) suggest that the relationship between parental socialization and children’s emotional outcomes could be moderated by the cultural context (Cheah & Robin, 2004; Kakihara & Tilton-Weaver, 2009).

Summary

Overall, a body of empirical research has demonstrated the relationship between parental emotion socialization and emotional outcomes in children. Additionally, a growing body of evidence has shown that high EF ability supports successful adaptation to stress, trauma, and loss in adult population. Although research efforts and empirical attention to EF have continued in the study of emotion regulation, the construct of EF has not been widely investigated among children; moreover, most investigations of EF have focused primarily on Western samples. Each country, however, has its distinct cultural values with respect to display rules of emotions and socialization of emotions. For instance, children’s emotion socialization or parenting beliefs and practices may reflect prevalent cultural values of independence (i.e., individualism) and interdependence (i.e., collectivism) (Tamis-LeMonda et al., 2008). Since culture has been shown to be crucial in explaining parent-child relationship and parenting practices (Bornstein et al., 2011), there is evidence to suggest that the cultural context could have a moderating role in parent-child relationships in reference to parental socialization factors and EF abilities in children. Therefore, investigating the connection between parental emotion socialization and children’s EF across cultures would enrich the cultural diversity literature by offering a better understanding of culture-specific developmental paths to socio-emotional competence in children.
CHAPTER THREE: METHOD

Methodology Summary

A quantitative-methods design was used to examine parental emotion socialization practices and children’s EF abilities in middle childhood. This facilitated the comparison of relationships between parental socialization factors and children’s EF in American families and South Korean families. The data was collected from child experiments which involved the use of the International Affective Picture System (IAPS) and parent questionnaires designed in prior studies (e.g., Gross & John, 2003; Halberstadt et al., 2008a; Mauss et al., 2010). By definition, “Quantitative research is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures” (Creswell, 2013, p. 4). Creswell (2013) explains two designs of quantitative research approach: surveys and experiments. Surveys “provide a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. From the results, the researcher generalizes or draws inferences to the population” (p. 155). The basic intent of an experiment is to test if a specific treatment influences an outcome. The computer-based experiment conducted with the children was complementary to the questionnaires used in this study and all served to identify the sample and generalize findings the population (e.g., Creswell, 2013). Additionally, a questionnaire is a set of written questions, while a survey is a broader term that includes both the set of questions and the process of gathering information through those questions for statistical analysis.

Gall, Gall, and Borg (2003) suggest that surveys describe the behaviors, characteristics, or attitudes of a sample population. They consider surveys effective in collecting data from a sample to “represent a population to which the findings of the data analysis can be generalized”
CULTURE, EMOTION SOCIALIZATION, AND EXPRESSIVE FLEXIBILITY

(p. 223). Given the surveys present the potential disadvantage of omitting valuable information (Leedy & Ormrod, 2005), an experimental approach focused on observational measures was used for child participants in the study. Because the mixed-measurement approach (e.g., coders’ ratings and self-report questionnaires) helps buffer the results from self-report biases (Wang & Hawk, 2019), the study employed a mixed-quantitative approach that included objective behavioral observations for child experiments and the use of participant self-report questionnaires from parents.

More specifically, to better identify parents’ emotion-related characteristics, the survey design was the preferred type of data collection for this study. The representative sampling of American and Korean parents may be used to generalize to other populations and settings so that it can help strengthen the parenting research field as a whole. In addition, to gather children’s most accurate responses about their emotion abilities, the experimental approach was utilized for this study. The observational experimental method is not restricted by the age of the participants while the answering method (e.g., paper-and-pencil survey) is possible only when the participant is capable of reading. Thus, an experimental intervention method has been designed for children of younger age group in my study who may lack text reading comprehension. Because of the reasons above, the quantitative research approach using survey and experiment was critical in the execution and analysis of this study.

**Participants**

The sample included 69 American children and their parents (fathers: $M$ age = 43.11 years, $SD = 3.4$ years; mothers: $M$ age = 43.15 years, $SD = 4.5$ years) and 77 Korean children and their parents (fathers: $M$ age = 43.15 years, $SD = 4.6$ years; mothers: $M$ age = 41.03 years, $SD = 4.2$ years). In the American sample, children’s mean age was 9.36 years, $SD = 1.2$ and 38
boys and 31 girls were in the sample. Parents reported children’s ethnicity. Twenty-seven were European-American, 39 were Asian-American, 2 were African-American, and 1 was Hispanic-American. For parental marriage status, 82.6% of the parents were married, 1.4% were single, 5.8% were divorced, 1.4% were widowed, and 8.8% did not respond. For parents’ education level, most were well-educated (mother: 48.4% had completed bachelor’s degree and an additional 46.8% had completed graduate degrees; father: for highest level of education completed by fathers, 40% completed a doctoral degree, 28.6% completed a master’s degree, 25.7% completed a bachelor’s degree, 2.9% graduated from high school, and 2.9% responded other). Their family income was reported and scored in the following manner: 1 = less than $9,999, 2 = $10,000-$29,999, 3 = $30,000-$59,999, 4 = $60,000-$89,999, and 5 = above $90,000. These families had incomes ranging from $10,000 to more than $90,000 per year. Half of the families had household incomes above $90,000.

In the Korean sample, the mean child age was 9.74, $SD = 1.21$. 40 boys and 37 girls were in the sample. 94.8% of the parents were married, 1.3% divorced, and 3.9% did not respond. For mother’s highest level of education completed, 24.7% completed high school, 64.9% graduated from a bachelor’s degree, 6.5% graduated from a master’s degree, and 3.9% did not respond. For father’s highest level of education completed, 16.9% completed high school, 67.5% graduated from a bachelor’s degree, 10.4% graduated from a master’s degree, 1.3% graduated from a doctoral degree, and 3.9% did not respond. The family income was reported and scored in the following manner: 1 = less than $9,999, 2 = $10,000-$29,999, 3 = $30,000-$59,999, 4 = $60,000-$89,999, and 5 = above $90,000. These families had annual incomes ranging from $10,000 to more than $90,000 per year. The average family income score for Korean sample was 4.51. Demographic characteristics of the sample are presented in Table 1.
Table 1

Demographic Characteristic of the Sample

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Americans (n = 69)</th>
<th>Koreans (n = 77)</th>
<th>Total (n = 146)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Child gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>38 (55.1)</td>
<td>40 (51.9)</td>
<td>78 (53.4)</td>
</tr>
<tr>
<td>Female</td>
<td>31 (44.9)</td>
<td>37 (48.1)</td>
<td>68 (46.6)</td>
</tr>
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<td>Child’s age</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>7yrs</td>
<td>4 (5.8)</td>
<td>2 (2.6)</td>
<td>6 (4.1)</td>
</tr>
<tr>
<td>8yrs</td>
<td>12 (17.4)</td>
<td>10 (13.0)</td>
<td>22 (15.1)</td>
</tr>
<tr>
<td>9yrs</td>
<td>22 (31.9)</td>
<td>22 (28.6)</td>
<td>44 (30.1)</td>
</tr>
<tr>
<td>10yrs</td>
<td>17 (24.6)</td>
<td>19 (24.7)</td>
<td>36 (24.7)</td>
</tr>
<tr>
<td>11yrs</td>
<td>14 (20.3)</td>
<td>20 (26.0)</td>
<td>34 (23.3)</td>
</tr>
<tr>
<td>12yrs</td>
<td>0 (0.0)</td>
<td>4 (5.1)</td>
<td>4 (2.7)</td>
</tr>
<tr>
<td>Mother’s age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 40</td>
<td>22 (35.5)</td>
<td>32 (42.7)</td>
<td>54 (39.4)</td>
</tr>
<tr>
<td>Over 41</td>
<td>40 (64.5)</td>
<td>43 (57.3)</td>
<td>83 (60.6)</td>
</tr>
<tr>
<td>Mother’s education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td></td>
</tr>
<tr>
<td>High school diploma</td>
<td>2 (3.2)</td>
<td>19 (25.3)</td>
<td>21 (15.3)</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>30 (48.4)</td>
<td>50 (66.7)</td>
<td>80 (58.4)</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>23 (37.1)</td>
<td>5 (6.7)</td>
<td>28 (20.4)</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>6 (9.7)</td>
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<td>6 (4.4)</td>
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<tr>
<td>Other</td>
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<td>1 (1.3)</td>
<td>2 (1.5)</td>
</tr>
<tr>
<td>Father’s age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age Group</td>
<td>Under 40</td>
<td>Over 41</td>
<td>Total</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td>7 (20.0)</td>
<td>28 (80.0)</td>
<td>35 (20.9)</td>
</tr>
<tr>
<td>Under 40</td>
<td>15 (21.3)</td>
<td>59 (78.7)</td>
<td>74 (21.3)</td>
</tr>
<tr>
<td>Over 41</td>
<td>23 (20.9)</td>
<td>87 (79.1)</td>
<td>110 (20.9)</td>
</tr>
</tbody>
</table>

Father’s education

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Under 40</th>
<th>Over 41</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>High school diploma</td>
<td>1 (2.9)</td>
<td>13 (17.6)</td>
<td>14 (12.8)</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>9 (25.7)</td>
<td>52 (70.3)</td>
<td>61 (56.0)</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>10 (28.6)</td>
<td>8 (10.8)</td>
<td>18 (16.5)</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>14 (40.0)</td>
<td>1 (1.4)</td>
<td>15 (13.8)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (2.9)</td>
<td>0 (0.0)</td>
<td>1 (0.9)</td>
</tr>
</tbody>
</table>

Marital status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Under 40</th>
<th>Over 41</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>1 (1.6)</td>
<td>0 (0.0)</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td>Married</td>
<td>57 (90.5)</td>
<td>73 (98.6)</td>
<td>130 (94.9)</td>
</tr>
<tr>
<td>Divorced</td>
<td>4 (6.3)</td>
<td>1 (1.4)</td>
<td>5 (3.6)</td>
</tr>
<tr>
<td>Separated</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Widowed</td>
<td>1 (1.6)</td>
<td>0 (0.0)</td>
<td>1 (0.7)</td>
</tr>
<tr>
<td>Cohabiting</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
</tbody>
</table>

Family income

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Under 40</th>
<th>Over 41</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $9,999</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>$10,000-$29,999</td>
<td>1 (1.6)</td>
<td>1 (1.3)</td>
<td>2 (1.5)</td>
</tr>
<tr>
<td>$30,000-$59,999</td>
<td>1 (1.6)</td>
<td>11 (14.7)</td>
<td>12 (8.8)</td>
</tr>
<tr>
<td>$60,000-$89,999</td>
<td>3 (4.8)</td>
<td>12 (16.0)</td>
<td>15 (10.9)</td>
</tr>
<tr>
<td>$90,000 &amp; over</td>
<td>57 (91.9)</td>
<td>51 (68.0)</td>
<td>108 (78.8)</td>
</tr>
</tbody>
</table>

Note. There were some missing data on each variable. Percentages are expressed relative to the number of valid cases rather than n.
Procedure

Children 7 to 12 years of age and their parents were recruited in Seoul, South Korea and in Boston, Massachusetts, United States. To recruit participants in the American sample, flyers were distributed to the Boston area. Participants were instructed to complete the study in the laboratory setting (Advance Cultural and Emotional Intelligence Lab, Boston University). Parents were told that participation was voluntary and that their children would be asked to engage in some emotion regulation tasks. Children participated with their parents’ consent, and they provided informed assent before beginning the study. Parents completed information about demographics, their beliefs about children’s emotions, emotion control values, and emotion regulatory strategies. Parents in America and South Korea completed the same set of questionnaires in the same protocol. Participants in South Korea were recruited from elementary schools in the capital city, Seoul. Principals and teachers were contacted by email and phone calls. After obtaining their permission, teachers provided students with general information on the study and assured them of confidentiality in written consent form. The teachers sent a questionnaire packet to the parents who were interested in the study and the participants were asked to bring the completed questionnaires to the school teachers. I visited the school and performed the emotion regulation experiment with students in a private room at the school. The length of time to complete the task for each participant were approximately one hour.

Data Collection Methods

Parent Questionnaires

The quantitative data for parents was collected through four questionnaires (see Appendix E, F, G, and H). In order to assess the impact of the paternal and maternal socialization practices on children’s EF abilities, parental beliefs about children’s emotions, emotion control
values, emotion regulation strategies, and their information about demographics were measured by self-report questionnaires.

**Parents’ Beliefs about Children’s Emotions**

The PBACE is a 35-item measure used to capture parents’ beliefs, attitudes, and feelings about children’s emotions (PBACE, Halberstadt et al., 2008a). Parents responded their level of agreement using a 6-point Likert-type scale (1 = strongly disagree, 6 = strongly agree). The subscales of PBACE questionnaire in this study were as follows: (1) parents’ belief about the danger of emotional expression and experiences (15 items, e.g., “Children who feel emotions strongly are likely to face a lot of trouble in life”); (2) parents’ role in guiding children’s emotions (9 items, e.g., “It is a parent’s job to teach their children how to handle their emotions”); and (3) parents’ belief that children can guide their own emotions (8 items, e.g., “Children can figure out how to express their feelings on their own”). Because the two scales regarding guidance were conceptually and empirically related (Castro et al., 2015), I generated a composite Parents Should Guide scale (17 items). For each subscale, higher scores indicated greater agreement with that belief. In the American sample, internal consistency was strong for parents’ belief about danger of emotions (α = .90) and acceptable for parents’ role in guiding children’s emotions (α = .76). In the Korean sample, internal consistency was acceptable for parents’ belief about danger of emotions (α = .79) and parents’ role in guiding children’s emotions (α = .70).

**Parents’ Emotion Control Values**

Using a scale ranging from 1 = strongly disagree to 7 = strongly agree, parents completed the 6-item ECV questionnaire to assess their values about emotion control (i.e., modulating one’s own emotional experiences and expressions) (6 items; e.g., “It is wrong for
people to always display how they feel”) (ECV; Mauss et al., 2010). Higher scores reflected more emotion control. The internal reliability for this measure was acceptable in the American sample ($\alpha = .64$) and in the Korean sample ($\alpha = .64$).

**Parents’ Regulation Strategies**

The Emotion Regulation Questionnaire was a 10-item questionnaire administered to parents to assess their emotion regulatory process of cognitive reappraisal (6 items; e.g., “When I want to feel more positive emotion, I change the way I’m thinking about the situation”) and expressive suppression (4 items; e.g., “When I am feeling negative emotions, I make sure not to express them”) (ERQ; Gross & John, 2003). Parents rated their agreement with each item on a 7-point Likert scale ($1 = strongly disagree, 7 = strongly agree$). A score of each subscale was computed by averaging the items in the subscale. In the American sample, internal consistency was strong for cognitive reappraisal ($\alpha = .83$) and acceptable for the expressive suppression ($\alpha = .76$). In the Korean sample, internal consistency was strong for both cognitive reappraisal ($\alpha = .81$) and expressive suppression ($\alpha = .80$).

**Demographics**

Parents’ marital status, education, family income and child’s age and ethnicity were assessed as potential covariates for the dependent variable, child’s expressive flexibility (EF). Past research has shown relations among SES, ethnicity and expressive flexibility (Côté, Gyurak, & Levenson, 2010).

**Child Experiments**

Child assessments were carried out in a private setting. Upon arrival for their experiment, child participants were informed that the study was aimed at understanding how to interact with
software that displayed emotion-eliciting pictures. Before starting experiments with children, the researcher established rapport with the child participants by talking about unrelated events.

One of the Korean participants (age 10, female) came into the lab with apparent tension and she told a personal story to the researcher by saying, “I’m a bit oversized, right? My mom told me to lose weight.” The child who met the researcher for the first time was able to engage in humorous conversation with the researcher who attempted to create a comfortable atmosphere. Another Korean participant (age 10, male) said as soon as he met the researcher, “I heard from my teacher that you are from Boston. My older brother lives in Boston, so I’ve traveled to the U.S. with my family to see my brother last summer. Which part of Boston do you live in?” The child asked a personal question, seemed to try to get closer to the researcher, and seemed motivated to participate.

Reflected in these examples of Korean participants is their generally cooperative attitude toward the researcher’s instruction for the EF task. Compared to Korean participants, American children participated in the task with a relatively objective attitude, keeping a reasonable distance from the researcher. According to cultural frames of children’s learning beliefs (Li, 2002), European Americans emphasize challenging attitude toward existing knowledge and authority, whereas Asians emphasize respect/receptivity to teaching authority. Due to these cultural differences in their attitude toward learning, it is highly likely that Korean participants perceived the researcher as equivalent to their teacher and responded to the researcher’s instructions cooperatively and with politeness. If the attitudes and tone of the researcher are not consistent for the child participants of the two countries who have a slightly different attitudes to the researcher, it could influence children’s task results. To minimize the potential problem, the
researcher attempted to maintain the same tone as well as take a consistent and objective attitude so as not to deviate from the prepared experimental script.

Expressive Flexibility (EF) Task

For the expressive-regulation task, subjects were seated before a desktop computer and filmed from a web camera positioned beside the computer. The expressive flexibility task, developed by Bonanno and colleagues (2004), was used to assess children’s EF abilities. Children were presented with three task blocks (enhancement, suppression, and normal response). Each block consisted of six images with three negative and three positive images from the International Affective Picture System (IAPS) (Lang et al., 1995). The valence and arousal of the selected images were balanced across blocks (e.g., equally negative compared to other blocks of negative stimuli), based on child norms for the IAPS set. Each image was displayed for 10 seconds with 4 seconds between images. The order of three blocks and the images within each block were randomized for each participant. At different points the participants were instructed to flexibly regulate emotional expression both upward (i.e., enhancement condition) and downward (i.e., suppression condition). In addition, they were instructed to behave normally in response to the emotion-evoking picture stimuli at a computer screen (i.e., control condition). The control condition served as a baseline measure of expressive flexibility and allowed comparisons across conditions within-subjects (Bonanno et al., 2004). Before the task, participants were told by research assistants, “Now, I am going to show you some pictures. I’d like to see how the pictures make you feel, so I am going to record your face on a web camera. After this task, I am going to show my friend the video from the task so that my friend can see how your face changes when you look at the pictures. My friend could not hear any sounds or see the pictures, just she will try to guess your feelings for each picture by watching your face.”
In the *enhancement* condition, children were told, “I am going to show you some pictures. Make sure you look at each picture carefully. This time, when you are looking at the pictures, try to show how the pictures make you feel by using facial expressions. Remember that my friend who is going to watch the video later can only see your face, and cannot hear you. So, make sure you really try to use your facial expressions to show how the pictures make you feel so that when my friend watches the video, she can guess what you are feeling too.”

In the *suppression* condition, children were told, “I will show you some pictures. Make sure you look at each picture carefully. This time, when you look at the pictures, try to hide how the pictures make you feel. Remember that my friend who is going to watch the video later can only see your face, and cannot hear you. So, do your best to not express any emotions so that my friend will not be able to guess what you are feeling.”

In the *control* (monitor-off) condition, children were told, “I am going to show you some pictures. Make sure you look at each picture carefully. My friend will not be able to see you during this part because I am going to turn the camera off. Just look at the pictures normally naturally.”

During these tasks, children’s facial expressions were video-taped. Two trained observers with no knowledge of the participants’ instructions for any given image stimuli attended. They were asked to rate children’s overall level of emotional expressiveness, regardless of positivity or negativity (1 = low, 5 = high). Final score for observer-rated expressivity was calculated by averaging the scores across the two observers. Observer agreement was high with an intraclass correlation coefficient (ICC) = .94. More specifically, participants’ EF scores were calculated in accordance with Westphal et al. (2010). Expressive-enhancement ability was obtained by subtracting the mean score in the control condition from the mean score in the enhancement
condition (i.e., Enhancement – Control). Expressive-suppression ability was obtained by subtracting the mean score in the suppression condition from the mean score in the control condition (i.e., Control – Suppression). The overall EF scores were derived by calculating the following summative scores: (1) “sum EF” through adding the enhancement ability and suppression ability scores; (2) “expressive polarity” through taking the absolute value of the difference between each child’s enhancement ability and suppression ability scores; and (3) “balanced expressive flexibility” through subtracting expressive polarity from the sum of enhancement ability and suppression ability scores (Westphal et al, 2010, p. 94). The third of these scores has been shown to indicate a clear marker of expressive flexibility in children (Wang & Hawk, 2019). Thus, this balanced expressive flexibility score was adopted to measure the children’s EF. Overall, expressive flexibility scores in this task reflected the ability to both enhance and suppress expression of emotion in accordance with situational context. Higher scores on the task indicated higher levels of expressive flexibility abilities.

Data Analysis

Questionnaire Coding

All the answers to questionnaires were given numerical values. To a positive statement connected to emotion control values and emotion regulation strategy, such as, “People should not express their emotions openly” and “When I’m faced with a stressful situation, I make myself think about it in a way that helps me stay calm,” would result in a score of 0 for “strongly disagree” to a score of 7 for “strongly agree.” For one scale, such as Parents’ Beliefs about Children’s Emotions, to a positive statement related to parents’ belief about danger of emotion and parents’ role in guiding children’s emotions, such as, “Feeling sad is just not good for children” and “When children are feeling angry, parents can help them work through those
feelings,” would result in a score of 0 for “strongly disagree” to a score of 6 for “strongly agree.” All the scores were summed for a raw score. Later, Cronbach’s Alpha was used to test the reliability scale.

**Coding of Expressive Flexibility**

After the experimental session, participants’ EF abilities were coded from videotape by trained coders who were blind to participant information. Using a coding system derived from Kring and Sloan’s (1991) description of specific facial expression, coders assessed participant’s level of expressiveness that occurred while children were presented with positive and negative pictures. Participants were presented with a series of pictures from the standardized International Affective Picture System (IAPS; Lang et al., 1995). Eighteen picture stimuli were selected from the IAPS and child norms in middle childhood (Lang et al., 1995) were used to balance positive and negative stimuli for valence and arousal. The emotion-eliciting stimuli consisted of 9 positive pictures (e.g., puppies, bunnies, ice cream, dolphins, birthday cake, flowers, candy, roller coaster, and M & M) and 9 negative pictures (e.g., snake, angry woman, AIDS patient, rat, pit bull, boy screaming, roach/pizza, shark, and soldier/war) (See Appendix I).

Each child’s level of expressiveness was coded by considering intensity and duration of facial expression (1 = low, 2 = fairly low, 3 = moderate, 4 = fairly high, 5 = high). A low rating was assigned to participants with few expressions and short and low in intensity. In contrast, a high rating was given to participants with many highly intense and longer expressions. The mean of level of expressiveness for each condition (i.e., enhancement condition, suppression condition, and control condition) was included on the Excel sheet and then calculated using statistical software, SPSS. In the coding procedures, participant’s responses were not coded if the participant had the following problems: 1) participant did not appear to be paying attention to the
picture stimuli (e.g., looking down or being away from the stimulus); 2) participant’s hand covered part of the face; and 3) participant displayed repetitive facial movements (e.g., facial tics). Child gender was dummy-coded as 0 for boy and 1 for girl. Ethnicity was also dummy coded as 0 for American child and 1 for Korean child. An overall expressive flexibility score ranged from -0.66 to 3.35.

**Questionnaire Translation**

All the questionnaires used in this study were initially developed in English. The Korean versions of the Parents’ Beliefs about Children’s Emotions (PBACE; Shin & Jeong, 2013) and Emotion Regulation Questionnaire (ERQ; Han & Hyun, 2006) had already been established. Translation and back-translation procedures (Brislin, 1980) were used to develop the Korean version of the Emotion Control Values (ECV) questionnaire. The questionnaire was translated by the researcher from English into Korean, and a bilingual research assistant who is fluent in both English and Korean translated the questionnaire back into English. The two English questionnaires were compared and the translation discussed to assure that no items lost their meaning in the translation process. This process was repeated until the bilingual speaker ensured equivalence in meaning between the English and Korean versions of the items.

**Statistical Analysis for Quantitative Data**

The data were collected from child experiments and parent questionnaires. Data from experiments were reviewed for errors. All returned questionnaires were also reviewed for missing items and failure of respondents to follow directions. The invalid responses for experiments and questionnaires were omitted. The data obtained from the experiments and returned questionnaires were entered into a Microsoft Excel database and exported to SPSS
software performing item analysis. Frequency and descriptive distributions were conducted in SPSS to analyze experiment and questionnaire responses.

Data analysis was conducted in the following six phases. First, the frequencies and percentages were calculated to examine demographic characteristics of the sample. Second, Pearson correlation coefficients (i.e., zero-order correlations) were performed to examine the interrelations among parental socialization variables and child variables for each culture. Third, partial correlations were further calculated between parental socialization variables and children’s EF, controlling for culture, parental education, family income, child’s age, and gender. Fourth, independent t-tests were performed to find the means and standard deviations (SD) for parental variables and child variables by culture by testing for differences between the two cultures. In all analyses, the alpha level of 0.05 was applied to all pairwise comparisons. Fifth, hierarchical regression analyses were conducted to examine the effects of paternal and maternal socialization variables on children’s EF, independent of culture, parental education, and family income. Sixth, hierarchical regression analyses were performed to examine whether culture moderated the relationships between parental socialization factors (e.g., parental beliefs about emotions, emotion control values, and emotion regulation strategies) and child EF ability. In all regression models, culture was dummy coded as 0 for Americans and 1 for South Koreans.

**Summary**

In summary, the main analysis of quantitative data in this study focused on hierarchical regression models in which child EF was regressed onto parental socialization factors in the following steps (see Tables 11, 12, and 13). Demographic variables such as mother’s education, father’s education, and family income were entered as controls in the first model step. Parental socialization factors (i.e., father’s belief about emotions as dangerous, mother’s belief about
emotions as dangerous, and father’s emotion control values) and culture (moderating variable) were then added in the second step. The two-way interaction terms of the parental socialization variables (i.e., father’s belief about emotions as dangerous, mother’s belief about emotions as dangerous, and father’s emotion control values) and moderator (e.g., father’s belief about emotions as dangerous x culture) were entered in the third step. The overall model showed the moderation effects of culture on parental belief about danger of emotions and paternal emotion control values. Thus, simple slope tests (Aiken & West, 1991) were conducted to graphically verify the influence of the moderating variable (culture) on parental belief about danger of emotions and emotion control values (see Figures 2, 3, and 4).
CHAPTER FOUR: FINDINGS

Introduction

The goal of this study was to examine how associations of parental emotion socialization with culture would differently influence children’s EF abilities across individualistic American culture and collectivistic Korean culture. The literature review clearly supports the need for further understanding of how parental emotion socialization factors such as parental beliefs about emotions, emotion control values, and emotion regulation skills influence child EF abilities in middle childhood. Clinicians who are aware of these factors are better prepared to understand family environments to help all children and their parents promote their emotional well-being and healthy parent-child relationship. This chapter describes the findings according to the four research questions that guided this study:

1. Are there cross-cultural differences in child expressive flexibility (EF) and parental emotion socialization (i.e., emotion-related beliefs, emotion control values, emotion regulation strategies) in American and South Korean families?
   a) Are there differences in children’s expressive enhancement, suppression, and flexibility within cultures?
   b) Are there cultural differences in parental emotion socialization and child EF between American and Korean samples?

2. How are expressive flexibility in children related to parental socialization variables and demographic variables (e.g., parents’ education and family income)?
   a) Is there a relationship between children’s EF and parental emotion socialization?
   b) Is there a relationship between children’s EF and demographic variables (e.g., parents’ education and family income)?
3. How does parental emotion socialization influence their children’s expressive flexibility?
   a) How does maternal emotion socialization (emotion-related beliefs, emotion control values, emotion regulation strategies) predict children’s expressive flexibility?
   b) How does paternal emotion socialization (emotion-related beliefs, emotion control values, emotion regulation strategies) predict children’s expressive flexibility?

4. Does culture (Individualistic American culture and Collectivistic Korean culture) have a moderating effect on the relationship between parental emotion socialization (emotion-related beliefs, emotion control values, emotion regulation strategies) and children’s EF?

This chapter provides an overview of the study design, the four guiding research questions, and a sectioned analysis of the quantitative data derived from child experiment and parent questionnaire results. It presents the results connected to each research question and briefly describes the direct relationship of the findings to the questions. In addition, related themes emerging from the analysis of the data derived from each guiding question are discussed. Finally, the study findings are presented to support the overall research questions of the study. This sets the foundation for a more comprehensive discussion in the next chapter.

**Questionnaires for Parents**

Each variable was examined for skewness and kurtosis to assure that the data were normally distributed. All variables demonstrated normal distributions (skewness range: -0.36 to 0.37 and kurtosis range: -0.79 to 1.82). The quantitative data were collected through four questionnaires (e.g., PBACE, ECV, ERQ, and demographics). The Parents’ Beliefs about Children’s Emotions (PBACE) (Halberstadt et al., 2008a) measures parental beliefs about
children’s emotional development and their roles in helping children’s emotions (see Appendix E). It is designed to assess parental beliefs about emotions through two dimensions such as parents’ belief about the danger of emotional expression and experience and parents’ role in guiding children’s emotions. The Emotion Control Values (ECV) (Mauss et al., 2010) measures parental values about emotion control to examine how they modulate their own emotional experiences and expressions (see Appendix G). The Emotion Regulation Questionnaire (ERQ) (Gross & John, 2003) measures parental emotion regulatory processes (see Appendix F). This instrument consists of two subscales, such as cognitive reappraisal and expressive suppression. The Demographic Questionnaire asked for the participant’s birth date, gender, education, marital status, ethnic background, and annual household income to serve as control variables in the analyses. A copy of the demographic questionnaire is included in Appendix H. Both American and Korean parents completed the four questionnaires regarding their emotion-related beliefs, values, behaviors, and personal information. Participating parents who have children in middle childhood lived in urban areas in Boston, U.S. and Seoul, South Korea.

Observations for Child Experiment

South Korean Children

The first day, accompanied by the principal and teacher, the researcher visited classrooms and introduced students to the study. Some teachers said that, “several students seem to be nervous because they consider the study experiment as a test.” As well, some students asked, “Will you let my mom know about the results (scores) of this experiment?” Because some children thought this experiment was a kind of test they tried to do well and demonstrated excessive care. Conversely, there were children who appeared uncomfortable in making their facial expressions freely in front of an unfamiliar adult (the researcher). Given this emotional
aspect of Asian culture (e.g., shyness), Wang and Hawk (2019) suggested more naturalistic settings around more familiar people when to measuring expressive flexibility in children. Testing the children in their school approximated a naturalistic setting, yet it could have reinforced their feelings and experience with school, which could have been distracting from the task at hand.

The observational data collected during the experiment phase provided valuable insight about the child characteristics as well as characteristics of the culture. It is important to note that exclamations or remarks were not considered for the children’s EF score because the EF task was designed to ignore the sounds made by children and only score the facial expressions. The following examples speak to the different responses of Korean children when presented with the task. These initial interactions offer beginning observations of the participants’ experience.

*Observation Examples*

Child A (age 11, female) came in with a smile when she entered the experimental room. She continued to express exclamation verbally while looking at IAPS picture stimuli. For example, the child responded by saying “Wow” when looking at positive pictures and “Eww” when looking at negative creepy pictures (e.g., snakes). During the experiment, this child also asked, “Are the others good at this activity?” apparently comparing her ability to that of others.

Child B (age 11, female) said, “My mom is very interested in the experiment. She asked me to find out what my experiment is about and how my results would be.” The child seemed curious and motivated at the beginning of the experiment, but when the child carried out the actual experiment, she was somewhat frustrated and said, “Oh, I can’t do it.”, which could point to the child not sure if she had done well.
Child C (age 9, male) was distracted throughout the experiment by saying “I didn’t listen carefully to the explanation about the experiment, can I start over again?” During the experimental session, the child looked at the picture for a moment and then looked around his surroundings and seemed to focus on what the researcher was doing. While looking at pictures used to measure suppression, the child lowered his head and covered his eyes while thinking hard about the answer.

Child D (age 11, male) was the son of the teacher at the school where I conducted the experiment. The child’s younger brother was also one of the participants and was part of the experiment prior to his brother. The child showed concern about his brother’s outcome by saying, “What did my brother do? Did my brother do better than me?”

Child E (age 10, male) immediately said, “Oh, I’m not good at making facial expressions.” when the researcher explained the EF task. The child seemed pressured to try very hard to show facial expressions, yet this appeared to result in responses that did not match the actual pictures. For example, he smiled awkwardly while looking at pictures designed to present negative stimuli (e.g., soldier in war).

Child F (age 10, female) was a transfer student who seemed very nervous and worried about the task. The child kept sighing and said, “I have a strong desire for winning” and reaffirmed that she had understood the researcher’s direction correctly by asking, “So, do I have to make a facial expression like this?” After finishing the task, the child also wondered about the result, “How was my score compared to other friends?” and “Is there a problem with my (mental) health?”
American Children

The experiment required the participation of parent-child dyads from each culture. It was more difficult and time consuming to collect data from American parent-child dyads than from Korean participants. In particular, the participation rate of American fathers in research was lower than that of Korean fathers. American parents were informed about this study through recruitment flyers and the study was conducted with interested parents who contacted the researcher by email and telephone. Korean parents were recruited in a designated public school and participated in the study with the suggestions of school principal and teachers. Due to this difference in recruiting procedure, it was expected that the participation rate and the time taken to collect the data were somewhat different between the two countries. Among the children in the lower grades, those who were observed not to have the cognitive capacity to understand the experimental directions were excluded from the results analysis. For example, when the researcher repeatedly explained the suppression condition and asked, “Try to hide how the pictures make you feel when you look at the picture” an 8-year-old-boy was unable to understand and said, “I don’t know how to hide my feelings, I don’t’ think I can do this”.

Observation Examples

Child G (age 11, male) was interested in expressing emotions in the enhancement condition by asking “Can I use my hands to express it?” This child appeared distracted by being filmed, which seemed to interfere with fully focusing on his responses when looking at the pictures. Inquisitiveness and distractibility also seemed present by Child H (age 11, female). She asked many questions during the experiment and appeared anxious about the unpredictable situation of next picture stimuli. She would repeatedly ask, “What picture is this? What picture
will come out next?” The child also expressed worries that she could not follow the researcher’s instructions in the suppression condition by saying, “what if I can’t hide my emotions?”

Child I (age 11, female) used a lot of verbal expressions while she was presented with a series of pictures in the enhancement condition by saying, “The puppy is so funny”, “I like snakes and this (snake) looks so cute.” In the suppression condition, however, the child regulated her emotions without any verbal expressions according to the researcher’s direction.

After listening to the researcher’s explanation of the task, Child J (age 11, female) said, “I’m not good at expressing emotions, even if I am a member of drama club in the school, but I’m not good at this.” In the suppression condition, the child showed a concrete recognition and understanding of emotions by asking, “Do I have to hide my emotions? Or is it a kind of false expression of emotions? For example, does it mean to pretend to be happy when I feel sad?” It was observed that her understanding of masked emotions was connected to her excellent ability to flexibly express or suppress emotion in relation to contextual demands.

Given the behavioral observations for the child experiment, gender differences and cultural differences emerged in performing the EF task. In both cultural groups, as soon as the researcher explained the experiment, it was often observed that boys seemed worried about being good at expressing emotions or making facial expressions. On the other hand, although it was not included in the EF score, girls were often observed not only making facial expressions but also verbally expressing exclamation while looking at the IAPS pictures.

Korean children tended to be interested in the results of other friends, and these children seemed to think that they should receive better scores than others. They perceived the experiment as they would an academic test, even when explained otherwise. This tendency can be explained by the competitive nature of the Korean educational system. For example, Koreans place a high
value on academic credentials as a means of success in society (McGoldrick et al., 2005). Thus, parents have high expectations for their children’s academic achievement in the hope of having a better future for the child and family. Such a social climate may be connected to Korean children’s concern about others’ scores and their eagerness to earn high scores during the EF task. On the other hand, American children did not conduct experiments in a familiar place, but they tended to take the task with less pressure compared to their Korean counterparts. This could be related to the fact that their testing was conducted in a laboratory separate from the school setting.

In addition, Korean children also often felt unfamiliar and embarrassed to express their emotions in front of researcher. These children were conscious of the researcher who observed them by looking at the researcher several times during the task. If this assumption is culturally plausible, in the naturalistic settings where there are no “observers”, more Korean children might have performed the task better. This may explain why they reported lower EF scores compared to American participants. Unlike Korean participants, most American children tended to pay attention to the task itself rather than to the presence of the observer (researcher) while performing the task. The cultural differences based on these observations are informative but preliminary. An extensive analysis of the observations is beyond the scope of the present study, yet the observations suggest noteworthy cultural differences regarding children’s responses and approach to the task. These initial impressions and observed differences are reflected in the following findings.

**Findings for Research Question #1**

*Are there cross-cultural differences in child expressive flexibility (EF) and parental emotion socialization (i.e., emotion-related beliefs, emotion control values, emotion regulation strategies) in American and South Korean families?*
In order to understand differences in child and parent variables of American and Korean samples, independent $t$-tests were conducted. This analysis was appropriate because this study sought to understand the differences in the average scores of child EF and parental emotion socialization factors between American families and Korean families. Child EF ability was measured through expressive flexibility task in the experimental setting. Parental emotion socialization was measured through self-report questionnaires, including parents’ emotion-related beliefs (e.g., danger of emotions and guidance of children’s emotions), values, and behaviors (e.g., reappraisal and suppression). Examples of questions included “Children who feel emotions strongly are likely to face a lot of troubles in life” (danger of emotions), “It’s the parent’s job to help children know when and how to express their positive emotions” (parental guidance of children’s emotions), “People should show their emotions when overcome with strong feelings” (emotion control values), “When I am feeling positive emotions, I am careful not to express them” (suppression), and “When I’m faced with a stressful situation, I make myself think about it in a way that helps me stay calm” (reappraisal).

Research Question 1a

*Are there differences in children’s expressive enhancement, suppression, and flexibility within cultures?*

In terms of within-culture comparison, the basic characteristics of EF, such as gender and age differences, were examined. All components of the EF construct (e.g., enhancement score, suppression score, and overall EF score) were examined for middle-childhood children in American and Korean cultures. In order to understand the levels of expressive enhancement, suppression, and overall flexibility within culture, a $t$-test for independent samples analysis (for child gender) and a simple analysis of variance (for child age) were conducted. These analyses
were appropriate because they identified the mean score of age group and gender and these groups were compared on their average score for each EF component.

In the American sample, there were significant gender differences in children’s enhancement ability and suppression ability. For example, boys showed higher enhancement ability, but lower suppression ability than girls. No gender differences were observed for expressive flexibility ($p = .81$). In terms of age differences, there were no significant differences in enhancement, suppression, and overall EF scores. Please see Tables 2 and 3.

Table 2

*Means and Standard Deviations of Expressive Enhancement, Suppression, and Flexibility by Gender for American Children*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>$N$</th>
<th>$M$</th>
<th>$SD$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>25</td>
<td>.64</td>
<td>.76</td>
<td></td>
<td>2.76**</td>
</tr>
<tr>
<td>Boys</td>
<td>37</td>
<td>1.19</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suppression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
<td>25</td>
<td>1.04</td>
<td>.98</td>
<td></td>
<td>-2.49*</td>
</tr>
<tr>
<td>Boys</td>
<td>37</td>
<td>.49</td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall EF</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Girls</td>
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<td>1.68</td>
<td>.95</td>
<td></td>
<td>-.24</td>
</tr>
<tr>
<td>Boys</td>
<td>37</td>
<td>1.62</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* *p < .05, **p < .01, ***p < .001.*
Means and Standard Deviations of Expressive Enhancement, Suppression, and Flexibility by Age for American Children

<table>
<thead>
<tr>
<th>Measures</th>
<th>7yrs</th>
<th>8yrs</th>
<th>9yrs</th>
<th>10yrs</th>
<th>11yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>4</td>
<td>11</td>
<td>22</td>
<td>14</td>
<td>11</td>
<td>62</td>
</tr>
<tr>
<td>Enhancement</td>
<td>1.00(.82)</td>
<td>.91(.70)</td>
<td>.82(.80)</td>
<td>1.00(.96)</td>
<td>1.27(.79)</td>
<td>.97(.81)</td>
</tr>
<tr>
<td>Suppression</td>
<td>.50(.56)</td>
<td>.82(.87)</td>
<td>.82(1.05)</td>
<td>.64(.84)</td>
<td>.55(.82)</td>
<td>.71(.89)</td>
</tr>
<tr>
<td>Overall EF</td>
<td>1.75(.96)</td>
<td>1.36(.67)</td>
<td>1.68(.99)</td>
<td>1.64(1.22)</td>
<td>1.82(.41)</td>
<td>1.65(.91)</td>
</tr>
</tbody>
</table>

In the Korean sample, there were significant gender differences in children’s enhancement ability and overall EF. For example, Korean girls showed higher enhancement ability and overall EF ability than Korean boys (see Table 4). As shown in Table 5, there were no significant age differences in all components such as enhancement score, suppression score, and overall EF score. The data was consistent with previous study findings, supporting that age differences were not observed for enhancement and suppression abilities, nor for overall EF between primary and junior high school students (Wang & Hawk, 2019).

Means and Standard Deviations of Expressive Enhancement, Suppression, and Flexibility by Gender for Korean Children

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
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</thead>
<tbody>
<tr>
<td>Enhancement</td>
<td>Girls</td>
<td>37</td>
<td>.62</td>
<td>.92</td>
<td>-1.78*</td>
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<tr>
<td></td>
<td>Boys</td>
<td>40</td>
<td>.28</td>
<td>.78</td>
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<tr>
<td>Suppression</td>
<td>Girls</td>
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<td>.41</td>
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<tr>
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<td>Boys</td>
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</tr>
<tr>
<td>Overall EF</td>
<td>Girls</td>
<td>37</td>
<td>1.03</td>
<td>.89</td>
<td>-2.28*</td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>40</td>
<td>.60</td>
<td>.74</td>
<td></td>
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</tbody>
</table>

Note. * p < .1, * p < .05, ** p < .01, *** p < .001.
Table 5

Means and Standard Deviations of Expressive Enhancement, Suppression, and Flexibility by Age for Korean Children

<table>
<thead>
<tr>
<th>Measures</th>
<th>7yrs</th>
<th>8yrs</th>
<th>9yrs</th>
<th>10yrs</th>
<th>11yrs</th>
<th>12yrs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>2</td>
<td>10</td>
<td>22</td>
<td>19</td>
<td>20</td>
<td>4</td>
<td>77</td>
</tr>
<tr>
<td>Enhancement</td>
<td>.00  (.00)</td>
<td>.20  (.42)</td>
<td>.73  (1.03)</td>
<td>.47  (1.17)</td>
<td>.25  (.44)</td>
<td>.50  (58)</td>
<td>.44  (.87)</td>
</tr>
<tr>
<td>Suppression</td>
<td>.00  (.00)</td>
<td>.20  (.79)</td>
<td>.41  (1.01)</td>
<td>.47  (.77)</td>
<td>.15  (.49)</td>
<td>.25  (.50)</td>
<td>.31  (.77)</td>
</tr>
<tr>
<td>Overall EF</td>
<td>.00  (.00)</td>
<td>.50  (.85)</td>
<td>1.05  (.84)</td>
<td>1.00  (1.00)</td>
<td>.60  (.59)</td>
<td>.75  (.96)</td>
<td>.81  (.84)</td>
</tr>
</tbody>
</table>

**Themes for Guiding Question 1a**

Two themes emerged from the analysis of the data on American and Korean children: (a) stable EF ability regardless of age and (b) gender-related patterns of expressive regulation abilities. During coding of the responses collected from child experiments, the themes of EF characteristics related to age and gender were reviewed in order to identify similarities and differences within cultures.

**Similarities.** In American and Korean samples, expressive enhancement, suppression, and overall flexibility were not related to children’s age. These EF abilities were not influenced by their age in both cultures. In terms of children’s suppression ability, it was found that girls are better at suppressing their emotions than boys in both cultures. These findings suggest that use of suppression as a regulatory strategy may be commonly seen in girls by middle childhood.

**Differences.** In the American sample, girls tend to suppress their emotions more frequently compared to boys, conversely, boys tend to enhance their emotion more frequently compared to girls. In the Korean sample, females outperformed their male counterparts in all the EF components, such as enhancement ability, suppression ability, and overall EF ability. This
finding supports the notion that girls may show earlier development in various emotional abilities than boys (e.g., Nolen-Hoeksema & Aldao, 2011).

**Research Question 1b**

*Are there cultural differences in parental emotion socialization and child EF between American and Korean samples?*

In terms of between-culture comparisons, seven significant cultural differences were found. First, American children’s expressive flexibility \((M = 1.66, SD = .88)\) was significantly greater compared with expressive flexibility \((M = .84, SD = .83, t (137) = 5.60, p < .001)\) of Korean children. Second, Korean mothers were more likely to believe that emotions can be dangerous or problematic \((M = 3.52, SD = .61)\) than American mothers \((M = 2.81, SD = .94; t (136) = -5.36, p < .001)\). American mothers were more likely to believe that they should play an active role in their child’s emotional development \((M = 4.40, SD = .47)\) than Korean mothers \((M = 3.95, SD = .51, t (136) = 5.43, p < .001)\). Korean mothers’ values about emotion control were greater \((M = 3.36, SD = .78)\) compared with American mothers’ \((M = 2.94, SD = .80, t (134) = -3.09, p < .01)\). Korean mothers also reported higher levels of suppression \((M = 4.07, SD = 1.18)\) than did American mothers \((M = 3.53, SD = 1.10, t (136) = -2.77, p < .01)\). Regarding paternal emotion socialization, Korean fathers were more likely to believe that emotions are dangerous \((M = 3.78, SD = .65)\) than American fathers \((M = 3.30, SD = .62, t (108) = -3.68, p < .001)\). Finally, American fathers reported higher levels of reappraisal \((M = 5.18, SD = 1.09)\) than did Korean fathers \((M = 4.79, SD = .92, t (108) = 1.95, p < .10)\).

Considering maternal socialization variables, there was cultural differences in danger of emotions, parental guidance, emotion control values, and suppression between American and Korean mothers. Paternal socialization variables indicated cultural differences in danger of
emotions and reappraisal between American and Korean fathers. There was no significant
cultural difference in maternal reappraisal, paternal guidance for children’s emotions, and
paternal suppression between American and Korean parents. These results indicate that there was
more significant cultural difference in maternal socialization variables compared to paternal
socialization variables between American and Korean samples.

This research question and their relevant analyses supported the overall study by
identifying factors that differentiate between children who exhibit high and low EF ability and
parents who exhibit high and low emotion socialization in their parenting practices across
cultures. By understanding these differences, clinicians who work with culturally diverse
families can better identify and support the emotion socialization factors that contribute to
promoting emotional well-being for positive parent-child relationships. The results of the
analyses are presented in Table 6 and Figure 1.
Table 6

Means, Standard Deviations (SD), and Ranges for Parental Socialization Variables and Child Variables by Culture

<table>
<thead>
<tr>
<th>Variables</th>
<th>Americans</th>
<th></th>
<th></th>
<th>Koreans</th>
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<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>Range</td>
<td>M</td>
<td>SD</td>
<td>Range</td>
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<td>PBACE</td>
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</tr>
<tr>
<td>Emotions as</td>
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<td>0.94</td>
<td>1.20-4.93</td>
<td>3.52</td>
<td>0.61</td>
<td>1.73-5.07</td>
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<tr>
<td>dangerous***</td>
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<tr>
<td>Parental guidance</td>
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<td>0.47</td>
<td>3.41-5.29</td>
<td>3.95</td>
<td>0.51</td>
<td>2.53-5.53</td>
</tr>
<tr>
<td>***</td>
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<tr>
<td>ECV**</td>
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<td>0.80</td>
<td>1.17-4.67</td>
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<td>0.78</td>
<td>1.83-5.67</td>
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<td>3.50-7.00</td>
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<tr>
<td>Suppression**</td>
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<td>1.10</td>
<td>1.00-6.25</td>
<td>4.07</td>
<td>1.18</td>
<td>1.00-6.25</td>
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<td>Father variables</td>
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<tr>
<td></td>
<td>Mean</td>
<td>Std. Dev.</td>
<td>95% CI Low</td>
<td>95% CI High</td>
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<tr>
<td>Emotions as dangerous***</td>
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<td>2.07-4.53</td>
<td>3.78</td>
<td>0.65</td>
<td>2.27-5.53</td>
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<td>Parental guidance</td>
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<td>3.29-5.06</td>
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<td>0.52</td>
<td>2.24-5.24</td>
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<td>ECV</td>
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<td>0.65</td>
<td>2.17-5.33</td>
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<tr>
<td>Reappraisal+</td>
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<td>1.09</td>
<td>3.33-7.00</td>
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<td>0.92</td>
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<td>2.50-6.25</td>
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<td>0.99</td>
<td>1.75-6.00</td>
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</tbody>
</table>

Note.  + $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$
Findings for Research Question #2

How are expressive flexibility in children related to parental socialization variables and demographic variables (e.g., parents’ education and family income)?

Research Question 2a

Is there a relationship between children’s EF and parental emotion socialization?

In order to understand the relationship among parents’ emotion socialization and children’s EF, Pearson’s correlations were used. Zero-order correlations were first calculated to examine the interrelations among parental socialization and children’s EF for each culture. This analysis was appropriate because it identified whether there is a significant correlation among child scores on EF task and parental socialization factors for each American sample and Korean
sample. For the American sample, children’s EF was negatively related to fathers’ belief about emotions as dangerous ($r = -.62, p < .001$) and emotion control values ($r = -.45, p < .01$) and mothers’ belief about emotions as dangerous ($r = -.29, p < .05$) and suppression ($r = -.22, p = .09$). For the Korean sample, children’s EF was negatively related to mothers’ use of suppression ($r = .24, p < .05$). Zero-order correlations for the full sample are presented in Table 7.
Table 7

Zero-Order Correlations among Parental Socialization Variables and Child Variables by Culture

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<td>0.04</td>
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<td>-</td>
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<td>-0.08</td>
<td>0.02</td>
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<td>0.03</td>
<td>0.10</td>
<td>-0.20</td>
<td>0.31*</td>
<td>-0.02</td>
<td>0.06</td>
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<td>0.15</td>
<td>0.52***</td>
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<td>-</td>
<td>0.22</td>
<td>0.52**</td>
<td>0.06</td>
<td>0.32*</td>
<td>-0.27</td>
<td>0.61***</td>
<td>0.23</td>
<td>0.38*</td>
<td>0.02</td>
<td>0.56**</td>
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<td>7. Father’s beliefs: parent guidance</td>
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<td>0.04</td>
<td>0.11</td>
<td>-</td>
<td>0.52**</td>
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<td>0.02</td>
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<td>-0.20</td>
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<td>-0.15</td>
<td>-0.11</td>
<td>-0.06</td>
<td>-0.12</td>
<td>0.13</td>
<td>0.07</td>
<td>0.23**</td>
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<td>0.04</td>
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<td>-0.21</td>
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<td>0.00</td>
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<td>12. Mother’s beliefs: danger of emotions</td>
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<td>-.16</td>
<td>.33***</td>
<td>.22*</td>
<td>-</td>
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</table>

Koreans

*Notes. American correlations are above the diagonal, and Koreans are below.

* Child gender was coded 0 = male, 1 = female.

* p < .1, *p < .05, **p < .01, ***p < .001
In order to understand the relationship between parental variables and children’s EF regardless of cultural background (i.e., America or South Korea), the significance of the partial correlation coefficient was identified. Partial correlations were calculated between parental variables and children’s EF, controlling culture, parental education, family income, child age, and gender. This analysis was appropriate because it identified whether there were significant correlations among the main study variables, regardless of culture. Independent of the group and individual variables, paternal and maternal belief about emotion as dangerous \((r = -.32, p < .001)\) \((r = -.33, p < .001)\), maternal emotion control values \((r = -.22, p < .05)\), and maternal suppression \((r = -.29, p < .001)\) were negatively correlated with children’s EF. In addition, maternal belief that guidance is important for child’s emotions was positively correlated with children’s EF abilities \((r = .19, p < .05)\).

Children’s EF ability was more closely related to their mothers’ socialization practices than fathers’ socialization practices. Four maternal socialization factors, embedded in three different types of socialization domains, were related to EF ability, whereas only one paternal socialization factor was related to their children’s EF ability. These findings suggest that mothers appear to play a more influential role in children’s emotional development in middle childhood. Table 8 reports the partial correlations.
Table 8
*Partial Correlations between Parental Socialization and Children’s Expressive Flexibility (EF)*

<table>
<thead>
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<th>Parental emotion socialization</th>
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<tr>
<td>Father’s beliefs: emotions as dangerous</td>
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<td>Father’s beliefs: parental guidance</td>
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<td>Father’s emotion control values</td>
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<td>Father’s reappraisal</td>
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<tr>
<td>Father’s suppression</td>
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<tr>
<td>Mother’s suppression</td>
<td>-.29***</td>
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</tbody>
</table>

*Notes.* Partialing out culture, parents’ education, family income, child’s age, and gender.

*p < .05, **p < .01, ***p < .001
Research Question 2b

Is there a relationship between children’s EF and demographic variables (e.g., parents’ education and family income)?

In order to understand the relations of study variables with the demographic variables, the significance of the correlation coefficient was identified. Specifically, the correlations associated with demographic variables of parents’ education, marital status, and family income were examined. Maternal education was significantly related to children’s EF scores ($r = .27, p < .01$), mothers’ danger of emotion ($r = -.40, p < .01$), parental guidance ($r = .21, p < .05$), emotion control values ($r = -.23, p < .01$), and suppression ($r = -.31, p < .01$). Paternal education was also significantly related to children’s EF ($r = .33, p < .05$), fathers’ danger of emotion ($r = -.24, p < .05$), and family income ($r = .47, p < .01$). Family income was likewise significantly related to children’s EF ($r = .29, p < .05$), mothers’ emotion control values ($r = -.15, p < .10$), and mothers’ suppression ($r = -.17, p < .05$). Because demographic variables of parents’ education and family income were significantly related to children’s EF, they were controlled for in subsequent analyses predicting expressive flexibility.

This question and analysis supported the overall study by seeking to identify relationships between family SES and study variables. These results showed that parents’ socioeconomic factors affected their emotion-related beliefs, values, behaviors, and their children’s emotional capacities. For example, children of parents with higher education and higher family income had greater expressive flexibility ability than children with lower family SES.
Themes for Guiding Question 2

Two themes emerged from the analysis of the data on demographic backgrounds of American and Korean families. They are 1) family correlates of EF and 2) family SES. During the coding of the responses collected from parental socialization and demographic variables, the role of family and parenting influences on child EF were found. These findings indicate that children’s EF in middle childhood is associated with family emotional environment (e.g., maternal and paternal socialization practices) and sociocultural factors (e.g., family SES: parental education and household income). By understanding these relationships, clinicians can better identify the sociodemographic factors that contribute to deteriorating parental socialization practices when supporting families with low SES. Because low-income families are exposed to poverty-related risks such as residential instability, their children may experience psychological distress and therefore it would lead to their poor emotional abilities. It is important to note that socioeconomic class (e.g., parents’ education and income) would have a significant effect on how parents rear their children and children’s emotional well-being.

Findings for Research Question #3

How does parental emotion socialization influence their children’s expressive flexibility?

In order to test hypotheses about how parents’ emotion socialization might predict children’s expressive flexibility, two hierarchical regression models were conducted in which children’s expressive flexibility was regressed onto mothers’ (see Table 9) and fathers’ (see Table 10) emotion-related beliefs (danger of emotion and parental guidance), emotion control values, and emotion regulatory strategies (reappraisal and suppression). Demographic variables including culture, child gender, child age, parent’s education, and family income were entered as controls in the first model step of both models because which maternal and paternal socialization
factors could account for variance in children’s expressive flexibility, independent of (cultural) group and individual differences were of interest.

**Research Question 3a**

*How does maternal emotion socialization (emotion-related beliefs, emotion control values, emotion regulation strategies) predict children’ expressive flexibility?*

In order to understand the relationship between maternal emotion socialization and children’s EF, the significance of the coefficient from the regression was identified. This analysis was appropriate because it identified the unique or collective influence of mothers’ emotion socialization on children’s EF ability regardless of culture.

The first model step, containing culture (child ethnicity), gender, age, parent’s education, and family income, was significant $F(6, 97) = 4.58, R^2 = .22, p < .001$. Culture (child ethnicity) was initially a significant predictor of children’s EF ($p = .007$), and remained significant in the subsequent step. Gender was marginally related to children’s EF ($p = .081$) and remained significant in the subsequent step ($p = .021$). Family income was also marginally related to children’s EF ($p = .099$) and remained non-significant in the subsequent step ($p = .131$); these variables combined predicted 22% of the variance in children’s EF. Next, maternal emotion socialization variables were added to Step 2 of the model to test whether maternal socialization factors would increase the variance explained above control variable. Maternal socialization factors increased the variance explained to 29%, $F (11, 92) = 3.333, R^2 = .285, p < .01$. Results from the final model step indicated that culture, child gender, and mothers’ use of suppression skills were predictive of children’s expressive flexibility. More specifically, with regard to maternal variables, mothers who utilized suppression as an emotion regulation strategy more frequently had children who reported less emotion flexibility than mothers who utilized
suppression strategy relatively infrequently. The full model accounted for approximately 29% of the variance in children’s expressive flexibility.

This research question and its relevant analysis supported the overall study by seeking to identify maternal emotion socialization factors in association with children’s expressive flexibility ability in middle childhood. The results showed that mother’s use of suppression was a unique socialization factor in predicting children’s EF. Thus, mothers who suppress their emotions may have negative effects on their children’s emotional well-being. In determining the levels of suppression skills, mothers responded to four questions in the Emotion Regulation Questionnaire, including “I keep my emotions to myself,” “When I am feeling positive emotions, I am careful not to express them,” “I control my emotions by not expressing them,” and “When I am feeling negative emotions, I make sure not to express them.” The regression model for maternal socialization predicting Child EF is presented in Table 9.
### Table 9

*Hierarchical Regression Analyses for Maternal Variables Predicting Children’s Expressive Flexibility (EF)*

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>b</th>
<th>SE</th>
<th>β</th>
<th>R² and ΔR²</th>
</tr>
</thead>
<tbody>
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<td>-.68</td>
<td>.25</td>
<td>-.33</td>
<td>.22***</td>
</tr>
<tr>
<td></td>
<td>Gender*</td>
<td>.32</td>
<td>.18</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.05</td>
<td>.07</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother’s education</td>
<td>.02</td>
<td>.14</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Father’s education</td>
<td>.06</td>
<td>.14</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family income+</td>
<td>.23</td>
<td>.14</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Culture**</td>
<td>-.84</td>
<td>.26</td>
<td>-.41</td>
<td>.06**</td>
</tr>
<tr>
<td></td>
<td>Gender*</td>
<td>.44</td>
<td>.18</td>
<td>.23</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.08</td>
<td>.07</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother’s education</td>
<td>-.03</td>
<td>.15</td>
<td>-.02</td>
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<tr>
<td></td>
<td>Father’s education</td>
<td>-.09</td>
<td>.15</td>
<td>-.08</td>
<td></td>
</tr>
</tbody>
</table>
Family income 
Emotions as dangerous 
Parental guidance 
Emotion control value 
Reappraisal 
Suppression* 

Notes. Americans were set as the reference group.

+ p < .10, *p < .05, **p < .01, ***p < .001.

Research Question 3b

How does paternal emotion socialization (emotion-related beliefs, emotion control values, emotion regulation strategies) predict children’s expressive flexibility?

In order to understand the relationship between paternal emotion socialization and children’s EF, the significance of the coefficient from the regression was identified. This analysis was appropriate because it identified the unique or collective influence of fathers’ emotion socialization on children’s EF ability regardless of culture.

The first step, including culture (child ethnicity), gender, age, parent’s education, and family income, was significant $F(6, 97) = 4.58, R^2 = .22, p < .001$. Culture was associated with children’s EF ($p = .007$) and remained significant in the subsequent step. Child gender was
marginally related to children’s EF \((p = .081)\), and remained significant in the subsequent step \((p = .021)\). Income was also marginally related to children’s EF \((p = .099)\) and remained of marginal significance in the subsequent step \((p = .096)\); these demographic variables combined predicted 22% of the variance in children’s EF. Next, paternal emotion socialization variables were added to Step 2 of the model to test whether paternal socialization factors would increase the variance explained above control variables. Paternal socialization factors increased the variance explained to 29%, \(F(11, 92) = 3.401, R^2 = .289, p < .01\). This final model step for the paternal socialization factors indicated several significant predictors of children’s EF, including culture, child gender, family income, and father’s belief about children’s emotions as dangerous. Specifically, children’s expressive flexibility was associated with culture and child gender. EF was also positively associated with family income and negatively associated with fathers’ belief about emotions as dangerous. More specifically, regarding paternal variables, fathers high in the belief that emotions are dangerous had children who reported less expressive flexibility than fathers low in the belief about danger. The overall model accounted for approximately 29% of the variance in children’s expressive flexibility.

This research question and relevant analysis supported the overall study by seeking to identify paternal emotion socialization factors in association with children’s expressive flexibility ability in middle childhood. The results showed that father’s belief about danger of emotions was a unique emotion socialization factor in predicting children’s EF. Thus, fathers who believe that emotions are dangerous or problematic may have negative effects on their children’s emotional well-being. In determining the levels of beliefs about danger of emotions, fathers responded to 15 questions in the Parents’ Beliefs about Children’s Emotions (PBACE) questionnaire. This was reflected in responses that included “Feeling negative emotions is sort of
a dead end street, and children should do whatever they can to avoid going down it.” “Showing anger is not a good idea for children,” “When children get angry they create more problems for themselves,” “Feeling sad is just not good for children,” “When children are too loving others take advantage of them,” “Children who are too loving can get walked all over,” “Feeling angry is just not good for children,” “When children get angry, it can only lead to problems,” “When children are too happy, they can get out of control,” “It is important for children to avoid feeling sad whenever possible,” “Anger in children can be emotionally dangerous,” “Children who feel emotions strongly are likely to face a lot of trouble in life,” “Children can think more clearly when emotions don't get in the way,” “Children's feelings can get hurt if they love too much,” and “When children start to show strong emotions, one never knows where it will end up.” The regression model for paternal socialization predicting child EF is presented in Table 10.

**Themes for Guiding Question 3**

A theme emerged from the analysis of the data on fathers’ and mothers’ emotion socialization factors: gender-specific emotion-coaching attitudes. Mothers’ emotion regulation strategies (e.g., suppression) were associated with emotional outcomes in children, whereas fathers’ emotion-related beliefs (e.g., emotion as dangerous) were associated with their children’s emotional outcomes in middle childhood. These findings highlight the distinction between maternal and paternal roles in child emotion regulation development. This distinction also implies that children may have different developmental trajectories for maternal and paternal socialization practices. By understanding these differences, clinicians can better identify the parental factors that contribute differently to emotional abilities in children, and therefore may support how fathers and mothers are uniquely engaged in children’s emotional lives.
Table 10

*Hierarchical Regression Analyses for Paternal Variables Predicting Children’s Expressive Flexibility (EF)*

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>( b )</th>
<th>( SE )</th>
<th>( \beta )</th>
<th>( R^2 ) and ( \Delta R^2 )</th>
</tr>
</thead>
<tbody>
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<td>-.68</td>
<td>.25</td>
<td>-.33</td>
<td>.22***</td>
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<td></td>
<td>Gender*</td>
<td>.32</td>
<td>.18</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.05</td>
<td>.07</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother’s education</td>
<td>.02</td>
<td>.14</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Father’s education</td>
<td>.06</td>
<td>.14</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family income*</td>
<td>.23</td>
<td>.14</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Culture*</td>
<td>-.58</td>
<td>.25</td>
<td>-.28</td>
<td>.06**</td>
</tr>
<tr>
<td></td>
<td>Gender*</td>
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<td>.18</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.09</td>
<td>.07</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mother’s education</td>
<td>.03</td>
<td>.14</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Father’s education</td>
<td>.03</td>
<td>.14</td>
<td>.03</td>
<td></td>
</tr>
</tbody>
</table>
Findings for Research Question #4

Does culture (Individualistic American culture and Collectivistic Korean culture) have a moderating effect on the relationship between parental emotion socialization (emotion-related beliefs, emotion control values, emotion regulation strategies) and children’s EF?

Hierarchical regression analyses were conducted to test moderating effects of culture on the relationship between parental emotion socialization and children’s EF abilities. Moderating effects were significant, with culture moderating three of ten relationships between parental emotion socialization and children’s EF: 1) father’s belief about danger of emotion; 2) mother’s belief about danger of emotions; and 3) father’s emotion control values. In all regression models, demographic characteristics such as parents’ education and family income were included as
predictors in order to control for the effects of these variables. The first step simultaneously entered the demographic background variables mentioned above. Parental socialization variables (emotion-related beliefs and emotion control values) and culture (moderating variable) were then added in the second step. The third step entered the hypothesized two-way interaction terms of the parental socialization variables and moderator (i.e., fathers’ belief about emotions as dangerous x culture). Because interactions term was statistically significant in the three models, follow-up simple slope tests were conducted to explore the nature of the significant interactions (Aiken & West, 1991). Each overall model showed the moderation effects of culture on fathers’ and mothers’ belief about emotion as dangerous and fathers’ emotion control values. Please see Tables 11, 12, and 13. (In the Tables, a standardized beta coefficient, $\beta$ was used to determine the relative importance of explanatory variables by comparing the strength of the effect of each independent variable to the dependent variable, child EF.)

**Fathers’ and Mothers’ Emotion-Related Belief: Emotions as Dangerous**

First, in order to examine the moderating effect of culture on the relationship between paternal beliefs about children’s emotions as dangerous and children’s EF, a regression analysis was conducted. This analysis was appropriate because this study sought to understand the differences in the relationship between parental emotion socialization and child EF in American families and Korean families. The relationship between paternal belief that children’s emotions are dangerous and children’s EF was moderated by culture, $F(6, 97) = 7.10, p < .001$. The overall model explained 31% of the variance in children’s expressive flexibility. More specifically, compared to the Step 1 model, the explanatory power of the Step 2 model into which father’s belief about danger of emotions and culture were additionally entered increased by 10% ($F = 6.19, p < .001$). Compared to the Step 2 model, the explanatory power of the Step 3 model into
which the two-way interaction of the father’s belief about danger of emotions and culture was additionally entered increased by 7% \( (F = 7.10, p < .001) \). For American fathers, their belief that children’s emotions are dangerous or problematic was negatively associated with children’s expressive flexibility, \( \beta = -.95, t(97) = -21.20, p < .001 \). In contrast, for Korean fathers, their belief that children’s emotions are dangerous was not significantly associated with children’s EF, \( \beta = -.09, t(97) = -.78, p > .05 \).

To visualize the significant interaction effects, simple slope test was conducted for low (-1 SD), and high (+1 SD) values of the moderator, culture (Aiken & West, 1991). Please see Figure 2. The simple regression lines indicated the pattern of influence of fathers’ belief about danger of emotions on children’s EF, suggesting the moderating effect of culture between the two cultures. The figure showed that the interaction between the paternal belief about danger of emotions and child EF was significant for American fathers, but not for Korean fathers. These findings indicate that American children’s EF was markedly lower for those with fathers who believe that emotions are dangerous. That is, for American families, the lower the fathers’ belief about danger of emotions, the higher children’s EF. Thus, the influence of fathers’ belief that emotions are dangerous was greater in American fathers, suggesting that they are more sensitive to belief about danger of emotions compared to Korean fathers. The results of this analysis are presented in Table 11.
Table 11

Regression Analyses Testing Culture as a Moderator Variable of Relationship Between Parental Socialization (Father’s Belief about Danger of Emotions) and Children’s EF

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>b</th>
<th>SE</th>
<th>β</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td>.14**</td>
</tr>
<tr>
<td>Mother’s education</td>
<td>.01</td>
<td>.15</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Father’s education</td>
<td>.25</td>
<td>.12</td>
<td>.24*</td>
<td></td>
</tr>
<tr>
<td>Family income</td>
<td>.26</td>
<td>.14</td>
<td>.19</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td>.24***</td>
<td></td>
</tr>
<tr>
<td>Mother’s education</td>
<td>-.02</td>
<td>.14</td>
<td>-.01</td>
<td></td>
</tr>
<tr>
<td>Father’s education</td>
<td>.03</td>
<td>.14</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>Family income</td>
<td>.28</td>
<td>.13</td>
<td>.21*</td>
<td></td>
</tr>
<tr>
<td>Father’s belief about emotions as dangerous</td>
<td>-.32</td>
<td>.13</td>
<td>-.22*</td>
<td></td>
</tr>
<tr>
<td>Culture</td>
<td>-.52</td>
<td>.24</td>
<td>-.25*</td>
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<td>Step 3</td>
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<td></td>
<td>.31***</td>
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<tr>
<td>Mother’s education</td>
<td>-.05</td>
<td>.13</td>
<td>-.04</td>
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CULTURE, EMOTION SOCIALIZATION, AND EXPRESSIVE FLEXIBILITY

<table>
<thead>
<tr>
<th></th>
<th>Father’s education</th>
<th>Family income</th>
<th>Father’s belief about emotions as dangerous</th>
<th>Culture</th>
<th>Father’s belief about emotions as dangerous x Culture</th>
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</thead>
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<tr>
<td></td>
<td>-.02</td>
<td>.29</td>
<td>-.95</td>
<td>-3.57</td>
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<tr>
<td></td>
<td>.13</td>
<td>.13</td>
<td>.24</td>
<td>1.04</td>
<td>.29</td>
</tr>
<tr>
<td></td>
<td>-.02</td>
<td>.22*</td>
<td>-.67***</td>
<td>-1.73**</td>
<td>1.65**</td>
</tr>
</tbody>
</table>

*Notes. Americans were set as the reference group.

*p < .05. **p < .01. ***p < .001.

Figure 2. Associations between father’s belief about danger of emotions and children’s EF by culture
Second, in order to examine moderating effect of culture on the relationship between maternal beliefs about children’s emotions as dangerous and children’s EF, a regression analysis was conducted. This analysis was appropriate because this study sought to understand the differences in the relationship between maternal emotion socialization and child EF in American families and Korean families. The relationship between maternal belief that children’s emotions are dangerous or problematic and children’s EF was moderated by culture, \( F(6, 97) = 5.28, p < .001 \). The overall model explained 25% of variance in children’s expressive flexibility. More specifically, compared to the Step 1 model, the explanatory power of the Step 2 model into which mother’s belief about danger of emotions and culture were additionally entered increased by 7% \( (F = 5.33, p < .001) \). Compared to the Step 2 model, the explanatory power of the Step 3 model into which the two-way interaction of the mother’s belief about danger of emotions and culture was additionally entered increased by 4% \( (F = 5.28, p < .001) \). For American mothers, their belief that children’s emotions are dangerous was negatively associated with children’s EF, \( \beta = -.46, t(97) = -10.17, p < .001 \). In contrast, for Korean mothers, their belief that emotions are dangerous was not significantly associated with children’s EF, \( \beta = .03, t(97) = .27, p > .05 \). The results of this analysis are presented in Table 12.

Follow-up simple slope test was conducted to explore the significant interactions. Please see Figure 3. The simple regression lines indicated the patterns of influence of mothers’ belief about danger of emotions on children’s EF, suggesting the moderating effect of culture between American and Korean families. The figure showed that the interaction between the maternal belief about danger of emotions and child EF was significant for American mothers, but not for Korean mothers. The findings indicate that American children’s EF was markedly lower for those with mothers who are higher in the belief that emotions are dangerous. Thus, for American
mothers, the more they believe that children’s emotions are dangerous, the less expressive flexibility their children experience in the mother-child relationship.

This research question and relevant analyses supported this study by identifying parental socialization factors that differentiate between American children’s regulatory flexibility and Korean children’s regulatory flexibility. By understanding these differences, clinicians can better identify and support the parental socialization factors that differently contribute to children’s emotional outcomes for America families and Korean families in culturally diverse settings.
Table 12

*Regression Analyses Testing Culture as a Moderator Variable of Relationship Between Parental Socialization (Mother’s Belief about Danger of Emotions) and Children’s EF*

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>$b$</th>
<th>SE</th>
<th>$B$</th>
<th>$R^2$</th>
</tr>
</thead>
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<td><strong>Step 1</strong></td>
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<td></td>
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<td>.14**</td>
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<tr>
<td>Mother’s education</td>
<td>.01</td>
<td>.15</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Father’s education</td>
<td>.25</td>
<td>.12</td>
<td>.24*</td>
<td></td>
</tr>
<tr>
<td>Family income</td>
<td>.26</td>
<td>.14</td>
<td>.19</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
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<td></td>
<td>.21***</td>
</tr>
<tr>
<td>Mother’s education</td>
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<td>.14</td>
<td>-.03</td>
<td></td>
</tr>
<tr>
<td>Father’s education</td>
<td>.02</td>
<td>.14</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>Family income</td>
<td>.28</td>
<td>.14</td>
<td>.21*</td>
<td></td>
</tr>
<tr>
<td>Mother’s belief about emotions as dangerous</td>
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<td>.13</td>
<td>-.15</td>
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</tr>
<tr>
<td>Culture</td>
<td>-.62</td>
<td>.24</td>
<td>-.30**</td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
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<td></td>
<td></td>
<td>.25***</td>
</tr>
<tr>
<td>Mother’s education</td>
<td>-.03</td>
<td>.14</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>Father’s education</td>
<td>.00</td>
<td>.14</td>
<td>.00</td>
<td></td>
</tr>
</tbody>
</table>
Family income  .29  .14  .21*

Mother’s belief about emotions as dangerous  -.46  .18  -.35**

Culture  -2.25  .83  -1.09**

Mother’s belief about emotions as dangerous x Culture  .48  .24  .87*

Notes. Americans were set as the reference group.

*p < .05. **p < .01. ***p < .001.

Figure 3. Associations between mother’s belief about danger of emotions and children’s EF by culture
Fathers’ Emotion Control Values

In order to examine the moderating effect of culture on the relationship between paternal values about emotion control and children’s EF, a regression analysis was conducted. This analysis was appropriate because this study sought to understand the differences in the relationship between paternal emotion control values and child EF in American families and Korean families. The relationship between fathers’ emotion control values and children’s expressive flexibility was moderated by culture, \( F(6, 97) = 5.17, p < .001 \). The overall model explained 24% of the variance in children’s EF. More specifically, compared to the Step 1 model, the explanatory power of the Step 2 model into which father’s emotion control values and culture were additionally entered increased by 6% (\( F = 4.85, p < .05 \)). Compared to the Step 2 model, the explanatory power of the Step 3 model into which the two-way interaction of the father’s emotion control values and culture was additionally entered increased by 4% (\( F = 5.17, p < .001 \)). For American fathers, their values about emotion control was negatively associated with children’s expressive flexibility, \( \beta = -.62, t(97) = -13.84, p < .001 \). Contrary to American fathers, Korean fathers’ emotion control values were not significantly associated with children EF, \( \beta = .06, t(97) = .54, p > .05 \). The results of this analysis are presented in Table 13.

To graphically verify the influence of the moderating variable, simple regression lines were plotted for low (-1 SD), and high (+1 SD) values of the moderator, culture (Aiken & West, 1991). Please see Figure 4. The simple regression lines indicated the patterns of influence of fathers’ emotion control values on children’s EF, suggesting the moderating effect of culture between American and Korean families. The figure showed that the interaction between the paternal values about emotion control and child EF was significant for American fathers, but not for Korean fathers. The findings indicate that the less American fathers value their emotion
control, the more expressive flexibility their children have. Conversely, the more American fathers value their emotion control, the less expressive flexibility their children experience. Thus, the impact of fathers’ emotion control values was greater on American fathers, suggesting American fathers may be more sensitive to their values about emotion control in parenting practices, compared to Korean fathers.

These results contribute to the overall study by identifying paternal socialization practices exhibited by American fathers who demonstrated higher sensitivity to emotion control values as compared to Korean fathers. By understanding these differences in parenting practices, clinicians with culturally diverse clients can better support that the relationship between parents’ emotion-related values and children’s emotional development may differ depending on the cultural background (e.g., Individualistic culture and Collectivistic culture). Therefore, it would be necessary to consider parental emotion socialization and culture together for supporting children with emotion regulation difficulties in clinical settings.
Table 13

Regression Analyses Testing Culture as a Moderator Variable of Relationship Between Parental Socialization (Father’s Emotion Control Values) and Children’s EF

<table>
<thead>
<tr>
<th>Predictor variables</th>
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<th>$SE$</th>
<th>$\beta$</th>
<th>$R^2$</th>
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<tbody>
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<td>Step 1</td>
<td></td>
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<tr>
<td>Mother’s education</td>
<td>.01</td>
<td>.15</td>
<td>.01</td>
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Family income       .22  .14  .16  
Father’s emotion control values       -.62  .26  -.50*  
Culture       -3.07  1.07  -1.49**  
Father’s emotion control values x Culture       .68  .29  1.36*  

**Notes.** Americans were set as the reference group.  
*p < .05. **p < .01. ***p < .001.  

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**Figure 4.** Associations between father’s emotion control values and children’s EF by culture.
Themes for Guiding Question 4

Two themes emerged from the analyses of the data on American and Korean parents and their children. They are 1) Western individualistic values in American families and 2) Eastern collectivistic values in Korean families. During the coding of responses collected from parent questionnaires and child experiments, the theme of cultural differences was reviewed and deconstructed into two sub-categories: Parental emotion-related beliefs and parental emotion-related values.

Differences in emotion-related beliefs. American parents in Western culture are more sensitive to beliefs about children’s emotions that emotions are dangerous or problematic compared to Korean parents in Eastern culture. Thus, parents who have higher levels of beliefs about danger of emotions would have a negative effect on their children’s emotional outcomes in American families. These American parents rate relatively high on items stating expressing emotions as dangerous, such as “It is important for children to avoid feeling sad whenever possible”, “Anger in children can be emotionally dangerous”, “When children are too happy, they can get out of control”, and “When children get angry, it can only lead to problems”. In other words, their higher belief in danger of emotions were associated with decreased EF abilities for American children. In Korean families, however, parental beliefs that emotions are dangerous were not associated with emotional abilities in children.

Difference in emotion-related values. American fathers in Western culture are more sensitive to values about emotion control compared to Korean fathers in Eastern culture. Thus, American fathers who have higher levels of emotion control values would be related to decreased emotional abilities in children. These American fathers rate relatively high on items that acknowledge emotion control value as a good thing, such as “People should not express their
emotions openly”, “It is wrong for people to always display how they feel”, and “People should show their emotions when overcome with strong feelings”. Their higher values about emotion control, in turn, would negatively affect their children’s EF abilities in American families. In Korean families, however, paternal values about emotion control were not associated with emotional outcomes in children.

**Summary of Findings**

This chapter examined the relationship between parental emotion socialization variables and culture and how this relationship may affect children’s EF ability in American and Korean samples. The main findings were:

1. Children who have higher levels of expressive flexibility are associated with their family SES (socioeconomic status) (e.g., parental education and family income).
2. Mothers’ and fathers’ socialization practices contribute differently to emotional abilities in children; mothers’ emotion regulation strategies (e.g., suppression) are predictive of children’s EF levels, whereas fathers’ emotion-related beliefs (e.g., emotions as dangerous) are predictive of children’s EF levels.
3. In a family environment in which there is more Western individualistic values, children’s EF ability is poorer when parents believe emotions are dangerous or problematic.
4. In a family environment in which there is more Western individualistic values, children’s EF ability is poorer when fathers highly value emotion control.

By integrating the children’s voices through initial responses and behavioral observations, I hoped to highlight the children’s experience within this chapter. The findings presented were guided by the four research questions framing the study. Chapter 5 will provide
further analysis of the findings, discuss their implications, and make recommendations for practitioners and future research.
CHAPTER FIVE: SUMMARY, DISCUSSION, FUTURE RESEARCH, AND FINAL REFLECTION

Summary

The purpose of this study was to examine the cross-cultural differences in patterns of associations of parental emotion socialization (e.g., parents’ emotion-related beliefs, emotion control values, and emotion regulatory strategies) with children’s expressive flexibility based on a culture-comparative approach. Specifically, the main goal was to investigate how paternal and maternal socialization factors might be linked to their children’s regulatory flexibility in between American and Korean samples. The study provided the first empirical evidence supporting the view that parents’ emotion socialization influences children’s expressive flexibility in middle childhood. Importantly, the results also highlight culturally-different developmental pathways related to parental socialization as connected to the identification of children’s emotional competence within cultural contexts.

In the following sections, the cultural differences in the child and parent variables are addressed, followed by a discussion of the findings as well as the strengths and limitations of the current study. Lastly, relevant suggestions for future research are also addressed and final researcher reflections are offered.

Differences in Children’s EF and Parental Emotion Socialization across American and Korean Cultures

As expected, multiple cultural differences according to child ethnicity in regard to parental emotion socialization factors and children’s EF abilities were found. First, American children had higher expressive flexibility scores, on average, than Korean children did. Contrary to the finding, an expressive flexibility research study with an adult sample found that there were
no effects of ethnicity on participants’ EF (Zhu, 2016). Yet despite well-documented research regarding EF abilities on adult populations, there is virtually no research examining the EF of young individuals in the cross-cultural literature. Thus, investigations of children’s EF abilities that include ethnically diverse populations, are needed to understand how EF abilities develop differently across cultures.

Second, as predicted, Korean mothers and fathers more strongly believed that emotions are dangerous compared to American mothers and fathers. Similarly, several studies showed that Asian and European individuals tend to differ with regard to values regarding emotions (e.g., emotions are dangerous versus functional) (Matsumoto, 1993; Russell & Yik, 1996). This could be related to the cultural beliefs about emotions in terms of individualism/collectivism and West/East distinctions. Because individualistic cultures (e.g., the US) in which children’s independence or autonomy is emphasized, parents highly value individuals’ expression of emotions (Kim & Sherman, 2007) and may perceive emotions as valuable or functional. Alternatively, Korean parents may believe that emotions are dangerous or problematic because in collectivistic cultures in which children’s relatedness to their family and interdependence are emphasized, parents in general value socially unobtrusive and compliant child behaviors to promote harmony in interpersonal relationships (Rothbaum & Trommsdorff, 2007).

Third, as expected, American mothers reported higher belief in guiding children’s emotion socialization compared to Korean mothers. This could be related to cultural values regarding emotion coaching. Some research has demonstrated that parents’ belief about guiding children’s emotions has been connected to children’s emotion talk and emotion understanding (Dunsmore & Karn, 2004). For example, American mothers more strongly focused on children’s and others’ emotions and thoughts when compared to Asian mothers who tended to emphasize
children’s external behaviors suitable to social norms when discussing emotions with their children (Doan & Wang, 2010). In this context, American parents who believe they are responsible for playing an active role in their child’s emotion socialization are likely to take more time to engage in a variety of socialization practices that may be conducive to children’s emotion socialization.

Fourth, as expected, Korean mothers reported higher emotion control values and emotional suppression than American mothers did. Korean mothers rated relatively high on items agreeing with the notion of emotion control as an appropriate manner of emotional responding, indicating that Korean mothers hold culturally specific beliefs that the expression of emotions—especially emotions that may disrupt relational harmony—should be controlled. The different views of emotion control in between Korean and American samples are also consistent with previous findings that Asian individuals are more likely to believe that people should generally control their emotions than European American participants (Mauss et al., 2010).

With regard to emotion suppression responses, this study replicated previous findings that individuals in Asian cultures tend to show more suppressing emotional behaviors as compared to North American participants (Gross & John, 2003). Because awareness of others’ emotional states is weighed more strongly than individual expression of emotion in East Asian cultures, downregulating high-arousal emotions of both negative and positive valences (i.e., suppression of emotion) is highly valued in individuals of these cultures (Tsai, Louie, Chen, & Uchida, 2007). Additionally, Matsumto, Yoo, and Nakagawa (2008) suggested the idea that individuals of cultures that emphasize collectivistic values, hierarchy, and maintenance of social order, are likely to have higher scores on suppression, whereas individuals of cultures that value individualism and affective autonomy tend to report lower scores on suppression. More
specifically, among twenty-three countries, Korea was one of the countries showing mean individual scores of emotion suppression that were higher than those in the United States. Consistent with these findings, the results of the current study demonstrated that mothers’ use of suppression, which may be a cultural norm that maintains interpersonal relationship or social bond in Eastern cultures, is more valued in the Korean sample than in the American sample.

**Relation of Parental and Demographic Variables to Children’s EF**

With respect to partial correlations between parental variables and children’s EF, parent-gender differences were noted. Mothers’ approach to emotion socialization was more strongly related to children’s EF abilities than was the case for fathers by controlling for culture, parental education, and family income. Four maternal socialization factors, embedded in three different types of socialization domains were significantly related to children’s flexible regulation, whereas only one paternal socialization factor (i.e., belief about danger of emotions) was related to EF. It was assumed that mothers may be more involved in the daily caretaking of their children (Patterson, Sutfin, & Fulcher, 2004) and, therefore, lead their child to rely more strongly on mothers rather than fathers in their own emotion-related parenting practices. These results indicate the importance of distinctive role for fathers and mothers in their children’s emotional lives. This distinction also implies that children may socialize their emotions through fathers’ and mother’s influences separately. Furthermore, as social changes have brought about diverse family roles for both men and women (McElwain et al., 2007), investigations of joint contributions of mothers’ and fathers’ socialization practices may be necessary to better understand the dynamic emotion socialization constructs within a family context.

Contrary to expectations, no child gender and age differences were found with regard to children’s EF abilities. This is consistent with recent findings that there were no gender
differences and no age differences between primary and junior high school students in overall EF scores (Wang & Hawk, 2019). Although there is some evidence for gender differences in children’s affective abilities showing that girls have stronger regulation skills than boys (Matthews, Cameron Ponitz, & Morrison, 2009), there has been little EF research on child samples in comparable age to the sample of the current study. Thus, further studies are needed to investigate the basic characteristics of EF construct in childhood and adolescence.

**Parents’ Education**

Parents with higher levels of education were more likely to have children who have greater expressive flexibility. The findings showed a relationship between fathers’ education and their belief about the danger of emotions. For example, fathers with higher levels of education were less likely to believe that emotions are dangerous. In addition, mothers’ education was related to their belief about danger of emotions, parental guidance, emotion control values, and suppression strategies. Specifically, mothers with higher levels of education were less likely to believe that emotions are dangerous and more likely to believe that parents need to teach their children about emotions. They also reported less emotion control values and suppression than mothers with low education.

**Family Income**

Children with higher levels of family income were more likely to have the ability to modulate flexibly to situational demands. Additionally, the findings indicated that family income was related to fathers’ education, mothers’ suppression, and mothers’ emotion control values. That is, children with higher levels of family income had fathers who were more likely to have a higher education level, mothers who were less likely to use suppression of emotion, and mothers who were less likely to have values about emotion control.
These findings support the view that there are positive linkages between the ability to regulate emotions and socioeconomic status (Côté et al., 2010). The results also suggest that parents’ education and family income are associated with both parental emotion socialization and their child’s emotional abilities. Consistent with the findings, some research examining SES and parenting practices has found that mothers of higher socioeconomic status tended to spend more time in conversation with their children and elicit richer dialogue from their children (Hoff, 2003; Hoff-Ginsberg & Tardif, 1995). It was assumed that socioeconomic status would exert influence on how parents socialize their children’s emotions and what resources are available to them for children’s socialization. It is possible that resources in high SES environments may buffer the deleterious effects of poor emotional abilities. Overall, it is possible that emotional resources available in higher socioeconomic environments (e.g., parental education, household income) contribute to a family environment in which children’s emotional experiences may be enriched and their emotional functioning would thus be improved.

Differences in the Linkages Between Parental Emotion Socialization and Children’ EF

Hypotheses regarding linkages between maternal and paternal socialization and children’s EF were partially supported. Two separate regression models that included only mother- or father-reported emotion socialization predicting children’s EF were performed. Regardless of cultural background, maternal and paternal socialization factors differently contributed to children’s EF abilities. Two notable findings among the maternal and paternal socialization factors emerged in the analyses of the resulting data. Regarding mothers’ socialization factors, suppression, one of the regulatory strategies, was the only socialization variable that significantly predicted children’s EF. Specifically, regression analyses suggested that mothers with higher use of suppression of emotion had children who reported poor flexible
regulation. When mothers display more emotion suppression responses as a regulatory strategy, children may have fewer opportunities to develop emotional abilities (e.g., expression of emotions, regulatory skills).

Regarding fathers’ socialization factors, only paternal belief that emotions are dangerous was significant as a predictor of children’s EF. When fathers strongly believe that emotions are dangerous, their children show lower expressive flexibility scores. It may be that fathers who believe that emotions are dangerous may avoid or discourage their children’s emotional expressions and thus believe such expression cannot be useful for their child in developing emotion socialization. This is consistent with past emotion socialization research in which fathers are more likely to believe that children’s emotions can be dangerous compared to mothers (Her, Dunsmore, & Stelter, 2012).

Interestingly, children’s EF ability was respectively predicted by mothers’ emotion regulatory strategy (e.g., suppression) and fathers’ emotion-related belief (e.g., danger of emotions). According to Rogers and colleagues (2016), emotion regulatory strategy may be considered a proximal socialization factor as mothers’ utilization of suppression strategies can be easily observable by children. Conversely, emotion-related beliefs are internal processes that are not always visible and obvious parts of parental behaviors; thus, these parental beliefs may be regarded distal socialization factors. As such, different types of emotional socialization factors between fathers (i.e., distal processes) and mothers (i.e., proximal processes) interact with each other and affect the regulatory development of children. These results suggest that, though mothers’ and fathers’ socialization practices may play different roles in children’s development, they may jointly contribute to children’s emotional outcomes (Garner, Robertson, & Smith, 1997). In addition, the findings from the current study suggest that children’s flexible regulation
may be collectively and uniquely affected by diverse forms of parental socialization. Considering that little is known regarding differences in the emotion socialization practices of mothers and fathers (Denham, Bassett, & Wyatt, 2007), future research for examination of parent-gender differences in emotion socialization beliefs and behaviors is needed.

**Moderating Role of Culture on Relationship between Parental Socialization and Children’s EF**

As predicted, the findings supported the hypothesis that the relation of parental emotion socialization to children’s expressive flexibility was moderated by culture (collectivistic versus individualistic culture). In the American group, parental belief that emotions are dangerous was negatively related to children’s EF abilities; in the Korean group, however, parental belief that emotions are dangerous was not related to children’s EF. That is, the influence of parental belief that emotions are dangerous was greater on American participants, suggesting that they are more sensitive to the belief about danger of emotions compared to their Korean counterparts. The results with American participants are consistent with previous findings showing that among families in Western cultures, children of parents who strongly endorse the belief that emotions are potentially harmful tend to show poor emotion-related abilities such as less emotion understanding skill, less socio-emotional adjustment (Garrett-Peters, Castro, & Halberstadt, 2016), and avoidance and distraction coping (Halberstadt et al., 2008b).

In addition, there were differences between the two groups of families (i.e., American and Korean) on the association between paternal emotion control values and children’s regulatory flexibility. For the American families, children whose fathers have higher levels of emotion control values had lower levels of EF abilities. Such a relationship between fathers’ emotion control values and children’s EF, however, was not found for the Korean families. In
other words, low children’s EF did not relate to parental higher values regarding emotion control for Korean participants, whereas in American participants, such a relation was found. The results were consistent with the findings of Mauss and Butler (2010), supporting that European and Asian individuals differ in terms of values regarding emotion control. That is, in European cultural contexts, emotion control is less valued because it may weigh against cultural values endorsing autonomy and self-expression, whereas individuals in Asian contexts automatize emotion control more frequently because they view negative emotion as a sign of weakness and control of emotions as desirable, especially with respect to socially disengaging emotions (Kim & Markus, 2002; Kitayama, Mesquita, & Karasawa, 2006; Markus & Kitayama, 1991; Potter, 1988; Tsai et al., 2006; Wu & Tseng, 1985). Therefore, it is possible that higher levels of values about emotion control were not associated with detrimental outcomes in Korean children because the construct fits within the Korean cultural context of values and customs. The results also support the premise that similar parental beliefs or values about emotion across ethnic groups can lead to different developmental outcomes for American and Korean children.

Contrary to my expectation, cultural differences in the relation between parents’ use of suppression and children’s EF scores were not found across American and Korean samples. It was expected in the current study that parents’ suppression would be positively related to Korean children’s EF but negatively related to American children’s EF; therefore, there would be a moderating effect of culture on the relation between parental suppression and children’s EF. Although suppression has shown to be related to maladaptive outcomes in American culture, several studies found that it has been associated with fewer negative emotion consequences and even better well-being in Asian culture (Su et al., 2015; Su, Wei, & Tsai, 2014). Since suppression is in line with the Asian cultural values that negative emotions should be controlled,
individuals in non-Western cultures are more effective at suppressing emotions and might even benefit from the use of suppression (Barnow & Balkir, 2012; Chen et al., 2018). Although deleterious effects of suppression may be less robust among Asian people, there is also some evidence to suggest that suppression is related to adverse psychological functioning, including depressive symptoms and poor school adjustment in Asian adolescents (Zhao & Zhao, 2015). Consequently, because previous findings between suppressing emotion and adaptive functioning in Asian culture have not always been consistent, further research will be necessary to identify the adaptiveness of emotional suppression within a cross-cultural context.

In this study, American families holding Western individualistic values were compared with Korean families who hold East Asian collectivistic values. In Western cultures, individuals tend to define themselves as an independent entity of social context, even with regard to an in-group (Markus & Kitayama, 1991). Emotions can be regarded as functional or valuable, and expression of emotions are considered indicative of positive psychological health and an individual’s authenticity because people may assert and experience themselves as unique through self-expression (Kim & Sherman, 2007; Suh, Diener, Oishi, & Triandis, 1998). In line with this cultural emphasis on emotion, American parents are more likely to value children’s emotions and encourage children’s sharing of their emotional experience and expression. Compared to parents who value emotions, parents who see emotions as potentially threatening or dangerous would discourage or avoid children’s emotional expressions. This may, in turn, decrease children’s willingness to express and discuss emotions with their parents and, thereby, affect children’s development of flexible regulation.

In contrast, individuals engaged in East Asian cultural contexts tend to conceive of themselves relative to members of an in-group (Markus & Kitayama, 1991). In East Asian
cultures feeling and expressing affect is less desirable compared to Western cultures (Bastian et al., 2012). Specifically, East Asian people tend to view emotions as potentially destructive or dangerous because they place emphasis on self-restraint, emotional moderation, and low arousal emotions (Doan & Wang, 2018; Lim, 2016). Accordingly, Asian parents in collectivistic cultures emphasize encouraging the expression of “socially preferred” emotions as a way to help promote the harmony and cohesiveness of the group (Greenfield et al., 2003; Keller et al., 2004).

Moreover, prior studies examining culturally specific values about emotion with East-West distinctions have shown that some Asian parents (e.g., Korean) reported that expression of emotions (especially, negative emotion) can potentially endanger the quality of relationships (Friedlmeyer, Corapci, & Cole, 2011; Park, 2011; Trommsdorff et al., 2012). Therefore, parents with Asian cultural values are more likely to believe that people should generally control their emotions than American parents (Eid & Diener, 2001; Kitayama & Park, 2007).

In addition, past cultural comparison studies have mainly compared North American culture with Chinese culture as a representative sample of Asian culture. Although China and Korea share characteristics influenced by the Confucian tradition, there are some sociocultural differences between the two cultures. Korean society’s emphasis on collectivistic values such as social order and restraint of personal desires is similar to Chinese culture. Korean Confucianism, however, postulates the family as a fundamental unit of the society and emphasizes family hierarchy based on age and gender (Han, 1989). Korean families tend to be based on an authoritarian and patriarchal relationship within the hierarchical family structure where children of all ages are demanded to obey and respect their parents especially the head of the household (e.g., filial piety) (Gil & Drewes, 2005). This suggests that Korean parents are less likely to
support their children’s display of negative emotions than American parents, possibly due to the cultural emphasis on children’s submissive compliance with parental authority.

The differential focus on emotion-related beliefs or values in socialization practices may reflect Eisenberg’s heuristic model (Eisenberg et al., 1998). Parental taken-for-granted ideas about the “right” or “natural” way to think or act, particularly in terms of the nature of the child, core values about parenting, the appropriate role of parents (i.e., parental characteristics), as well as characteristics of the culture (e.g., individualism versus collectivism) may contribute to the socialization of children’s emotion (Harkness & Super, 2006). Thus, consistent with the heuristic model, children’s EF abilities may be uniquely and substantially affected by diverse forms of parental socialization (e.g., emotion-related values and beliefs) across American and Korean cultures. Accordingly, parental beliefs, values, or strategies regarding emotion may be associated with different meaning in different cultural contexts.

The findings suggest that there are different aspects of parental emotion coaching in American and Korean cultures. Children in Western individualistic cultures are less likely to accept parental belief about danger of emotion and emotion control values, and those parental emotion-coaching attitudes tend to have more deleterious effects on American children’s emotional abilities compared to their Korean counterparts in collectivistic cultures. American children seem to perceive parental belief about danger of emotion and emotion control values as non-supportive because Western cultures highly value expression of inner states or feelings and parental role of emotion coaching (Gottman, 1998).

By contrast, Korean children in an East Asian culture, in which mutual obligations and a close bond within the family are highly valued in order to maintain the family hierarchy (Gil & Drewes, 2005), seem to perceive their parental emotion-coaching attitudes (e.g., emotion control
values and belief about danger of emotion) as aspects of normal parenting. For example, in this cultural context very expressive individuals are seen as socially immature and poorly regulated, suggesting that children’s individuality or self-expression is discouraged by parents to promote group interests and avoid social conflicts (Mulder, 1992). Parental beliefs about danger of emotions or values about emotion control, however, might not be maladaptive if those emotion-related values and beliefs are desired by their cultural norms. More specifically, compared to the Korean family environment in which restrictive emotion parenting behaviors are common, American family environments in which emotions are not valued, or contempt for emotions is expressed, seem to result in more detrimental emotional outcomes in American children because parental openness toward emotional expression is viewed as normative in this cultural context. As a result, American children in less expressive socialization practices may consider emotions as inappropriate or unworthy and then inhibit their emotion-related thoughts and displays. It is possible that such socialization practices are likely to lead to more maladaptive regulatory flexibility for American children in the current study. Overall, these differences in socialization practices (e.g., emotion-related beliefs and values) suggest that associations among parental socialization factors and children’s emotional outcomes could be moderated by the cultural context. Accordingly, these findings from the study highlight the importance of examining parental socialization and culture together for children’s emotional abilities.

**Strengths, Limitations, and Future Directions**

First, this study adds to the emotion regulation literature by establishing important associations between parental socialization factors and children’s regulatory flexibility. Specifically, I address that parental socialization factor (e.g., emotion-related beliefs and values) is predictive of children’s ability to flexibly enhance and suppress emotions in accordance with
situational demands across cultures. Thus, the current study lays the groundwork for investigating school-aged children’s EF. In addition, I employed a quantitative-methods design that included objective observational measures and participant self-reported questionnaires. This approach with observer ratings and self-report questionnaires helped prevent the risk of self-report biases for the results. Second, I explored multiple forms of parental socialization to assess their cumulative and unique contributions to children’s regulatory abilities. Moreover, the current study provides valuable information about different patterns of socialization practices in fathers and mothers and suggest the importance of understanding the family context in influencing children’s emotional outcomes. Third, the inclusion of Western and East Asian participants allowed me to analyze the effects of culture (e.g., individualistic versus collectivistic) and illustrate the importance of examining whether family environments in different ethnic groups have different developmental outcomes for children.

In spite of relevant findings in this study, there were some limitations noted. First, this study focused on middle-class families in both American and Korean samples, and the majority of parents had at least a college-level education. Thus, future investigations including a wider variety of parental education and socioeconomic status levels may be more generalizable across populations. In addition, while the positive correlation between family SES and children’s emotional abilities were examined in this study, how the parenting practices of low socioeconomic levels affect children’s emotions has not been directly investigated. Considering the notion of parental resilience defined as “the capacity of parents to deliver competent, quality parenting to their children, despite adverse circumstances” (Gavidia-Payne, Denny, Davis, Francis, & Jackson, 2015), it would be important to study children whose parents suffer from financial difficulties and lack of resources from a strength-based perspective. This could help to
identify their ability to deal with adversity and would provide insight into resiliency in low-income parents and emotional competence in children. Second, although multiple parental socialization factors (e.g., parental characteristics) and cultural factor that might influence children’s EF were examined in this study, it is important for future research to explore child characteristics (e.g., child’s personality or behavioral dispositions) as predictors of children’s EF abilities within the heuristic model (Eisenberg et al., 1998). Third, this study focused on children during middle childhood based on the notion that by then children have mastered basic emotional knowledge and understood the masking of emotions in this period (Pons et al., 2004). However, future research with longitudinal approaches and experimental designs including children in early childhood may be helpful in understanding the full developmental course of EF as well as how linkages between parenting and children’s EF evolve over time. Moreover, it would be additionally relevant to explore how regulatory flexibility appears during the transition from middle childhood to pubertal stage, which is reported to show decreased levels of parent-child cohesion and emotional self-disclosure (Collins, 1990). Considering that the ability to flexibly regulate emotions is especially relevant during adolescence, it would be significant to study how Eastern and Western cultural norms and contexts may challenge this transition differently. Thus, future research that considers the apex of pubertal change with reference to cultural norms and EF abilities would enrich and expand the findings of EF construct. Fourth, the study focused on heteronormative-two parent-households. However, future studies could be expanded to include other types of family (e.g., LGBT families, grandparents or other extended family constellations) which may address the influence of different caretaking roles on children’s emotional development. Finally, future studies using a combination of other measures (e.g.,
psychophysiological measures) may shed light into underlying biological mechanisms that can influence individuals’ course of development.

**Final Reflections**

Overall, this research makes an important contribution to the literature on children’s emotion regulation and parenting. Findings from the study illuminate the understanding of how cultural background relates to emotion socialization by examining how the cultural context affects associations between parental socialization and children’s flexible emotional regulation in middle childhood. The results are consistent with the idea that parental values and beliefs about emotion are associated with different meanings in different cultural contexts. This is particularly relevant when different beliefs about the danger of emotions and values related to emotion control in socialization practices are considered. Because individuals’ EF abilities play a pivotal role as protective factors against highly stressful life events (Bonanno et al., 2011), it is important for researchers and clinicians to facilitate the development of intervention programs aimed at improving EF in children with emotion regulation difficulties. Furthermore, the assertion that there are different meanings of parental socialization factors related to children’s EF in Western and Eastern cultures is useful to further understanding of emotional regulation and the influence of culture. Investigating predictors and correlates of EF within the larger cultural context would enhance our knowledge of various emotion regulation processes for children within culturally diverse settings.

In addition, it was my supposition that participation in this study would also benefit the parents. This assumption was based on the opportunity to review their emotion-coaching attitudes toward their children, which could shed light into the effects of parenting style and its influence on children’s emotional abilities. I hoped that children would benefit from this
study in that investigating precursors (e.g., parenting styles) to greater EF may be important in learning how to improve children’s emotional functioning. I believe that findings of this study also contribute to the work of educators or clinicians that would benefit from the integration of culturally informed approaches into curriculum, assessment and treatment plans. This will result in more effective ways of understanding, influencing and promoting children’s socio-emotional competence.

It is important to mention that through this work, I have developed personally and professionally and have gained insight into diverse populations exceeding my past knowledge and experience. I have been able to examine and compare an element of the culture of my birth with that of U.S. culture, the place where I currently live. I have grown beyond my beginning experience in child welfare, as psychotherapist in South Korea, and as research assistant studying human development in the United States. My past experiences with children and their families have played a crucial role in understanding myself, my family, community, and society more deeply. It is clear that my past experience has inevitably led to my cross-cultural lens and translates into my approach using American and Korean samples.

My work with a multicultural family in South Korea was a catalyst for such cross-cultural understanding and served as impetus for this work. My contact with the family began when I met a ten-year-old boy whose father was American and mother was Korean. The child was born in the U.S. and lived there for six years. The mother reported that after moving to Korea, the child began to exhibit academic and behavior issues. She confessed that she has a hard time educating her child within the norm of Korean society. Namely, within a culture where children’s academic achievement in school is directly connected to the parents’ prestige, whereas academic failure brings shame. She seemed to be worried about how to provide emotional support to her child
who was confused by cultural differences in educational environment between the U.S. and Korean culture. The child was experiencing a lot of pressure to work hard and meet high academic expectations in school. Such pressure led to lower self-esteem, peer relationship problems, and even school refusal. After months of therapy sessions, he was symbolically able to express his increased self-confidence by accepting differences and seeking to harmonize with friends of other groups through his play themes. He also had done enough to be able to manage his academic concerns and school adjustment issue within his relationship with his family, school, and community. His adventures with cultural differences in Korean society seemed to offer him the opportunity to navigate the complexity of cultural identity between the different two cultures and then truly embrace diverse values. The mother also recognized that her son was striding two different cultures and he would be able to exhibit his strengths in various social settings by developing multiple emotional capacities relevant to bi-cultural competences. It was a great pleasure and privilege to work with the child client and to listen to his mother’s cultural conflicts and concerns. No one can ever fully understand another’s culture, but humility, respect, and awareness of others’ cultural values and history will contribute to positive social change for children’s well-being from multicultural background.

The experience with this family emphasized the need to further my knowledge regarding culture and children’s emotional development. I recognized the importance of culturally-competent approaches that promote the growth and wellbeing of children and their families. I proceeded to acquire further knowledge and training leading to graduate work and to this doctoral thesis. The findings of this study have affirmed my commitment to continued multicultural study in children’s emotional development and associated practice. I proceed with the promise of continued relevant work that contributes to the emotional gains of diverse
populations within society. This is particularly significant when considering projections for 2020 suggesting that most of the U.S. population under 18 years old are youth of color (Federal Interagency Forum on Child and Family Statistics, 2018); however, populations of color are still less studied (Frey, 2015). Thus, my work on child emotional development in a cross-cultural context can facilitate a better understanding of multicultural educational practices that can be beneficial to children’s academic and emotional development. In addition, given that multicultural families are increasingly settling in both the United States and South Korea, my conclusions related to awareness about the role of different socioeconomic class and sociocultural background are important.

There is the need for culturally sensitive interventions, which include a complex examination of multicultural families in both countries. Culturally sensitive interventions require the acknowledgement of the intersection of race, class and gender and its significance in people’s lives. I expect this study will inform and advance possibilities for my future clinical and research work in the U.S or South Korea. I also hope it can do the same for others with an interest in culture within the field of education and child development. Finally, my wish is that this dissertation will play a much-needed role in enhancing awareness of differences. I end by encouraging the continued acquisition of knowledge regarding the influence of cultural values and beliefs and how those beliefs influence emotional responses. Awareness and knowledge in this area can promote unity and understanding rather than set us apart from diverse others whether in South Korea or the United States.
Appendix A: Flyer Text for Participant Recruitment in Boston, United States

**Emotion Regulation Project**

The emotion regulation project is a research study which aims to investigate the effects of parenting style on children’s emotion regulation ability.

☐ Participant recruitment information

We are looking for families that meet the requirement below:

- Child’s age must be between 7 – 11 years old.

☐ What is involved?

- Children in this study will be asked to play some games designed to test their emotion intelligence abilities. Parents will fill out surveys about their parenting styles.
- The total testing time required for the study is approximately one hour for each child and parents.

☐ How are participating families compensated?

- Parents will be compensated $20 for their time.
- We will provide a small gift (toy) for your children.

☐ Where does the study take place?

You can decide! We can do home visits, or you can come visit us at the Advance Cultural and Emotional Intelligence Lab.

The research is non-invasive and confidential.

For more information about participating in this research project:

Email: heimison@gmail.com
Appendix B: Email Text for School Principal and Teachers in South Korea

Dear teachers,

Hi,

My name is Heimi Son. I am studying child’s emotional competence and cultural differences in the Advance Cultural and Emotional Intelligence lab. I’d like to invite you for your students to participate in a research study. The title of research is “Effects of parenting style on children’s emotion regulation for Korean and American families.”

Briefly, the purpose of this study is to investigate the effects of parenting style on children’s emotion regulation, and their associations to children’s mental health between Korean and American children.

I will visit your school to complete the study for one-hour session. During the session, students will be escorted into a private classroom in your school where they conduct a computerized emotion regulation task on a laptop computer after school. Their parents will be asked to fill out several questionnaires regarding their child’s mental health and parenting style. All of their responses will be kept confidential. Because we sincerely appreciate their time and energy, we will give their parents a gift certificate ($20) and students will receive a small gift (toy) based on their performance on the emotion regulation task.

I will provide teachers with instructions how to guide their students about performing tasks and then the instructed teachers will provide their students with general information on this study. Please do not enforce to complete the tasks to students who do not want to participate in this study. Participation in this research is voluntary, so your students and their parents have a right to refuse to take part in this research.

After obtaining teachers and principal’s permission, several classes will be randomly selected from each grade between the 1st and 5th grade classes. If you would like your students to participate, please do not hesitate to express an interest in participation. I hope this work will help you to understand your students better and improve teaching methods in your class. I look forward to talking to your students.

If you need more detailed information or have any questions about the study, please feel free to email me. Thank you very much for your time and consideration.

Sincerely,

Heimi Son
Appendix C: Informed Consent, Parent

INFORMED CONSENT FORM

Title of Project: Effects of parenting style on children’s emotion regulation abilities for American and Korean children.

Investigators: Heimi Son, M.A. and Stacey N. Doan, Ph.D.

We invite you and your child to participate in our research study. We are interested in whether parenting style influences their children’s regulatory flexibility and how the regulatory flexibility differently develops among ethnically diverse groups.

Purpose: The purpose of the current study is to investigate the effects of parenting style on children’s expressive regulation, and their associations to children’s mental health among American and Korean children.

What happen in this research study? Your child will carry out a computerized expressive regulation task with a researcher that requires flexible facial expressions. We will ask parents to fill out several questionnaires about their child’s mental health and parenting style. The whole time will take approximately one hour.

Risks and Discomforts: There are no foreseeable risks for you and your child. If your child displays any sign of discomfort, we will terminate participation.

Benefits: There are no individual benefits from participating, but we hope this work will contribute to understanding how parenting style is related to children’s regulatory flexibility and mental health with a multicultural perspective.

Confidentiality: The information in the study records will be kept completely confidential. You and your child’s name will never be associated with any responses or information your family provides.
Costs and Payments: There is no cost to you and your child for participation. Parents will be compensated $20 for their time and children will receive a small gift (toy) based on their performance on the task.

Voluntary Participation: Participation in this research is voluntary. You or your child may decline to participate without penalty and without loss of benefits. You and/or your child may choose to discontinue participation at any time during the study without negative consequences.

Parent’s Permission: I have read and understand the above information. I hereby acknowledge the above and give my voluntary consent for myself and my child named below to participate in this study.

Parent Participant name

........................................................................................................................................

Child Participant name

........................................................................................................................................

Parent Participant’s signature

........................................................................................................................................

Date

........................................................................................................................................

Contact Information: If you have any questions about the study, please feel free to contact Heimi Son by email (heimison@gmail.com) or by phone (617-803-4252).
Appendix D: Verbal Assent, Child

Hi, my name is [researcher’s name]. I’m a researcher at Culture and Emotion Lab. Right now, I’m trying to learn about how you take care of your feelings and what affects you to do so. I would like to ask you to help me by being in a study, but before I do, I want to explain what will happen if you decide to help me.

We will look at some pictures together and play some games. During this game, you will be video-taped as a part of the game. There will be no right or wrong ways for the games. By being in the study, you will help me understand what affects the way you take care of your feelings.

Your parents, teacher or friends will not know what you played and how you responded on the games. When I tell other people about my study, I will not use your name, and no one will be able to tell who I’m talking about.

Your parents say it is okay for you to be in my study. But if you don’t want to be in the study, you don’t have to be. What you decide won’t make any difference about you and how other people think about you. I won’t be disappointed, and no one else will be disappointed, if you don’t want to be in the study. If you want to be in the study now but change your mind later, that’s okay. You can stop at any time. If there is anything you don't understand you should tell me so I can explain it to you.

You can ask me questions about the study. If you have a question later that you don’t think of now, you can call me or ask your parents to call me or send me an email.

Do you have any questions for me now?

Would you like to participate in the study and play games with me?

NOTES TO RESEARCHER: The child should answer “Yes” or “No.” Only a definite “Yes” may be taken as assent to participate.

Name of Child: _______________________________
Parental Permission on File: □ Yes    □ No
(If “No,” do not proceed with assent or research procedures)

Child’s Voluntary Response to Participation: □ Yes □ No

Signature of Researcher: ___________________________    Date: ________________

(Optional) Signature of Child: ___________________________
Appendix E: Parents’ Beliefs about Children’s Emotions

Instructions: These statements express different beliefs about children’s emotional development and about parents’ roles in helping children with their emotions. Please read each statement and write in the number that shows how much you agree with the statement. Put this response in the column titled “Answer”.

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feeling negative emotions is sort of a dead end street, and children should do whatever they can to avoid going down it.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Showing anger is not a good idea for children.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>When children get angry they create more problems for themselves.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Feeling sad is just not good for children.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>When children are too loving others take advantage of them.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Children who are too loving can get walked all over.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Feeling angry is just not good for children.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>When children get angry, it can only lead to problems.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>When children are too happy, they can get out of control.</td>
<td></td>
</tr>
</tbody>
</table>
When children show pride in what they have done, it is a good thing.

It is important for children to avoid feeling sad whenever possible.

Feeling sad helps children to know what is important to them.

When children express anger, someone in the family ends up having to deal with the consequences.

Anger in children can be emotionally dangerous.

Children who feel emotions strongly are likely to face a lot of trouble in life.

Children can think more clearly when emotions don’t get in the way.

Children's feelings can get hurt if they love too much.

When children start to show strong emotions, one never knows where it will end up.

When children become sad or upset, parents can let them manage their feelings on their own.

It's the parent's job to teach children how to handle negative feelings.

It's the parent's job to help children know when and how to express their positive emotions.

How and when to show positive emotions is something that children have to figure out for themselves.

It's important for parents to help a child who is feeling sad.
24 It is important for parents to teach children when and how to show pride in themselves.

25 It's a parent's job to teach children about happiness.

26 When children are feeling angry, parents can help them work through those feelings.

27 Children can figure out how to express sad feelings on their own.

28 It is a parent's job to teach their children how to handle their emotions.

29 Children generally learn how to deal with their angry feelings, without parents telling them how.

30 It's usually best to let a child work through their negative feelings on their own.

31 Children can learn to manage their emotions without help from parents.

32 It's important for parents to teach children the best ways to express their feelings.

33 It's a parent's job to teach children how to deal with distress and other upsetting feelings.

34 When children are angry, it is best to just let them work it through on their own.

35 Children can figure out how to express their feelings on their own.
Appendix F: Emotion Regulation Questionnaire

We would like to ask you some questions about your emotional life, in particular, how you control (that is, regulate and manage) your emotions. The questions below involve two distinct aspects of your emotional life. One is your emotional experience, or what you feel inside. The other is your emotional expression, or how you show your emotions in the way you talk, gesture, or behave. Although some of the following questions may seem similar to one another, they differ in important ways. For each item, please answer using the following scale:

1

strongly disagree

2

neutral

3

strongly agree

4

5

6

7

---

No. Item

1 When I want to feel more positive emotion (such as joy or amusement), I change what I'm thinking about.

2 I keep my emotions to myself.

3 When I want to feel less negative emotion (such as sadness or anger), I change what I'm thinking about.

4 When I am feeling positive emotions, I am careful not to express them.

5 When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm.

6 I control my emotions by not expressing them.

7 When I want to feel more positive emotion, I change the way I'm thinking about the situation.
8 I control my emotions by changing the way I think about the situation I'm in.

9 When I am feeling negative emotions, I make sure not to express them.

10 When I want to feel less negative emotion, I change the way I'm thinking about the situation.
Appendix G: Emotion Control Values

Please respond to the following questions. For each item, please answer using the following scale:

1------------------2------------------3------------------4------------------5------------------6------------------7

strongly disagree neutral strongly agree

<table>
<thead>
<tr>
<th>Number</th>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>People should not express their emotions openly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>It is wrong for people to always display how they feel.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>It is better for people to let out pent up emotions.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>People should show their emotions when overcome with strong feelings.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>People in general should control their emotions more.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I think it is appropriate to express emotions, no matter whether negative or positive.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix H: Demographics

Please write in answer or check one answer if choices are given.

- **Yourself**

  Age: __________

  Sex: Male/ Female

  Relationship to child: __________

  Education (please check one):
  - Less than high school ____
  - High school diploma ____
  - Bachelor’s degree ____
  - Master’s degree ____
  - Doctoral degree ____
  - Other ____

  Ethnic background:
  - African American ____
  - Asian American ____
  - European American ____
  - Hispanic American ____
  - Native American ____
  - Other ____

  Marital status:
  - Single ____
  - Married ____
  - Divorced ____
  - Separated ____
  - Widowed ____
  - Cohabiting ____

  Religion: ____________________

  Total annual household income:
  - Less than $9,999 __
  - $10,000-$29,999 __
  - $30,000-$59,999 __
  - $60,000-$89,999 __
$90,000 & over

How many children do you have? ________________

- **Participating child**

  Birthday: ________________________

  Sex: __________

  Ethnic background:
  - African American____
  - Asian American____
  - European American____
  - Hispanic American____
  - Native American____
  - Other____

  Birthplace: _______________________
References


collectivism in cultures and individuals. *Social Development, 17*(1), 183-209. doi: 10.1111/j.1467-9507.2007.00419.x


