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Wang, Wen
Spinrad, Tracy L
Gal-Szabo, Diana E
et al.

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Brief Report

The relations of White parents' implicit racial attitudes to their children's differential empathic concern toward White and Black victims

Wen Wang [a], Tracy L. Spinrad [a,*], Diana E. Gal-Szabo [a], Deborah Laible [b], Sonya Xinyue Xiao [a], Jingyi Xu [a], Rebecca Berger [a], Nancy Eisenberg [a], Gustavo Carlo [c]

[a] Arizona State University, Tempe, AZ 85287, USA
[b] Lehigh University, Bethlehem, PA 18015, USA
[c] University of California, Irvine, Irvine, CA 92697, USA

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ABSTRACT

The goal of this study was to investigate the relations between White parents' implicit racial attitudes and their children's racially based bias in empathic concern toward White and Black victims of injustice as well as the moderating role of children's age in this relation. Children aged 5–9 years (N = 190) reported how sorry (i.e., sympathy) and nervous (i.e., personal distress) they felt after watching sympathy-inducing videos in which either a White (non-Hispanic) child or a Black child was teased by peers. Participants' primary caregivers (mostly mothers) completed a computerized Implicit Association Test to assess their implicit racial attitudes. Parents' implicit race bias was associated with their children's reported sympathy toward Black victims and their sympathetic bias (i.e., relative sympathy toward White vs. Black victims); however, results were moderated by children's age. Specifically, parents with higher implicit race bias tended to have children with lower levels of sympathy toward Black victims for younger children and higher levels of sympathetic bias for younger and average-aged children but not for older children. Older children tended to report relatively high levels of sympathy toward Black victims and low levels of sympathetic bias regardless of their parents' implicit attitudes. The importance of parents' implicit attitudes in understanding young children's race-based moral

* Corresponding author.
E-mail address: tspinrad@asu.edu (T.L. Spinrad).

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emotional responses and the implications for intervention work are discussed.

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Introduction

It is widely accepted that individuals tend to show favoritism toward ingroup versus outgroup members. Social identity theorists posit that self-concept is partially built through identifying with membership in a social group. As individuals classify themselves as members of a social group, they adopt the values, norms, and attitudes of their group, showing favoritism toward their own group (Tajfel, 1978). One form of such favoritism is sympathy toward racial/ethnic ingroup versus outgroup others, although very few researchers have examined this form of favoritism with young children. Furthermore, the socialization correlates of White children's sympathy toward a marginalized racial group in the United States, Black children, has not been investigated. The goal of the current study was to examine the relation of parental implicit racial attitudes to children's sympathy and personal distress toward members of a racial outgroup.

Children's sympathy and personal distress toward racial ingroup and outgroup members

Sympathy is a vicarious other-oriented response that involves feelings of sorrow or concern toward another person (Eisenberg, Spinrad, & Knafo-Noam, 2015). In contrast, observing another's suffering may draw another feeling—personal distress, which is a self-focused aversive response such as anxiety or discomfort in response to another person's distress. Sympathy is thought to motivate prosocial behaviors (e.g., helping, sharing), whereas personal distress is generally unrelated, or even negatively related, to prosocial behavior (Eisenberg et al., 2015).

Although they are seldom examined, it is important to understand children's sympathy and prosocial behaviors toward various recipients. Children as young as 18 months appear to show more concern (i.e., sympathy) and prosocial behaviors toward their mothers as opposed to strangers (Spinrad & Stifter, 2006), indicating that young children likely differentiate their concern toward others based on their history or relationship with the recipients. What is less clear is whether children differentiate their concern based on the race of the recipients. There is evidence that White elementary school-aged children assume that White children experience higher levels of pain in daily pain experience than Black children (Dore, Hoffman, Lillard, & Trawalter, 2018). In addition, researchers have found that children as young as 5 to 7 years tend to attribute more human-like traits and positive emotions to ingroup versus outgroup members (e.g., gender and geographic groups: McLoughlin, Tipper, & Over, 2018; racial group: Williams & Steele, 2019). These findings suggest that White children may experience more empathy (or sympathy) toward same-race (vs. other-race) peers.

Few researchers have examined whether children show race-based biases in sympathy or personal distress, particularly in social (vs. pain-inducing) contexts. Research using artificial group membership (e.g., defining groups based on T-shirt color) indicates that elementary school-aged children reported more empathy toward socially rejected ingroup versus outgroup children (Masten, Gillen-O'Neel, & Brown, 2010). Investigating natural social groups (in terms of ethnicity or nationality), Sierksma and colleagues found that adolescents (aged 8–13 years) were *more* prosocial toward ethnic/national outgroups versus ingroups (Sierksma, Lansu, Karremans, & Bijlstra, 2017; Sierksma, Thijs, & Verkuyten, 2014). However, these prosocial behaviors toward outgroups (e.g., help in word-guessing games) were guided by youths' negative stereotype toward that group (e.g., the outgroup was less smart and needed more assistance; Sierksma et al., 2017). Questions still remain regarding how young children differentially respond to ingroup and outgroup members when sympathy or personal distress is elicited in a social situation (i.e., the child is teased or bullied).

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Parents' implicit racial attitudes

According to Bigler and Liben (2007)'s developmental intergroup theory, children's development of social stereotypes is shaped by both explicit and implicit signals in their social environment. Implicit racial attitudes are those beliefs and values that can be spontaneously triggered by mere presence of attitude stimuli and direct behaviors without participants' full awareness and control (Greenwald & Banaji, 1995). Both implicit and explicit race attitudes make distinctive contributions in predicting individuals' behaviors (Brownstein, Madva, & Gawronski, 2020), but studies have shown that implicit race attitudes uniquely predict people's nonverbal behaviors when interacting with outgroups above and beyond explicit race attitudes (Jost, 2019; Kurdi et al., 2019; McConnell & Leibold, 2001).

Parents' implicit racial attitudes might also be examined in relation to their children's biases. Researchers found that children showed preference for, and provided more prosocial behaviors to, groups when adults demonstrated more positive nonverbal behaviors toward the groups (with racial groups: Castelli, De Dea, & Nesdale, 2008; with aritifical groups: Skinner, Olson, & Meltzoff, 2019). Moreover, Castelli, Zogmaister, and Tomelleri (2009) found that Italian White parents' implicit racial prejudice was related to children's fewer reported positive attributes toward Black peers. Because parents' implicit racial biases may be communicated by subtle cues, such as nonverbal behaviors, friendliness, and eye contact (Dovidio, Kawakami, & Gaertner, 2002; Hofmann, Gschwendner, Castelli, & Schmitt, 2008; Skinner & Meltzoff, 2019), we expected that parents' implicit race attitudes would be associated with children's sympathy or personal distress toward White and Black peers.

The current study

We focused on racial bias in sympathy or personal distress of White (European American) children who represent the majority group that benefits from power and privilege in the United States. The existence of children's race-related empathy biases has the potential to shed light on a form of discrimination that perpetuates inequity in the United States. The primary research question was whether White parents' implicit race attitudes were related to children's differential empathic concern toward White or Black victims. Given evidence that adults' implicit bias negatively predicts children's helping, sharing, and positive attitudes toward the discriminated group (Castelli et al., 2008, 2009; (Skinner, Meltzoff, & Olson, 2017; Skinner et al., 2019), we hypothesized that White parents' implicit bias (White favoritism) would be negatively related to children's sympathy toward Black victims and positively related to children's sympathetic bias (i.e., feeling more sympathy toward White victims than toward Black victims). Our hypotheses for children's personal distress reactions were less clear. White parents' implicit White preference could reduce children's overall empathy toward outgroup members, resulting in lower personal distress reactions toward Black victims. On the other hand, because personal distress is a self-focused measure of arousal (self-focused anxiety/distress), it could be that parents' racial negativity toward Black people predicts children's higher fear/anxiety in response to Black victims. In exploratory analyses, we also tested whether children's age moderated the aforementioned relations given children's larger nonfamilial social networks with age.

Method

Participants

A total of 190 children (103 boys; M_{age} = 7.09 years, SD = 0.94, range = 5.40–8.91) and their primary parents were recruited from two metropolitan areas: the Southwestern United States (n = 99) and the Northeastern United States (n = 91). Because of our interest in studying racial biases, all children were non-Hispanic White.

We requested that each child be brought to the University research lab by the parent who typically spent the most time with the child (i.e., primary parent). Of those in the study, 177 cases were mothers, 12 were fathers, and 1 had another relationship. Demographic information is provided in the online supplementary material.

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Procedures

Southwest participants were recruited via various methods (e.g., local museums, bookstores, after-school programs, Facebook), and Northeast participants were recruited from a research database hosted by the Psychology department at the University. Participants were invited to a lab located in each university for a visit. Parents filled out a survey regarding demographic information and completed the computer-based task that assessed parents' implicit race attitudes. Meanwhile, their children, in another room, watched two sets of two short films (four films in total). In each film, there was either a same-sex White child or Black child who was teased by his or her White peers (the films were counterbalanced). Both children and their caregivers also completed other tasks that were not included in the current analyses. The total visit took about 75–90 min (see supplementary material for details).

Measures

Primary parents' implicit race attitudes

A computerized Implicit Association Test (IAT) was conducted, which tested the strength of the associations between a target concept (i.e., race in this study: Black vs. White people) and an attribution concept (i.e., positive vs. negative words) through the response latency of different associations (details are described in the supplementary material). The rationale behind this task was that parents respond quicker to the associations between attributions and race that already exist in their minds (e.g., a negative word paired with a Black face) than the reversed pairing.

Latency to correct categorization of each trial was recorded. The final scores were calculated as D-scores[1] (Lane, Banaji, Nosek, & Greenwald, 2007), which considered the differences between the latency of stereotype-congruent and -incongruent conditions and each participant's standard deviation. A higher D-score indicates that a participant matched the stereotype-congruent condition faster than the stereotype-incongruent condition and reflects a stronger negative attitude toward Black people.

Sympathy and personal distress toward White and Black victims

Children reported sympathy and personal distress after watching each short video clip depicting a social injustice against another same-sex child (each film was shot in four versions; see supplementary material for descriptions). The films were very similar in terms of emotional content, and in all films the perpetrator was White. In each set of films, the participant watched one film with a White victim and the other film with a Black victim. The presentation of the stories and race of the target was counterbalanced, and films were always matched for child sex (four possible orders for each set).

After each film, children were presented a picture of the victim and were asked to rate to what degree they felt sorry for the victim (i.e., sympathy) and felt nervous (i.e., personal distress) when watching the film (3 = *a whole lot,* 2 = *some,* 1 = *a little bit,* 0 = *not at all*). We also calculated children's biased feelings of sympathy and personal distress by computing the difference score between their reported feelings when watching the White victim versus the Black victim for each set of films. A higher bias score indicated children's favoritism to White victims in feelings of sympathy/personal distress. Children's sympathy and personal distress scores were correlated across the two sets of films for White victims (rs = .46 and .49, ps < .001 for sympathy and personal distress, respectively) and Black victims (rs = .56 and .43, ps < .001 for sympathy and personal distress respectively). Thus, we created a composite score averaging the responses across the two sets of films.

[1] The IAT required that the participants press the correct button to move on to the next trial; thus, we used the improved algorithm suggested by Lane et al. (2007), using an adapted algorithm (using two critical blocks) from Greenwald, Nosek, and Banaji (2003, Table 4).

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Results

Descriptive statistics and missing data

A total of 25 cases had some missing data (18 missing parent IAT and 7 missing other data). Independent *t* tests found no differences between those with and without complete data on demographic data (*t*s < 1.54, *p*s > .13). Similarly, *t* tests showed no site differences (*t*s < 1.15, *p*s > .25) or sex differences (*t*s < 1.88, *p*s > .06) across all the variables. Missing data were considered missing at random (MAR) and were accounted for through full information maximum likelihood (FIML) estimation in Mplus (Version 8.1).

Descriptive data and correlations among variables are presented in Table 1. The *t* tests indicated that there were no mean differences on children's reported sympathy ($t = -0.26$, $df = 182$, $p = .80$) and personal distress ($t = 0$, $df = 184$, $p = 1.00$) toward White versus Black targets. Parents' implicit White preference was not significantly correlated with child-reported sympathy or personal distress toward either White or Black victims. Child age was positively related with child-reported sympathy toward Black victims ($r = .24$, $p = .001$).

Primary analyses

In three regression analyses, children's sympathy and personal distress toward Black victims, White victims, and bias scores were predicted. Parental IAT, children's age, and the interaction term between the two were predictors. Child sex and the order of the videos were covariates (see supplementary material). All continuous predictors were grand mean centered (Cohen, Cohen, West, & Aiken, 2003). All models were fully saturated. The a priori approach through G*Power software (Version 3.1) (Faul, Erdfelder, Lang, & Buchner, 2007) showed that a small effect size of .10 and sufficient power (.80, $\alpha = .05$) could be obtained with a sample size of 134. Therefore, the current sample size was sufficient for the current analysis.

Parents' IAT was positively associated with children's sympathetic bias ($\beta = .19$, $p = .04$) but was not related to sympathy toward Black or White victims (Table 2). Furthermore, age was at least marginally positively related to children's sympathy toward White and Black victims (βs = .12 and .21, *p*s < .06 and .001 for White and Black victims, respectively). Age was marginally negatively related to sympathetic bias ($\beta = -.08$, $p = .08$). Parental IAT and child age were not related to personal distress.

Child age moderated the effects of parental IAT on children's sympathy toward Black victims ($\beta = .30$, $p = .04$) and sympathetic bias ($\beta = -.29$, $p = .01$) (but not on children's sympathy toward White victims or personal distress outcomes). According to Cohen et al. (2003), the simple slope analysis indicated that parents' implicit White preference was negatively related to children's sympathy toward Blacks for younger children ($\beta = -.41$, $p = .04$) but not for average-aged children ($\beta = -.13$, $p = .34$) and older children ($\beta = .15$, $p = .42$). Average-aged and older children's sympathy toward Black victims remained relatively high regardless of parental IAT (βs = .13 and .15, *p*s = .34 and .42, respectively) (Fig. 1A). Similarly, older children's sympathetic bias remained relatively low and was unrelated to parents' implicit race bias ($\beta = -.08$, $p = .56$), but parents' White preference was positively related to children's sympathetic bias for younger children ($\beta = .47$, $p = .001$) and average-aged children ($\beta = .19$, $p = .05$) (Fig. 1B).[2]

Discussion

This study documented a relation between parents' implicit biases and their White children's differential sympathy feelings toward White and Black children—an important finding because children's sympathy toward members of other races may promote positive attitudes and lower prejudice toward

[2] We computed additional analyses in which only mothers were considered, removing 15 families, and another analysis with only observed data ($N = 164$). In the two analyses, the results remained the same (with some minor changes for values of some coefficients). We chose to present the findings with the full sample to maximize the power. In addition, for interpretive purposes, we also computed simple slopes with parents' IAT as a moderator (see supplementary material).

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Table 1
Descriptive statistics and correlations among variables.

	1	2	3	4	5	6	7	8	9	10
Covariates										
1. Child sex[a]	–									
2. Order–Black first	.13	–								
Predictors										
3. Parent IAT[b]	.09	−.03	–							
4. Child age[c]	<.01	<.01	−.01	–						
Outcomes										
5. Sympathy toward Black	.04	−.18*	−.05	.24**	–					
6. Sympathy toward White	.05	−.16*	.03	.14	.73**	–				
7. Bias of sympathy	.02	.03	.15	−.13	−.40**	.34**	–			
8. Personal distress toward Black	.14	−.03	.04	−.03	.22**	.19*	−.07	–		
9. Personal distress toward White	.13	−.03	.11	.03	.21**	.21**	−.02	.78**	–	
10. Bias of personal distress	−.01	.01	.10	.08	−.01	.04	.07	−.28**	.39**	–
N	190	190	171	190	187	186	183	188	187	185
Min	0	0	−1.17	5.40	0	0	−1.50	0	0	−1.50
Max	1	1	1.08	8.91	3	3	2.50	3	3	1.50
Mean	0.46	0.51	0.28	7.09	2.47	2.48	0.01	0.75	0.74	0
Standard deviation	0.50	0.50	0.44	0.94	0.81	0.78	0.58	0.86	0.90	0.59

[a] Child sex is coded 0 = male, 1 = female.
[b] Parent IAT (Implicit Association Test) is parental implicit race attitude (higher score indicates more race attitude bias, aka favoring White).
[c] Child age is in years.
* $p < .05$.
** $p < .01$.

Table 2
Main effects and interaction of parental implicit race attitude and age on children's reported sympathy and personal distress toward Black, White, and bias scores.

	Black target			White target			Bias (difference score)		
	B	*SE*	*p*	*B*	*SE*	*p*	*B*	*SE*	*p*
Sympathy									
Child sex	.12	.11	.31	.11	.12	.33	.01	.08	.93
Order–Black first (Set 1)	−.29*	.11	.01	−.27*	.11	**.02**	.02	.08	.81
Parent IAT	−.13	.13	.35	.03	.13	.85	.19*	.10	.04
Child age	.21***	.06	<.001	.12+	.06	.06	−.08+	.04	.08
IAT * Age	.30*	.15	.04	.01	.15	.95	−.29**	.11	.01
R^2	.12**			.05			.08*		
Personal distress									
Child sex	.24+	.13	.05	.23+	.13	.08	−.03	.09	.75
Order–Black first (Set 1)	−.08	.13	.49	−.08	.13	.56	.02	.09	.82
Parent IAT	.04	.15	.81	.20	.15	.21	.14	.10	.17
Child age	−.02	.07	.72	.04	.07	.59	.06	.05	.23
IAT * Age	−.05	.17	.78	−.13	.17	.44	−.05	.11	.69
R^2	.02			.03			.02		

Note. IAT, Implicit Association Test.
+ p <.10.
* p <.05
** p <.01
*** p <.001

racial outgroups (Eisenberg, Eggum, & Di Giunta, 2010). Therefore, biased feelings of sympathy during childhood has implications for understanding attitudes regarding equity and social justice. Our study is the first, to our knowledge, to examine young children's differential sympathy and personal distress

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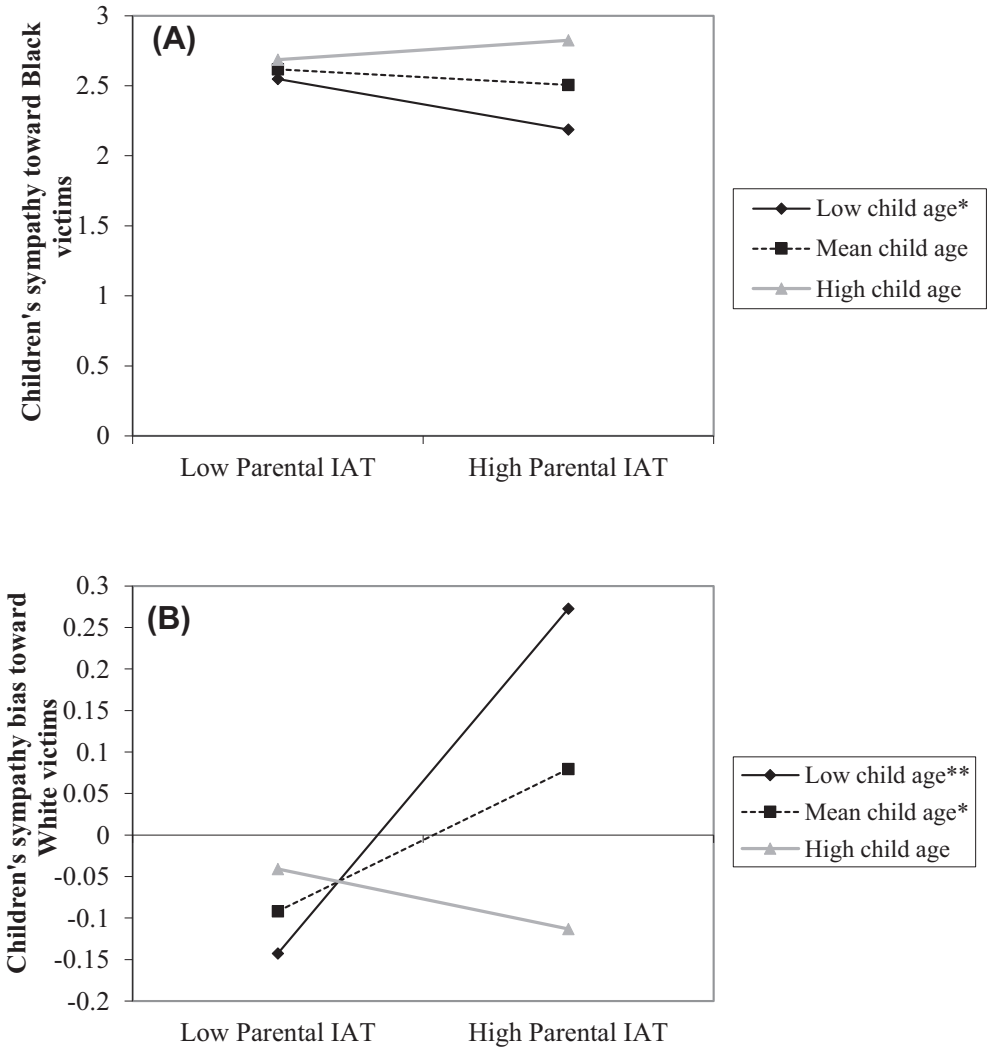


Fig. 1. Child age moderates the relations between parental implicit race attitude and child self-reported sympathy. (A) Children's sympathy toward Black victims. (B) Children's sympathetic bias. High Implicit Association Test (IAT) scores indicate parents' more race bias/more White favoritism. *$p < .05$; **$p < .01$.

toward racial groups in social settings (i.e., a child is teased or bullied) and whether such bias is related to parents' implicit racial attitudes.

In the field of children's racial attitude development, theorists have different opinions on whether the associations between parents' and children's racial attitudes vary at different developmental periods. According to social-cognitive developmental theory (Aboud, 2008), more similarity between parents' and children's attitudes is expected as children get older because older children are more likely to internalize their parents' racial attitudes (Degner & Dalege, 2013). However, based on social identity development theory (Nesdale & Flesser, 2001), it is also possible that the link between parents' and children's racial attitudes gets weaker as children get older because children are exposed to other socializers and have more contact with diverse others (Burkholder, Elenbaas, & Killen, 2020). Consistent with this latter theory, we found that parents' IAT was associated with their children's sympa-

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thetic bias, particularly for younger children and children near the mean age of our sample. Parents' IAT was not related to older children's sympathy bias, perhaps because other socializers become more influential as children grow. Indeed, researchers have reported that 8- to 13-year-old children were likely to follow peers' norms in deciding whether to help immigrant individuals who were in need of some mild help (e.g., run out of toys; Sierksma et al., 2014).

The aforementioned findings are, more generally, consistent with existing studies in which parents' implicit prejudice or adults' nonverbal unfriendliness predicted children's negative attitudes toward the discriminated group (Castelli et al., 2009, 2008; Skinner et al., 2019). Children might be able to detect and pick up parents' nonverbal cues toward racial outgroups such as squeezing the child's hand somewhat tighter when passing a Black person in their neighborhood. These nonverbal cues are thought to be largely predicted by parents' racial attitudes (Jost, 2019) and thus could account for the way in which children differentiate their sympathy responding toward White and Black victims. Our results are consistent with this thinking; parents' IAT was related to children's sympathy toward Black victims and sympathetic bias but not to children's sympathy toward White victims.

Another possible explanation of the moderation effect by age is children's increasing desire to be fair and equal at older ages, especially from 3 to 8 years (e.g., Fehr, Bernhard, & Rockenbach, 2008; Silk & House, 2016). That is, as children develop, they are less likely to show any bias in reporting their sympathy either because they feel the moral obligation to be fair to both ingroup and outgroup members (Sierksma et al., 2014) or because they have the awareness that it is socially inappropriate to express different levels of sympathy toward White and Black victims. There was some evidence of this standpoint in our data; compared with young children, there were less variations in older children's reported sympathy toward both White and Black victims, and older children reported higher levels of feeling sorry toward Black victims and lower sympathetic bias than younger children (although the effect of age on children's sympathetic bias was marginally significant).

Children's self-focused emotions (i.e., nervousness and personal distress) were not associated with any of the predictors, including parents' IAT, child age, and the interaction between the two. It is possible that personal distress is predicted by child characteristics (e.g., negativity, self-regulation) and is less likely to be shaped by the social environment (Eisenberg, 2010). Other parental factors such as explicit racial biases and parents' own anxiety or dispositional fear could be examined in future research examining race-related bias in children's personal distress reactions.

Although this was not the main focus of the current study, we surprisingly did not find mean-level differences overall in children's empathic concern toward racial ingroup versus outgroup victims, which is not consistent with previous related work. One possible reason is that previous studies used artificial groups (based on T-shirt color) (e.g., Masten et al., 2010) rather than social groups such as race. Another reason may be that other studies did not examine children's emotional reactions but rather tested children's cognitive attributions toward ingroup and outgroup members in terms of human-liked traits and pain experiences in the experimental settings (e.g., Dore et al., 2018; McLoughlin et al., 2018). To our knowledge, this study is one of the first to examine children's moral emotional reactions to racial ingroup and outgroup victims in realistic social injustice settings. Because this is pioneering work in this field, more evidence is needed to further determine the processes involved in children's feelings of sympathy toward ingroup versus outgroup members.

Although this study has several strengths, such as eliciting children's sympathy and personal distress through videos with realistic scenarios and focusing on young White children's biased feelings of sorrow and nervousness toward their own racial group and its relation to parents' implicit race attitudes, the limitations of the current study, which imply future research needs, should also be recognized. First, future studies should include parents' explicit and implicit attitudes (rather than only implicit ones) in predicting children's behaviors (Brownstein et al., 2020). Second, researchers should use longitudinal data to capture the development and direction of effects in understanding the socialization of White children's sympathetic bias favoring White victims (Baron, 2015; Payne, Vuletich, & Lundberg, 2017). Third, multi-measure approaches (e.g., including observational and physiological measures with reduced social desirability demands) are needed to assess children's sympathetic bias (Tully, Donohue, & Garcia, 2015). And last, future studies should examine whether children's sympathetic bias is related to the race of victims or the consistency/inconsistency of race between perpetrators and victims through experimental designs.

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This study has highlighted the importance of parents' implicit racial attitudes in shaping young children's racial empathy bias. In practice, it is important to consider possible ways of reducing parents' implicit White favoritism such as intergroup contact (Lai, Hoffman, & Nosek, 2013). Acknowledging the debate about the effectiveness of the intergroup contact and individuals' IAT (Skinner & Meltzoff, 2019), several studies have found positive associations between intergroup contact/friendship and implicit racial attitudes (e.g., Qian, Heyman, Quinn, Fu, & Lee, 2017; Žeželj, Jakšić, & Jošić, 2015; see null results in Hughes, Babbitt, & Krendl, 2019). Furthermore, it would be important to understand whether the relation of parents' racial attitudes to children's biases depends on whether children have more or less contact with diverse others.

In conclusion, the current study is the first to examine the relations between White children's favoritism to racial ingroup members in their sympathetic emotional responses and their parents' IAT and has the potential for understanding prejudice, discrimination, and segregation in society (Eisenberg et al., 2010). This study emphasized the importance of parents' *implicit* racial attitudes in shaping children's sympathy favoritism. Thus, to promote the equity of children's sympathy to racial ingroup and outgroup members, verbal education might not be enough. It may be important to first make parents aware of their own implicit racial attitudes and to help parents critically examine the ways in which their own implicit attitudes may affect children's caring for others.

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Appendix A. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jecp.2020.104928.

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