ORIGINAL RESEARCH ARTICLE

Ethnic-racial discrimination, family ethnic socialization and Latinx children's emotion competence

Stacey N. Doan[1] [ORCID] · **Ana K. Marcelo[2]** · **Tuppett M. Yates[3]**

Abstract

Emotion competence is vital for success in a wide range of domains. Although a large body of research has demonstrated that universal socialization processes, such as parenting, influence children's emotion competence, few studies have identified risk and protective factors that may also contribute to the development of emotion competence, particularly among children of Latin descent. This study evaluated hypothesized negative relations between Latinx children's perceived experiences of ethnic-racial discrimination (ERD) and later emotion competence as indexed by children's emotion knowledge and coping skills. Further, we explored both direct and interactive effects of family ethnic-racial socialization (FES) on Latinx children's emotion competence in the wake of ERD. Latinx children ($N = 100$, 44% female) reported on their perceived experiences of ERD at age 7 and parents reported on FES at age 8. Emotion competence was assessed at age 8 using a laboratory assessment of the child's emotion recognition and labeling skills to index emotion knowledge. Parents reported on children's positive and maladaptive coping. Latinx children's perceived experiences of ERD were related to lower levels of emotion knowledge and higher levels of maladaptive coping 1 year later. FES was also associated with higher levels of positive coping. Importantly, FES moderated the effect of ERD on children's maladaptive coping, but not on children's emotion knowledge or positive coping. The relation between ERD and maladaptive coping was significant at high FES levels, but not at low FES levels. These findings document the incidence and negative impact of young, Latinx children's experiences of ERD on their emotion competence and highlight the influence of FES on Latinx children's emotional development in contexts of ERD.

Keywords Coping · Ethnic-racial discrimination · Emotion knowledge · Family ethnic socialization

✉ Stacey N. Doan
stacey.doan@cmc.edu

Extended author information available on the last page of the article

Introduction

Emotion competence, the ability to recognize, understand and effectively regulate emotions, is a universal and core adaptive capacity that is associated with positive development in a variety of domains (Blair 2002; Eisenberg 2000; Trentacosta and Fine 2010). A large body of research has demonstrated that universal socialization processes, such as supportive parenting, are powerful influences on emotion competence (for a review, see Denham et al. 2007). However, few studies have sought to examine specific risk and protective factors that may be more germane to the development of ethnic minority children, particularly with regard to the development of emotional competence. Ethnic minority children grow up in ecological contexts that expose them to unique risks, such as ethnic-racial discrimination (ERD), and protective factors, such as ethnic-racial socialization, that may influence the development of emotion competence. These experiences may shape emotion competencies in a wide range of ways. For example, ERD may act as a stressor that disrupts or overwhelms children's developing understanding of emotion, especially for young children who may not yet fully understand the complexities of ERD. At the same time, ethnic-racial socialization may offer a unique context in which parents discuss others' (e.g., the dominant group's) perceptions and emotions, as well as methods for dealing with unfair treatment, which may positively influence children's emotion competencies (Scott 2003).

Empirical efforts to understand the impact of children's early experiences of their ethnicity-race in and beyond the family, including experiences of ERD and family-ethnic socialization (FES), are vital for an inclusive developmental science that captures processes influencing adjustment in age-relevant adaptive domains for ethnic minority children (Coll et al. 1996). To date, however, research on constituent elements of children's emotion competence, such as emotion knowledge and coping, have largely ignored the potential influence of culturally-salient risk and protective factors. The current study sought to address this gap in the literature by evaluating the hypothesized negative relation between Latinx children's perceived experiences of ERD and their later emotion competence with regard to both emotion knowledge and emotion coping. Further, we evaluated both the main and interactive effects of FES on hypothesized relations between ERD and emotion competence outcomes.

Emotion knowledge and emotion coping

Emotion competence encompasses the ability to recognize and label emotions, as well as the capacity to engage effective coping strategies that promote children's adaptive success in a wide range of domains, including self-control, academic achievement, and social competence (Denham et al. 2003; Fabes et al. 2003; Trentacosta and Izard 2007). Children's emotion knowledge increases in complexity over the course of development. Children perceive and respond to

emotion signals from the earliest days of infancy (Mumme et al. 1996) and start to use emotion terms at about two years of age (Bartsch and Wellman 1995). By the preschool years, most children can recognize emotion labels and facial expressions (Camras and Allison 1985), though there remains robust interindividual variability in the degree to which these capacities have developed (Camras and Allison 1985; Cutting and Dunn 1999; Dunn et al. 1991). Children's early emotion knowledge is influenced by demographic factors, such as age and gender (Pons et al. 2003), as well as socialization factors, such as parent–child conversations (Denham et al. 1994; Doan and Wang 2010; Tenenbaum et al. 2008). Moreover, a strong body of evidence suggests that culture influences the development of emotion knowledge (Cole and Tan 2007; Rubin 1998; Wang 2008) by shaping both trajectories of change (Doan et al. 2019) and socialization factors (Doan and Wang 2010; Hofmann and Doan 2018).

In addition to emotion knowledge, the quality of children's emotion coping, defined as conscious volitional efforts to regulate, emotion, behavior, and physiology in response to stressful demands or circumstances (Compas et al. 2001), is a component of broader emotion competence that is associated with psychological well-being (Smith et al. 2006). For example, positive coping strategies, such as distraction and seeking social support, can reduce negative emotions and stress (Sandler et al. 1994), whereas maladaptive coping strategies, such as aggression and venting, can lead to poorer adjustment in the context of a stressor (Eisenberg et al. 1994; Shelton and Harold 2007).

Given the prominent role of emotion competence in development, identifying factors that promote or hinder its emergence is important for understanding successful adaptation. In general, supportive and warm parenting allows children to use their parents as a psychological resource, which facilitates the development of emotion knowledge (Dunn et al. 1991) and adaptive emotion coping skills (McElwain et al. 2015). In addition to emotion socialization processes within the family, children's experiences outside the family may influence emotion competence. Given the sociocultural embeddedness of emotion processes in development (Hofmann and Doan 2018), children's experiences of their ethnicity–race in the context of ERD and FES may hinder or foster the development of emotional competence. Although prior studies have examined differences in parental emotion socialization as a function of culture and ethnicity–race (Doan and Wang 2010; Brown et al. 2015; Friedlmeier et al. 2011), the current study represents a novel evaluation of relations among ethnic minority children's experiences of ERD and later emotion competence in the context of varying degrees of FES.

ERD and the development of emotion competence

Just as supportive socialization contexts may promote emotion competence, social contexts that undermine the child's sense of confidence and security may threaten the development of emotional competence. ERD entails the negative treatment of others based on their ethnicity, race, accent, and country of origin (Pachter et al. 2010). Harrell (2000) offered a multidimensional model of racism-related stress

wherein both experiences of ERD and vicarious exposure via witnessing loved ones encounter discrimination were posited as negative influences on development that could be buffered by internal and external processes, including cultural factors such as FES. Consistent with Harrell's theoretical model, studies have documented the detrimental effects of ERD on adolescent and adult adjustment, including poor health outcomes (Astell-Burt et al. 2012; see Pachter and García Coll 2009 for review), poor psychological well-being (Seaton et al. 2011; Soto et al. 2011), and poor behavioral well-being (Copeland-Linder et al. 2011; Stock et al. 2013). However, research evaluating the effects of ERD on children's adaptive functioning has lagged behind research with adolescent and adult samples (Causadias 2013; Simons et al. 2002).

Brown and Bigler's (2005) developmental model of discrimination experiences holds that children as young as 6 years of age can understand their ethnicity-race, and, by extension, perceive instances of ERD. In support of this model, research has shown that even young children can identify discrimination and understand the core components of racism (Hirschfeld 1995, 2008). However, relatively few studies have examined the developmental impact of young children's encounters with ERD (see Marcelo and Yates 2018, for a notable exception). Studies with samples of older children and early adolescents replicate those with adolescents and adults, documenting detrimental effects of ERD on behavior problems (Bogart et al. 2013), substance use (Gibbons et al. 2014), and psychosocial well-being (Nyborg and Curry 2003). The ongoing dearth of research on young children is especially problematic given that, as noted by García Coll and Szalacha (2004), it may be especially important to study ERD in early development because children encounter heightened levels of ethnic-racial prejudice and the actions it informs during the transition to formal school (Quintana 1998; Wasserberg 2014).

In addition to limited research examining childhood experiences of ERD, prior studies of ERD effects have focused on behavioral and psychological well-being (e.g., behavior problems, health outcomes, depression, anxiety), leaving a gap in our understanding of how ERD may influence core adaptive processes, such as emotion knowledge and coping. Some studies with adolescents and adults reveal significant negative relations between ERD and emotional competence. Although studies shave not yet examined relations between ERD and emotion knowledge, ERD is correlated with specific coping strategies, such as higher levels of support seeking (Brittian et al. 2013), emotion-focused coping (Vassillière et al. 2016), and engagement coping strategies (Sanchez et al. 2018), as well as with increased levels of anger expression (Park et al. 2017) and general difficulties in emotion regulation (Graham et al. 2015). The current study sought to extend prior works by evaluating the hypothesis that childhood ERD would be negatively related to children's emotion knowledge and coping.

Given the current political climate in the United States, and the negative sociopolitical rhetoric targeting Latin communities, it is particularly important to examine if and how experiences of ERD affect Latinx children. A recent qualitative study in which Wray-Lake et al. (2018) interviewed Latinx adolescents (ages 14–19) about their views and feelings regarding the political climate under the current administration, revealed that Latinx youth experience negative feelings and events, including

a sense of heightened anxiety, anger, and contempt, as well as ERD. Thus, the first aim of this investigation was to examine perceived experiences of discrimination among 7-year-old Latinx children to evaluate if and how these experiences negatively impact later emotion competence.

FES and the development of emotion competence

FES encompasses a range of family processes, including intragroup processes, such as promoting cultural values and systems, and intergroup processes, such as preparation for bias, which have been associated with a variety of child adjustment outcomes (for a review, see Hughes et al. 2006). Perhaps unsurprisingly, FES is positively associated with ethnic-racial identity development for both Latinx (Umaña-Taylor et al. 2013; Supple et al. 2006) and Black children (Marshall 1995). Likewise, prior research supports positive relations between FES and cognitive outcomes among Latinx youth (Banerjee et al. 2011), as well as negative relations with child behavior problems among Black youth (Caughy et al. 2002). Interestingly, despite the generally positive benefits of FES for development among ethnic-racial minority children, some studies have documented negative relations between FES and academic adjustment among Black children (Fisher et al. 2000; Marshall 1995), particularly girls (Brown et al. 2009). From these and other studies, there is some evidence suggesting that FES, particularly activities focused on racial bias preparation, may undermine development by heightening Black children's expectations of discrimination or mistrust (Biafora et al. 1993).

Although relatively few studies have systematically examined relations between FES and children's emotion competence, researchers have theorized that emotion socialization may be embedded in the context of ethnic socialization among Black children and likely children from other ethnic-racial minority groups (Dunbar et al. 2017). Indeed, a significant aspect of emotion socialization is how parents help children navigate negative emotions, such as sadness and anger, via direct strategy instruction and modelling effective coping (Fabes et al. 2002; Jones et al. 2002). Thus, in some cases, FES may support emotion knowledge and adaptive coping in the wake of ERD, particularly if parents use experiences of ERD as a context for discussing emotions and modelling appropriate emotion coping skills (McHale et al. 2006). At the same time, however, given past research demonstrating negative relations between FES and child adjustment outcomes (Marshall 1995), FES may also exacerbate the expected negative relation between ERD and children's emotion competence if it promotes mistrust (Hughes and Chen 1999) and/or increases children's awareness of cultural judgements without preparing them to cope with bias.

In contrast to studies suggesting that preparation for bias may have detrimental effects on child development, less is known about how other facets of FES, such as cultural socialization that promotes positive valuation of one's identity through implicit and explicit transmission of cultural knowledge, may influence children's development generally, and particularly in contexts of ERD. Thus, the second aim of this study was to explore the association of cultural socialization, rather than bias preparation, dimensions of FES with emotion knowledge and coping among Latinx

children, as well as its potential influence as a moderator of the hypothesized negative relations between ERD and children's emotion competence.

Study overview

The current study evaluated prospective relations between Latinx children's perceived experiences of ERD and their emotion competence 1 year later as indicated by measures of emotion knowledge and emotion coping strategies. We focus on middle childhood to redress the paucity of research among this age group, particularly given that middle childhood is when children become firmly entrenched in social systems that extend beyond the family (e.g., schools, neighborhood, peers) that expose them to increased experiences of ERD (García Coll et al. 2000). Moreover, as children's scope of social interaction expands, FES may take on increased salience as parents may initiate socialization practices to prepare their children for expected encounters with ERD by bolstering their sense of belonging in their ethnic-racial group(s) and their knowledge of traditions associated with such membership(s). In the current study, we look specifically at the transmission of cultural knowledge aspect of FES rather than preparation for bias. Finally, middle childhood is an important period for understanding children's emergent emotional competence because the primacy of parents' roles as facilitators of children's emotion knowledge and coping declines amidst children's increased independence from parents.

Given prior evidence that experiences of ERD are associated with a range of negative outcomes, including social-emotional difficulties (Soto et al. 2011), we hypothesized that experiences of ERD would predict lower levels of emotion knowledge, higher levels of maladaptive emotion coping, and lower levels of positive emotion coping. Next, we explored both the main effect of FES on these emotion competence indicators and its putative moderating influence in light of prior mixed evidence regarding the influence of FES on child adjustment, particularly in contexts of ERD. On the one hand, FES could mitigate the deleterious effects of ERD on emotion competence if parents capitalize on such experiences as an opportunity to discuss emotionally challenging experiences (i.e., emotion knowledge) and instruct or model strategies to navigate them (i.e., emotion coping). On the other hand, given that FES is known to promote ethnic-racial identity among Latinx youth (Umaña-Taylor et al. 2013; Supple et al. 2006), and following the tenets of social identity theory (Mummendey et al. 1999), it may be that children are more vulnerable to the negative impacts of ERD when their ethnic-racial identity is more central to their sense of self.

In sum, this investigation drew on a longitudinal study with a sizable sample of young Latinx children to fill extant gaps in the literature by (1) advancing our understanding of ERD effects in early development, (2) with regard to a core developmental system, namely emotion competence, and (3) as potentially influenced by FES dimensions that tap both explicit and implicit cultural socialization processes. Moreover, we evaluated theoretically specified demographic variables as potential covariates given prior evidence that age (Pons et al. 2003), socioeconomic status (Bradley

and Corwyn 2002), and sex (Chaplin et al. 2005; Umaña-Taylor et al. 2009) are associated with emotion knowledge, emotion coping, and/or FES.

Methods

Participants

The current sample was drawn from an ongoing study of child development among 250 parent–preschooler dyads. Participants in these analyses were 100 Latinx children (44% female; 100% US-born) who completed a laboratory assessment of ERD at age 7 (M_{age}=7.13 years; SD=0.23). At age 8, 95 of these children returned for a follow-up assessment of emotion competence (M_{age}=97.83 months; SD=3.35). Primary caregivers were 96.7% biological mothers, 2.2% foster/adoptive mothers, and 1.1% other female kin. The average family SES score based on the Hollingshead (1975) Four-Factor Index of Social Status was 30.61 (SD=10.82), which corresponds to semi-skilled employment (e.g., sales clerk).

Procedures

Families were recruited to participate in a longitudinal study of "children's early learning and development" via flyers placed in community-based child care centers. A brief intake screening by phone was followed by a 3-h laboratory assessment. Children with diagnosed developmental disabilities and delays (n=3) and children outside the target age range of 45–54 months at the start of the study (not tracked) were excluded. In addition, due to limited interpreter resources at the time the study began, four children who were not able to understand English were excluded from this study. Although the linguistic representativeness of our child sample was limited, 64.6% of the Latinx children resided in homes where Spanish was the dominant language, and 35.9% of the Latina caregivers were born outside the US (all but one in a Latin American country and 79.6% in Mexico), which is comparable to the national rate of 34.9% among Latina females. Participants were compensated with $25/h of assessment and children received a small gift each visit. Informed consent and assent were obtained from the child's legal guardian and the child, respectively. All procedures were approved by the University's Human Research Review Board.

Perceived experiences of discrimination

At age 7, children completed the Perceptions of Racism of Children and Youth Questionnaire (PRaCY; Pachter et al. 2010), which is a validated self-report measure designed to assess perceived experiences of racism and discrimination in 7–18 year-olds. Prior to administering the measure, the examiner provided the following definition of discrimination to the child:

> When people discriminate against other people, it means they treat people badly or do not respect them, because of the color of their skin, because they

speak a different language or have an accent, or because they come from a different country or culture. For each of the following situations, think whether you have ever in your life felt discriminated against because of the color of your skin, your language or accent, or because of your culture or country of origin.

Following this definition, participants completed eight of the original ten PRaCY items identified for young children (e.g., Have you ever had your teachers assume that you are not smart or intelligent because of the color of your skin, your language or accent, or your culture or country of origin). Two items were omitted from this study due to their low relevance for children of this age (i.e., Have you ever been watched closely or followed around by security guards or store clerks at a store or mall because of …? Have you ever received poor service at restaurants because of…?). For the current analyses, perceived experiences of discrimination reflected a composite of the child's frequency of endorsement across the 8 items on a 5-point scale (i.e., once, twice, about once a year, about once a month, or weekly; $M = 4.14$, $SD = 6.42$, score range 0–33; Kuder-Richardson 20 alpha $= 0.74$). More than half the children (59.6%) reported experiencing at least one instance of discrimination. The PRaCY is gaining popularity as a valid measure of perceived discrimination experiences in studies with adolescents (Namazi 2014; Park et al. 2017; Sangalang and Gee 2015) and young children (Pachter et al. 2010; Schwartz 2014).

Emotion knowledge

At age 8, children completed the Kuschè Emotional Inventory (KEI; Kuschè 1984) to measure both emotion recognition and labeling components of emotion knowledge. Emotion recognition was assessed by asking the child to select a target emotion from four cartoon drawings (the target emotion and three distractors) of children expressing emotions through bodily and facial expressions (e.g., "Which boy/girl feels happy? Point to happy;" $\alpha = 0.80$). Emotion labeling was assessed by showing the child one cartoon drawing and asking her/him to select the expressed emotion from four verbal options, including the target emotion, one incorrect emotion, and two incorrect emotions of the opposite valence (e.g., "Does this boy/girl feel happy, sad, angry, or scared?" $\alpha = 0.81$). Labeling choices were repeated in reverse order to minimize recency bias. Each component was measured across 30 items (20 negative emotions and 10 positive emotions). For both emotion recognition and labeling components of emotion knowledge, responses were scored on a range of correctness (i.e., *incorrect* [0], *correct valence* [1], *correct* [2]). The current analyses were based on the sum of children's emotion recognition and labeling skills ($r_{label-recog} = 0.77$, $p < 0.05$; $\alpha = 0.89$).

Emotion coping

At age 8, parents completed the Children's Coping Scale (CCS; Eisenberg et al. 1993) to indicate the likelihood that their child would engage in different types of coping from *Not at all likely* (1) to *Extremely likely* (7) when faced with a

challenging situation. Following Eisenberg et al. (1993), as well as our own factor analysis, maladaptive coping was indicated by a composite of two aggression items (e.g., "Resolves problems through physical or verbal aggression…") and two venting items (e.g., "Cries to elicit assistance from others to help solve the problem…;" $\alpha = 0.63$), and positive coping was indicated by a composite of two instrumental coping items (e.g., "Takes some constructive action to improve a problem situation…"), two cognitive items (e.g., "Tries to think about the situation in a positive way…"), two distraction items (e.g., "Avoids thinking about a problem or attempts to ignore it…"), and two support seeking items (e.g., "Tells problems to friends or family in the hope of getting support…;" $\alpha = 0.71$). The CCS has been used in a number of studies employing diverse samples of school-aged children (e.g., Song et al. 2018; Colassante et al. 2015; Waters and Thompson 2014).

Family ethnic socialization (FES)

At age 8, caregivers reported on their FES practices using the FES measure (Umaña-Taylor 2001; Umaña-Taylor and Fine 2004). Caregivers were orally presented with 12 items that assessed the two primary FES components: covert activities (e.g., "My family participates in activities that are specific to my ethnic group;" $\alpha = 0.90$) and overt activities (e.g., "I teach my child about our ethnic/cultural background;" $\alpha = 0.91$). Caregivers rated each item using a five-point scale from *not at all true* (1) to *very much true* (5), with higher scores connoting higher levels of FES. Overt and covert FES activities were highly correlated, $r = 0.76$, $p < 0.001$. Thus, we combined these two variables to yield a global measure of FES for these analyses ($\alpha = 0.91$). The FES scale has been used in a variety of samples, including adolescents and young adults (e.g., Padilla et al. 2016; Sanchez et al. 2017; Santiago and Wadsworth 2011).

Data preparation and preliminary analysis

We first examined the data for univariate nonnormality (Afifi et al. 2007). Reports of ERD and scores on the KEI evidenced moderate skew and were transformed using the log 10 transformation. For ease of interpretation, untransformed means are presented in tables, but all analyses used the transformed variables. Data were missing for ERD ($n = 11$), FES ($n = 6$), emotion knowledge ($n = 8$), and emotion coping ($n = 5$) as a result of children missing the time point (13% of missing data) or measure non-completion due to shortened visits (87% of missing data). Missing data were addressed using multiple imputation with the expectation–maximization (EM) algorithm in SPSS (Schafer and Graham 2002) as supported by Little's MCAR test; $\chi^2 = 31.40$, $p = 0.45$. Multiple imputation using the EM algorithm is superior to prior approaches, such as listwise deletion, mean substitution, and imputation with a limited number of iterations, because it estimates expected values from observed values through multiple iterations (up to 100) until the values stabilize to yield the best and most likely pooled estimate (Musil et al. 2002). Following multivariate and bivariate analyses, three hierarchical regression analyses evaluated the relation of ERD

with emotion knowledge, maladaptive emotion coping, and positive emotion coping, as well as the main and moderating effects of FES in each model. In cases where the interaction was significant, we probed for simple slopes. Only the model main effects (i.e., step 2 of the hierarchical regression) were interpreted when the interaction was not significant.

Results

Descriptive and bivariate findings

Table 1 depicts the means, standard deviations, and range of the study variables at the item- and composite-levels, as well as the bivariate relations among them. A multivariate analysis of variance (MANOVA) followed by Bonferroni-corrected post hoc comparisons revealed a significant effect by child gender on the study variables, Wilks' $\lambda = 0.87$, $p = 0.05$. Caregivers of daughters reported higher levels of FES than caregivers of sons ($p = 0.05$). Gender differences in reports of ERD and emotion knowledge were also below $p = 0.10$. Thus, child gender was included in all analyses. Child age at both time points and family SES were not significantly associated with any study variables, and thus were omitted from further analyses. Experiences of ERD were negatively associated with emotion knowledge $r = -27$, $p = 0.01$, and positively associated with maladaptive coping, $r = 0.24$, $p = 0.02$. FES was significantly associated with positive coping skills, $r = 0.28$, $p = 0.01$.

Table 1 Descriptive statistics and bivariate relations among key variables

Variables	SES	EK	ERD	FES	Positive coping	Maladaptive coping
1. SES	–					
2. EK	0.18	–				
3. ERD	0.03	−0.33**	–			
4. FES	0.05	0.04	0.07			
5. Positive coping	0.16	0.05	0.09	0.28**	–	
6. Maladaptive coping	0.09	0.07	0.28**	−0.12	0.08	–
Item mean (*SD*)	–	1.79 (0.19)	1.46 (1.85)	3.16 (0.98)	4.32 (0.92)	2.54 (1.18)
Item range	–	1–2	0–8	1–5	1.89–6.67	1–6.67
Composite mean(*SD*)	30.61 (10.82)	54.76 (4.73)	4.15 (6.42)	3.16 (0.98)	28.39 (6.24)	10.18 (4.73)
Composite range	13–60	30–60	0–33	1–5	13–46	4–25

SES socioeconomic status, *EK* emotion knowledge, *ERD* ethnic-racial discrimination, *FES* family ethnic socialization

**$p \leq 0.01$

Regression analyses

Three hierarchical regression models evaluated the individual and interactive relations of ERD and FES with emotion knowledge, positive emotion coping, and maladaptive emotion coping (see Table 2). ERD predicted lower levels of emotion knowledge, but neither the main nor the moderating effects of FES attained significance. ERD predicted higher levels of maladaptive coping, but this effect was qualified by a significant interaction between FES and ERD. As shown in Fig. 1, the relation between ERD and maladaptive coping was significant at high levels of FES, but not at low levels of FES. Finally, FES was significantly associated with higher levels of positive coping, but neither the main nor the moderating effects of FES attained significance.

Post-hoc analyses

To evaluate the alternate hypothesis that FES could be a proxy for general parenting support, we re-ran all analyses controlling for parental warmth as indicated by children's reports of parental warmth on the Parental Acceptance-Rejection

Table 2 Regression of emotion competence constructs on experiences of ethnic-racial discrimination (ERD) as moderated by family ethnic socialization (FES)

Predictor	Emotion knowledge			Maladaptive coping			Positive coping		
	β	SE	p	β	SE	p	β	SE	p
Step 1									
Sex	0.06	0.93	0.56	− 0.13	0.16	0.22	0.11	0.13	0.28
F(1,99)	0.34		0.56	1.56		0.22	1.20		0.28
R^2	0.003			0.02			0.01		
Step 2									
Sex	**0.02**	**0.92**	**0.88**	− 0.08	0.16	0.61	**0.06**	**0.13**	**0.57**
ERD	**− 0.31**	**1.08**	**≤ 0.01**	0.24	0.18	0.02	**− 0.04**	**0.15**	**0.72**
FES	**0.05**	**0.48**	**0.59**	− 0.12	0.08	0.24	**0.27**	**0.07**	**0.01**
F(3,99)	**3.42**		**0.02**	2.72		0.05	**2.87**		**0.04**
ΔR^2	**0.09**		**0.01**	0.06		0.04	**0.07**		**0.03**
Step 3									
Sex	0.03	0.93	0.80	**− 0.05**	**0.16**	**0.61**	0.07	0.13	0.50
ERD	−0.31	1.02	≤0.01	**0.24**	**0.18**	**0.02**	−0.03	0.15	0.73
FES	0.05	0.48	0.62	**− 0.13**	**0.08**	**0.19**	0.27	0.07	0.01
ERD×FES	0.07	1.04	0.47	**0.20**	**0.18**	**0.04**	0.08	0.15	0.41
F(4,99)	2.68		0.04	**3.15**		**0.02**	2.31		0.06
ΔR^2	0.01		0.47	**0.04**		**0.04**	0.01		0.41

Bolded steps were interpreted in the results section

ERD ethnic-racial discrimination, *FES* family ethnic socialization
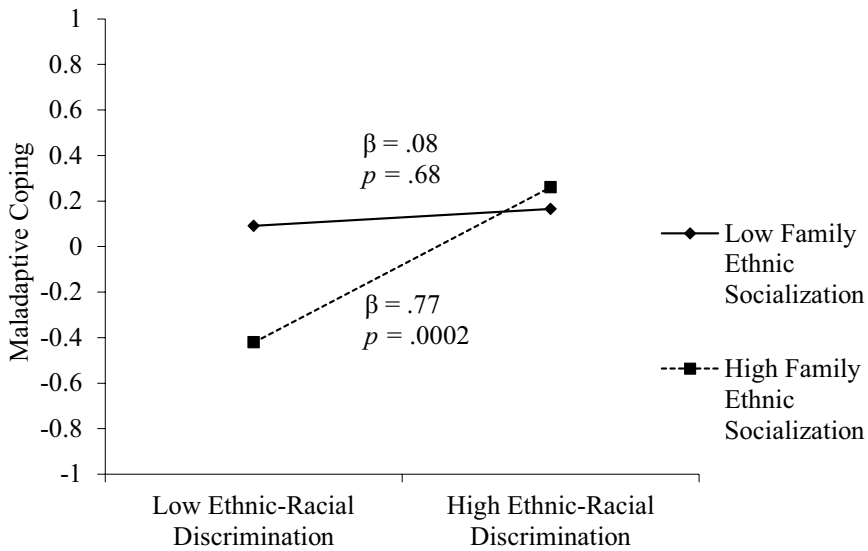
Note. Low and high represent plus/minus one standard deviation around the mean.

Fig. 1 Family ethnic socialization moderates the relation between ethnic-racial discrimination and children's maladaptive coping skills. Low and high represent plus/minus one standard deviation around the mean

Questionnaire at age 7 (PARQ; Rohner et al. 2005). All findings remained the same, which supports the independent influence of FES above and beyond parental warmth.

Discussion

The current study investigated prospective relations among young Latinx children's experiences of ERD, FES and emotion competence. Children's perceptions of ERD were associated with lower levels of emotion knowledge and increased maladaptive coping. In addition, FES was positively related to children's positive emotion coping. Importantly, FES moderated the association between children's ERD and maladaptive coping, but it did not moderate relations of ERD with emotion knowledge or positive coping. Specifically, children's reported experiences of ERD were associated with higher levels of maladaptive coping in families with relatively high FES levels, but not in families with relatively low FES levels.

Consistent with prior research, these results indicate that ERD evidences detrimental associations with children's adaptation and development (Pascoe and Smart Richman 2009; Schmitt et al. 2014). At the same time, however, this study is the first to demonstrate that these deleterious effects extend to children's emotion competence. Additional research is needed to evaluate putative mechanisms by which ERD may exert these effects. One possibility is that the negative relation between

ERD and emotion competence follows from a domain general process wherein experiences of ERD serve as a stressor that undermines children's overall well-being (Sanders-Phillips 2009). Alternatively, because experiences of ERD are associated with increased depression and anxiety, and with decreased psychological resilience (Wong et al. 2003), socioemotional difficulties in the wake of ERD may make it more difficult for children to develop emotion knowledge and implement effective coping strategies. This latter interpretation is consistent with prior studies of adolescents showing that exposure to ERD increases the probability of delinquent behavior, including acts of violence (Simons et al. 2006). For young children, ERD may engender a sense of helplessness and futility, which children may then express through venting and aggression. Moreover, relative to adolescents and adults, young children may be particularly vulnerable to ERD because they have more limited capacities to articulate, and reason through their perceptions of being treated unfairly, as well as less well-developed emotion processing and coping strategies.

As reviewed earlier, varied facets of the children's sociocultural context, particularly FES, may shape how children experience ERD. In this study, FES moderated the obtained relation between ERD and maladaptive coping, but did not influence the relation between ERD and emotion knowledge. Interestingly, although our measure of FES focused on cultural socialization, rather than interracial interactions and bias preparation, the data suggest that FES had a vulnerability-enhancing effect on children in the wake of ERD. Specifically, children in high FES families evidenced a positive relation between ERD and maladaptive coping, whereas there was no significant relation between ERD and maladaptive coping among children in low FES families. This pattern of effects in the context of ERD is especially noteworthy, given the positive main effect of FES on children's positive emotion coping in this study.

Past research on the developmental correlates and sequelae of FES has yielded mixed results. Some studies find that ethnic-racial socialization in African American families is associated with positive outcomes, including better mental health (Constantine and Blackmon 2002; McHale et al. 2006) and greater problem-solving skills (Caughy et al. 2002), yet other data suggest that FES is associated with negative academic outcomes among African American children (Marshall 1995). The child's developmental status, the specific nature of parents' FES messages, and the broader developmental context (e.g., experiences of ERD) may be important factors that may account for these discrepant FES findings. For example, although messages about cultural history and ethnic-racial pride remain relatively stable across development, parents' preparation of their children for ethnic-racial bias, including promoting a sense of mistrust, increases with age (Hughes and Chen 1997). Moreover, bias-focused messages may be increased in contexts of heightened ERD thereby altering the expression of FES in contexts of ERD. Given known correlations between cultural socialization messages and messages regarding preparation for bias (Hughes and Johnson 2001), it may be that elevated rates of FES with regard promotion of identity through transmission of cultural knowledge in this study also signaled increased levels of bias preparation. Thus, it is conceivable that, if focused on mistrust, FES could lead to increased anger and venting in response to experiences of ERD. Another interpretation of these data may be that, whereas FES is likely

protective when it promotes positive ethnic-racial identity in adolescence, FES practices in early development may overly accelerate young children's identity formation (Marshall 1995), which could prompt young children to become aware of their outsider status in advance of their capacity to cope with that awareness. As noted by Cross (1995), this moment of recognition (i.e., the encounter phase) is characterized by an increased sense of upheaval and hostility, which could lead to more maladaptive coping, particularly among young children. This explanation is consistent with Social Identity Theory (Mummendey et al. 1999), which would posit that FES may increase children's awareness of their marginalized identities, and this heightened awareness in combination with experiences of ERD may increase children's perceptions of, and anger about, their status inferiority.

Interestingly, ERD was not significantly related to positive coping, nor was this relation influenced by the context of FES, though FES was positively related to positive coping. One possibility for this may be that mechanistic pathways to positive coping operate through parental modeling or instruction in ways that do not influence ERD effects. Parents who provide relatively high levels of FES may be more likely to discuss the challenges of being an ethnic-racial minority and identify effective ways for children to manage negative emotions that may arise in social situations. Consistent with this perspective, aspects of FES, namely ethnic-racial socialization, have been shown to predict more developed problem-solving skills, and lower levels of behavior problems (Caughy et al. 2002). That said, it is not yet clear which elements of FES may be promotive and which elements may hinder positive adaptation. Thus, future research would benefit from a qualitative analysis of the content of family conversations about ethnicity and culture. FES may be a proxy for a broadly involved and nurturing family context, which would also facilitate children's emergent emotion knowledge and coping capacities, however, post hoc analyses controlling for parental warmth in this sample demonstrated that the obtained FES effects remained significant above and beyond general parenting warmth.

Limitations and future directions

Notwithstanding the incremental knowledge afforded by this prospective examination of the individual and interactive effects of ERD and FES on emotion competence among young Latinx children, several limitations of the current study necessarily qualify our interpretations while pointing to promising directions for future research.

First, although longitudinal, the available data did not support the assessment of all study constructs at all time points, thus limiting our ability to detect change over time and render causal interpretations. It is particularly unfortunate that our measures of ERD and FES were separated by 1 year's duration. This is a necessary byproduct of relying on longitudinal data that were not explicitly designed to address these questions. However, future studies should incorporate designs that are better suited to evaluate directional (and potentially reciprocal) relations among ERD, FES, and children's emotion competence.

Second, despite our use of multiple informants, the current investigation relied on questionnaire, rather than observational or experimental, assessments. For example, although self-report measures of ERD are the norm in discrimination research (Pachter et al. 2010), they may suffer from biases as a result of related psychological processes or vulnerabilities (Schwarz 1999; Schwarz and Oyserman 2001). Experimental manipulations of children's exposure to unfair treatment in future studies would provide better causal evidence of ERD effects. Relatedly, because we used a questionnaire measure of ethnic-racial socialization that focused only on implicit and explicit expressions of cultural socialization, we were unable to ascertain which dimensions of FES may be most impactful for understanding child development in and beyond contexts of ERD. Likewise, future research is needed to elucidate specific mechanisms by which FES may exert promotive or deleterious effects on child adjustment. Observational and qualitative data would provide a more nuanced perspective on how parents discuss ethnicity and race when socializing their children. These kinds of data would be especially valuable for evaluating our interpretations as to why FES was vulnerability-enhancing in the context of ERD, but generally promotive of positive emotion coping because it captures both the content and form of socialization discussions, as well as non-verbal indicators of the quality of parent–child interactions during these exchanges. Of note, even within questionnaire-based methods of assessing FES, there is a great deal of variability in emphasis that may contribute to mixed findings. For example, some research includes measures with explicit items tapping strategies for coping (e.g., The Teenager Experience of Racial Socialization Scale; Stevenson et al. 2002), whereas other studies focus on racism-related socialization and preparation for bias to the exclusion of racial knowledge or pride (e.g., Scott 2003), and still other studies of ethnic-racial socialization include separate surveys that assess both cultural socialization and bias preparation (e.g., Tang et al. 2016; Wang and Huguley 2012). Of note, some FES measures are designed for particular cultural groups. For example, the Latino/a Values Scale (Kim et al. 2009) would have allowed us to capture cultural socialization processes that may be particularly salient in Latinx families, such as *familism*, *respeto*, and *machismo/marianismo*. Finally, although our use of parent-reported coping mitigated concerns about children's ability to understand and report on their emotion coping strategies, parent reports are limited to more observable coping processes in some, but not all, contexts. This is particularly relevant to the current study of children in middle childhood when their social interactions expand well beyond the parental sphere. Future investigations should employ both multi-informant and multi-method research designs.

Third, the PRaCY's modest reliability and the amassing evidence that ERD negatively affects young children's development highlight the need to develop better measures to assess ERD in early development. As noted earlier, experimental manipulations may yield valuable observational data. Although the present study focused on *perceptions* of discrimination and unfair treatment, which can only be reported, young children's abilities to understand the nuances of discrimination and track their frequencies may be limited. In addition, although 59.6% of children reported at least one instance of perceived discrimination, the overall mean level of ERD was rather low. The obtained relations may vary within an observational

paradigm and in contexts where children perceive more frequent ERD experiences. More generally, there is an ongoing need for research aimed at understanding how children define discrimination and how their perceptions coincide with their actual experiences using observational or experimental data.

Conclusion

The current study contributes to the limited understanding of how children's ethnic and cultural background may interface with specific risk and protective factors to shape emotion competence. Perceptions of ERD were associated with children's lower emotion knowledge and increased maladaptive coping. Children may be particularly vulnerable to ERD because they have more limited coping and emotion regulation strategies as compared to adults. They may also be less able to articulate, and reason through their perceptions of being treated unfairly. Interestingly, although FES was related to positive emotion coping skills, it also exacerbated the negative effects of ERD on children's maladaptive emotion coping. Because FES may foster children's identification with their ethnicity-race, experiences of ERD may be felt more acutely. Our research highlights the importance of considering the multiple and nuanced factors that may influence the development of children from ethnic-racial minority groups.

References

Afifi, A. A., Kotlerman, J. B., Ettner, S. L., & Cowan, M. (2007). Methods for improving regression analysis for skewed continuous or counted responses. *Annual Review of Public Health, 28,* 95–111. https://doi.org/10.1146/annurev.publhealth.28.082206.094100.

Astell-Burt, T., Maynard, M. J., Lenguerrand, E., & Harding, S. (2012). Racism, ethnic density and psychological well-being through adolescence: Evidence from the Determinants of Adolescent Social Well-being and Health Longitudinal Study. *Ethnicity & Health, 17,* 71–87. https://doi.org/10.1080/13557858.2011.645153.

Banerjee, M., Harrell, Z. A., & Johnson, D. J. (2011). Racial/ethnic socialization and parental involvement in education as predictors of cognitive ability and achievement in African American children. *Journal of Youth and Adolescence, 40*(5), 595–605.

Bartsch, K., & Wellman, H. M. (1995). *Children talk about the mind*. Oxford: Oxford University Press.

Biafora, F. A., Warheit, G. J., Zimmerman, R. S., Gil, A. G., Apospori, E., Taylor, D., et al. (1993). Racial mistrust and deviant behaviors among ethnically diverse Black adolescent boys. *Journal of Applied Social Psychology, 23*(11), 891–910.

Blair, C. (2002). School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American Psychologist, 57*(2), 111.

Bogart, L. M., Elliott, M. N., Kanouse, D. E., Klein, D. J., Davies, S. L., Cuccaro, P. M., et al. (2013). Association between perceived discrimination and racial/ethnic disparities in problem behaviors among preadolescent youths. *American Journal of Public Health, 103,* 1074–1081. https://doi.org/10.2105/AJPH.2012.301073.

Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology, 53*(1), 371–399.

Brittian, A. S., Toomey, R. B., Gonzales, N. A., & Dumka, L. E. (2013). Perceived discrimination, coping strategies, and Mexican origin adolescents' internalizing and externalizing behaviors: Examining the moderating role of gender and cultural orientation. *Applied Developmental Science, 17*(1), 4–19. https://doi.org/10.1080/10888691.2013.748417.

Brown, C. S., & Bigler, R. S. (2005). Children's perceptions of discrimination: A developmental model. *Child Development, 76,* 533–553. https://doi.org/10.1111/j.1467-8624.2005.00862.x.

Brown, G. L., Craig, A. B., & Halberstadt, A. G. (2015). Parent gender differences in emotion socialization behaviors vary by ethnicity and child gender. *Parenting, 15*(3), 135–157.

Brown, T. L., Linver, M. R., Evans, M., & DeGennaro, D. (2009). African-American parents' racial and ethnic socialization and adolescent academic grades: Teasing out the role of gender. *Journal of Youth and Adolescence, 38*(2), 214–227.

Camras, L. A., & Allison, K. (1985). Children's understanding of emotional facial expressions and verbal labels. *Journal of Nonverbal Behavior, 9*(2), 84–94.

Caughy, M., Campo, P., Randolph, S., & Nickerson, K. (2002). The influence of racial socialization practices on the cognitive and behavioral competence of African American preschoolers. *Child Development, 73,* 1611–1625. https://doi.org/10.1111/1467-8624.00493.

Causadias, J. M. (2013). A roadmap for the integration of culture into developmental psychopathology. *Development and Psychopathology, 25*(4 Pt 2), 1375–1398. https://doi.org/10.1017/S0954579413000679.

Chaplin, T. M., Cole, P. M., & Zahn-Waxler, C. (2005). Parental socialization of emotion expression: Gender differences and relations to child adjustment. *Emotion, 5*(1), 80.

Colassante, T., Zuffiano, A., & Malti, T. (2015). Do moral emotions buffer the anger-aggression link in children and adolescents? *Journal of Applied Developmental Psychology, 41,* 1–7.

Cole, P. M., & Tan, P. Z. (2007). Emotion socialization from a cultural perspective. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 516–542). New York, NY: Guilford Press.

Coll, C. G., Crnic, K., Lamberty, G., Wasik, B. H., Jenkins, R., Garcia, H. V., & McAdoo, H. P. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development*, *67*(5), 1891–1914.

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: problems, progress, and potential in theory and research. *Psychological Bulletin*, *127*(1), 87.

Constantine, M. G., & Blackmon, S. K. M. (2002). Black adolescents' racial socialization experiences: Their relations to home, school, and peer self-esteem. *Journal of Black Studies, 32*(3), 322–335.

Copeland-Linder, N., Lambert, S. F., Chen, Y.-F., & Ialongo, N. S. (2011). Contextual stress and health risk behaviors among African American adolescents. *Journal of Youth and Adolescence, 40*(2), 158–173. https://doi.org/10.1007/s10964-010-9520-y.

Cross, W. E., Jr. (1995). The psychology of nigrescence: Revising the Cross model. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 93–122). Thousand Oaks, CA: Sage Publications Inc.

Cutting, A. L., & Dunn, J. (1999). Theory of mind, emotion understanding, language, and family background: Individual differences and interrelations. *Child Development, 70*(4), 853–865.

Denham, S. A., Bassett, H. H., & Wyatt, T. (2007). The socialization of emotional competence. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 614–637). NewYork: Guilford Press.

Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., et al. (2003). Preschool emotional competence: Pathway to social competence? *Child Development, 74*(1), 238–256.

Denham, S. A., Zoller, D., & Couchoud, E. A. (1994). Socialization of preschoolers' emotion understanding. *Developmental Psychology, 30*(6), 928.

Doan, S. N., Lee, H. Y., & Wang, Q. (2019). Maternal mental state language is associated with trajectories of Chinese immigrant children's emotion situation knowledge. *International Journal of Behavioral Development, 43*(1), 43–52.

Doan, S. N., & Wang, Q. (2010). Maternal discussions of mental states and behaviors: Relations to emotion situation knowledge in European American and immigrant Chinese children. *Child Development, 81*(5), 1490–1503.

Dunbar, A. S., Leerkes, E. M., Coard, S. I., Supple, A. J., & Calkins, S. (2017). An integrative conceptual model of parental racial/ethnic and emotion socialization and links to children's social-emotional development among African American families. *Child Development Perspectives, 11*(1), 16–22.

Dunn, J., Brown, J., Slomkowski, C., Tesla, C., & Youngblade, L. (1991). Young children's understanding of other people's feelings and beliefs: Individual differences and their antecedents. *Child Development, 62*(6), 1352–1366.

Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology, 51*(1), 665–697.

Eisenberg, N., Fabes, R. A., Bernzweig, J., Karbon, M., et al. (1993). The relations of emotionality and regulation to preschoolers' social skills and sociometric status. *Child Development, 64*(5), 1418–1438.

Eisenberg, N., Fabes, R. A., Nyman, M., Bernzweig, J., & Pinuelas, A. (1994). The relations of emotionality and regulation to children's anger-related reactions. *Child Development, 65*(1), 109–128.

Fabes, R. A., Martin, C. L., Hanish, L. D., Anders, M. C., & Madden-Derdich, D. A. (2003). Early school competence: The roles of sex-segregated play and effortful control. *Developmental Psychology, 39*(5), 848.

Fabes, R. A., Poulin, R. E., Eisenberg, N., & Madden-Derdich, D. A. (2002). The Coping with Children's Negative Emotions Scale (CCNES): Psychometric properties and relations with children's emotional competence. *Marriage & Family Review, 34*(3–4), 285–310.

Fisher, C. B., Wallace, S. A., & Fenton, R. E. (2000). Discrimination distress during adolescence. *Journal of Youth and Adolescence*, *29*(6), 679–695.

Friedlmeier, W., Corapci, F., & Cole, P. M. (2011). Emotion socialization in cross-cultural perspective. *Social and Personality Psychology Compass, 5*(7), 410–427.

García Coll, C., Akerman, A., & Cicchetti, D. (2000). Cultural influences on developmental processes and outcomes: Implications for the study of development and psychopathology. *Development and Psychopathology, 12*(3), 333–356. https://doi.org/10.1017/S0954579400003059.

García Coll, C., & Szalacha, L. A. (2004). The multiple contexts of middle childhood. *The Future of Children, 14,* 81–97. https://doi.org/10.2307/1602795.

Gibbons, F. X., Kingsbury, J. H., Weng, C.-Y., Gerrard, M., Cutrona, C., Wills, T. A., et al. (2014). Effects of perceived racial discrimination on health status and health behavior: A differential mediation hypothesis. *Health Psychology, 33,* 11–19. https://doi.org/10.1037/a0033857.

Graham, J. R., Calloway, A., & Roemer, L. (2015). The buffering effects of emotion regulation in the relationship between experiences of racism and anxiety in a Black American sample. *Cognitive Therapy and Research, 39*(5), 553–563. https://doi.org/10.1007/s10608-015-9682-8.

Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry, 70*(1), 42–57. https://doi.org/10.1037/h0087722.

Hirschfeld, L. A. (1995). Do children have a theory of race? *Cognition, 54,* 209–252. https://doi.org/10.1016/0010-0277(95)91425-R.

Hirschfeld, L. A. (2008). Children's developing conceptions of race. In S. M. Quintana & C. McKown (Eds.), *Handbook of race, racism, and the developing child* (pp. 37–54). Hoboken, NJ: Wiley.

Hofmann, S. G., & Doan, S. N. (2018). *The social foundations of emotion: Developmental, cultural and clinical dimensions*. Washington, DC: American Psychological Association.

Hollingshead, A. A. (1975). *Four-factor index of social status*. Unpublished manuscript. New Haven, CT: Yale University.

Hughes, D., & Chen, L. (1997). When and what parents tell children about race: An examination of race-related socialization among African American families. *Applied Developmental Science, 1*(4), 200–214.

Hughes, D., & Chen, L. (1999). The nature of parents' race-related communications to children: A developmental perspective. In L. Balter & C. S. Tamis-LeMonda (Eds.), *Child psychology: A handbook of contemporary issues* (pp. 467–490). New York, NY: Psychology Press.

Hughes, D., & Johnson, D. (2001). Correlates in children's experiences of parents' racial socialization behaviors. *Journal of Marriage and Family*, *63*(4), 981–995.

Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology, 42*(5), 747.

Jones, S., Eisenberg, N., Fabes, R. A., & MacKinnon, D. P. (2002). Parents' reactions to elementary school children's negative emotions: Relations to social and emotional functioning at school. *Merrill-Palmer Quarterly, 48*(2), 133–159.

Kim, B. S., Soliz, A., Orellana, B., & Alamilla, S. G. (2009). Latino/a values scale: Development, reliability, and validity. *Measurement and Evaluation in Counseling and Development*, *42*(2), 71–91.

Kuschè, C. (1984). *The understanding of emotion concepts by deaf children: An assessment of an affective education curriculum*. Doctoral dissertation, University of Washington.

Marcelo, A. K., & Yates, T. M. (2018). Young children's ethnic–racial identity moderates the impact of early discrimination experiences on child behavior problems. *Cultural Diversity and Ethnic Minority Psychology*. https://doi.org/10.1037/cdp0000220.

Marshall, S. (1995). Ethnic socialization of African American children: Implications for parenting, identity development, and academic achievement. *Journal of Youth and Adolescence, 24*(4), 377–396.

McElwain, N. L., Holland, A. S., Engle, J. M., Wong, M. S., & Emery, H. T. (2015). Child-mother attachment security and child characteristics as joint contributors to young children's coping in a challenging situation. *Infant and Child Development, 24*(4), 414–434.

McHale, S. M., Crouter, A. C., Kim, J. Y., Burton, L. M., Davis, K. D., Dotterer, A. M., et al. (2006). Mothers' and fathers' racial socialization in African American families: Implications for youth. *Child Development, 77*(5), 1387–1402.

Mumme, D. L., Fernald, A., & Herrera, C. (1996). Infants' responses to facial and vocal emotional signals in a social referencing paradigm. *Child Development, 67*(6), 3219–3237.

Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology, 76*(2), 229.

Musil, C. M., Warner, C. B., Yobas, P. K., & Jones, S. L. (2002). A comparison of imputation techniques for handling missing data. *Western Journal of Nursing Research*, *24*(7), 815–829.

Namazi, S. (2014). *Ethnic-racial socialization, perceived discrimination, and overall functioning among Iranian American youth*. Alliant International University.

Nyborg, V. M., & Curry, J. F. (2003). The impact of perceived racism: Psychological symptoms among African American boys. *Journal of Clinical Child and Adolescent Psychology, 32,* 258–266. https://doi.org/10.1207/S15374424JCCP3202_11.

Pachter, L. M., & García Coll, C. (2009). Racism and child health: A review of the literature and future directions. *Journal of Developmental and Behavioral Pediatrics, 30,* 255–263. https://doi.org/10.1097/DBP.0b013e3181a7ed5a.

Pachter, L. M., Szalacha, L. A., Bernstein, B. A., & García Coll, C. (2010). Perceptions of Racism in Children and Youth (PRaCY): Properties of a self-report instrument for research on children's health and development. *Ethnicity & Health, 15,* 33–46. https://doi.org/10.1080/13557850903383196.

Padilla, J., McHale, S. M., Updegraff, K. A., & Umaña-Taylor, A. J. (2016). Mexican-origin parents' differential treatment and siblings' adjustment from adolescence to young adulthood. *Journal of Family Psychology, 30*(8), 955–965. https://doi.org/10.1037/fam0000229.

Park, I. J., Wang, L., Williams, D. R., & Alegría, M. (2017). Does anger regulation mediate the discrimination-mental health link among mexican-origin adolescents? A longitudinal mediation analysis using multilevel modeling. *Developmental Psychology, 53,* 340–352.

Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: a meta-analytic review. *Psychological Bulletin, 135*(4), 531.

Pons, F., Lawson, J., Harris, P. L., & De Rosnay, M. (2003). Individual differences in children's emotion understanding: Effects of age and language. *Scandinavian Journal of Psychology, 44*(4), 347–353.

Quintana, S. M. (1998). Children's developmental understanding of ethnicity and race. *Applied & Preventive Psychology, 7,* 27–45. https://doi.org/10.1016/S0962-1849(98)80020-6.

Rohner, R. P., Khaleque, A., & Cournoyer, D. E. (2005). Parental acceptance-rejection: Theory, methods, cross-cultural evidence, and implications. *Ethos*, *33*(3), 299–334.

Rubin, K. H. (1998). Social and emotional development from a cultural perspective. *Developmental Psychology, 34,* 611–615.

Sanchez, D., Smith, L. V., & Adams, W. (2018). The relationships among perceived discrimination, marianismo gender role attitudes, racial-ethnic socialization, coping styles, and mental health outcomes in Latina college students. *Journal of Latina/o Psychology, 6*(1), 1–15. https://doi.org/10.1037/lat0000077.

Sanchez, D., Whittaker, T. A., Hamilton, E., & Arango, S. (2017). Familial ethnic socialization, gender role attitudes, and ethnic identity development in mexican-origin early adolescents. *Cultural Diversity and Ethnic Minority Psychology, 23*(3), 335–347. https://doi.org/10.1037/cdp0000142.

Sanders-Phillips, K. (2009). Racial discrimination: A continuum of violence exposure for children of color. *Clinical Child and Family Psychology Review, 12*(2), 174–195.

Sandler, I. N., Tein, J. Y., & West, S. G. (1994). Coping, stress, and the psychological symptoms of children of divorce: A cross-sectional and longitudinal study. *Child Development, 65*(6), 1744–1763.

Sangalang, C. C., & Gee, G. C. (2015). Racial discrimination and depressive symptoms among Cambodian American adolescents: The role of gender. *Journal of Community Psychology*, *43*(4), 447–465.

Santiago, C. D., & Wadsworth, M. E. (2011). Family and cultural influences on low-income latino children's adjustment. *Journal of Clinical Child and Adolescent Psychology, 40*(2), 332–337. https://doi.org/10.1080/15374416.2011.546038.

Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods, 7,* 147–177. https://doi.org/10.1037//1082-989x.7.2.147.

Schmitt, M. T., Branscombe, N. R., Postmes, T., & Garcia, A. (2014). The consequences of perceived discrimination for psychological well-being: A meta-analytic review. *Psychological Bulletin, 140*(4), 921.

Schwartz, B. S. (2014). Perceived discrimination, ethnic identity development, and well-being in children: An exploration study. Open Access Dissertations, 1223. Retrieved from https://scholarlyrepository.miami.edu/oa_dissertations/1223

Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist, 54,* 93–105. https://doi.org/10.1037/0003-066X.54.2.93.

Schwarz, N., & Oyserman, D. (2001). Asking questions about behavior: Cognition, communication, and questionnaire construction. *American Journal of Evaluation, 22,* 127–160. https://doi.org/10.1016/S1098-2140(01)00133-3.

Scott, L. D., Jr. (2003). The relation of racial identity and racial socialization to coping with discrimination among African American adolescents. *Journal of Black Studies, 33*(4), 520–538.

Seaton, E. K., Neblett, E. W., Upton, R. D., Hammond, W. P., & Sellers, R. M. (2011). The moderating capacity of racial identity between perceived discrimination and psychological well-being over time among African American youth. *Child Development, 82,* 1850–1867. https://doi.org/10.1111/j.1467-8624.2011.01651.x.

Shelton, K. H., & Harold, G. T. (2007). Marital conflict and children's adjustment: The mediating and moderating role of children's coping strategies. *Social Development, 16*(3), 497–512.

Simons, R. L., Murry, V., McLoyd, V., Lin, K.-H., Cutrona, C., & Conger, R. D. (2002). Discrimination, crime, ethnic identity, and parenting as correlates of depressive symptoms among African American children: A multilevel analysis. *Development and Psychopathology, 14,* 371–393. https://doi.org/10.1017/s0954579402002109.

Simons, R. L., Simons, L. G., Burt, C. H., Drummund, H., Stewart, E., Brody, G. H., et al. (2006). Supportive parenting moderates the effect of discrimination upon anger, hostile view of relationships, and violence among African American boys. *Journal of Health and Social Behavior, 47*(4), 373–389.

Smith, C. L., Eisenberg, N., Spinrad, T. L., Chassin, L., Morris, A. S., Kupfer, A., et al. (2006). Children's coping strategies and coping efficacy: Relations to parent socialization, child adjustment, and familial alcoholism. *Development and Psychopathology, 18*(2), 445–469.

Song, J., Colasante, T., & Malti, T. (2018). Helping yourself helps others: Linking children's emotion regulation to prosocial behavior through sympathy and trust. *Emotion, 18*(4), 518–527. https://doi.org/10.1037/emo0000332.

Soto, J. A., Dawson-Andoh, N. A., & BeLue, R. (2011). The relationship between perceived discrimination and Generalized Anxiety Disorder among African Americans, Afro Caribbeans, and non-Hispanic Whites. *Journal of Anxiety Disorders, 25,* 258–265. https://doi.org/10.1111/j.1745-6924.2009.01099.x.

Stevenson, H. C., Jr., Cameron, R., Herrero-Taylor, T., & Davis, G. Y. (2002). Development of the teenager experience of racial socialization scale: Correlates of race-related socialization frequency from the perspective of Black youth. *Journal of Black Psychology, 28*(2), 84–106.

Stock, M. L., Gibbons, F. X., Gerrard, M., Houlihan, A. E., Weng, C.-Y., Lorenz, F. O., et al. (2013). Racial identification, racial composition, and substance use vulnerability among African American adolescents and young adults. *Health Psychology, 32,* 237–247. https://doi.org/10.1037/a0030149.

Supple, A. J., Ghazarian, S. R., Frabutt, J. M., Plunkett, S. W., & Sands, T. (2006). Contextual influences on Latino adolescent ethnic identity and academic outcomes. *Child development, 77*(5), 1427–1433.

Tang, S., McLoyd, V. C., & Hallman, S. K. (2016). Racial socialization, racial identity, and academic attitudes among African American adolescents: Examining the moderating influence of parent–adolescent communication. *Journal of Youth and Adolescence*, *45*(6), 1141–1155.

Tenenbaum, H. R., Alfieri, L., Brooks, P. J., & Dunne, G. (2008). The effects of explanatory conversations on children's emotion understanding. *British Journal of Developmental Psychology, 26,* 249–263. https://doi.org/10.1348/026151007X231057.

Trentacosta, C. J., & Fine, S. E. (2010). Emotion knowledge, social competence, and behavior problems in childhood and adolescence: A meta-analytic review. *Social Development, 19*(1), 1–29.

Trentacosta, C. J., & Izard, C. E. (2007). Kindergarten children's emotion competence as a predictor of their academic competence in first grade. *Emotion, 7*(1), 77.

Umaña-Taylor, A. (2001). *Ethnic identity development among Mexican-origin Latino adolescents living in the U.S.* Unpublished doctoral dissertation, University of Missouri, Columbia.

Umaña-Taylor, A. J., Alfaro, E. C., Bámaca, M. Y., & Guimond, A. B. (2009). The central role of familial ethnic socialization in Latino adolescents' cultural orientation. *Journal of Marriage and Family, 71*(1), 46–60.

Umaña-Taylor, A., & Fine, M. A. (2004). Examining ethnic identity among Mexican-origin adolescents living in the United States. *Hispanic Journal of Behavioral Sciences, 26*(1), 36–59. https://doi.org/10.1177/0739986303262143.

Umaña-Taylor, A. J., Zeiders, K. H., & Updegraff, K. A. (2013). Family ethnic socialization and ethnic identity: A family-driven, youth-driven, or reciprocal process? *Journal of Family Psychology, 27*(1), 137.

Vassillière, C. T., Holahan, C. J., & Holahan, C. K. (2016). Race, perceived discrimination, and emotion-focused coping. *Journal of Community Psychology, 44*(4), 524–530. https://doi.org/10.1002/jcop.21776.

Wang, Q. (2008). Emotion knowledge and autobiographical memory across the preschool years: A cross-cultural longitudinal investigation. *Cognition, 108*(1), 117–135.

Wang, M. T., & Huguley, J. P. (2012). Parental racial socialization as a moderator of the effects of racial discrimination on educational success among African American adolescents. *Child Development, 83*(5), 1716–1731.

Wasserberg, M. J. (2014). Stereotype threat effects on African American children in an urban elementary school. *Journal of Experimental Education, 82,* 502–517. https://doi.org/10.1080/00220973.2013.876224.

Waters, S. F., & Thompson, R. A. (2014). Children's perceptions of the effectiveness of strategies for regulating anger and sadness. *International Journal of Behavioral Development, 38*(2), 174–181. https://doi.org/10.1177/0165025413515410.

Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality, 71*(6), 1197–1232.

Wray-Lake, L., Wells, R., Alvis, L., Delgado, S., Syvertsen, A. K., & Metzger, A. (2018). Being a Latinx adolescent under a Trump presidency: Analysis of Latinx youth's reactions to immigration politics. *Children and Youth Services Review, 87,* 192–204. https://doi.org/10.1016/j.childyouth.2018.02.032.

Affiliations

Stacey N. Doan[1] (ID) · **Ana K. Marcelo**[2] · **Tuppett M. Yates**[3]

1   Department of Psychological Sciences, Claremont McKenna College, 850 Columbia Avenue, Claremont, CA 91711, USA

2   Clark University, Worcester, USA

3   University of California, Riverside, USA