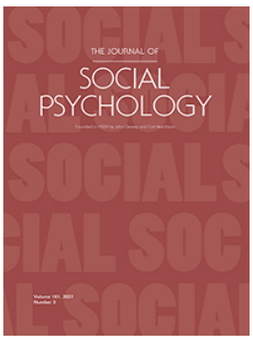

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Parallel empathy and group attitudes in late childhood: The role of perceived peer group attitudes

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ABSTRACT

Although several studies have examined outgroup empathy, the link between trait empathy and outgroup attitudes has been underinvestigated. In the present study this link was investigated among two samples of ethnic Dutch preadolescents (N = 335, M_{age} = 10.83 years, SD = 0.94; 53% girls; N = 326; M_{age} = 10.53 years, SD = 1.03; 48% girls). It examined children's parallel empathy in relation to their ethnic attitudes, and the moderating role of perceived peer norms. Results (partly) support the hypotheses that empathy is associated with more outgroup positivity and less ingroup bias (ingroup minus outgroup attitude). The negative link between empathy and outgroup bias was stronger when peers were perceived to be more biased against the outgroup.

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Several research findings in social and developmental psychology suggest that empathy is key to positive outgroup attitudes (for reviews, see Miklikowska, 2018; Stephan & Finlay, 1999). Most of this research involves the situational experience of empathy for outgroup members, i.e. state-like outgroup empathy. Batson et al. (1997), for example, conducted a classic set of experiments showing that asking people to take the perspective of individuals from stigmatized outgroups can increase their positivity toward those groups in general. Also, a meta-analysis of prejudice-reduction programs concluded that the outgroup attitudes of children and adolescents can be improved by stimulating their outgroup empathy (Beelmann & Heinemann, 2014). Considerably fewer studies, however, have focused on individual differences in trait empathy, that is the general tendency to empathize with other persons (rather than outgroup members in particular), and particularly little is known about the impact of these differences on children's outgroup attitudes. The few studies that did focus on trait empathy indicate that the tendency to empathize with others relates to more outgroup positivity in children (Nesdale et al., 2005), adolescents (Miklikowska, 2018), and adults (Álvarez-Castillo, Fernández-Caminero & González-González, 2018).

The present study sought to replicate and complement these findings by critically examining the link between trait parallel empathy and ethnic outgroup attitudes in ethnic majority preadolescents (age 8–13 years), and by investigating the moderating role of the perceived attitudes of the classroom peer group. To this aim, two sets of survey data were analyzed that were collected among ethnic Dutch majority preadolescents in the Netherlands. Although (some of) the group attitudes of these children have been investigated in previous studies (Geerlings, Thijs & Verkuyten, 2017), those studies did not examine the role of empathy. The participant children reported on their attitudes toward Turkish and Moroccan (both datasets) as well as Surinamese (Dataset 1) and Chinese people (Dataset 2). Although these four groups are culturally distinct and show different levels of integration into Dutch society, they are all ethnic minority groups in the Netherlands and experience discrimination there (Andriessen, 2017; Gijsberts et al., 2011).

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Empathy and intergroup attitudes

As a trait, empathy has been conceptualized in many and sometimes inconsistent ways (Hall & Schwartz, 2019). Still, there is agreement that it consists of cognitive and affective aspects (Eisenberg et al., 2006; Miklikowska, 2018; Stephan & Finlay, 1999). The cognitive aspect of empathy, perspective taking, involves the ability to see things from others' point of view and thus to understand how others feel. Its affective aspects involve the experience of similar emotions, referred to as parallel empathy (e.g., feeling sad when others feel sad), but also the experience of reactive emotions in response to others' emotional states, referred to as empathic concern (e.g., feeling concern for others who feel sad). It has been shown that the affective and cognitive factors are interrelated in the course of development (i.e., empathic concern facilitates perspective taking from mid- to late adolescence; Miklikowska, 2018).

There are at least three theoretical reasons to expect that trait empathy increases positivity toward minority outgroups. First, empathic concern implies that an individual cares for the well-being of others. This care could generalize to the members of other groups, thus stimulating positive attitudes toward those outgroups as a whole (Batson et al., 1997; see also Stark et al., 2013, for attitude generalization). Second, the ability to take the perspective of others (including relatively "unfamiliar" outgroup members) and experience parallel emotions in result might enhance perceptions of intergroup similarity, and thereby facilitate the development of a more positive orientation toward the outgroup. Thus, seeing the world from "their" viewpoint and feeling what "they" feel can lead to the conclusion that "they" are "just like us" (Stephan & Finlay, 1999). Third, many minority groups suffer from discrimination and stigmatization. When majority group members experience empathy for minority outgroup members who face discrimination, majority members may become more aware of the injustices these outgroup members have to endure. This, in turn, could improve their outgroup attitudes (Finlay & Stephan, 2000; Nesdale et al., 2005).

Empirical research on empathy and outgroup attitudes is largely consistent with this reasoning. Most of these studies have used experiments or interventions to manipulate the outgroup empathic states of adults and children via perspective taking. They found that taking an outgroup perspective can improve outgroup evaluations (e.g., Batson et al., 1997; Beelmann & Heinemann, 2014; Dovidio et al., 2004; Galinsky & Moskowitz, 2000; Vescio et al., 2003; for exception see Vorauer & Sasaki, 2009) and overpower ingroup bias in children's intention to help (Sierksma et al., 2014).

To our knowledge, only four studies have examined the link between trait empathy and outgroup attitudes, with two studies including parallel empathy. Álvarez-Castillo et al. (2018) found that outgroup prejudice was related to a combination of cognitive and affective empathy components among adults. However, this relation was indirect and mediated by social dominance orientation, i.e. the preference for social group hierarchies based on the belief that some groups are superior to others. Miklikowska (2018) included perspective taking and empathic concern as simultaneous predictors of adolescents' prejudice (anti-immigrant attitudes) over time. Both aspects of trait empathy were strongly related to prejudice, but only perspective taking had a unique effect, mediating the impact of empathic concern. It is important to note, however, that this study examined only one affective component of empathy, that is empathic concern (e.g., "When I see someone getting exploited, it feels like I want to protect that person"; Davis, 1983). The tendency to be concerned about others does not automatically imply that one's own feelings mirror the feelings of others, which means that individual differences in parallel empathy (the other affective component of trait empathy) could still be important for one's outgroup attitudes. This was found, in fact, in a set of experiments among Anglo-Australian children (age 5–12) by Nesdale et al. (2005). These authors examined children's ethnic group attitudes using a variation of the minimal group paradigm. That is to say, based on a quasi-random criterium (their drawing ability) children were assigned to a team of coethnic children that competed against another team consisting either of coethnic or ethnic outgroup children (Pacific Islanders). The children did not actually meet any of those in- or outgroup peers and only saw pictures of them. The results showed that children's parallel empathy predicted a positive attitude toward the

rival team when that team consisted of ethnic minority peers (Study 1 and 2). Moreover, this effect was stronger than when the rival team consisted of coethnics (Study 1). In the latter case, the effect of empathy was not significant.

Consistent with Nesdale et al.'s (2005) findings, it can be expected that children's parallel empathy has positive effects on their outgroup attitudes, and negative effects on their ingroup bias, i.e. their ingroup attitudes minus their outgroup attitudes. Each of the aforementioned mechanisms for the empathy-outgroup-attitude link – i.e., generalized concern for distant and unfamiliar others, enhanced perceptions of outgroup-ingroup similarity, increased sympathy for the outgroup's social position (Batson et al., 1997; Stephan & Finlay, 1999) – seems to assume that children know their ingroup others well and care for them already. Thus, if parallel empathy increases positivity toward minority outgroups via these mechanisms, it should have a weaker effect on children's attitudes toward the more familiar majority ingroup. There is ample evidence for ingroup bias among ethnic majority children (see e.g., Thijs, 2017). This suggests that their ingroup attitudes are quite positive already and that there is less room for empathy-related improvement.

Perceived normative context

An important question is not only if, but also under what conditions children's parallel empathy is related to their outgroup attitudes. Several theoretical perspectives, such social identity development theory (Nesdale, 2004) and sociocognitive developmental theory (Rutland et al., 2010) claim that children's outgroup attitudes are affected by social norms. Research has supported these claims by showing that children adjust their outgroup attitudes to the norms of their peer group both in experimental (e.g., De França & Monteiro, 2013; McGuire et al., 2015) as well as in "real life" settings such as classrooms (e.g., Kiesner et al., 2003; Miklikowska, 2017). Given the normative importance of peers for children's outgroup attitudes, it is vital to examine if and when peer norms affect the impact of children's empathy on their outgroup attitudes. In the present study this was done by taking the perceived ethnic attitudes of the classroom peer group into account. These perceived attitudes can function as so-called descriptive norms by indicating what evaluative responses are common in the classroom (see Lapinski & Rimal, 2005).

Theoretically, peer norms could either increase or decrease the empathy-outgroup-attitude link. On the one hand, a negative peer group norm could inhibit the impact of parallel empathy as it might motivate children to not "apply" their empathic tendencies to the outgroup. This was found by Nesdale et al. (2005) in their second experiment: parallel empathy had a positive effect on their outgroup attitude if children were told that there was a positive (inclusive) ingroup norm about the outgroup, but there was no effect if children learned there was a negative (exclusive) norm. This seems consistent with the notion that more empathic children are generally more understanding of others' feelings and beliefs, and, therefore, also receptive to social group norms (Rutland et al., 2010).

Yet on the other hand, it could also be expected that the impact of parallel empathy is stronger when children perceive a *less* positive norm toward the outgroup. The perception of such a negative norm could indicate that there is shared prejudice toward the outgroup. And, as mentioned, the empathy-outgroup attitude link may be especially strong when outgroups are stigmatized or discriminated against (see Finlay & Stephan, 2000). This expectation is inconsistent with Nesdale et al.'s (2005) findings, but it is important to note that their study had two specific features. First, the children reported their ethnic attitudes in the presence of an experimenter, and this could mean that the more empathic children might have been more motivated to give norm-consistent responses than their less empathic peers. Second, the peer group norm in Nesdale et al.'s (2005) second experiment was experimentally manipulated rather than assessed from the child's own perspective. One possibility is that, rather than being more attentive to it, the more empathic children were simply more likely to register the norm correctly. Research suggests that children can misperceive the norms relayed to them in experiments (McGuire et al., 2017) and this might be more likely for less empathic children who are less focused on others.

Overview of the present research

This research used two datasets collected among ethnic Dutch majority preadolescents to investigate the link between their parallel empathy and ethnic outgroup attitudes, and to examine the moderating role of the perceived attitudes of the classroom peer group. Four hypotheses were evaluated.

First, it was expected that children's parallel empathy was positively related to their ethnic outgroup attitudes (H1), and – anticipating a stronger association with their outgroup versus their ingroup attitudes – negatively related to their ingroup bias (ingroup minus outgroup attitudes) (H2). Next, it was tested whether the empathy-out-group attitude link was weaker (H3) or rather stronger (H4) if children perceived less positive classroom attitudes (descriptive norms) about the out-group. These two competing hypotheses could be examined in Dataset 2 only.

In testing these hypotheses, children's perceptions of the relational closeness with their teacher (available in both datasets) and multicultural education (available in Dataset 1 only) were included as control variables. These variables were found to be significant predictors of children's ethnic attitudes in previous research on the present datasets, and could be expected to be related to children's empathy and to their intergroup attitudes. Including them allowed for a stronger test of our hypotheses. Relationships with teachers can function as so-called secondary attachment bonds which can provide children with security and the confidence to approach others and confront new and challenging situations (Verschueren & Koomen, 2012). Attachment researchers have shown that relational security can increase empathic responses (Mkulincer et al., 2001) and mitigate the fear of (unfamiliar) outgroup members (Mikulincer & Shaver, 2001). Moreover, positive relations with teachers may increase openness to ethnic others (Miklikowska et al., 2019). Multicultural education often seeks to increase intergroup attitudes by prompting students to look beyond their own culture and to find commonalities with the lives of others (Verkuyten & Thijs, 2013), and increasing outgroup empathy is an effective component of interventions to prevent or reduce prejudice in children and adolescents (Beelmann & Heinemann, 2014). Although the focus was on trait empathy rather than outgroup empathy, perceived multicultural education could be a third variable causing a spurious relation between children's empathy and outgroup attitudes. In addition to this, children's age and gender were considered as control variables. Empathy is a marker of socio-emotional development (Eisenberg & Fabes, 1990) and, both older children and girls have been found to be more empathic than younger children and boys (Eisenberg et al., 2006). At the same time research has found both positive and negative changes in children's ethnic attitudes during early adolescence (for a meta-analysis, see Raabe & Beelmann, 2011), and more outgroup positivity among girls versus boys (Jargon & Thijs, 2020).

Method

Participants

Two datasets were used gathered among preadolescent children (aged 7–13) in the 4th to 6th grade of different primary schools across the Netherlands.

Dataset 1

The sample consisted of 335 ethnic Dutch students (M_{age} = 10.83 years, SD = 0.94; 53% girls) from 36 classes (grades 4–6) in 16 schools in different parts of the Netherlands. Together with their classmates of other, mixed, or unknown ethnicities, these children took part in a short-term longitudinal study on classroom dealings with ethnic diversity. The study consisted of two waves. Wave 1 was halfway through the school year (January-March) and Wave 2 was at the end of the school year (June and July). During both waves, children were surveyed under similar conditions. They completed a questionnaire in their classroom, under supervision of their teacher and/or a research assistant. The questionnaires included questions related to ethnic diversity and children's experiences with their teachers and peers. Participation in the study was voluntary and anonymous and all children with parental consent participated. The children were selected based on their ethnic self-labeling at Wave 2 and the

additional criteria that this self-labeling should be similar or compatible to that of Wave 1 and that both parents of the children should be born in the Netherlands. Initially, 360 children were selected in this way, but because there were few missing values on the variables (≤3.1%) and missings seemed to be at random according to the LMCAR test, $\chi^2(36) = 26.79$, $p = .87$, listwise deletion was used. All variables used in the present study were assessed at Wave 2, except children's gender and the perception of multicultural education.

Dataset 2

Originally, 543 children from 22 primary school classrooms (Grades 4–6) in 8 schools in different parts of the Netherlands participated. After receiving informed parental consent, students anonymously and voluntarily filled out a pen-and-paper questionnaire in their classroom. The survey included questions about ethnic diversity children's experiences with their teacher and peers, but also vignettes and questions about helping behaviors. For the present study, children were selected who identified both of their parents as ethnic Dutch ($n = 363$) and did not indicate to be non-Dutch themselves.[1] As less than 7.5% of the scores on each study variable was missing, and missings seemed to be completely at random, $\chi^2(100) = 91.95$, $p = .71$, again listwise deletion was used. This led to a final sample of 326 participants (48% girls) with a mean age of 10.53 years ($SD = 1.03$).

Measures

Parallel empathy (both datasets)

Children's tendency to empathize with others was assessed using an adaptation of the Index of Empathy for Children and Adolescents (Bryant, 1982) by Nesdale et al. (2005). This measure has adequate reliability across different age groups in Nesdale et al.'s (2005) study and has been successfully used in Dutch research (see Sierksma et al., 2014). Nesdale's adaptation consists of eight items, including "If I see another child cry, I almost have to cry myself as well", and "If I see happy people, I become happy myself as well." Answers were scored on a scale ranging from 1 (*Absolutely never!*) to 5 (*Always!*).

To test whether the eight items loaded on a single factor in both datasets, a multiple group Confirmatory Factor Analysis (CFA) was conducted in Mplus version 8.3 (Muthén & Muthén, 2012). Four fit indexes were relied on: the comparative fit index (CFI), the Tucker Lewis index (TLI), the root mean square error of approximation (RMSEA), and the standardized root mean residual (SRMR). Model fit is considered good if CFI and TLI have values of 0.95 or higher, and RMSEA and SRMR are lower than 0.05. CFI and TLI values larger than 0.9 and RMSEA and SRMR values smaller than 0.1 are considered acceptable (Kline, 2011).

Results showed weak support for an unconstrained one-factor model, $\chi^2(40) = 262.64$, CFI = 0.80, TLI = 0.72, RMSEA = 0.13, SRMR = 0.07. However, the fit of this model was acceptable after removing three items ("I really like it if someone receives a surprise", "I pity animals in pain", and "If a story has a happy ending, I feel happy myself") that were not characteristic for parallel empathy and deviating from Bryant's original scale, and after allowing one error correlation between two items ("If I see happy people, I become happy myself as well" and "I feel bad when I see another child who has no one to play with""), $\chi^2(8) = 23.15$, CFI = 0.98, TLI = 0.94, RMSEA = 0.08, SRMR = 0.03. Constraining the factor loadings, and subsequently, the intercepts across both samples did not lead to deteriorations in model fit, respectively, $\chi^2_{diff}(4) = 3.49$, $p = .48$, and $\chi^2_{diff}(4) = 8.89$, $p = .06$. This indicated that the factor structure for the five-item scale was metrically and scalarly invariant and thus similar across both datasets. For the analyses the five items were averaged together, and Cronbach's alpha was 0.71 in both datasets.

Group attitudes

Dataset 1. Children's attitudes toward Surinamese, Turkish, Moroccan, and Dutch people were assessed using a Likert-type response format consisting of seven faces. These measures were

introduced as questions "about what **you** think about different groups of people living in the Netherlands." These faces ranged from very happy (1; *big smile*) to very sad (7; *big frown*), and there was a neutral mid-point (3; *straight face*). The "seven faces" response format (Yee & Brown, 1992) has been successfully used to examine group attitudes among early adolescents from different ethnic groups. Measures were recoded such that higher scores indicated more positive evaluations. The attitudes toward Surinamese, Turks, and Moroccans were strongly related ($r > 0.55$).

Dataset 2. Children's attitudes toward Dutch, Turkish, Moroccan, and Chinese were assessed with the same smiley-face scales as in dataset 1.[2] These measures were introduced by the instruction to indicate "what **you** think about the next groups of people." Again, the three outgroup attitudes were strongly related ($r > 0.5$). Additionally, children's attitudes toward Moroccan (outgroup) and Dutch (ingroup) peers were assessed with four trait evaluations. Unfortunately, these trait evaluation measures were not available for other ethnic groups. The participants had to estimate whether most of the children in each group were, "friendly', "honest", "fun to play with", "eager to help", and the response scale ranged from 1 (*No, certainly not!*) to 5 (*Yes, certainly!*). Different studies have successfully used such trait dimensions to examine group attitudes in children (Brown & Bigler, 2002; Thijs, 2017; Verkuyten, 2002). Cronbach's alpha was 0.90 for the outgroup attitude and 0.84 for the ingroup attitude. CFA in Mplus supported a two-factor structure in which the items for each group evaluation loaded on separate factors: $\chi^2(19) = 67.21$, CFI = 0.96, TLI = 0.95, RMSEA = 0.09, SRMR = 0.04.[3] For the Dutch target group, the trait evaluation measure was weakly related to the smiley face measure, $r = 0.13$, presumably because the distribution of the latter had strong skewness, −4.44, and kurtosis, 29.81. For the Moroccan target group, however, the correlation between both measures was strong, $r = 0.67$, which supported their validity.

Perceived classroom attitudes (Dataset 2)

To assess the perceived attitudes of the classroom peer group, children completed the aforementioned "seven-faces" scales (Yee & Brown, 1992) to indicate how most of the children in their class evaluated various groups. For the present analyses (see below) the perceived classroom attitudes toward Dutch (ingroup) and Moroccan people (outgroup) were used. In addition, a perceived bias score was calculated by subtracting the perceived outgroup attitude from the perceived ingroup attitude.

Control variables

To examine the unique effects of parallel empathy, children's perceptions of multicultural education (in Dataset 1) and relational closeness with their teacher (in both datasets) were considered as control variables. Perceived multicultural education was measured by three items, including "Does your teacher ever say that you should respect all cultures?" These items have been used in previous studies in the Netherlands (Verkuyten & Thijs, 2013) and Cronbach's alpha was 0.74 for these three items. Relational closeness was measured with six items from the preliminary version of the Student Perception of Affective Relationship with Teacher Scale (SPARTS; Koomen & Jellesma, 2015) in Dataset 1 ($\alpha = 0.84$) and six items from its final version in Dataset 2 ($\alpha = 0.82$). A sample item is "If I have a problem, I can share it with my teacher."

Results

Correlations

Table 1 shows the intercorrelations and means for the study variables. In Dataset 1, empathy was positively related to the attitude toward Surinamese people, but unrelated to the other outgroup attitudes or the attitude toward the Dutch ingroup. The correlations for the smiley-face measures in Dataset 2 indicate that children's empathy was associated with positive attitudes toward Chinese, Turkish, and Moroccan people but, again, unrelated to the ingroup attitude measure. Additionally,

Table 1. Intercorrelations and means.

	Dataset 1 (n = 335)						*Dataset 2 (n = 326)*				
	1	2	3	4	5	*M (SD)*	1	3	4	5	*M (SD)*
1. Parallel Empathy						2.83 (0.75)					2.83 (0.78)
2. Multicultural Education	0.12*					3.14 (0.92)	-	-	-	-	-
3. Teacher Closeness	0.17**	0.20**				3.70 (0.77)	0.25**				4.00 (0.70)
4. Gender	0.35**	0.07	0.13*			0.53 (-)	0.33**	0.00			0.48 (-)
5. Age	0.13*	0.21**	0.04	0.08		10.83 (0.94)	0.04	−0.03	−0.06		10.53 (1.03)
Smiley face measures											-
Surinamese	0.18**	0.24**	0.18**	0.05	0.15**	5.20 (1.59)	-	-	-	-	-
Turks	0.06	0.24**	0.15**	0.07	0.07	4.53 (1.83)	0.12*	0.16**	0.01	0.11	4.64 (1.71)
Moroccans	0.05	0.23**	0.17**	0.07	0.01	4.30 (1.97)	0.20**	0.18**	0.10	0.10	4.39 (1.82)
Chinese	-	-	-	-	-	-	0.16**	0.07	0.09	0.13*	4.96 (1.61)
Dutch	0.04	0.00	0.17**	0.11	0.06	6.73 (0.71)	0.01	0.02	0.09	−0.04	6.79 (0.60)
Trait evaluations											
Moroccan children	-	-	-	-	-	-	0.30**	0.23**	0.13*	0.05	3.31 (0.85)
Dutch children	-	-	-	-	-	-	0.02	0.12*	−0.03	−0.17**	4.15 (0.58)

* $p < .05$, ** $p < .01$

empathy was positively related to their trait evaluation of Moroccan children, and unrelated to their trait evaluation of Dutch children.

With respect to the control variables, perceived multicultural education and teacher closeness were related to both empathy and (most of) the group attitude measures. Next, girls reported more empathy than boys in both datasets, but gender was related to the trait evaluation measures only, and unrelated to the smiley face measures. Finally, age was related to both empathy in Dataset 1 only, where it was related to the attitude toward Surinamese people as well. Based on these correlations it was decided to include perceived multicultural education and teacher closeness in all analyses where possible, and to control for age in Dataset 1 and for gender in the analyses of the trait evaluation measures in Dataset 2.

Regression analyses

Given that the children in each dataset were nested in classrooms, their scores were not fully independent. Analyzing dependent data with conventional statistical tests could lead to an underestimation of standard errors and hence to spuriously significant results (Snijders & Bosker, 1999). To prevent this, the hypotheses were tested with multilevel regression analyses in Mplus version 8.4 (Muthén & Muthén, 2012) in conjunction with the robust maximum likelihood estimator (MLR).[4] Multivariate modeling was used to analyze the smiley face measures. To test the hypothesis (H2) about the link between empathy and ingroup bias, ingroup bias measures were calculated by subtracting the score on each outgroup attitude measure from the score for the corresponding ingroup attitude measure. For ease of interpretation, all continuous measures were standardized (z scores) and a contrast was used for gender ("0.5" for girls and "-0.5" for boys).

Smiley-face measures

For each dataset, we first ran a set of multivariate models to estimate the impact of empathy without (Model 1), and with the control variables included (Model 2). The results for these models are shown in Table 2 (Dataset 1) and 3 (Dataset 2). Next, we put similarity constraints on the regression coefficient for parallel empathy in the full models (control variables included) to inspect the overall (common) effect of this predictor.

In Dataset 1, empathy was related to children's evaluations of the Surinamese outgroup only. It had a significant positive effect on the attitude toward that group, and a negative significant effect on the bias against it. Although both effects became marginally significant when the control variables were added, they were still in line with the hypotheses (and significant with one-sided testing) (see Table 2).

Further analyses of the constrained full models showed that the common effects of empathy were not significant for outgroup attitudes, $b = 0.07$, $se = 0.05$, $p = .22$, or bias, $b = -0.06$, $se = 0.05$, $p = .27$.

In Dataset 2, empathy had positive effects on the attitudes and negative effects on the bias toward each group, but the effects for the Turkish target group became not significant when the control variables were included in the full models (see Table 3). Still, the common coefficients indicated an overall positive effect on outgroup attitudes, $b = 0.13$, $se = 0.05$, $p = .01$, and an overall negative effect on ingroup bias, $b = -0.13$, $se = 0.05$, $p = .01$.

Trait evaluations (Dataset 2 only)

Models 1 and 2 in Table 4 show the main effects of parallel empathy on children's trait evaluations of Moroccan peers, respectively, without and with the control variables included. In both cases these effects were significant, and positive for children's outgroup evaluation and negative for their ingroup bias.

Next, the perceived classroom attitudes and their interactions with empathy were entered as predictors (Model 3). For the outgroup evaluation, the perceived attitude toward Moroccans was included, and for ingroup bias the perceived bias score (attitude toward Dutch minus attitude toward

Table 2. Multivariate regression models for group-specific smiley-face measures (Dataset 1).

	Attitude toward			In-Group Bias relative to		
	Surinamese	Turks	Moroccans	Surinamese	Turks	Moroccans
	b (SE)	*b (SE)*	*b (SE)*	*b (SE)*	*b (SE)*	*b (SE)*
Model 1 Parallel Empathy	0.17 (0.07)*	0.06 (0.05)	0.04 (0.05)	−0.14 (0.07)*	−0.04 (0.05)	−0.02 (0.06)
Model 2 Parallel Empathy	0.13 (0.07)†	0.03 (0.05)	0.01 (0.05)	−0.12 (0.07)†	−0.02 (0.05)	−0.01 (0.06)
Multicultural Education	0.14 (0.06)*	0.17 (0.08)*	0.16 (0.07)*	−0.15 (0.07)*	−0.17 (0.09)*	−016 (0.08)*
Teacher Closeness	0.09 (0.07)	0.08 (0.07)	0.10 (0.06)†	−0.02 (0.08)	−0.01 (0.07)	−0.04 (0.05)
Age	0.10 (0.06)	0.04 (0.07)	−0.03 (0.08)	−0.07 (0.06)	−0.01 (0.06)	0.06 (0.07)

† $p < .10$,* $p < .05$

Table 3. Multivariate regression models for group-specific smiley-face measures (Dataset 2).

	Attitude toward			In-Group Bias relative to		
	Turks	Moroccans	Chinese	Turks	Moroccans	Chinese
	b (SE)	*b (SE)*	*b (SE)*	*b (SE)*	*b (SE)*	*b (SE)*
Model 1 Parallel Empathy	0.10 (0.05)*	0.18 (0.05)**	0.16 (0.06)**	−0.10 (0.04)*	−0.17 (0.05)**	−0.15 (0.06)*
Model 2 Parallel Empathy	0.07 (0.05)	0.14 (0.05)**	0.15 (0.06)*	−0.07 (0.04)	−0.14 (0.05)**	−0.14 (0.06)*
Teacher Closeness	0.14 (0.05)**	0.14 (0.06)*	0.04 (0.04)	−0.13 (0.05)*	−0.13 (0.06)*	−0.03 (0.04)

† $p < .10$,* $p < .05$, ** $p < .01$

Table 4. Regression models for trait evaluation measures (Dataset 2).

	Attitude toward Moroccan Peers			Ingroup Bias relative to Moroccan Peers		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
	b (SE)	*b (SE)*	*b (SE)*	*b (SE)*	*b (SE)*	*b (SE)*
Parallel Empathy	0.28 (0.06)**	0.22 (0.06)**	0.17 (0.06)**	−0.26 (0.07)**	−0.22 (0.07)**	−0.18 (0.06)**
Teacher Closeness	-	0.17 (0.07)*	0.12 (0.07)†	-	−0.09 (0.08)	−0.06 (0.07)
Gender	-	0.12 (0.12)	0.12 (0.11)	-	−0.13 (0.14)	−0.15 (0.14)
PCA	-	-	0.38 (0.08)**	-	-	0.34 (0.07)**
Parallel Empathy* PCA	-	-	−0.07 (0.04)	-	-	−0.11 (0.04)**

PCA = Perceived Classroom Attitudes.
† $p < .10$,* $p < .05$, ** $p < .01$

Moroccans). The interaction was significant for ingroup bias only, and further examined with simple slope analyses (see Aiken & West, 1991). Results indicated that the relation between empathy and ingroup bias was *stronger* when the perceived classroom norm was more (1 *SD* > *M*) versus less biased (1 *SD* < *M*), $b = -0.28$ $se = 0.08$, $p < .01$, versus $b = -0.07$, $se = 0.06$, $p = .27$. Figure 1 illustrates the interaction for the unstandardized bias measure. Note that even for the highly empathic children the ingroup bias was positive (>0) indicating a preference for the own group. This supports the idea that children were already quite positive about the ingroup and that there was less room for empathy-related attitude improvement.

Discussion

The aim of the current study was to further understand the link between trait empathy and ethnic outgroup attitudes by examining the role of parallel empathy and perceived classroom norms in two samples of ethnic majority group children. The main expectations were that children with a stronger tendency to empathize emotionally with others would be more positive toward ethnic others (H1) and less biased in favor of their ingroup (H2).

These hypotheses received only moderate support in our first dataset. Children's parallel empathy was related to more positive outgroup attitudes and to less ingroup bias. However, these results applied to the Surinamese target group only, and the impact of empathy appeared to be group-specific rather than general. Still, the two hypotheses received considerable support in the second dataset. Empathy had the expected effects on the smiley face evaluations (attitudes and bias) of each group, and although some of the effects were not significant when the control variables were included, its overall impact was significant. Moreover, empathy was significantly related to the trait evaluations of Moroccan children (outgroup attitude) and Moroccan versus Dutch children (ingroup bias).

These results are (partly) in line with earlier studies which found that two aspects of trait empathy (i.e., perspective taking and empathic concern) predicted adolescents' attitudes toward immigrants (Miklikowska, 2018) and that children's parallel empathy was positively related to their ethnic outgroup attitudes (Nesdale et al., 2005). Moreover, consistent with Nesdale et al.'s (2005) findings, the present results indicate that children's parallel empathy was more relevant for their evaluation of the outgroup than for their evaluation of the ingroup. Importantly, these results are in line with several explanations for the empathy-outgroup-attitude link proposed in the literature, that is to say the notions that, compared to less empathic individuals, more empathic individuals are more likely to understand outgroup others, to care for those others,

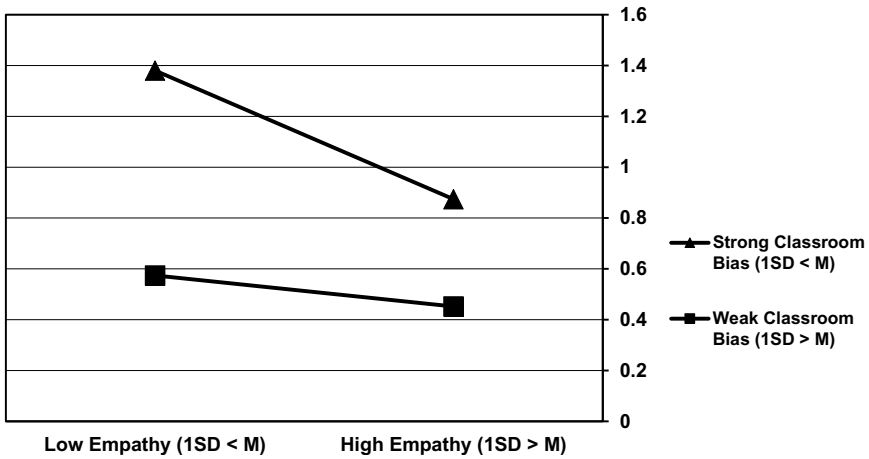

Figure 1. Interaction effect of parallel empathy and perceived classroom bias on in-group bias.

and to develop sympathy for their situation (Batson et al., 1997; Stephan & Finlay, 1999). Each of these explanations seems to assume that the outgroup is psychologically distant and unfamiliar, and that empathy can help to overcome this distance and unfamiliarity. The fact that no relation was found between children's empathy and their attitude toward the more familiar ingroup is clearly consistent with these assumptions. The more empathic children in Dataset 2 were less biased in favor of their ingroup, which suggests that empathy has a potential to bridge the evaluative distinction made between in- and outgroup others. Still, even those children displayed some ingroup bias in their attitudes, which supports social identity theory's (Tajfel & Turner, 1979) claim that people have the basic tendency to prefer their ingroup over outgroups.

Consistent with research on social identity development theory (Nesdale, 2004) and socio-cognitive developmental theory (Rutland et al., 2010) the current study also examined the role of perceived classroom attitudes in Dataset 2. More specifically, it tested the competing hypotheses that the empathy-outgroup attitude link was weaker (H3) or rather stronger (H4) if children perceived a less positive outgroup attitude in the classroom peer group. The analyses supported the last hypothesis, but only when children's outgroup attitude was examined relative to their ingroup attitude (i.e., ingroup bias) in combination with the perceived outgroup attitude relative to the perceived ingroup attitude (i.e., perceived ingroup bias). Thus, children's parallel empathy appeared to matter most for their biased outgroup attitude when the perceived classroom attitude toward the outgroup was less biased. Apparently, children were most likely to "apply" their empathic tendencies to ethnic outgroup members if they sensed that there was shared antipathy or prejudice against those ethnic others. This interaction is opposite to the one reported by Nesdale et al. (2005; Study, 2) who found that children's parallel empathy had a positive effect on their outgroup attitudes when the peer group norm about the outgroup was positive as well. It is important to note, however, that those authors manipulated the peer norm and assessed children's group attitudes in the presence of an experimenter, whereas the present study included children's subjective perceptions of the attitudes of their group and assessed their own attitudes in private. Thus, the present results do not rule out the possibility that more empathic children are more likely to register particular social norms or show norm-consistent responses in public situations. Future research could use experimental designs to test these possibilities.

It is also interesting to relate the current findings to the so-called empathy bias, which is the well-documented tendency to experience less empathy for outgroup as compared to ingroup members (e.g., Bruneau et al., 2017; Neumann et al., 2013). At first sight, this tendency might seem incompatible with the finding that children's empathy was unrelated to their ingroup attitudes. However, the present study did not examine outgroup empathy, and the absence of the empathy-ingroup-attitude link does not imply a lack of empathy for the ingroup. In fact, it is probably just because out-group empathy is not as self-evident as ingroup empathy that trait empathy has the potential to improve one's outgroup attitudes (rather than one's ingroup attitudes). People can have difficulties putting themselves in the position of outgroup others because these others are unfamiliar to them. Yet, once they successfully do this, those others become more familiar and group biases can be overcome. Individuals high on trait empathy are better at this than others, and it is reasonable to expect that those individuals are less prone to the empathy bias. Future research should test this possibility by including measures of trait empathy, outgroup empathy, and ingroup empathy.

The findings of the present study have practical relevance because they indicate that children's intergroup relations may be improved by increasing their trait empathy. Many multicultural interventions aim to increase empathy for outgroups (Beelmann & Heinemann, 2014) but do not explicitly target interpersonal empathy. However, a focus on interpersonal rather than outgroup empathy can prevent possible unintended effects of such multicultural interventions, such as the reification of group boundaries or increases in stereotypical thinking (see Bigler, 1999). Next, the interaction findings suggest that it is especially relevant to increase interpersonal empathy when children sense that their peers are biased against the outgroup. Hence, interventions to enhance interpersonal empathy are very

likely to be worth the investment in contexts of outgroup prejudice, that is in situations where attitude improvement is most needed.

In evaluating the present findings, it is important to consider some of the differences within and between the datasets. First, the relation between children's empathy and outgroup attitudes appeared to be stronger when the trait evaluations rather than the smiley-face measures were analyzed. It could be that argued there was more measurement error in the latter because they were single item measures, but the correlations between them were relatively strong. Possibly the trait evaluations were more appropriate for detecting effects of empathy because those measures were more concrete – as they asked about outgroup peers rather than the outgroup in general, and because they required children to think of the outgroup more – as children had to indicate what their outgroup peers were like. Future research could test this possibility by manipulating different types of group evaluation measures. However, it is not fully clear why the results for the smiley-face measures were more pronounced in the second as compared to the first dataset. Based on the number of ethnic Dutch (relative to the total number of original) participants, it might be concluded that the children in Dataset 1 were more familiar with ethnic diversity at their schools. Theoretically this could make the impact of interpersonal empathy less relevant: These children might have been already quite positive about ethnic others, due to more opportunities for positive interethnic contact (Allport, 1954; Pettigrew & Tropp, 2008). Still, the fact that the average group attitudes (smiley-face measures) were rather similar across both data-sets (Table 1) goes against that interpretation. Alternatively, the inclusion of other help-related questions (prior to the empathy and group attitude measures) in Dataset 2 might have made individual differences in empathy more salient there. Regardless of their exact explanation, it is important to acknowledge these different outcomes, as they stress the importance of replication in psychological research (Pashler & Wagenmakers, 2012). The results of the present study indicate that trait empathy can contribute to positive group attitudes but that this will not always be the case. Future research should further examine when, why, and how this effect operates.

In addition to this, some limitations need to be considered. First, the cross-sectional nature of the data does not permit conclusions about the direction and causality of the relationships. Future research should therefore use longitudinal or experimental designs to substantiate our conclusions. Second, the study fully relied on children's self-reports and this means that the possibility of common method variance cannot be ruled out. Future attempts to replicate its findings could use independent sources for different measures, and research on children could use parental ratings of empathy (e.g., Dadds et al., 2008). Related to this, the focus was on children's subjective perceptions of peer group attitudes, and these might have been (partly) based on children's own ethnic attitudes via the process of social projection or social anchoring. In fact, an earlier study used Dataset 2 to examine perceived classroom bias as the outcome of children's own bias as assessed with the smiley-face measures (Thijs & Verkuyten, 2016).[5] Still, it is important to study children's subjective perceptions and understandings of (descriptive) norms as those eventually guide their behavior. Moreover, perceived "real-life" norms probably have more ecological validity than norms relayed in an experiment, and children might be affected by them more easily. Finally, the study focused on parallel empathy only and future research should further examine its effects combined with those of empathic concern and perspective taking.

To conclude, the present study found that parallel empathy is related to more outgroup positivity in ethnic majority children, but also that this relationship is dependent on the perceived normative context. Individual differences in parallel empathy appear to matter most for children's ethnic bias when they perceive bias as common, and this is when anti-prejudice interventions are most needed. Hopefully, these findings contribute to a further understanding of the role of empathy in intergroup relations.

Notes

1. Dataset 2 included three questions on the degree of Dutch identification where children could also indicate that they considered themselves as non-Dutch. Children who did so for one or more of the questions were excluded,

but also children who did not answer all of them. The identification measure was not part of the analyses as it was unrelated to children's empathy.
2. The datasets also contained smiley-face measures for other groups (Polish people, Dataset 1), and (German people, in Dataset 2). These questions were not included as those groups are not typical minority groups in Dutch society.
3. The trait evaluation measures were part of a small survey experiment which tried to influence children's outgroup attitudes via an attachment priming procedure. However, the experimental manipulation only influenced children's ingroup attitude but not their outgroup attitude or ingroup bias. Moreover, it was unrelated to empathy and it did not interact with it.
4. Because the focus was on individual children, no predictors at the classroom level were included.
5. For this reason, the effects of the norm perceptions on the smiley-face attitude measures were not analyzed.

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Data availability statement

The data described in this article are openly available in the Open Science Framework at https://osf.io/fm8y5/?view_only=6c0bc71a1ecb41ee86e0becdc990a451.

Open scholarship

This article has earned the Center for Open Science badges for Open Data and Open Materials through Open Practices Disclosure. The data and materials are openly accessible athttps://osf.io/fm8y5/?view_only=6c0bc71a1ecb41ee86e0becdc990a451.

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