

Disentangling unique and consensual group norm perceptions: A study with ethnic majority students

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The influence of group norms is often tested via people's norm perceptions. Yet, people's group norm perceptions can be inaccurate, which raises the question to what extent effects of perceived norms indicate real group influence. The present study sought to obtain a better understanding of the value of group norm perceptions in social influence research. We used (longitudinal) data collected in 51 primary school classrooms in the Netherlands (Grades 3–6) and examined how majority of children's ($N = 779$; aged 7–13 years) perceptions of the anti-prejudice norm of their classroom peer group affected their ethnic outgroup attitudes both concurrently and over time. We divided these perceptions into a consensual and a unique part and investigated the moderating role of ingroup identification. Results showed concurrent effects of the consensual and unique norm perceptions, but a longitudinal effect of the consensual perceptions only. Classroom identification increased the concurrent effect of unique norm perceptions but decreased their longitudinal effect. Our findings indicate that norm perceptions can be important sources of actual group influence as long these perceptions are consensually shared, and that especially high identifiers rely less on their unique norm perceptions over time.

Keywords: Perceived norms; Consensus; Ethnic attitudes; Group identification.

Social norms are extremely popular in the social and behavioural sciences, especially in developmental, social and cross-cultural psychology (Legros & Cislighi, 2020). Social norms indicate what most group members typically do (descriptive norms) or consider appropriate (injunctive norms) (Cialdini & Trost, 1998), and can be examined in various ways. They can be experimentally manipulated, objectively assessed—by aggregating attitudes, beliefs, or behaviours of individual group members (or a representative sample of them)—or measured via individuals' subjective perceptions. A powerful argument for doing the latter is that norms are most likely to be influential through people's personal understandings of them (see NSNC, 2014–2016). However, people's norm perceptions can also be inaccurate, because it is not always clear what others do, think or believe, especially when it comes to socially sensitive topics. This possibility of misperception raises the important question to what degree the effects of a perceived group norm indicate real group influence or spurious influence from other sources such as

the media or, in case of social projection, the self (Thijs & Verkuyten, 2016). Although it is practically impossible to answer this question for broad social categories based on similarities between people (such as gender or national groups), it can be addressed in so-called dynamic groups, smaller groups in which people interact and know each other (see Marques et al., 2001) and for which the norm perceptions of all group members can be established. In the present study, we did the latter by examining a sample of 51 school classes (Grades 3–6).

We focused on ethnic majority students and examined how their perceptions of the anti-prejudice norm of their classroom peer group predicted their ethnic outgroup attitudes, both cross-sectionally (in the fall) and longitudinally (from the fall to the spring). We also tested the moderating role of children's classroom identification. Our norm perception measure involved a combination of descriptive and injunctive norms as we asked our participants how often most children in their classrooms made statements (descriptive) to the effect that they considered

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prejudice unacceptable (injunctive). Due to our sampling of whole classrooms, we were able to measure the norm perceptions of (almost) all children in each classroom. Thus, we could examine the degree to which the norm perceptions of the ethnic majority children were shared with their classmates (consensual) but also the degree to which they deviated from those of their classmates (unique). To our knowledge, the empirical distinction between consensual and unique norm perceptions has not been made in the literature before. However, as we will explain below, it is crucial for determining the degree to which effects of perceived group norms indicate true group influence. Almost all participants were in late childhood (8–10 years) or early adolescence (11–13 years), which are important periods for the development of intergroup relations: Children of those ages have acquired more flexible ways of thinking about group boundaries (Aboud & Amato, 2001) and their group attitudes are increasingly dependent on social norms (McGuire et al., 2015).

Norms and norm perceptions

Due to the numerous definitions and operationalizations of social norms, the literature about them is “multifaceted and at times contradictory” (Legros & Cislighi, 2020, p. 62). Yet, empirical research has to depart from specific definitions, and in the present study, we follow Cialdini and Trost (1998) by considering norms as “rules and standards that are understood by members of a group, and that guide/constrain social behavior without the force of law” (p. 152).

This description clarifies that norms are existing characteristics of groups (“rules and standards”) that are subjectively perceived (“understood”) by their members. Accordingly, researchers have made the distinction between collective norms (sometimes also called actual norms) and perceived norms, where the first refer to what groups as a whole really think or do, and the second to individuals’ beliefs about those consensual thoughts and behaviours (Rimal & Lapinski, 2015; Thijs & Verkuyten, 2016).

Perceived norms do not always match with collective norms. Sometimes, individuals may draw erroneous conclusions about the prevailing attitudes or behaviours of other group members because they have no direct access to them (Prentice & Miller, 1993). In those situations, people may be affected by what they perceive to be the norms of the group, but not by the collective norms themselves. It may be difficult to see how a group can have a normative impact if its members misperceive its norms, and this raises the question whether it is useful to include norm perceptions in research on actual (rather than “imagined”) group influence. However, the answer to this question depends on the nature of people’s normative misperceptions. On the one hand, they may be idiosyncratic and reflect egocentric biases (Kitts, 2003).

For example, social psychologists have demonstrated the process of self-anchoring in which people assume that other group members are similar to themselves—as opposed to self-stereotyping, the process in which prototypical group characteristics are seen as self-defining (van Veelen et al., 2016). Likewise, research on preadolescents indicates that they tend to project their own ethnic attitudes on the perceived norms of their classmates (Thijs & Verkuyten, 2016; Thijs & Zee, 2019). This social projection produces false consensus and clearly undermines the usefulness of individual norm perceptions as predictors of attitudes or behaviours, especially in cross-sectional designs where the direction of relations cannot be established. If norm perceptions are at least partly a result of one’s personal attitudes and beliefs, there is the risk of overestimating normative influence.

However, group norms can also be collectively misperceived, and collective norm perceptions can be important sources of group influence even if they are incorrect. This is clearly evidenced by the literature on pluralistic ignorance (Sargent & Newman, 2021), the phenomenon of “no one believes, but everyone thinks that everyone believes” (Krech & Crutchfield, 1948, p. 389). Probably the most famous example of this is the situation where most college students consume more alcohol than they actually want, because they mistakenly assume that their peers value excessive alcohol consumption (Prentice & Miller, 1993). By its very nature, pluralistic ignorance is a group-level phenomenon that can explain similar outcomes for different group members (Sargent & Newman, 2021).

Accordingly, it is not so much the degree to which norm perceptions match collective norms, but the degree to which they are consensual that determines their usefulness in social influence research. When norm perceptions are shared among group members they can be regarded as group characteristics. And regardless of whether or not these shared perceptions are correct (i.e., match the collective norms), they are potentially important sources of group influence. Conversely, there can be no group influence through individuals’ norm perceptions if those are completely idiosyncratic. Any effect of these unique perceptions must be related to individual rather than group-level factors.

In practice, group norm perceptions are hardly fully shared or fully idiosyncratic, but rather a combination of both. Thus, it makes sense to divide these perceptions into a consensual part that is shared with the rest of the group and a unique part that is not shared with the rest of the group. This division can be made if the perceptions of all group members (or a representative sample) are known. The consensual part can then be obtained by averaging the perceptions of all group members, and the unique part by centring the perceptions of the individual members on the group average (see Thijs & Verkuyten, 2016). Figure 1 shows this for two members (X and Y) from two hypothetical groups (A and B). Member X of Group A

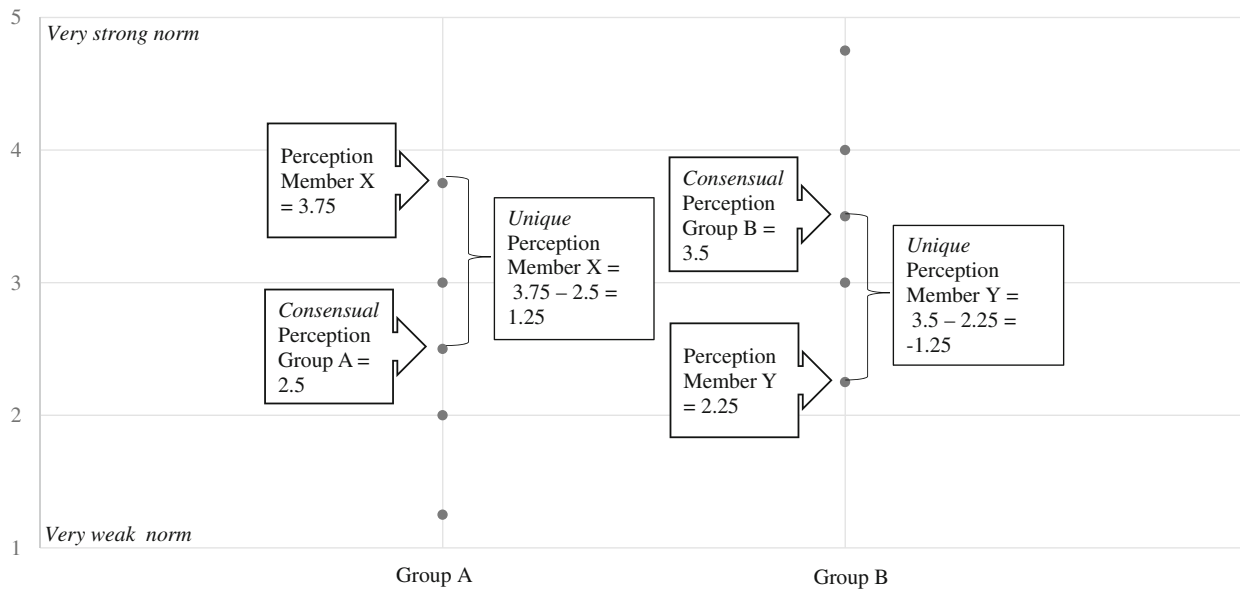


Figure 1. Example of consensual and unique norm perceptions.

perceives a stronger norm than Member Y of Group B. However, this difference is the result of their unique norm perceptions, as the consensual norm perception is actually weaker in Group A.

The consensual and unique parts of people's norm perceptions could affect the same outcome variables in the same way. Because people rely on ingroup others to obtain meaningful information about their social world (Turner et al., 1987), they can be assumed to attach importance to what they perceive to be the norm, regardless of whether this perception is shared or not. However, it is reasonable to expect that this dual impact of uniquely and consensually perceived norms is more easily detected in cross-sectional designs where norm perceptions and outcome variables are simultaneously assessed, as compared to longitudinal designs where the relations between those measures can be examined over time.

Being sensitive to group norms implies being sensitive to social consensus. However, the unique part of people's norm perceptions indicates a lack of consensus, as it reflects disagreement with their ingroup members. The discovery that one's norm perceptions (partly) differ from those of others may lead to the conclusion that one has over- or underestimated the norm, and would make one's unique perceptions a less reliable source of influence. However, this possibility would only apply to their longitudinal effects, because it takes time to discover that those perceptions are not consensually shared. Moreover, to the degree that subjective norm perceptions are due to social projection, and thus reflect what individuals think and believe already, they may also have less unique impact over time. Taken together, this leads to the prediction that the longitudinal effect of the unique part of people's norm

perceptions should be smaller than that of the consensual part.

Identification

The influence of social norms on attitudes can be expected to be stronger for individuals who highly identify with their social group. According to Self-Categorization Theory (Turner & Reynolds, 2012) this can be explained by the process of self-stereotyping "through which people assign the norms and the attributes of the category to themselves" (p. 406). People are more likely to be guided by what is perceived to be common and desirable in their group, if they think, feel and behave like typical group members, and this partly depends on the degree to which they identify with their ingroup. Research has supported this notion by showing that the impact of social group norms is stronger for higher compared to lower identifiers (e.g., Blondé et al., 2022; Masson & Fritzsche, 2014). However, because high identifiers perceive a relatively strong overlap between themselves and their ingroup, the reverse process of self-anchoring (or social projection), is more likely for them as well (Thijs & Verkuyten, 2016).

The two processes of self-stereotyping and self-anchoring suggest two complementary possibilities as to how ingroup identification could moderate the impact of subjective norm perceptions. When these perceptions and their proposed outcomes are simultaneously assessed (cross-sectional situation), both the consensual and unique parts can be expected to have more impact for high- as compared to low identifiers. The former is more oriented toward the ingroup, and there is no reason to expect differences for the unique

and consensual perceptions. However, this changes when the impact of people's subjective norm perceptions is examined over time. Whereas ingroup identification can still be expected to strengthen the longitudinal impact of the consensual part of these perceptions, it can also be expected to diminish the longitudinal impact of their unique part. By definition, the unique part deviates from the consensual part and because high identifiers are more attuned to their ingroup, they are more likely to discover this deviation and to less strongly rely on their unique perceptions. Moreover, given their tendency to use social projection (Thijs & Verkuyten, 2016), their unique perceptions are more likely to reflect their previous attitudes and thus have less impact beyond those previous attitudes themselves.

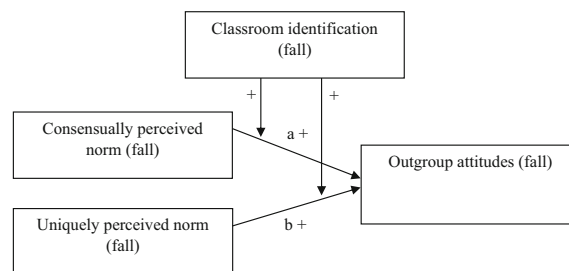
The present study

The present study sought to obtain a better understanding of the value of subjective group norm perceptions in social influence research by (a) dividing these perceptions in consensual and unique parts, (b) examining the cross-sectional and the longitudinal impact of both parts, and (c) investigating the moderating role of ingroup identification. We used (longitudinal) data collected in 51 primary school classrooms in the Netherlands (fall and spring), and we examined ethnic Dutch majority children, their perceptions of the anti-prejudice norm of their classroom peer group, their classroom identification and their attitudes toward Moroccan and Turkish peers. Despite their differences, people of Turkish and Moroccan descent are seen as typical ethnic minority groups in the Netherlands. They face relatively high levels of prejudice and discrimination (Andriessen, 2017), and Dutch majority children evaluate these groups quite similarly, and generally less positively than their ethnic ingroup (Thijs & Verkuyten, 2016) or other ethnic outgroups (van Bommel et al., 2020).

Figure 2 shows our hypotheses (not pre-registered). First, we expected positive main effects for both the consensual and the unique parts of the norm perceptions on individuals' outgroup attitudes, both cross-sectionally (Paths a and b) and longitudinally (Paths c and d). Second, we hypothesized that the longitudinal effect of the unique part would be smaller than the longitudinal effect of the consensual part (Path d < Path c). Third, we hypothesized that the cross-sectional impact of children's unique and consensual norm perceptions (Paths a and b) would be stronger for higher versus lower classroom identifiers.

Finally, we anticipated that children's classroom identification would strengthen the longitudinal impact of their consensual norm perceptions (Path c) but weaken the longitudinal impact of the unique perceptions (Path d). We controlled for gender, age and ethnic classroom composition. Sometimes girls report more outgroup

Cross-sectional Model



Longitudinal Model

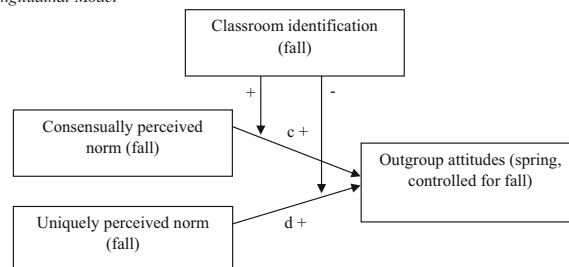


Figure 2. Summary of expected relations.

positivity than boys (van Bommel et al., 2020), and with age, children think more flexibly about group boundaries (Aboud & Amato, 2001). Moreover, the ethnic composition of their classroom determines whether children have opportunities for interethnic contact which could affect their ethnic outgroup attitudes (Tropp & Prenevost, 2008).

METHODS

Data and participants

The data for this study were collected in 51 primary school classes (Grades 3–6) in the Netherlands during the school year 2017–2018. This number of classes was large enough (≥ 50 ; Maas & Hox, 2005) to use them as clusters in our multilevel analyses (see below). There were three waves. For the present study, we selected the Wave 1 (Fall) and Wave 3 (Spring) data, but we used information from all waves to assess children's ethnic backgrounds and used the Wave 2 (Winter) data in our additional analyses (see below). At all waves, students filled out questionnaires in the classroom, while there was a researcher or research assistant present. After informed passive consent was obtained from parents (respectively, 93% and 90% of the children per class, on average, at Wave 1 and Wave 3) 1258 children participated. We used data from this total sample to measure the consensual part of children's norm perceptions and the ethnic composition of their classroom. Yet for our main analyses, we only selected children who could be identified as ethnic Dutch (see "Ethnic background") and had no missing values on the variables of interest. This final sample consisted of 779 children

(403 girls and 376 boys), with a mean self-reported age of 9.82 years ($SD = 1.20$; range = 7–13¹) at Wave 1. They were from 51 classrooms in 31 schools (indicating a mean of 1.65 participating classrooms ($SD = 1.02$) and 25.13 children ($SD = 21.03$) per school), and 116 of them were in Grade 3 (14.9%), 246 in Grade 4 (31.6%), 161 in Grade 5 (20.7%), and 256 in Grade 6 (32.9%). Because more than half (19) of the schools were represented by one classroom only, we decided not to include the school as a separate level. The percentage of missing values on the perceived norm, classroom identification, and the two outgroup attitude measures ranged from 4.6 to 10.41%. A Little's MCAR test including age indicated that the missing data pattern could be regarded as completely at random, $\chi^2(37) = 52.01$, $p = .052$.

The data for this study were collected with the University of Amsterdam, and approval for the research project was granted by the Ethics Review Board of that university (project no. 2017-CDE-8653). The ethnic review boards of Dutch universities acknowledge each other's judgements. The study was performed in accordance with the ethical standards as set forth in the 1964 Declaration of Helsinki and its later amendments. As mentioned, informed passive consent was obtained from the parents/caregivers of the participating children.

Measures

Ethnic background

At each wave, children were asked about their own ethnicity and the ethnicities of their mother and father, but they were permitted to skip these questions in 36 classes at Wave 3.² The ethnic Dutch participants for the present study were selected in two steps. First, we took those children who identified themselves, their mother *and* their father as completely Dutch during at least one of the waves. Next, we found that seven children in this selection reported (partly) Turkish or Moroccan identities (for themselves or their parents) at one or more of the other waves. Because we focused on Turks and Moroccans as ethnic outgroups, we removed those children from the selection.

Perceived anti-prejudice norms

To assess children's perceptions of the anti-prejudice norms expressed by the classroom peer group, they were asked, at Wave 1, to rate how often most children in their class made the following statements: "You should be nice and honest to people from other cultures," "It is

wrong to be mean to people from other countries," and "People from all cultural groups are equal." These items were based on research on multicultural education in the Netherlands (see Verkuyten & Thijs, 2013), and referred to both national and cultural others as cultural diversity and migration are closely connected in the Netherlands (see Andriessen, 2017). The response scale ranged from "Absolutely never!" (1) to "Very very often!" (5). Although we examined the effects for the selected (ethnic Dutch) Participants only, we used the available responses of *all* participants to obtain a reliable aggregate measure of the consensually perceived norm in each classroom.

Our measures were created in four steps. First, we computed scale scores for the selected sample ($\alpha = 0.82$; $N = 779$) and the total sample ($\alpha = 0.80$; $N = 1191$). Next, we calculated two intraclass correlations (ICC's) to examine whether we could aggregate the scores in the total sample to obtain consensual norm perceptions: ICC1, which indicates the proportion of shared variance within classes, and ICC2, indicating the degree to which individual scores in each class can be combined to form a reliable aggregate (Lüdtke et al., 2009). ICC1 was 0.113, meaning that 11.3% of the variance in individual perceptions could be attributed to different classrooms. ICC2 was 0.75, indicating sufficient agreement among classmates to aggregate their perceptions. Third, we created a measure for the *consensually perceived norm* in each classroom by averaging all norm perceptions available there. Finally, we calculated a measure for the *uniquely perceived norm* by centring the individual perceptions of the selected sample on the consensual perceptions.

Classroom identification

Classroom identification was assessed at Wave 1 by three items that were based on earlier research among Dutch primary school children (Thijs & Verkuyten, 2016), namely "Do you like being part of your class?," "Are you proud of your class?" and "Do you think it is important to be part of your class?"; α was 0.75.

Outgroup attitudes

Children's outgroup attitudes were assessed at Waves 1 and 3 by asking them to evaluate whether, respectively, "most" Moroccan and Turkish children were "honest," "fun to play with," and "eager to help." The response scale ranged from "No, certainly not!" (1) to "Yes, certainly!" (5). These measures have been successfully used to examine ethnic outgroup attitudes in previous research (Thijs & Zee, 2019). Both in the fall and the spring, the

¹ Only five of the children were 7 years old and one child was 13 years old.

² On group of test assistants decided to diminish the burden of data collection for the participating children by allowing them to skip the questions about their ethnicity at Wave 3.

items for each group evaluation loaded on a separate factor (see preliminary analyses below), but the factors for the attitudes toward Moroccan and Turkish children were strongly related ($r_s > 0.80$). Thus, we combined the evaluation items for those groups in a six-item outgroup attitude scale, for which Cronbach's alpha was .90 in the fall, and .93 in the spring.

Ethnic classroom composition

Our measure for ethnic classroom composition reflected the proportion of students who identified themselves, their mother, *and* their father as completely Dutch during at least one of the waves not counting the students reporting (partly) Turkish or Moroccan identities at one or more waves.

Data analytic strategy

We tested our hypotheses with multilevel analyses in Mplus (Muthén & Muthén, 2012). We examined observed variables (scale scores) because we could not estimate latent variables for the consensual and unique norm perceptions at the same time: The former was based on the larger total sample ($N = 1191$) and the latter on the selected sample ($N = 779$). As the consensual and unique norm perceptions had the same metric, we directly compared their effects by imposing similarity constraints (Kline, 2011). We also ran additional tests to examine whether the effects of children's consensual and unique norm perceptions were age-dependent. However, we first conducted confirmatory factor analyses in Mplus (on the selected sample) to examine the factor structure underlying the individual-level measures and to test whether the structure for children's ethnic attitudes was invariant over time. All of our Mplus output is available in the open science framework at <https://osf.io/wrz6a/>. We also examined the intercorrelations and means of the individual-level measures.

RESULTS

Preliminary analyses

Factor structure and measurement invariance

First, we specified a six-factor model with corresponding factors for (1) the perceived norm items, (2) the classroom identification items, (3) the items for the fall evaluation of Moroccan children, (4) the items for the fall evaluation of Turkish children, (5) the items for the spring evaluation of Moroccan children, and (6) the items for the spring evaluation of Turkish children. With four cross-factor error correlations for children's out-group attitudes—between the “honest” items for

Turkish children and Moroccan children, and the “eager to help” help items for each target group, both in the fall and in the spring—the fit of this model was adequate (see Kline, 2011): $\chi^2(116) = 242.613$, CFI = 0.986, TLI = 0.981, RMSEA = 0.037, SRMR = 0.028. Subsequently, we examined whether the group attitude measures were metrically invariant over time by putting similarity constraints on the fall and spring loadings of each item, and the fall and spring correlations of the two factors. This did not worsen the fit of the model, $\chi^2_{\text{diff}}(5) = 2.295$, $p > .8$, which means that there was metric invariance and that it was meaningful to control for children's fall attitudes in the longitudinal analyses. We did not test for scalar invariance as we did not want to compare the attitude levels over time.

Intercorrelations and means

Table 1 shows the intercorrelations and means of the individual-level variables. The norm measure involves the participants' individual perceptions prior to separating them into a unique and consensual parts. It was associated with more outgroup positivity both concurrently (fall) and over time (spring). In addition, children's outgroup attitudes were relatively stable over time. We also examined the correlation between the consensually perceived norms and ethnic composition at the classroom level ($N = 51$). It was not significant, $r = -0.12$.

Main analyses

We conducted two sets of multilevel regression analyses. The first set was cross-sectional and involved outgroup attitudes in the fall, and the second set was longitudinal and predicted children's spring attitudes (later) controlling for their fall attitudes (concurrent). In both sets, we first inspected the variance distributions of the dependent variable across the individual (Level 1) and the classroom level (Level 2) (Step 1). Next, we examined the main effects of the unique (Level 1) and consensual (Level 2) parts of children's norm perceptions and compared those by means of equality constraints (Step 2), and subsequently investigated the interactions between children's norm perceptions and classroom identification (Step 3). We controlled for gender, age, and ethnic classroom composition in Steps 2 and 3, and for children fall attitudes in all longitudinal analyses. Results of the last two steps are shown in Table 2.

Cross-sectional analyses

The first step of the cross-sectional analyses indicated that 1.7% of the total variance in children's outgroup attitudes was at the level of the classroom. $p = .32$. Next, in Step 2, the unique part of children's norm perceptions

TABLE 1
Intercorrelations and descriptives for individual variables

Variable	1	2	3	4	M	SD
1. Perceived norm					1.87	0.81
2. Classroom identification	0.08*				4.15	0.79
3. Outgroup attitudes	0.23**	0.15**			3.39	0.90
4. Later outgroup attitudes (Spring)	0.13**	0.05	0.53**		3.64	0.91
5. Age	0.26**	−0.02	0.05	−0.05	9.82	1.20
6. Gender (girl 0.5 vs. boy −0.5)	−0.02	0.01	0.16**	0.15**	0.02	−

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

TABLE 2
Multilevel models for the prediction of outgroup attitudes

	Cross-sectional (Fall)		Longitudinal (Fall→ Spring)	
	Step 1	Step 2	Step 1	Step 2
Fixed effects	<i>B (SE)</i>	<i>B (SE)</i>	<i>B (SE)</i>	<i>B (SE)</i>
Constant	2.31 (0.36)*	3.32 (0.41)**	2.56 (0.32)**	3.12 (0.36)**
Individual level				
Uniquely perceived norm (UPN)	0.24 (0.04)**	0.22 (0.04)**	−0.00 (0.03)	0.01 (0.03)
Classroom identification (CLI)	0.15 (0.04)**	0.16 (0.04)**	−0.03 (0.04)	−0.04 (0.04)
CLI*UPN	—	0.14 (0.06)*	—	−0.10 (0.05)*
Gender (girl 0.5 vs. boy −0.5)	0.30 (0.06)**	0.31 (0.06)**	0.11 (0.05)*	0.11 (0.05)*
Age	0.01 (0.04)	0.01 (0.04)	−0.11 (0.04)**	−0.11 (0.04)**
Outgroup attitudes (Fall)	—	—	0.53 (0.04)**	0.54 (0.04)**
Class level				
Consensually perceived norm (CPN)	0.25 (0.15)	0.21 (0.15)	0.36 (0.12)**	0.37 (0.12)**
Classroom composition (%Dutch)	−0.10 (0.20)	−0.10 (0.20)	−0.22 (0.19)	−0.21 (0.19)
Cross-level interactions				
CLI*CPN	—	0.07 (0.15)	—	0.14 (0.12)
Random effects				
σ^2_e	0.71 (0.04)**	0.70 (0.04)**	0.57 (0.03)**	0.56 (0.03)**
σ^2_u	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
$\sigma^2_{\text{class room identification}}$	—	0.01 (0.01)	—	0.01 (0.01)

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

had a positive effect, indicating that children who perceived a stronger anti-prejudice norm in their classroom compared to their classmates were more likely to report positive evaluations of ethnic outgroup peers. The effect of the consensual part was not significant ($p = .085$), but also not significantly ($p = 1.00$) different from the effect of the unique part. Further inspection indicated that the standardised effect of the unique perception was small to medium, $\beta = .21$, and that the standardised effect of the consensual perception was strong, $\beta = .58$, and surprisingly, significant, $p < .05$ (see Cohen, 1992). Classroom identification had a positive effect, and girls had more positive outgroup attitudes than boys.

In the third step, children's classroom identification interacted with the unique part of their norm perceptions only. This interaction accounted for 1.1% of the Level 1 variance. To further inspect it, we first moved the nonsignificant interaction between identification and the consensual perception from the model, after which the

interaction with the unique perception was still significant ($p < .05$). Next, we plotted the effects of a strong ($1\ SD > M$) versus weak ($1\ SD < M$) unique norm perception for high ($1\ SD > M$) versus low ($1\ SD < M$) levels of classroom identification. As shown in Figure 3, the impact of the unique perceptions was stronger for high ($b = 0.33$, $SE = 0.44$, $p < .01$) versus low identifiers ($b = 0.12$, $SE = 0.07$, $p = .11$).

Longitudinal analyses

After the impact of the fall attitudes was controlled for in Step 1, 2.4% of the variance in children's spring attitudes was at the classroom level (Level 2), $p = .09$. The unique part of children's norm perceptions had no effect over time in Step 2, but the consensual part was associated with more positive outgroup attitudes. The difference between both effects was significant ($p < .01$), and further inspection showed that the standardised effect

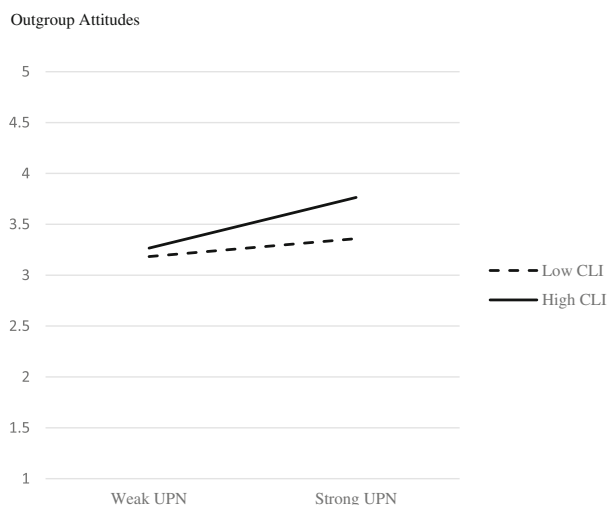


Figure 3. Cross-sectional interactions between norm perceptions and classroom identification on outgroup attitudes. *Note.* UPN = uniquely perceived norm; CLI = classroom identification. “Weak” and “Low,” and “Strong” and “High” refer to, respectively, 1 *SD* below, and 1 *SD* above the variable means.

of the consensual perception was strong, $\beta = 0.75$. In the third step, the interaction between classroom identification and the unique part of the prescriptive norm perception was significant yet small (explaining 0.9% of the Level 1 variance). Again this interaction remained significant ($p < .05$), when we removed the nonsignificant interaction between classroom identification and the consensual part. Figure 4 illustrates this interaction after this removal. The effect of the unique part was positive for low identifiers (1 *SD* < *M*; $b = 0.09$, $SE = 0.06$) and negative for high identifiers (1 *SD* > *M*; $b = -0.07$, $SE = 0.04$), although not significant in both cases, $p > .10$.

Additional analyses

Finally, we conducted four sets of additional analyses to strengthen our interpretation of the findings. Full results of these analyses are available in the open science framework at <https://osf.io/wrz6a/>. First, we explored whether the main effects of children’s unique and consensual norm perceptions differed for older versus younger participants. We calculated two interaction terms for age and each of the perception measures and added them to the first steps of our models. Both effects were not significant in either the cross-sectional model or the longitudinal model. Thus, the effects of the norm perceptions were not dependent on age.

Next, we reran our analyses with a revised version of the consensual norm perception measure based on the aggregated perceptions of the selected sample (Dutch majority) only, and accordingly, with a different unique norm perception measure. In our main analyses, we used

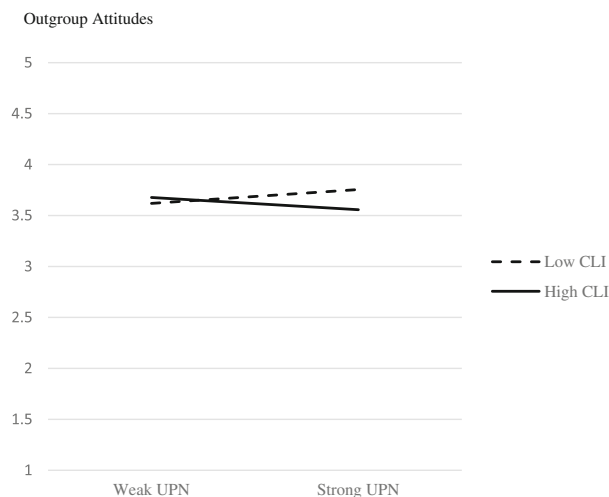


Figure 4. Longitudinal interactions between norm perceptions and classroom identification on outgroup attitudes. *Note.* UPN = uniquely perceived norm; CLI = classroom identification. “Weak” and “Low,” and “Strong” and “High” refer to, respectively, 1 *SD* below, and 1 *SD* above the variable means.

the original sample including non-Dutch participants as those were part of the classroom peer group as well. However, when thinking about their classmates, the Dutch participants might have had only their ingroup peers in mind, as the norm measure related to intergroup relations. Results suggested this was not the case: The effects of the norm perceptions were roughly similar to those reported in Table 2, but both the standardised cross-sectional effect of the consensual norm perception and the longitudinal interaction between the unique perception and classroom identification were no longer significant.

In another set of longitudinal analyses, we examined children’s outgroup attitudes at Wave 2 (Winter) rather than Wave 3 (Spring) as the dependent variable. Results are similar to those reported in the main analyses, but the interaction between classroom identification and the uniquely perceived norm was no longer significant. This further supports the idea that it takes time to discover that one’s group norm perceptions are not consensually shared.

In the last set of longitudinal analyses, we controlled for the Wave 2 rather than the Wave 1 attitude. All effects that were significant in the main analyses were significant in those analyses as well. This suggests that the norm perceptions continued to have an effect later in the school year.

DISCUSSION

Individuals may sometimes misperceive the norms of their groups, which calls into question the value of including subjective norm perceptions in research on real group influence. The present study set out to reach a better

understanding of this value by examining a large sample of ethnic majority students who reported on their ethnic outgroup attitudes as well as on the anti-prejudice norms of their classroom peer group. School classes constitute demarcated, dynamic groups in which students know each other (see Marques et al., 2001), and for which the norm perceptions of all group members can be established. Thus, they provide an excellent opportunity to divide group norm perceptions of individuals in a consensual part (shared with group members) and a unique part (not shared with group members). We tried to make a unique contribution by examining the cross-sectional and the longitudinal impact of both parts on children's outgroup attitudes, and by investigating the moderating role of children's classroom identification.

We expected that both parts of the norm perceptions would be positively associated with outgroup attitudes (concurrently and longitudinally), but also that the longitudinal effects would be smaller for the unique as compared to the shared part. There was considerable support for these hypotheses. Children who uniquely perceived a strong anti-prejudice norm in their classroom peer group concurrently had a more positive outgroup attitude. The concurrent impact of the consensual norm perceptions was not significant but similar in size to the effect of the unique perceptions and the standardised effect was significant. Moreover, children's consensual norm perceptions predicted a more positive outgroup attitude over time, and this longitudinal effect was stronger than that of the unique part. These findings are consistent with the idea that it takes time to discover that one's own norm perceptions can deviate from those of others, which would make them a less reliable source of influence, and also with the notion that these norm perceptions could partly reflect one's pre-existing attitudes due to social projection.

Our last hypotheses were premised on the assumption that group norms have more psychological relevance for high identifiers. For the cross-sectional situation, where norm perceptions and attitudes were simultaneously assessed, we expected that children's classroom identification would increase the impact of what they perceived to be the norm, consensually as well as uniquely. For the longitudinal situation, we anticipated that the consensual perceptions would have a stronger effect for high classroom identifiers but that the unique parts would have a weaker effect for them. Our analyses provided partial support for these hypotheses. Classroom identification increased the cross-sectional impact of the unique norm perceptions and diminished the longitudinal impact of that part. The first of these findings is consistent with Self-Categorization Theory and its claim that once people categorise themselves as ingroup members, the norms of the ingroup become important for them (Turner et al., 1987). The second finding indicates that high identifiers are also more sensitive to a lack of group consensus. They were initially more strongly and positively affected by

their unique perception of the anti-prejudice norm in their classroom, but less so over time, even to the extent of readjusting their attitude in the opposite direction.

Children's classroom identification did not significantly moderate the impact of the consensual part of the norm perceptions, although the sign of the interactions was positive and in line with our expectations. Presumably, this had to do with the size of the interaction effects in combination with the number of classrooms. The interaction effects of the unique part were small (explaining around 1% of the individual-level variance), and not larger than the longitudinal interaction effect of the consensual part (see Table 2). Our number of 51 classrooms was clearly sufficient to do multilevel analyses (Hox et al., 2018), but possibly the cross-level interaction effects were too small to detect with 51 classrooms. The fact that there were less classrooms than children could also explain why the non-standardised cross-sectional effect of the consensually perceived norm was not significant yet similar to that of the uniquely perceived norm.

Taken together our findings indicate that it is useful to include norm perceptions in social influence research: The consensual perceptions explained between-classroom variation in outgroup attitudes, and this means that they were an important source of group influence. As suggested by the literature on pluralistic ignorance (Sargent & Newman, 2021), norm perceptions do not need to be correct to be influential, but only consensually shared. Thus, we respectfully disagree with the position that individual norm perceptions should not be aggregated because they are inaccurate (Rimal & Lapinski, 2015). Yet, although the accuracy of consensual norm perceptions is irrelevant to the question of whether there is group influence, it could be important for interventions. Earlier research found that children's perceptions of the diversity norms in their classrooms were strongly related to the collective norms there (Thijs & Verkuyten, 2016), and it is unlikely that the children in the present study completely misperceived the anti-prejudice norm, as our measure referred to public and thus observable expressions of this norm ("do children in your class say ...?"). However, if consensually perceived norms do not match collective norms, this has implications for norm-based attempts to change attitudes (e.g., prejudice) and behaviours (e.g., excessive drinking). Then, it might be more productive to target the consensual misperceptions of the norm rather than the collective norm itself (see also the social norms approach; NSNC, 2014–2016).

The present study has some qualifications and limitations that need to be considered. First, the standardised effects of the consensual norm perceptions (>0.5) indicated that they explained a relatively large share of the differences in outgroup attitudes between majority of children from different classrooms. Still, only a small part of the total variance in those attitudes was at the classroom

level to begin with (<2.5%). Thus, the overall group influence via the consensual norm perception was comparatively small in this particular study, explaining less than 1% of the total variance in the cross-sectional model, and less than 2% of it in the longitudinal model.

Next, although our longitudinal design permitted conclusions about the direction of effects, we cannot make causal claims or rule out third variable problems. Children's group attitudes could be affected by the perceived norms of other parties as well,³ and although we controlled for the possible influence of interethnic (i.e., ethnic classroom composition), interethnic contacts outside the school context and classroom differences in socio-economic status could have played a role. Experimental designs would be more appropriate for making causal statements, but experiments can lack ecological validity.

Third, in interpreting the longitudinal effects of children's unique norm perceptions, we assumed that children noted the discrepancy between their own perceptions and those of others. Future research should directly examine this assumption. Fourth, due to sample restrictions, we only included (self-identified) ethnic majority children in our study, and future studies could examine how children from other groups respond to perceived anti-prejudice norms in their classroom. Finally, it is important to replicate our conclusions with different kinds of outcomes (e.g., behaviours) and other participant groups. We cannot extrapolate our conclusions to other situations, but we suspect they are not limited to the context of the present research.

In sum, our findings suggest that subjective norm perceptions can be important sources of actual group influence as long these perceptions are consensually shared. Thus, we hope to inspire other researchers in the popular field of social norms to take (dis)agreement on normative consensus into account.

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³ We also had measures for the perceived anti-prejudice norms of parents and teachers. When we added the consensual and unique parts of these measures to our Models 1 (Table 2) the main effects of the consensually perceived peer norm were not significant, but still larger and more significant than those of the consensual parts of the other measures. This lack of effects was probably due to the strong correlations between the consensual parts of the different measures ($r > 0.83$).

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