

# MODERATING ROLE OF RACE IN EMOTION SOCIALIZATION PRACTICES

by

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(Under the Direction of Anne Shaffer)

## ABSTRACT

The current study explored the relations between parental emotion socialization responses and adult emotion regulation in an African American ( $N = 23$ ) and European American ( $N = 81$ ) young adult sample. We predicted in our overall sample that supportive emotion socialization responses would be correlated with fewer emotion regulation difficulties and unsupportive emotion socialization responses would be correlated with greater emotion regulation difficulties, while additionally exploring whether these associations differed by race. Results were consistent with hypotheses such that emotion regulation difficulties were negatively correlated with supportive parental emotion socialization and positively correlated with unsupportive emotion socialization responses. Regression analyses were performed to test race as a moderator of relations between parental emotion socialization practices and emotion regulation difficulties were not significant. Post hoc simple slope analyses revealed significant differences between the effects of parental emotion socialization responses on emotion regulation abilities for African American and European American participants.

INDEX WORDS: emotion socialization, emotion regulation, race

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## CHAPTER 1

### INTRODUCTION

Emotion socialization has become a principal area of focus for understanding children's social and emotional outcomes. Although still developing, a growing body of literature suggests that childhood emotion socialization is associated with the development of later emotion regulation techniques. Given that emotion regulation difficulty has been linked to an increased risk for emotional and behavioral problems (Cicchetti, Akerman & Izard, 1995; Eisenberg et al., 2001), efforts have emerged to gain a better understanding of processes such as emotion socialization that underlie the development of adaptive emotion regulation techniques.

Much of existing emotion socialization literature suggests that supportive responses to children's expression of negative emotions such as encouraging emotional expression, and using emotion-focused and problem-focused reactions are positively correlated with adaptive functioning and overall well-being (Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002). On the contrary, non-supportive responses such as distress reactions, punitive reactions, and minimization reactions have been negatively correlated with adaptive functioning and well-being (Eisenberg, Cumberland, Spinrad, 1998). Research has also acknowledged that factors such as family context including parenting style, family expressiveness, emotion-related parenting practices and culture also play an important role in the development of emotion regulation (Morris, Silk, Steinberg, Myers, Robinson, 2007). However, there is a lack of literature examining the influence of cultural context on emotion socialization. Recent work suggests that cultural context plays a role in emotion socialization processes, such that parents from minority

backgrounds may socialize their children differently in order to contend with different cultural and societal expectations for appropriate behavior (Nelson et al., 2012, Cole & Tan, 2007). For example, a study published by Nelson et al. (2013) found that expressive encouragement was negatively correlated with children's social and academic competence for African American children and positively correlated for the same outcomes in European American children. These findings suggest that socialization practices traditionally believed to be universally promotive of social and emotional development may have different implications for minority groups.

Expanding on previous literature, this study tests the relations between retrospectively reported parental emotion socialization practices and current emotion regulation in a young adult sample. The first goal of the proposed study is to test the relations between parental emotion socialization practices and later adult emotion regulation abilities. Given that the majority of existing literature focuses on the association between emotion socialization and childhood emotional development, it is our intent to add to the paucity of literature examining the effects of early socialization patterns on later adult outcomes. A second goal of the proposed study is to examine whether the association between parental emotion socialization and adult emotion regulation varies as a function of race.

With the exception of research exploring cultural differences in parenting style, (Kelley & Tsang, 1992; Varela et al., 2004; Julian, McKenry, McKelvey, 1994) relatively few studies have explored racial differences in parenting practices, particularly those related to children's emotional development. Thus, the present study addresses this gap in the existing parenting literature. By examining emotion socialization practices in African American and European American families, this work adds to developing literature that suggests that cultural differences

exist within parenting practices and that such differences may be more adaptive for those from a particular cultural background (Cole & Tan, 2007).

### *Emotion Socialization*

Emotion socialization refers to the ways in which interactions with others, particularly parents, shape how individuals come to understand emotions and emotional experiences (Shipman et al., 2007; Morris et al., 2007; Han & Shaffer, 2013). During early childhood, emotion socialization is primarily composed of the parents' experience and regulation of their own emotions, and the parents' reactions to the child's emotions and the parents' discussion of emotions with the child (Eisenberg et al., 1998). Given that families serve as the initial social context for emotional experiences, parents play a significant role in socializing their children to emotional experiences. Children respond to emotion socialization in learning emotional competence skills, such as how to understand their emotions, based on their interactions with their parents. Thus, emotion socialization teaches children how to label emotional experiences and facilitates the regulation of these experiences as well (Shields & Cicchetti, 1997). Early emotion socialization is further related to childhood emotional competence and social competence, including the ability to develop and maintain positive social relationships and display emotions in a socially sanctioned manner (Eisenberg et al., 1998).

A great deal of research has focused on emotion regulation as an outcome of emotion socialization practices. Emotion regulation involves internal processes such as emotional experience, psychological arousal, and external process that modulate the influence of individuals and situational factors in the emotional experience (Morris et al., 2007). More specifically, this process involves the specific emotion an individual experiences as well as the intensity, duration and lability of the experience (Morris et al., 2007). An important component

of emotion regulation is the ability to respond to emotionally arousing situations in a way that is socially appropriate. Thus, emotion regulation is one context by which one can understand the quality of one's psychosocial adjustment, by examining how their emotional experiences fall within the bounds of appropriate societal and cultural rules (Garside & Kilmes-Dougan, 2002).

The development and subsequent accumulation of emotion regulation strategies begins in infancy (Field, 1994) however, early childhood is an essential period for emotional development (Cole, Dennis, Martin & Hall, 2008). Cole et al. (2008) suggest that as children mature during early childhood they begin to play a more active role in regulating their distress (Cole, Teti, Zahn-Waxler, 2003). As children's emotional competence increases, learning to regulate their emotions becomes a central focus of emotional development, and this process continues into adolescence (Eisenberg et al., 1998). Research suggests that children regulate their emotional expression in part due to how they feel individuals will respond to their emotional expressions (Shipman & Zeman, 2001; Fuchs & Thelen, 1988; Zeman & Garber, 1996). Particular emphasis has been placed on how parents respond to children's displays of negative emotions. Eisenberg et al. (1998) found that punitive or negative responses to children's displays of negative emotion are linked to maladaptive emotion regulation strategies and emotion dysregulation. Parental minimization of children's emotions has been consistently linked to avoidant emotion regulation strategies in childhood (Eisenberg, Fabes, Carlo, & Karbon, 1992; Eisenberg, Fabes, & Murphy, 1996). Negative and dismissive parental responses have been associated with increased displays of child anger (Snyder, Stoolmiller, & Wilson, 2003). In contrast, maternal problem-focused reactions have been positively related to adaptive children coping responses (Eisenberg, Fabes, & Murphy, 1996). Similarly, other researchers have demonstrated favorable outcomes in response to supportive emotion socialization strategies. Magai, Consedine, Gillespie, O'Neal and

Vilker (2004) found that reward socialization responses increased positive affect and decreased negative affect.

### *Early Emotion Socialization and Adult Emotion Regulation*

Within the emotion socialization literature, much of the attention has focused on the influence of parental emotion socialization on childhood emotion regulation. However, by adulthood, individuals have developed more entrenched strategies for responding to emotional experiences. Few studies have examined the relationship between early parental emotion socialization patterns and adult emotion regulation. One exception, Garside & Kilmes-Dougan (2002) found that retrospectively reported emotion socialization responses were positively correlated with psychological distress in young adults. Related, other studies have shown that retrospectively reported childhood experiences are predictive of adult attachment styles (Hazan and Shaver, 1987; Mickelson, Kessler and Shaver, 1997) however, these studies did not investigate this relationship as it relates to emotion socialization or emotion regulation.

### *Racial Differences in Emotion Socialization*

Much of existing literature examining parenting differences within minority populations is limited to specific parenting domains. Less attention has been focused on cultural differences as it pertains to emotion-focused parenting practices, and even fewer researchers have focused their attention on racial differences in parental emotion socialization. While research on parenting minority children is of interest to the field, there is little work on how this is related to children's emotional development. Research on general minority parenting practices suggests that there are both similarities and differences between the parenting goals of European American parents and those of parents from minority backgrounds (Csizmadia, Kaneakua, Miller & Halgunseth 2013). Often, parenting practices that have been studied on primarily European

American families, are presumed to be equally effective for minority families without much evidence to support this.

In recent years, researchers have begun to question the universal nature of adaptive parenting practices (Bowie et al., 2011; Lamborn & Felbab, 2003). A review of literature on race and culture in child development suggests that little is understood on “whether parenting domains that are optimal in one target population are optimal in others” (Quintana et al., 2006). Existing research on parenting styles suggests that minority parents utilize different parenting practices consistent with their cultural beliefs, and beliefs pertaining to the requirements of the environment around them (Cole & Tan, 2007).

Consistent with the views above, a cultural values model has been proposed that states successful parenting practices may be unique to different racial and ethnic groups as a result of unique social ecological factors (Bowie et al., 2011). Thus, minority parents are likely to raise their children in a way that is consistent with their own unique cultural beliefs but also incorporates their beliefs about the larger majority culture. For example, negative emotional displays from African-Americans are more likely to be viewed as aggressive and threatening from the majority culture (Kang & Chasteen, 2009; Stevenson, Herrero-Taylor, Cameron, & Davis, 2002). Thus, to contend with this, there is a greater tendency for African American parents to socialize their children to avoid emotional expression, which may result in being labeled as aggressive (Nelson et al., 2012). This message is likely to be delivered along with other messages about race and racial identity, a process referred to as racial socialization. Consequently, African American children may be receiving emotion socialization messages that are intertwined or influenced by messages about prejudice and discrimination, that are unique from those received by European American children.

### *Current Study*

The goals of this study were to examine the relations between retrospectively reported parental emotion socialization practices and current emotion regulation abilities in a racially diverse young adult sample; additional analyses will test for potential differences in these relations dependent on race. Consistent with existing literature (Fabes et al., 1999; Silk et al., 2011) we predicted that reports of unsupportive emotion socialization practices would be negatively correlated with emotion regulation abilities in young adulthood. Conversely, we predicted that supportive emotion socialization practices would be positively correlated with young adult emotion regulation abilities in our overall sample. Next, we examined differences in emotion socialization practices based on race. We predicted that expressive encouragement would be lower for African American families (as compared to European American families). Further, we hypothesized that race would moderate the relations between parental emotion socialization practices and adult emotion regulation. Specifically, following work by Nelson et al. (2012), we predicted that parental expressive encouragement would be positively correlated with emotion regulation for European American individuals and negatively correlated with emotion regulation abilities among African Americans, extending this previous research to a young adult sample. Given the lack of additional extant research on this topic, moderation analyses by race for other emotion socialization practices, will be exploratory. In order to maximize our understanding of how emotion socialization influences function in families, we included retrospective reports of both paternal and maternal behaviors. Existing research has suggested that paternal and maternal emotion socialization behaviors are not always in concordance with one another and can have varying influence on child functioning. For instance, some studies have found that fathers utilize more punitive responses and less supportive responses to children's emotions in comparison to

mothers (Eisenberg, Fabes, & Murphy, 1996; McElwain, Halberstadt, & Volling, 2007).

Additional, research has also suggested that the strength of the relationship between emotion socialization behaviors and child functioning may vary for mothers and fathers (Carson & Parke, 1996; Denham & Kochanoff, 2002).



## CHAPTER 2

### METHODS

#### *Participants*

One hundred four participants (African American, N= 23; European American, N= 81) were recruited using the University of Georgia Psychology Department Research Participant Pool and via flyers posted around the university. Study announcements for voluntary participation will also made to relevant university listservs. The study sought to recruit 200 participants in total with an equal number of African American and European American college students between the ages of 18-25. Minimum inclusion criteria included age 18 or older in order to give consent, currently enrolled students, and self-identification as one of the relevant racial groups. Exclusion criteria included anyone over the age of 25, mixed-race or biracial individuals, as well as individuals with intellectual difficulties or other disabilities that would result in difficulty comprehending or completing study materials. An additional two participants were excluded from analysis due to significant inconsistencies in response data.

#### *Procedure*

The proposed study was approved by the University of Georgia's Institutional Review Board. Data collection was conducted via a secure online portal. Participants were briefed on the objective of the study and were required to provide informed consent via an informational letter at the beginning of the online data collection session. After consent was obtained, study participants completed a series of questionnaires detailed below during a one-time on-line session. After completing the study, debriefing materials were presented; participants were

thanked for their participation, and given the opportunity to record any questions or concerns, or contact the researchers if desired. Subsequently, study participants enrolled in Introductory Psychology were granted course credit for their participation and those not enrolled in Introductory Psychology were compensated ten dollars for their participation.

### *Measures*

*Demographics.* Students completed a demographic questionnaire that included questions related to race, ethnicity, gender, family income, parental education, and parents' marital status. Participants' self-reports of race served as a measure of the racial group moderator variable.

*Emotion Socialization.* Individuals completed a revised version of the Coping with Children's Negative Emotions Scale (CCNES; Fabes et al., 1990), reworded to capture retrospective reports of maternal emotion socialization practices. The CCNES has been previously used as a parent-report measure of parental emotion socialization (Fabes et al., 2002; Suveg, Shaffer, Morelen, & Thomassin, 2011) and adequate internal consistency, test-retest reliability, and construct validity for this scale has been reported (Fabes et al., 2002).

A revised version of the CCNES was used in the present study to measure our independent variable of retrospectively reported emotion socialization experienced during childhood, similar to a revision of the CCNES utilized by Leerkes, Supple, Su, & Cavanaugh (2013). The revised CCNES asked participants to rate the extent to which they recall specific types of responses to negative emotion displays across 12 hypothetical scenarios, focusing on their parents or primary caregivers. Participants used a 7-point Likert scale to indicate on a scale from 1 (very unlikely) to 7 (very likely) the likelihood that their parent would respond to each of the distressing situations in each of the six possible ways listed for each item. For example, one question asked, "If you lost some prized possession and reacted with tears, your mother/father

would: a.) get upset with you for being so careless and then crying about it; b.) tell you that you are over-reacting; c.) help you think of places you haven't looked yet; d.) distract you by talking about happy things; e.) tell you it's OK to cry when you feel unhappy; or f.) tell you that's what happens when you're not careful." The measure yields six subscales, with adequate reliability for both maternal and paternal reactions: minimizing reactions (mothers  $\alpha = .86$ ; fathers  $\alpha = .85$ ), punitive reactions (mothers  $\alpha = .85$ ; fathers  $\alpha = .84$ ), distress reactions (mothers  $\alpha = .78$ ; fathers  $\alpha = .70$ ), expressive encouragement (mothers  $\alpha = .92$ ; fathers  $\alpha = .92$ ), problem-focused responses (mothers  $\alpha = .88$ ; fathers  $\alpha = .91$ ), and emotion-focused reactions (mothers  $\alpha = .92$  fathers  $\alpha = .93$ ). Previous research has identified minimizing, punitive and distress reactions as unsupportive emotion socialization practices, while expressive encouragement, problem-focused responses and emotion-focused reactions have been considered supportive (Fabes et al., 2002). In the current study we examined individual subscales as well as composite subscales of supportive and unsupportive responses that were created by averaging the individual subscales.

*Emotion Regulation.* The dependent variable of emotion regulation was measured using the Difficulties in Emotion Regulations Scale (DERS; Gratz & Roemer, 2004). The DERS is a self-report measure designed to measure emotion dysregulation. Individuals used a 5-point Likert scale to rate the degree to which they were experiencing or recently experienced difficulty regulating emotions, ranging from almost never (0-10% of the time) to almost always (91-100% of the time). Total scores on the measure range from 36 (almost never experiences difficulties) to 180 (almost always experiences difficulties). The DERS has high internal consistency ( $\alpha = .92$ ), good test-retest reliability and adequate construct and predictive validity (Gratz & Roemer, 2004). The measure has been used successfully by other researchers studying emotion regulation (Han & Shaffer, 2013; Burns, Jackson & Harding, 2010; Neumann, van Lier, Gratz & Koot,

2010) to date. Participants' total composite score across each of the six subscales of the DERS ( $\alpha = .89$ ), served as a current indicator of emotion regulation difficulties.

#### *Data Analytic Plan*

Prior to the study's start, a power analysis was conducted to calculate the needed sample size ( $N = 200$ ) based on an estimated effect size of .30 and  $p$  value of  $\leq .01$ . Preliminary analyses first evaluated descriptive statistics to identify potential confounding variables (e.g. age, gender), which were included as covariates in further analyses. Relations between emotion socialization and emotion regulation were tested via regression analysis with the CCNES subscales serving as our predictor variables and the DERS total score serving as our outcome.

To address our second hypothesis of whether the relationship between emotion socialization and emotion regulation varied by race we tested the direct and moderated relationships between race, emotion socialization, and emotion regulation via multiple regression. Analyses of variance (including potential covariates as indicated) was conducted to examine potential racial group differences on the CCNES subscales of distress reactions, punitive reactions, minimization reaction, problem-focused reactions, emotion-focused reactions, and expressive encouragement. We further tested the relationships between the CCNES subscales and DERS total score using race as a moderator. Regression analyses were performed using the PROCESS macro within the SPSS statistical program.

## CHAPTER 3

### RESULTS

#### *Missing Data Analyses*

Multiple imputation procedures (Graham, 2009; Schafer & Olsen, 1998) were used to address missing data in the sample using SPSS. Little's MCAR test was performed to ensure that missing data was missing at random ( $\chi^2 = 2501.305$ ;  $df = 3855$ ) prior to proceeding with multiple imputation. A total of 5 imputations were made and subsequent analyses were completed on averaged imputation values. An additional two participants were excluded from data analyses due to inconsistent responding patterns and abnormally high amounts of missing data.

#### *Preliminary Analyses*

Descriptive statistics are presented in Table 1. Independent sample  $t$ -tests and analyses of variance (ANOVA) revealed significant differences on study variables in relation to race and sex. Specifically, there were significant differences between African American participants and White participants in relation to reports of fathers' distress reactions ( $F(1, 86) = 5.49, p = 0.021$ ) with African American individuals reporting significantly greater distress responses ( $M = 3.63, SD = .82$ ) from their fathers in comparison to European American participants ( $M = 3.10, SD = .82$ ). Greater distress responses were positively correlated with greater emotion regulation difficulties. Other significant differences emerged in relation to sex. Specifically, men reported significantly greater overall unsupportive emotion socialization responses from their fathers ( $F(1, 86) = 25.15, p < 0.001$ ), including minimizing ( $F(1, 102) = 16.93, p < 0.001$ ), punitive ( $F(1,$

102) = 25.17,  $p < 0.001$ ) and distress reactions ( $F(1, 86) = 15.38, p < 0.001$ ), as well as mothers' minimization ( $F(1, 102) = 7.18, p < 0.009$ ) responses which was positively correlated with greater emotion regulation difficulties.

Bivariate, zero-order correlations were performed for study variables on the entire sample and are presented by racial group in Table 1. Correlations were observed in the expected directions, consistent with study hypotheses. In our overall sample, reports of greater overall maternal and paternal supportive emotion socialization responses were significantly correlated with fewer emotion regulation difficulties. Greater maternal unsupportive responses were not significantly correlated with greater emotion regulation difficulties however these correlations were in the expected direction. Additionally, reports of overall paternal unsupportive emotion socialization responses were significantly correlated with reports of greater emotion regulation difficulties. Age was significantly correlated with reports of paternal emotion socialization responses, and as such, was included as a covariate in subsequent moderation analyses.

Bivariate correlations by race revealed differences between African American and European American participants. For African American participants, supportive maternal emotion socialization responses were significantly negatively correlated with emotion regulation difficulties. Supportive paternal responses to negative emotions were negatively correlated to emotion regulation difficulties however, these correlations were not significant. Similarly, both maternal and paternal unsupportive responses to negative emotions were positively correlated with emotion regulation difficulties, however these correlations were not significant. No individual supportive or unsupportive subscales were significantly correlated with emotion regulation difficulties, however these were all in the expected direction with the exception of paternal expressive encouragement reactions, which were positively correlated with emotion

regulation difficulties, although not significant. For European American participants, overall maternal supportive responses, maternal problem focused responses, maternal emotion focused responses, and paternal problem focused responses were all significantly negatively correlated with emotion regulation difficulties. Conversely, overall paternal unsupportive responses and paternal distress responses were significantly positively correlated with emotion regulation difficulties. Additional significant correlations between maternal and paternal emotion socialization responses for participants are highlighted in Table 1.

### *Moderation Analyses*

To test for moderation, interaction effects were computed using bootstrapping procedures recommended by Preacher and Hayes (2008) and provided via the PROCESS macro in SPSS. Contrary to the study hypothesis that race would moderate the relations between parental emotion socialization responses and adult emotion regulation abilities, no significant interaction effects were found for the supportive or unsupportive CCNES composite scales. Additional exploratory analyses went on to test whether there were interaction effects present for specific subscales of parental emotion socialization responses and their relations to adult emotion regulation. None of these analyses revealed significant interaction effects.

Although the overall interaction effects were not significant, exploratory simple slope analyses were conducted to probe racial differences. Among maternal responses to children's negative emotions, overall supportiveness (see Figure 1) ( $t = -2.38, p = .02, 95\% \text{ CI} = -3.61, -.33$ ) as well as two specific subscales: emotion-focused (see Figure 2) ( $t = -2.60, p = .010, 95\% \text{ CI} = -.10.28, -1.38$ ) and problem-focused (see Figure 3) ( $t = -2.64, p = .01, 95\% \text{ CI} = -.11.26, -1.60$ ) were significantly negatively correlated with emotion regulation difficulties for White participants but not for African American participants. Overall, maternal unsupportive responses

to negative emotions (see Figure 4) were significantly negatively correlated to emotion regulation abilities in African American participants but not for White participants ( $t = 2.11, p = .04, 95\% \text{ CI} = .14, - 4.67$ )

Simple slopes analyses of paternal emotion socialization responses revealed that fathers' overall, unsupportive responses (see Figure 5) were significantly positively correlated with difficulties in emotion regulation for White participants but not African American participants ( $t = 2.11, p = .04, 95\% \text{ CI} = .11, 3.72$ ). Additionally, fathers' distress reactions to negative emotions (see Figure 6) were significantly related to difficulties in emotion regulation for White participants, but not for African American participants ( $t = 2.07, p = .04, 95\% \text{ CI} = .25, 12.19$ ).



## CHAPTER 4

### DISCUSSION

Cultural context is an important consideration when examining parenting behaviors. Parents of different racial backgrounds socialize their children in relation to cultural beliefs about emotions and expectations about emotions from society. Prevailing research on emotion socialization suggests that there are universal responses to parental socialization patterns. However, more recently research has begun to suggest that cultural differences may play a significant role in parental emotion socialization as well as the outcome of these parental behaviors. The present study sought to add to the emotion-focused parenting literature by examining whether childhood emotion socialization responses predicted later adult emotion regulation abilities. The current work further examined race as potential moderator of the relations between parental emotion socialization responses and adult emotion regulation abilities.

Our findings of a significant correlation between supportive maternal emotion socialization responses and fewer emotion regulation difficulties in adulthood suggest that early parenting behaviors are related to later emotion regulation abilities. Further, these findings were not limited to maternal socialization behaviors as we found that unsupportive paternal responses to negative emotions were also significantly related to adult emotion regulation difficulties. Age was negatively correlated with reports of paternal supportive emotion socialization responses, such that younger individuals reported more supportive paternal emotion socialization responses. Conversely, age was positively correlated with unsupportive paternal emotion socialization responses, such that older individuals in the study reported greater unsupportive paternal emotion

socialization responses. One reason for this may be that fathers perceive the need to provide more support to younger individuals in the sample as they are newly transitioning into college.

Despite previous research by others suggesting that cultural context may influence the relationship between parental emotion socialization responses and child outcomes, our hypothesis that race moderated the relationship between parental emotion socialization responses was not supported. A likely reason for this is that we did not have required sample size to detect these effects. However, our bivariate correlations and simple slopes findings yielded interesting results. Bivariate correlations by race revealed that for African American participants paternal expressive encouragement responses were positively correlated with emotion regulation difficulties. Additionally, for African American participants paternal minimizing responses were negatively correlated with emotion regulation difficulties, suggesting that individuals whose fathers minimized their negative emotions have fewer emotion regulation difficulties. Although, neither of these correlations achieved statistical significance they are consistent with work suggesting that expressive encouragement and minimization subscales may be operating differently for ethnic minorities (Nelson et al., 2012; Smith & Walden, 2001). Our finding that overall supportive maternal responses to negative emotions, and emotion-focused and problem-focused responses in particular, were significantly positively correlated with emotion regulation abilities for White participants and not African Americans was consistent with previous research (Eisenberg et al., 1998 and Morris et al., 2007). This suggests that supportive responses to children's negative emotions is positively correlated with emotion regulation abilities during childhood and adolescence. Simple slope analyses also suggested that overall unsupportive responses were significantly positively correlated to emotion regulation difficulties in African American participants but not in White participants. This finding was inconsistent with previous

research that utilized primarily European American samples (e.g., Eisenberg et al., 1998; Morris et al., 2007) suggesting that unsupportive responses are positively correlated with emotion regulation difficulties. Taken together, the findings of this study add to our understanding of the role of early parental emotion socialization responses and later adult emotion regulation abilities as well as the influence of racial context to parenting behaviors and outcomes of these behaviors. While our study did not observe any moderation effects, our post hoc analyses suggest the need for continued research on racial and cultural differences in emotion-focused parenting.

While this study contributes to the growing emotion socialization literature, there are some limitations that are worth noting. First, as noted previously, the study has not met the prerequisite amount of study participants to achieve full power in detecting an effect. As such, the study's findings of no interaction effect between race and reports of parental emotion socialization responses should be interpreted with caution. Furthermore, the study's two comparison groups were mismatched in regards to sample size (i.e., 23 African American participants, 81 White participants). Other limitations that are worth noting, there was only one reporter of study variables, which were measured via questionnaire measures. Thus, common method variance may have resulted in inflated intercorrelations. Additionally, the cross-sectional design limits the ability to draw causal conclusions from the above findings. This is particularly important given the bidirectional nature of emotion socialization, and research suggesting that child characteristics such as temperament (Cole, Dennis, Smith- Simon, & Cohen, 2009; Fabes et al., 1994) and gender (Garside & Klimes- Dougan, 2002; Brody, 1993) contribute to parent's emotion socialization behaviors as well.

Future directions for research on emotion socialization should include continued investigation of how early emotion socialization responses affect later adult outcomes, and this

study provides additional support for the retrospective assessment of childhood emotion socialization experiences. Additionally, future research should also continue to examine the ways in which culture may influence parental emotion socialization responses in hopes of creating more culturally sensitive measures. The results of this work have important implications for clinical interventions. Currently, there are relatively few interventions that promote universal practices for emotion socialization (Havighurst, Wilson, Harley, Prior, Kehoe, 2010; Shipman & Fitzgerald, 2005). These interventions, at present, do not consider how culture may influence which practices may be more or less helpful given individuals cultural context. As such, future research should continue to focus on accessing cultural influences of emotion socialization and the ways in which these influences contribute to adaptive and maladaptive outcomes for individuals of varying cultural backgrounds.

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Table 1.

*Descriptive statistics and bivariate correlations*

	AA <i>M</i>	EA <i>M</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	( <i>SD</i> )	( <i>SD</i> )																	
1. DERS Total	77.05 (21.48)	81.76 (23.24)	--	-.24*	-.14	-.30	-.23	.33	.25	.39	.32	-.01	.11	-.05	-.05	.23	-.02	.19	.32
2. Mat. Supportive	12.01 (3.68)	12.90 (3.37)	-.27*	--	.88*	.91*	.96*	-.34	-.24	-.44	-.29	.82*	.76*	.69*	.75*	.10	.22	-.20	.13
3. Mat. EE	3.16 (1.33)	3.33 (1.32)	-.15	.86*	--	.64*	.77*	-.18	-.11	-.33	-.10	.60*	.77*	.40	.47*	.23	.20	.12	.25
4. Mat. PF	4.60 (1.23)	4.88 (1.18)	-.33*	.92*	.65*	--	.88*	-.33	-.23	-.42	-.28	.84*	.64*	.78*	.81*	.05	.24	-.34	.08
5. Mat. EF	4.25 (1.44)	4.69 (1.23)	-.31*	.93*	.66*	.87*	--	-.43	-.32	-.48*	-.40	.82*	.68*	.73*	.79*	-.01	.18	-.32	.05
6. Mat. Unsupportive	9.30 (3.08)	8.71 (2.55)	.13	-.58*	-.43*	-.56*	-.61*	--	.95*	.86*	.94*	-.23	-.00	-.30	-.30	.40	.35	.43	.22
7. Mat. Min.	3.12 (1.23)	2.91 (1.0)	.02	-.41*	-.31*	-.40*	-.42*	.91*	--	.74*	.81*	-.14	.12	-.21	-.23	.51*	.50*	.51*	.31
8. Mat. Dis.	3.25 (.81)	3.09 (.89)	.19	-.62*	-.45*	-.60*	-.64*	.87*	.69*	--	.73*	-.26	-.22	-.19	-.28	.12	.11	.20	-.02
9. Mat. Pun.	2.88 (1.08)	2.76 (.88)	.06	-.55*	-.37*	-.53*	-.59*	.91*	.75*	.70*	--	-.26	.03	-.40	-.30	.37	.277	.40	.25
10. Pat. Supportive	11.54 (3.64)	12.02 (3.44)	-.21	.70*	.70*	.60*	.60*	-.26*	-.17	-.27*	-.29*	--	.80*	.90*	.96*	.06	.24	-.23	.05

11. Pat. EE	2.92 (1.23)	2.78 (1.22)																	
			-.08	.61*	.74*	.43*	.47*	-.22	-.13	-.22	-.26*	.83*	--	.51*	.68*	.36	.39	.19	.35
12. Pat. PF	4.53 (1.38)	4.75 (1.28)																	
			-.24*	.63*	.52*	.61*	.58*	-.22	-.14	-.25*	-.24*	.92*	.58*	--	.88*	-.04	.17	-.36	-.07
13. Pat. EF	4.09 (1.46)	4.54 (1.34)																	
			-.24	.65*	.61*	.57*	.58*	-.23*	-.14	-.24*	-.26*	.95*	.68*	.89*	--	-.11	.12	-.39	-.10
14. Pat. Unsupportive	10.86 (2.99)	9.44 (2.67)																	
			.27*	-.31*	-.24*	-.30*	-.31*	.58*	.61*	.50*	.42*	-.46*	-.26*	-.45*	-.51*	--	.88*	.84*	.92*
15. Pat. Min.	3.66 (1.11)	3.36 (1.05)																	
			.21	-.18	-.11	-.17	-.21	.57*	.68*	.41*	.39*	-.28	-.17	-.26*	-.34*	.90*	--	.60*	.67*
16. Pat. Dis.	3.63 (.82)	3.10 (.82)																	
			.26*	-.32*	-.24*	-.31*	-.31*	.46*	.41*	.55*	.27*	-.44*	-.22	-.47*	-.49*	.85*	.60*	--	.72*
17. Pat. Pun.	3.35 (1.09)	2.96 (1.01)																	
			.21	-.35*	-.30*	-.33*	-.32*	.49*	.46*	.40*	.42*	-.52*	-.34*	-.50*	-.58*	.94*	.76*	.75*	--

Note. AA= African American (correlations listed above diagonal), EA= European American (correlations listed below diagonal), Mat = Maternal, Pat = Paternal, EE= Expressive

Encouragement, PF= Problem Focused, EF= Emotion Focused, Min= Minimizing, Dis= Distress, Pun= Punitive

\* $p < .05$

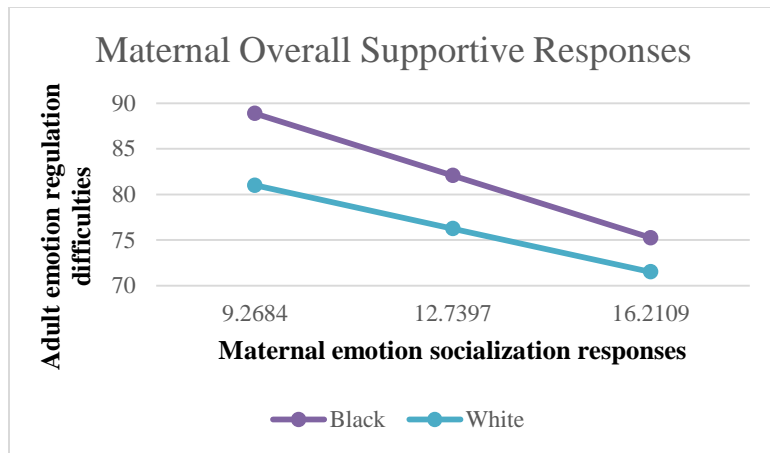


Figure 1. *Relations between overall maternal supportive responses and adult emotion regulation*

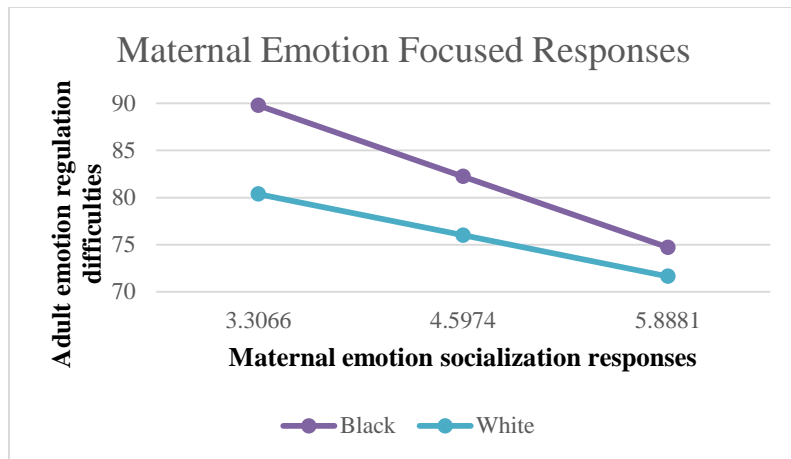


Figure 2. *Relations between maternal emotion-focused responses and adult emotion regulation*

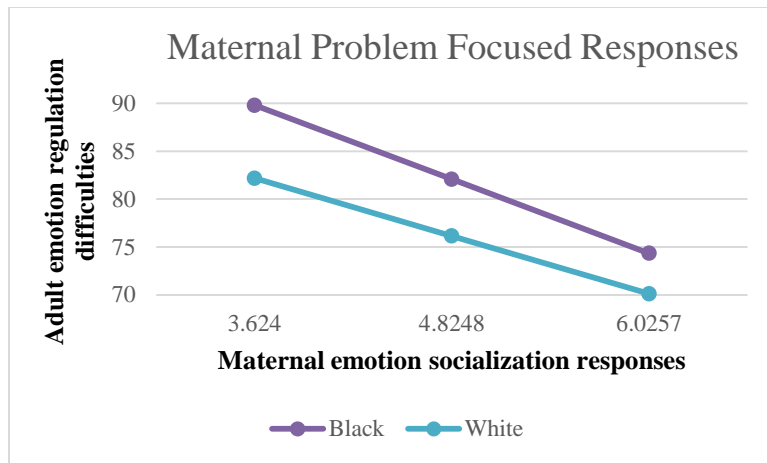


Figure 3. *Relations between maternal problem-focused responses and adult emotion*



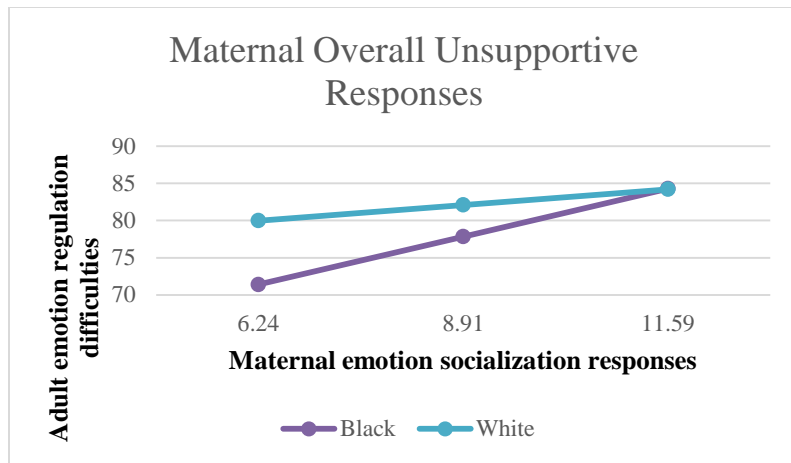


Figure 4. *Relations between maternal unsupportive responses and adult emotion regulation*

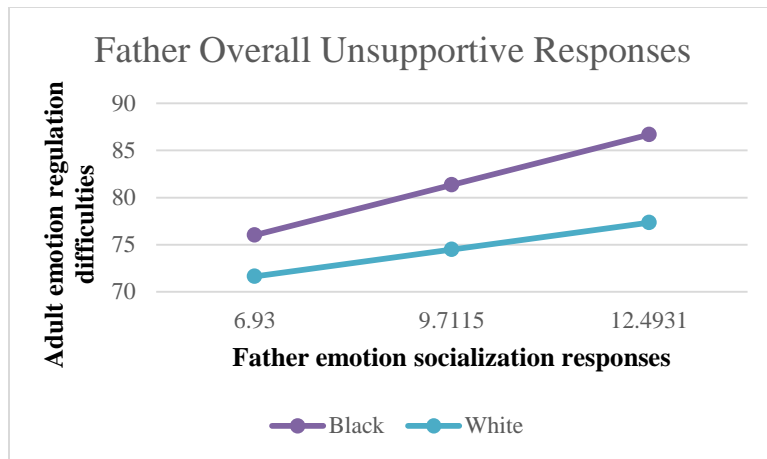


Figure 5. *Relations between overall paternal unsupportive responses and adult emotion regulation*

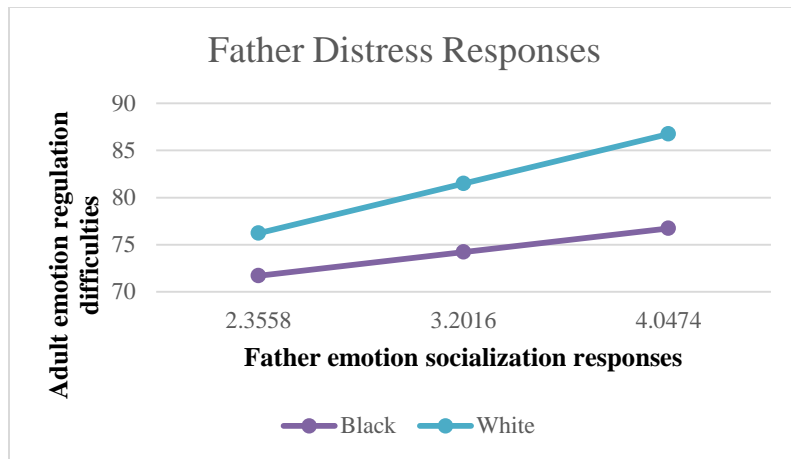


Figure 6. *Relations between paternal distress responses and adult emotion regulation*