



Peer likeability and victimization in young adolescents: Moderating effects of descriptive and status group norms for aggression and prosocial behaviour and network density

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Introduction. Previous research has shown that peer victimization can be highly responsive to variables at the classroom level. Aggressive and prosocial norms may promote or reduce its status in classrooms. However, yet there is an apparent lack of success to explain which types of norms are more influential. This study examined the role of aggressive and prosocial descriptive and status norms in the peer victimization–status link. It also explores how the network density increases adherence to the prevailing norm in the classroom and its effect on the status of the victims.

Method. Data on peer acceptance and rejection, victimization, prosocial behaviour, and aggression were collected with sociometric methods in a sample of 6,600 students ($M = 13.1$ years, $SD = 0.6$; 49.2% girls), from 269 classrooms in 81 secondary schools in Spain. Group norms for aggression and for prosocial behaviour were assessed in three ways, the behaviour of all peers (class-norm), the behaviour of most-liked peers (likeability-norm), and the behaviour of most salient peers (visibility-norm).

Results. Multilevel regression analyses revealed that the negative impact of victimization on peer likeability was moderated by the classroom's norm for prosocial behaviour, by the status norm of most visible peers' norm for prosocial behaviour and for aggression, and by the group's network density. The behavioural status norms of most likeable peers had no significant effect.

Conclusion. These results underscore the overall importance of group context as a moderating factor of the relation between victimization and peer status in adolescents, and add to the growing body of knowledge driven by the socio-ecological approach to the study of peer relations in developmental psychology. As implications for education, these results affect the importance of considering socio-emotional variables in the formation of class groups in order to reduce victimization.

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Developmental psychologists interested by the study of adolescents' peer relations have traditionally focused on the status–victimization relationship. Peer victimization has shown to be associated with being disliked or rejected by their classmates (Schuster, 1999). Although rejection can be a consequence of victimization, it might be also an antecedent. This has led to some researchers to propose the existence of a vicious cycle of reciprocal influence (Hodges & Perry, 1999). This status–victimization link can be highly responsive to variables at the classroom level. Of particular interest from a peer ecology perspective are studies that have specifically tackled issues relating to the potentially moderating effects of behavioural group norms on the relation between individual behaviour and the peers' social status in different groups. Sentse, Scholte, Salmivalli, and Voeten (2007) reported that especially bullying, but to a lesser extent victimization too, were better accepted in classrooms of adolescents where both behaviours were normative. Kärnä, Voeten, Poskiparta, and Salmivalli (2010) found that the positive association between victimization and peer rejection in 3rd to 5th graders was strengthened in classrooms where the norm for reinforcing bullying was high and the norm for defending victims was low. Isaacs, Voeten, and Salmivalli (2013) found that the positive association between rejection and peer victimization was heightened in classrooms where a high level of aggression was normative. Aggression and prosocial behaviour are key components of the behavioural repertoire that adolescents enact to initiate, maintain, and terminate their social relationships with peers. They have often been studied separately, analysing issues such as their stability over time, with high levels for both types of behaviours (Hay & Cook, 2007). Both behavioural categories have been found to correlate with each other, although the strength and valence of the correlation is highly variable with more reports of negative than positive correlations (see Appendix). In a very exceptional way, this analysis has been carried out on how both types of behaviours influence each other and the impact of one on the other over time (Obsuth, Eisner, Malti, & Ribeaud, 2015). Findings showed that aggressive behaviour predicted decreases in prosocial behaviour however, prosocial behaviour did not predict changes in aggressive behaviour in the following year (Chen, Huang, Chang, Wang, & Li, 2010; Obsuth et al., 2015).

Descriptive and status peer norms

Two main categories of norms can be found in the literature. *Descriptive norms* or those that refer to what peers typically do, that is, the central tendency of a behaviour in a given group, for example, a classroom. From a social identity theory perspective, adherence to descriptive norms allows us to obtain social support, behavioural confirmation and to share a common identity (Festinger, 1954). Other approaches to the study of the effect of group norms on individual variables have focused on groupings other than the entire classroom. *Status norms* refer that popular students' behaviours are more attractive and show a higher influence on their peers (Kruglanski et al., 2002). *Visibility* is a type of peer status, also called social impact, popularity, prestige, reputation, or prominence, derived from adding liked most and liked least nominations (Coie, Dodge, & Coppotelli, 1982; Knack, Tsar, Vaillancourt, Hymel, & McDougall, 2012; Lee, 2009) which correlates positively with aggression, and in most studies also with prosociality (Appendix). A visibility-norm would indicate the level of an attribute present in those students with reputational prominence in a group. *Likeability* is another kind of peer status also called sociometric popularity, social preference, acceptance, and peer liking, and is assessed as the difference between the number of liked most and liked least nominations (Cillessen,

Schwartz, & Mayeux, 2011; Coie & Cillessen, 1993). *Likeability* has been found to be negatively associated with *aggression* and with victimization, and positively with prosocial behaviour (Appendix). A likeability-norm would indicate the level of an attribute in those individuals with high levels of peer acceptance in a group. Whereas visibility is related to social impact, reputation, and prestige, likeability is more related to affection and peer acceptance or rejection (Cillessen, 2011; Cillessen & Marks, 2011; Prinstein, 2007; Ruschoff, Dijkstra, Veenstra, & Lindenberg, 2015). Visibility and likeability represent two distinct dimensions of peer status and their correlation is highly variable across studies (see Appendix).

One of the main goals for adolescents is oriented to obtain peer status according to goal-framing theory (Lindenberg, 2008). Conformity to status norms could be explained by reputational salience hypothesis (Hartup, 1996), which states that friendship similarity occurs specially in attributes with importance in determining the adolescent's social reputation. For instance, prosocial or aggressive behaviours would be stronger in classrooms where these attitudes were associated with popularity, so they would be reputationally salient (Lanina-Wijnen et al., 2020). Several authors have studied the status norms' influence, by analysing popularity norms (Dijkstra, Lindenberg, & Veenstra, 2008; Lanina-Wijnen, Gremmen, et al., 2018; Lanina-Wijnen et al., 2016, 2020; Rambaran, Dijkstra, & Stark, 2013; Zwaan, Dijkstra, & Veenstra, 2013) or likeability-norms (Lanina-Wijnen, Gremmen, et al., 2018). Status norms are at the bottom of various social processes, for instance, peer influence on risk attitudes (Rambaran et al., 2013), friendship selection, and influence processes related to aggressive peers (Lanina-Wijnen et al., 2016) or academic achievement (Lanina-Wijnen, Gremmen, et al., 2018). Few studies have described the influence of different types of aggressive and prosocial norms, by comparing the status and descriptive levels of norm on different social processes (Dijkstra & Gest, 2015; Dijkstra et al., 2008; Lanina-Wijnen, Harakeh, Dijkstra, Veenstra, & Vollebergh, 2018; Lanina-Wijnen et al., 2016), however to date, no research has been done to test comparatively its influence on the victimization–status link. One of the objectives of this study is to compare the effect of prosocial and aggressive norms established at the class level versus the status norms established by students with greater likeability or visibility on the relationship between victimization and likeability. It is expected to find a greater influence of the norms based on the status established by subgroups compared to the descriptive norms, also within the former, a greater influence of the norms established on visibility is expected in comparison with the likeability.

Various procedures have been used for the calculation of class-norms. Regarding the descriptive norms, the most common calculation has been in obtaining the means added by class groups of the nominations received, either on prosociality or on aggressiveness (Dijkstra, & Gest, 2015; Dijkstra et al., 2008; Lanina-Wijnen et al., 2016). For the calculation of status norms, some authors have used the calculation of mean levels of aggression for those students with higher levels of popularity (>1 SD) (Dijkstra et al., 2008). Others have used the correlation between the nominations received on aggressiveness or prosociality with popularity (Lanina-Wijnen et al., 2020; Rambaran et al., 2013).

Social networks' effect

Another type of classroom-level characteristic whose impact on behaviour–peer status links has been assessed are indices derived from network analysis (Wasserman & Faust, 1994), such as *centralization* (Ahn & Rodkin, 2014; Gest, Graham-Bermann, & Hartup,

2001; Meter & Card, 2016; Neal & Cappella, 2012; Serdiouk, Rodkin, Madill, Logis, & Gest, 2015), *hierarchical structure* (Ahn, Garandeanu, & Rodkin, 2010; Garandeanu, Ahn, & Rodkin, 2011; Martín-Babarro, Díaz-Aguado, Martínez-Arias, & Steglich, 2016; Pattiselanno, Dijkstra, Steglich, Vollebergh, & Veenstra, 2015; Saarento, Garandeanu, & Salmivalli, 2015; Saarento & Salmivalli, 2015; Zwaan et al., 2013), and *density* (Ahn et al., 2010; Ahn & Rodkin, 2014; Dijkstra, Cillessen, & Borch, 2013; Martín-Babarro et al., 2016; Sijtsema, Veenstra, Lindenberg, & Salmivalli, 2009). With regard to density, for example, an index of how well students are connected to everyone else in the classroom. Density implies how many positive ties can be found in a group (Lott & Lott, 1965). It allows the transmission of group beliefs (Podolny & Baron, 1997) and facilitates the exchange of information (Ryan, 2001). Density describes the connectivity of the group and it could be a transmitter of prosocial or antisocial attitudes (Ahn et al., 2010). It has to be analysed with other variables to provide a more specific information, for instance, in combination with embeddedness (Ahn et al., 2010) or hierarchy (Martín-Babarro et al., 2016). Ahn et al. (2010) analysed the interacting effect of density and hierarchy on the status–victimization and status–aggression links. They found that victimized children were more rejected in highly hierarchized and dense classrooms. Martín-Babarro et al. (2016) found that rejected students were more victimized in highly hierarchized and dense classrooms. The interaction effect of density with class-norms has been little explored so far. The possible effect of adherence or intensification of the norm due to greater connectivity in the group has not been sufficiently explored.

The present study: objectives and hypotheses

The primary goal of the present study is to examine whether a group's behavioural norms can have a moderating effect on the association between peer victimization and likeability, which has often been reported to be negative (Appendix). We aim to establish if this negative link can be moderated by the descriptive norms for aggression and for prosocial behaviour of the entire classroom, status norms of most-liked peers and most visible peers.

We next tackle the analysis of four hypotheses, as we are concerned with four dimensions of group context: *norm* level (descriptive vs. status within classrooms), *status* type (likeability vs. visibility), *behaviour* category (aggression vs. prosocial behaviour), and *network* characteristics (density). In the hypotheses that follow, we assess the potentially moderating effect of each of these four group context-related variables on the negative relation between likeability and peer victimization. The first hypothesis predicts that *status'* norms are more influential than descriptive or entire *classrooms'* norms. This hypothesis is predicated on the assumption that within classrooms youth are more strongly influenced by specific peers, even if only because the classroom's structure typically consists of subgroups and students tend to engage in interactions with peers only or mostly from subgroups they are members of. Thus, victimization will show a higher association with likeability in those classroom groups with prosocial norms established by status compared to those with prosocial descriptive norms. Likewise, victimization will show a lower level of likeability when the norms are aggressive with a greater influence when the norm is established by status in comparison with descriptive norms. The second hypothesis posits that *visibility*-norms are more influential than *likeability*-norms in moderating the negative association between likeability and victimization. This hypothesis is predicated on the assumption that youth are more strongly influenced by peers scoring high on visibility than on likeability. This hypothesis will have a differential

effect depending on the type of status norm analysed (prosocial or aggressive). Victimization will be related to a better status in groups with higher prosocial visibility-norms compared to those with higher prosocial likeability-norms. The influence of aggressive visibility-norms will be the opposite. Victimization will show a worse status in those groups with a higher aggressive visibility-norm compared to those with a higher aggressive likeability-norm.

The third hypothesis proposes that the norms for *prosocial* behaviour are more influential than the norms for *aggression*. Several research studies have found greater presence of prosocial than aggressive students in class groups, as well as a greater effect of prosocial norms than aggressive norms on different social processes among peers. Since our study is concerned with the link between likeability and peer victimization, it seems reasonable to suggest that prosocial behaviour can have a greater impact than aggression on this specific behaviour–status link. We expect to find a greater influence and a stronger positive association of likeability with victimization in class groups with a predominance of prosocial norms compared to groups with aggressive norms, where this relationship is expected to be weaker.

Finally, our fourth hypothesis tests the interacting effect of density and social norms on the victimization–status link. More specifically, we predict that density will increase adherence to social norms. Norms will amplify its effect in highly dense classes. Those prevailing norms will show a bigger effect on the victimization–status link as a consequence of the connectedness within the classroom (Hypothesis 4).

Method

Participants

Participants were 6,600 students ($M = 13.1$ years, $SD = 0.6$; 49.2% girls) from 269 classrooms (grades 7–8; average class size 24.54 students, $SD = 4.77$) in 81 secondary schools from two regions of central Spain (Madrid and Castile-León) (68% were public schools). The participating centres were able to use the tool made available to them by the researchers. The participation of the students was 17% with respect to the total of students of each school, of which 97% of them obtained active parental consent. Eighty-six per cent of the schools demonstrated a middle SAS. In the Spanish educational system, students in the first cycle of compulsory secondary education (grades 7–8) stay with their class group from approximately October to June for practically all class hours (26 hr per week).

The sample consisted of 77.4% Spaniards, 16.7% Latin Americans, 2.4% Eastern Europeans, 2.2% Maghrebis, and 1.3% other cultural origin.

Only students who assented to participate and whose parents provided active informed consent were included in this study. Participants completed an online-based questionnaire during regular school hours in one 50-min session. This questionnaire was part of a larger-scale survey carried out with the Sociescuela application (Martín-Babarro, 2014), which aimed to assess the characteristics and level of violence at schools in the two regions aforementioned.

Procedure

During each session, two research assistants gave instructions on how to complete the questionnaire and assured the students that their answers would remain confidential. All

the information was peer reported and based on peer nominations within classrooms. Students were shown a matrix with their classmates' names and photographs and indicated their responses to the questionnaire items by selecting the pictures of the chosen classmates. This computer-based sociometric procedure enabled the participants to even nominate absent classmates and made it possible to work out indices of aggression, prosocial behaviour, and victimization for all the students in the 269 classrooms.

Measures

Gender

This measure was dummy coded (girl = 1, $n = 3,250$; boy = 0, $n = 3,350$).

Victimization

This was obtained through a peer-nomination method with no limit in the nominations' number, which yielded three measures of victimization: *physical* (e.g., "Which of your classmates are often pushed around or beaten by other students?") *verbal* (e.g., "Which of your classmates are regularly made fun of or insulted?"), and *relational* (e.g., "Which of your classmates are usually ignored or ostracized?"). For each question, the number of nominations that each student received was divided by the number of students who had answered the question and then, the three values (physical, verbal, and relational victimization; Cronbach's $\alpha = 0.79$) were added and divided by three (range from 0 to 0.96; $M = 0.05$; $SD = 0.11$). Finally, the victimization index was z-standardized.

Likeability

This index reflects how well a child is liked by his or her peers within the classroom, as it integrates rejection (least-liked nominations) and acceptance (most-liked nominations) into a single variable. The index of acceptance was estimated from the students' nominations (up to nine classmates in each case) to the following question, "Which classmates do you like to sit with?" Similarly, the rejection index was assessed with a question about the classmates, "Whom you would least like to sit with?". The total number of nominations obtained by each student in each category was divided by the number of students who responded to that question. The likeability index was obtained by subtracting the rejection index from the acceptance index (range from -0.96 to 0.88 ; $M = 0.15$; $SD = 0.32$) and converted to a z-score. Both items were previously used (Authors, 2011, 2014, 2016) and correlated positively with other similar respective items (i.e., 'Who do you like?', 'Who do you dislike?') applied by following a ratings procedure.

Visibility

It is a variable related to the prominence or social impact that a student has in the group. Although it is not measuring the same, some authors consider that it could be acting as a dimension of influence, power or in relation to popularity (Cillessen & Marks, 2011; Guy, Lee & Wolke, 2019; Parkhurst & Hopmeyer, 1998). This was defined as the number of most-liked nominations *plus* the number of least-liked nominations received by each

participant (range from 0 to 1.64; $M = 0.63$; $SD = 0.23$). As for likeability, this index was z-transformed within the classroom.

Prosocial behaviour

This was assessed by asking students which of their classmates: (1) treated their classmates well, (2) helped their classmates, and (3) got on well with the teachers (Cronbach's $\alpha = .85$); with a limit of three nominations in each case. This allowed calculation of a prosociality index for each student. To do this, the number of nominations a student received in each category was divided by the number of respondents to the relevant question. Next, the obtained scores in the three questions were added and divided by 3 (range from 0 to 0.84; $M = 0.11$; $SD = 0.12$) and z-transformed. We used aggregated individual measures to construct three measures of classroom prosociality: the *classroom*-norm was defined as the mean of individual indices of prosociality for a given classroom, the *likeability*-norm was defined as the mean prosociality of the most-liked students (those who obtained scores at least one SD above the sample mean in the likeability index), and the *visibility*-norm defined as the mean prosociality of the most salient peers (those who obtained scores at least one SD above the sample mean in the visibility index).

Aggression

This index was based on three parameters analogous to those used in prosociality: which of their classmates (1) treated their classmates bad, (2) bothered their classmates, and (3) got on badly with the teachers (Cronbach's $\alpha = .84$), with a limit of three nominations too. The number of nominations a student received in each category was divided by the number of respondents to the relevant question and the obtained scores in the three questions were added and divided by 3 (range from 0 to 0.91; $M = 0.09$; $SD = 0.14$), and then transformed into z-scores. From these data, we estimated the *classroom*-norm, the *likeability*-norm, and the *visibility*-norm for aggression in the same way as done for the three prosociality norms.

Density

This construct captures the average level of connectivity between the members of a group (Wasserman & Faust, 1994). It was assessed by asking each student to choose between up to nine classmates, which ones they were friends with. The final score corresponds to the total number of nominations received by all the group members divided by the maximum number of possible nominations in each group. Higher values indicate that there are many connections among group members and consequently, the group is said to be highly dense. Density was calculated for all groups (range = -0.99 to 0.02 ; $M = 0.67$; $SD = 0.09$). These scores were z-standardized.

Analysis

The raw data analysed in this study were nested and non-independent, that is, there were scores of individuals ($N = 6,600$ students) within classrooms ($N = 269$ groups). Thus, we used hierarchical or multilevel regression analyses that are suited to deal with such kind of data (Snijders & Bosker, 1999), where individual-based scores represent level-1 variables

(i.e., gender, victimization, aggression, prosocial behaviour, likeability, and visibility in the present study) and group-based scores represent level-2 variables (i.e., class-norms, likeability-norms, and visibility-norms for prosocial behaviour and for aggression in this study). We carried out seven multilevel analyses using the HLM7 program (Raudenbush, Bryk, & Congdon, 2010). The dependent variable in this study was peer likeability and its relation to victimization. *Model 1* investigated the effect of individual victimization on likeability, while controlling for gender. Models 2–7 explored the potentially moderating effects on the likeability–victimization link of the following seven level-2 variables: density (in all models), prosocial group norms (*model 2*: mean classroom level of prosocial behaviour; *model 3*: mean level of prosocial behaviour of most-liked students; *model 4*: mean level of prosocial behaviour of most visible students, and aggression group norms; *model 5*: mean classroom level of aggression; *model 6*: mean level of aggression of most-liked students; *model 7*: mean level of aggression of most visible students). Tests of models–7 also included the analysis of the corresponding two-way and three-way interactions that, in many cases, involved cross-level interactions. In each model, the following interactions were tested: first, gender and victimization; second, victimization and density; on the other hand, the norm corresponding to each model was tested with victimization, also with density, and finally with victimization and density together.

To assess how well each model fit the data, we calculated the deviance and the decrease in deviance that in this study involved comparisons of models 2–7 with model 1. The decrease in deviance has approximately a chi-square distribution with the degrees of freedom equal to the difference in the number of parameters for the two models compared. A significant decrease in deviance is thus interpreted as a significant improvement of fit of the model (Dijkstra et al., 2008; Salmivalli & Voeten, 2004). We run Student's *t*-tests to compare boys versus girls on the scores obtained in all in the student-level variables ($N = 6,500$ students) and Pearson's correlations between student-level variables and between group-level variables ($N = 269$ classrooms).

Results

Descriptive statistics and correlations

Descriptive analysis showed that girls scored higher than boys (mean = 0.12) on likeability ($t(6598) = -7.66$, $p < .001$; $M = 0.17$ and $M = 0.12$, respectively; Cohen's $d = 0.16$), whereas boys scored higher than girls on victimization ($t(6598) = 10.81$, $p < .001$; $M = 0.02$ and $M = 0.01$, respectively; Cohen's $d = 0.28$). Figure 1 shows that across classrooms ($N = 269$) peer victimization correlated negatively with likeability. In 96% ($n = 257$) of all classrooms, the correlation between likeability and level of victimization was negative, and in 70% ($n = 189$) this negative correlation ranged from -0.3 to -0.7 .

Table 1 presents the correlations between group-level variables examined in this study. Class-norms were highly inter-correlated ($r = .76$), then were visibility-norms ($r = .68$). Prosocial class-norms correlated strongly with prosocial visibility-norm ($r = .74$) and aggression visibility-norm ($r = .56$). Aggression class-norms correlated strongly with aggression visibility-norm ($r = .57$).

Multilevel analyses

Table 2 describes the results obtained in each of the seven models tested.

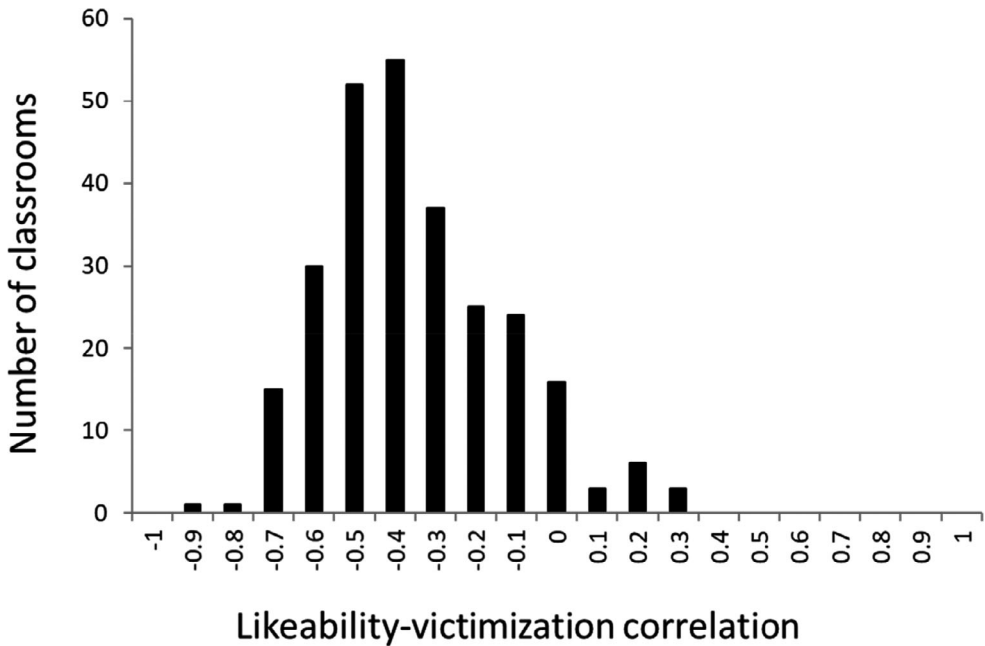


Figure 1. Frequency distribution of correlation coefficients between individual victimization and likeability in 269 classrooms.

Girls showed higher levels of likeability than boys in all models. Model 1 shows that victimization was negatively related to likeability ($b = -0.725$, $t(6590) = -22.43$, $p < .001$). It also shows that gender was positively related to likeability ($b = 0.251$, $t(6590) = 4.87$, $p < .001$). Model 2 shows that the Prosocial Class-Norm ($b = 0.149$, $t(6590) = 4.83$, $p < .001$) weakened the negative impact of victimization on likeability. This finding suggests that victims showed more likeability in groups with higher Prosocial Class-Norm than in those with lower Prosocial Class-Norm (Figure 2). Model 4 shows an interaction effect of Prosocial Visibility-Norm ($b = 1.462$, $t(6590) = 4.36$, $p < .001$) on the relationship of victimization and likeability (Figure 3). Victimization was negatively associated with likeability in all classrooms; however, this relation was weaker in classroom groups with high than in those with low Prosocial Visibility-Norm.

The impact of the three categories of group norms for aggression was explored in models 5 through 7 (see Table 2). The analyses show that only the Aggression-Norm of most visible students (model 7) did have a significant effect on the relation between individual victimization and likeability ($b = 1.740$, $t(6590) = 3.82$, $p < .001$), and this was one of attenuating such relation (Figure 4). Victimization was a negative predictor of likeability; however, this relationship was stronger in classrooms with high Aggressive Visibility-Norm than in those with low Aggressive Visibility-Norm (supporting our **second hypothesis**). Two prosocial norms (classroom- and visibility-norm) showed an interaction effect on the relationship between victimization and social preference, compared to one aggressive norm (visibility-norm). This result partially confirms the third hypothesis that prosocial norms will show more influence than aggressive norms. Two status norms (Aggressive Visibility-Norm and Prosocial Visibility-Norm) versus one descriptive norm (Prosocial Class-Norm) show a greater relevance of the norms

Table 1. Correlation coefficients among group-level variables

Variables	Total		Correlations									
	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	
Individual-level variables (N = 6,600)												
1. Likeability	.14	.32										
2. Victimization	.01	.03	-.039*									
Group-level variables (N = 269)												
3. Prosocial class-norm, PCN	.27	.12	.074*	.075*								
4. Prosocial likeability-norm, PLN	1.73	1.14	.008	.002	0.24***							
5. Prosocial visibility-norm, PVN	.04	.10	.025*	.074*	0.86***	0.23***						
6. Aggression class-norm, ACN	.09	.03	.034*	.066*	0.87***	0.21**	0.26***					
7. Aggression likeability-norm, ALN	.01	.02	-.005	.025*	0.11	-.007	0.07	0.17***				
8. Aggression visibility-norm, AVN	.04	.07	.018	.093*	0.75***	0.20**	0.82***	0.75***	0.06			
9. Network density, ND	.67	.09	.032*	-.023	-.010	0.03	-.007	-.014*	-.011*	-.003		

Note. *p < .05; **p < .01; ***p < .001.

Variable	Model 5			Model 6			Model 7		
	Y	SE	t	Y	SE	t	Y	SE	t
Intercept	-0.124	0.028	-4.45***	-0.125	0.028	-0.51***	-0.1140	0.026	-4.45***
Gender (I = girl)	0.251	0.052	4.85***	0.250	0.052	4.84***	0.233	0.052	4.51***
Victimization	-0.748	0.033	-22.55***	-0.743	0.032	-23.07***	-0.781	0.031	-24.7***
Gender × Victimization	0.015	0.059	0.25	0.011	0.057	0.19	-0.015	0.058	-0.26
Density	-0.006	0.010	-0.60	-0.134	0.010	-1.35	-0.002	0.002	-1.23
Victimization × Density	-0.102	0.032	-3.19***	-0.113	0.029	-3.90***	0.146	0.032	-4.60***
Aggression CN	0.049	0.011	4.37***						
Aggression CN × Density	0.004	0.010	0.41						
Victimization × Aggression CN	0.066	0.041	1.61						
Victimization × Aggression CN × Density	-0.024	0.031	-0.78						
Aggression LN									
Aggression LN × Density				0.016	0.011	1.56			
Victimization × Aggression LN				-0.008	0.012	-0.65			
Victimization × Aggression LN × Density				-0.043	0.033	-1.33			
Aggression VN				-0.029	0.027	-1.08			
Aggression VN × Density							0.053	0.026	2.07*
Victimization × Aggression VN							-0.018	0.027	-0.65
Victimization × Aggression VN × Density							1.740	0.457	3.82***
Deviance			6.375			6.369	0.768	0.392	1.96
Decrease in deviance			52 (3) ***			63 (2) ***			47 (3) ***

Note. CN = Class-norm; LN = likeability-norm; VN = Visibility-norm.

* $p < .05$; ** $p < .01$; *** $p < .001$.

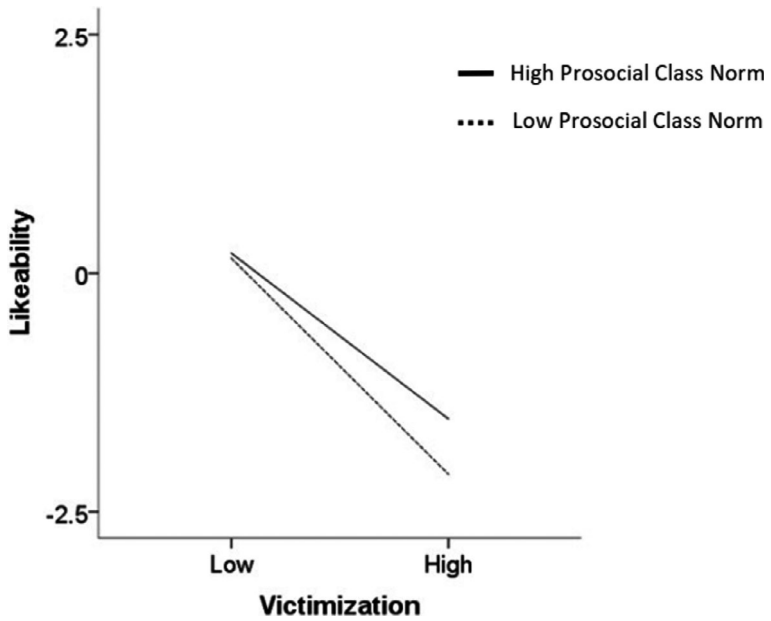


Figure 2. Effect of prosocial class-norm on the negative impact of individual victimization on likeability. The plots are presented following Aiken and West's (1991) guidelines (i.e., Low: -1 SD below the mean and High: $+1$ SD above the mean).

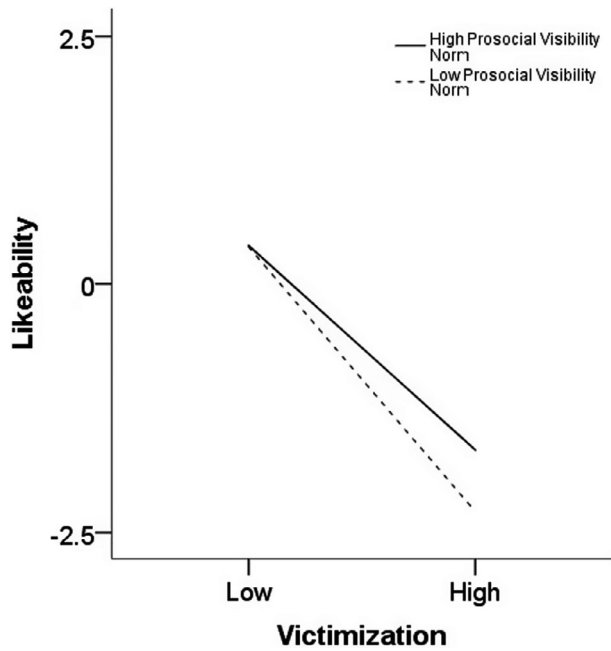


Figure 3. Effect of prosocial visibility-norm on the negative impact of individual victimization on likeability. Low: -1 SD below the mean and high: $+1$ SD above the mean.

established by the individual with visibility in the group, compared to the norms established by the entire class group. This result partially confirms the first hypothesis.

Impact of network density

The effect of network density on the relation between likeability, victimization, and group norms for prosocial behaviour and aggression was explored in models 2 through 7. Table 2 shows that this three-way interaction only reached statistical significance in the analyses involving the Prosocial Class-Norm ($b = 0.062$, $t(6590) = 2.91$, $p < .001$) and the Prosocial Visibility-Norm ($b = 0.600$, $t(6590) = -2.60$, $p < .01$). These effects are depicted in Figures 5 and 6. Being victimized was negatively associated with likeability, but this relationship was weaker in classrooms with high density than in those with low density (Figure 7). These results support our fourth hypothesis which proposed that density would increase adherence to social norms.

Deviance

Table 2 shows that all the models that tested the effect of some group norm (for prosociality and for aggression) on the likeability–peer victimization association, in addition to network density, fit the data better than the model which only tested the individual effect of victimization (model 1).

Discussion

The strong negative association between peer victimization and likeability reported in so many previous studies indicates that disliked adolescents not only suffer of social rejection and eventually exclusion, but they are also likely targets of aggression from their peers. Whether this socially painful and adverse condition can somehow be attenuated (or heightened) in groups with varying behavioural norms for aggression and for prosocial behaviour, and with varying degrees of overall connectedness (density), was the subject of the four hypotheses tested below.

The first hypothesis we set out to test was whether behavioural descriptive norms were less influential than the behavioural status norms *within classrooms*. We reasoned that peers would be more likely to influence and be influenced by peers they interact with more often, are more exposed to, are more salient, or are more liked than by the peers of the class at large. The results of our analysis lend support to this finding as we also found that when the behavioural norm analysed was aggression, the status norm of most visible adolescents was more influential than the norm of the entire class. Thus, when aggression was normative by most visible peers, then victimized peers were less disliked, that is, the behavioural status norm for aggression of most visible peers weakened the negative impact of individual victimization on likeability. Few have been the studies that have directly compared the contribution of behavioural norms of differently sized groups (e.g., descriptive versus status norms within classrooms) to account for between-classroom variation in the impact of behaviour on peer status (Dijkstra & Gest, 2015; Dijkstra et al., 2008; Laninga-Wijnen et al., 2016). Laninga-Wijnen et al. (2016) found that popularity norms rather than descriptive norms for aggression showed an interacting effect on friendship selection and influence processes related to aggression. Dijkstra et al. (2008) have addressed this problem by comparing the effect of entire classes' versus the status

norm of most popular peers' behavioural norm for proactive aggression on the impact of individual bullying on acceptance and rejection, and found that it was the latter that turned out to be more influential. A second test of this same hypothesis involved the comparison of the effect of class-level norms for prosociality versus the norms for prosociality of most visible peers. In this analysis, however, both group norms turned out to have the same effect of attenuating the negative relation of individual victimization to likeability. That is, when prosocial behaviour is prevalent in the classroom or by most visible peers, victimized peers are better accepted. In line with this, Dijkstra and Gest (2015) also showed that in classrooms when status norms were positive for academics and prosocial behaviour, the levels of peer victimization were lower.

Our second hypothesis posited that the behavioural status norms of most visible peers would be more likely than the status norms of most likeable peers to influence the negative association between likeability and peer victimization. This hypothesis thus examined the potential effects of *status type*, namely, *visibility* versus *likeability*, on the potential moderating role of norms for aggression and for prosocial behaviour on the relation of individual victimization to likeability. Previous research has reported that most popular peers are more influential than most likeable peers (Cillessen, 2011; Laninga-Wijnen, Gremmen, et al., 2018). We also found that this was indeed the case in our study, as high levels of prosocial behaviour and aggression by visible peers attenuated the level of disliking of highly victimized peers. We also found that neither the aggression *likeability* norm nor the prosocial *likeability* norm had any significant effect on the likeability–victimization association. In other words, the behavioural norms of most likeable peers were less influential than the behavioural norms of most visible peers. Few studies have studied comparatively the influence of likeability and visibility as different types of status norms. Laninga-Wijnen, Gremmen, et al. (2018) analysed the effect on norms based on

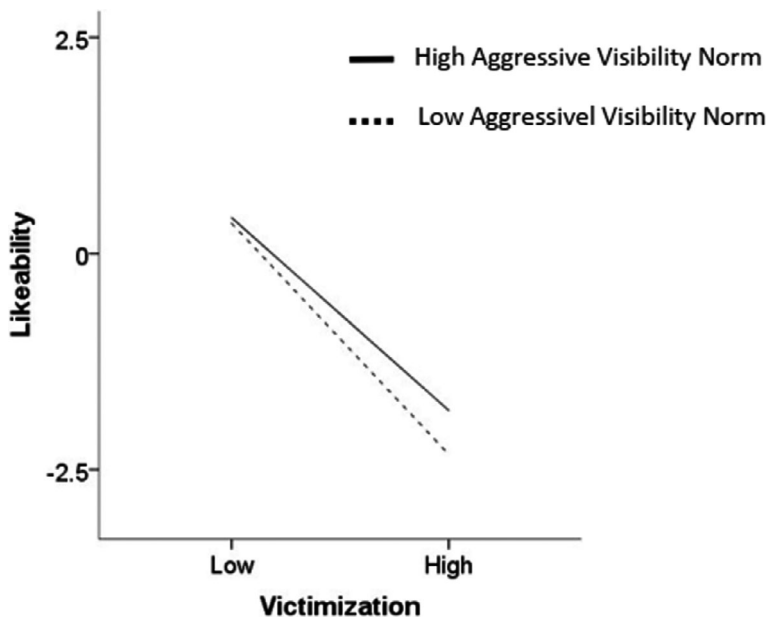


Figure 4. Effect of aggression visibility-norm on the negative impact of individual victimization on likeability. Low: -1 SD below the mean and high: $+1$ SD above the mean.

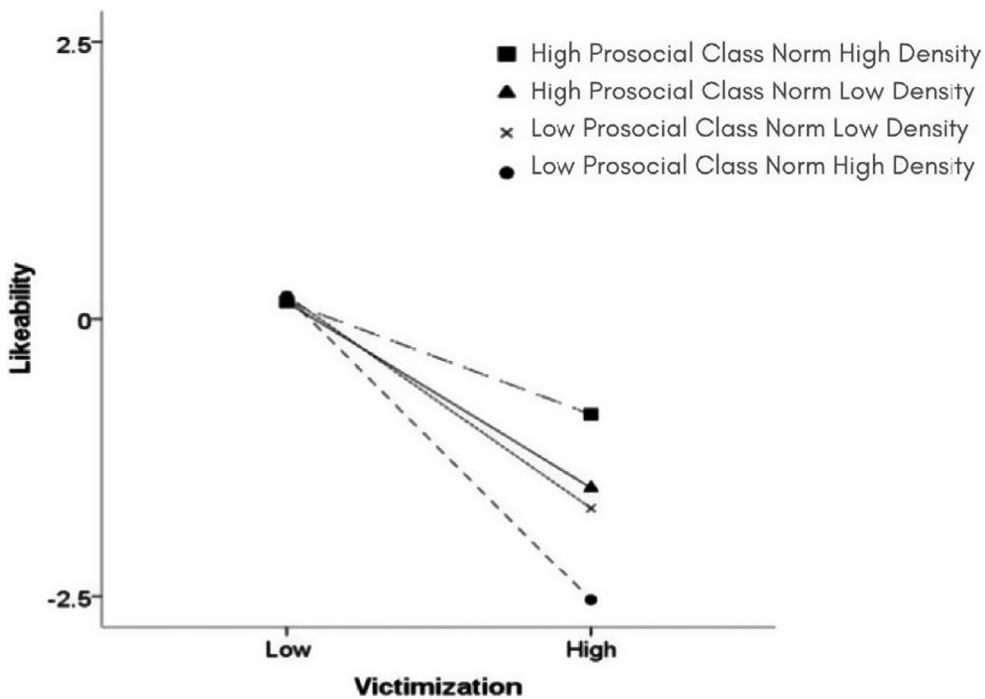


Figure 5. Effect of social network density on the relationship between prosocial class-norm, individual victimization, and likeability. Low: -1 SD below the mean and high: $+1$ SD above the mean.

popularity, acceptance, unpopularity, and rejection related to academic achievement. Popularity norm strengthened friendship selection among similar peers, both among low and high achievers. Acceptance and rejection norms did not play a role in friendship processes. These results lend further empirical support to the notion that visible peers have greater impact than likeable classmates (Dijkstra & Gest, 2015; Shi & Xie, 2012; Shin, 2017).

In these first two hypotheses, we test two possible explanatory ways on the influence of norms. On the one hand, the tendency to obtain status among peers would explain a conformity to norms established by students with a certain popularity which could be explained from the hypothesis of reputational salience (Hartup, 1996). Students with greater visibility in the group indicate the way forward on which behaviours are valuable within the group (Kruglanski et al., 2002). Finally, conformity to the descriptive norms of the entire group would be explained based on obtaining a series of resources such as emotional and social support and the fact of sharing a common identity in line with theory of social identity (Festinger, 1954). Our findings show a greater conformity to status norms, especially in those associated with visibility, however, although to a lesser extent we also found conformity to the descriptive norm.

Our third hypothesis predicted that *prosocial* norms might have a greater effect than *aggression* norms on the likeability–victimization negative association. Our results partly confirmed this hypothesis as whereas only the aggression visibility-norm influenced this link, however, we found that both the prosocial norm of classrooms as well as that of most visible peers did have a moderating (weakening) effect on the negative impact of victimization on likeability. Other authors have found similar results, with a greater effect

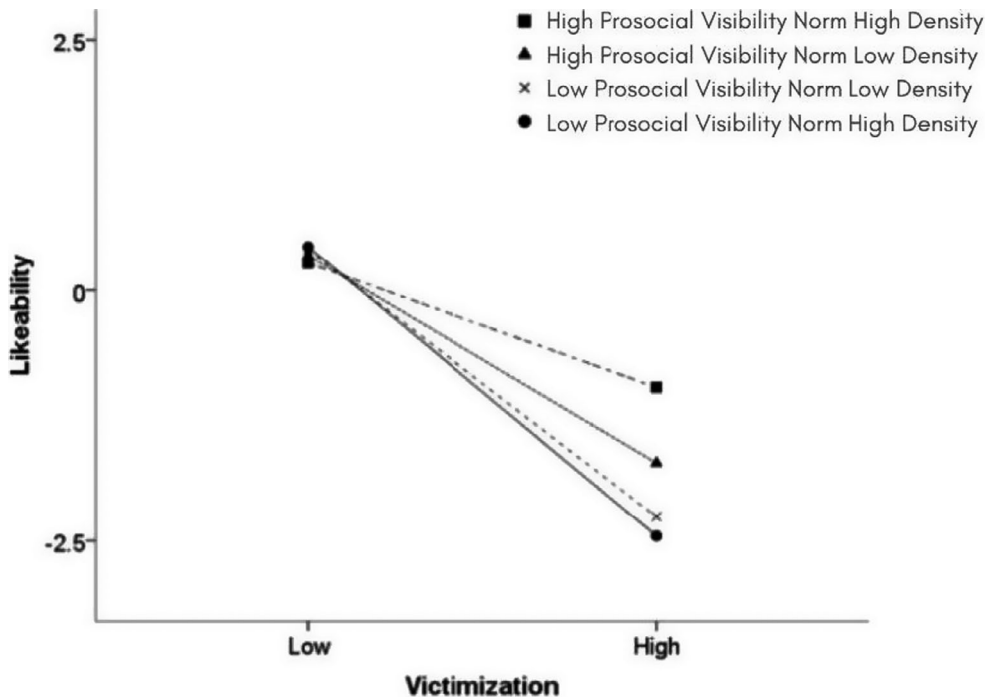


Figure 6. Effect of social network density on the relationship between prosocial visibility-norm, individual victimization, and likeability. Low: -1 SD below the mean and high: $+1$ SD above the mean.

of prosocial norms than aggressive norms in class groups (Laninga-Wijnen, Harakeh, et al., 2018; Laninga-Wijnen et al., 2020). Among the possible explanations for this predominance could be the low level of aggressiveness found in class groups (Laninga-Wijnen, Harakeh, et al., 2018).

The fourth hypothesis investigated the effect of the interaction between density and the various group norms for aggression and for prosocial behaviour analysed on the negative link between individual victimization and likeability. As we predict, density could be increasing adherence to prevailing social norms in classrooms. We found that victims were less disliked in highly dense classrooms with high prosocial descriptive and visibility norms. The effect of norms could be being amplified as a consequence of the connectivity within the classroom.

Limitations, and future research

Our study had some limitations worth noticing. First, the approach adopted was correlational; therefore, it can only provide information about patterns of co-variation, not causation. It would be necessary to carry out a longitudinal investigation to see if the results found could be confirmed in terms of causality. Second, although the peer status construct visibility is widely regarded in the literature as conceptually analogous to popularity, we did not measure popularity directly, instead visibility was used as a proxy for popularity. Despite the fact that the status of the students based on social impact does not represent the same as the popularity concept, both concepts showed a remarkable level of overlap with 48% of the students with social impact presenting a high level of

perceived popularity (Parkhurst & Hopmeyer, 1998) or a correlation of 0.24 between both categories (Zwaan et al., (2013). This limitation could be conditioning the interpretation of the results, so it would be of interest to analyse the norms based on visibility and social impact compared to popularity-based norms. Third, we measured and analysed victimization by coding how many nominations classmates received on the items, however, we did not analyse separately the three forms of victimizations that were actually coded separately, namely, physical, verbal, and relational. Third, with respect to victimization, items collected through peer-reports were used, as well as sociometric measures on social acceptance and rejection. It is possible that a method variance can occur. It would be advisable to use measures also collected through the self-report in the case of victimization.

Finally, we did not record information to distinguish proactive/instrumental from reactive aggression, nor proactive aggression from bullying, as different authors have pointed out (Card & Little, 2006; Dodge & Coie, 1987). Both types of aggression show differential characteristics, for example proactive aggressiveness implies the participation of students with greater social dominance and popularity in the group (Polman, Orobio de Castro, Thomaes & van Aken, 2009), reactive aggressiveness, however, is related to students with lower levels of popularity in the group and greater social isolation (Dodge & Coie, 1987). When constructing aggressive class-norms, it would be advisable to consider one or another type of aggressiveness, as they have different objectives and obey different types of social dynamics in the class group. On a more practical level, future studies could aim to identify the group-level at which behavioural norms seem to influence more strongly the behaviour of their individual members, for example, schools, classmates, or popular peers. This would be useful to help implement prevention programmes based on

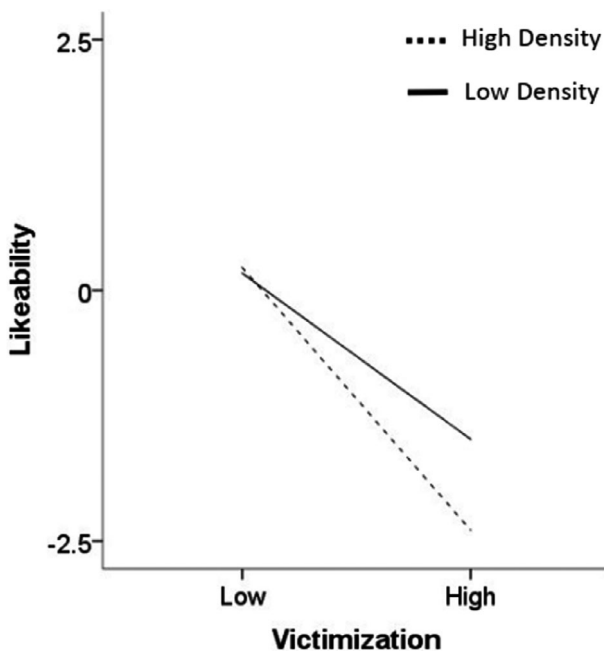


Figure 7. The effect of social network density on the likeability of the victims. Low: -1 SD below the mean and high: $+1$ SD above the mean.

the social dynamization of classrooms oriented to strengthen peer cultures based on prosocial norms. Likeability is obtained within a group context (Brewer & Caporael, 1990; Cosmides & Tooby, 1987). To understand the behaviours, that is, victimization, related to likeability we need to look at contextual variables. Contextual variables, such as the presence or absence of aggressive norms in a class group, could influence the appearance of victimization behaviours received by the students with the most rejection. Other future lines of research that could provide interesting results would be those that combine the use of other variables based on the analysis of social networks, and what relationship they could have with the norms established in the class groups. Variables such as hierarchy or the joint use of hierarchy and density, as proposed by various authors (Ahn et al., 2010; Author, 2016), would allow us to study whether the structures of peer groups could be influenced by the norms established in them or vice versa.

Finally, another possible line of research considering the relationship between gender and the different types of victimization that occur in bullying, it could be advisable to carry out an analysis of prosocial and aggressive norms calculated for boys and girls separately. Likewise, the sex ratios at the class level could be considered to see their influence on the relationship between victimization and likeability.

Practical implications

Despite the limitations indicated above, it is important to highlight the usefulness of the study carried out. The results found have practical implications for educational intervention, mainly when considering the group influence on behaviours that occur in the classroom. An increasing number of anti-bullying programmes are considering group-based interventions (peer support, peer helpers, circle of friends) to reduce victimizing behaviours. Taking into account that the majority of bullying episodes, bullies go to the same class as the victims (Díaz-Aguado, Martínez, & Martín, 2013; Salmivalli, & Peets, 2009), the configuration and modification of class groups and the cultures that are formed in them is essential to reduce this type of behaviour. The relationship between prosocial norms and the strengthening of the positive relationship between victimization and social preference found by this research in comparison with the influence of aggressive norms could be pointing to the importance of incorporating more targeted modules into anti-bullying programmes, oriented to improve prosociality instead of focusing exclusively on aggressive behaviours (Figure 7).

Conclusions

Altogether, these results underscore the overall importance of group context as a moderating factor of the relation between behaviour and peer status in adolescents. First, *prosocial* norms emerge as more influential than *aggression*. Second, descriptive norms defined at classroom-level and status norms of most visible peers are more influential than status norms of most-liked peers when they are assessed in interaction with group density. Moreover, network density turned out to be a significant amplifier of the influence of prevailing norms on the behaviour–status associations.

Conflicts of interest

All authors declare no conflict of interest.

Author contribution

David Aguilar Pardo: Writing – original draft (equal). **Fernando Colmenares Gil:** Writing – original draft (equal); Writing – review & editing (equal). **Belén Martínez-Fernández:** Data curation (equal); Investigation (equal). **Javier Martín-Babarro:** Methodology (equal); Writing – review & editing (equal).

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Appendix :

r	Age (year-old)	Source	Observations
Correlations between aggression and prosocial behaviour			
-.38	10–13	Berger, Batanova, and Cance (2015)	
-.17 & .42	13–16	Chang (2004)	
-.16	10	Chung and Chen (2010)	
-.15 & -.35	11–13	Closson (2009)	
-.24	10	Dawes, Chen, Farmer, and Hamm (2017)	
-.61	13	De Bruyn and Cillessen (2006)	
-.18 & -.21	9	Peters, Cillessen, Riksen-Walraven, and Haselager (2010)	
-.30	10	Schwartz (2000)	
-.14	17	Van den Broek, Deutz, Schoneveld, Burk, and Cillessen (2016)	
-.44	10–12	Boor-Klip et al. (2017)	
-.70	12	Wolters, Knoors, Cillessen, and Verhoeven (2014)	
-.78	16	Woodhouse, Dykas, and Cassidy (2012)	
-.32	8–11	Zimmer-Gembeck et al. (2015)	
-.06 & -.29	9	Troop-Gordon and Unhjem (2018)	
.05 & .13	10–13	Berger and Rodkin (2012)	
.02	14	Cillessen, Mayeux, Ha, de Bruyn, and LaFontana (2014)	
.21 & .46	7–9	Neal and Cappella (2012)	
.21	13–15	Puckett, Aikins, and Cillessen (2008)	
.02	14	Sijtsema, Lindenberg, and Veenstra (2010)	
Correlations between popularity and likeability			
.68	8–9	Ahn et al. (2010)	
.65	9–10	Ahn et al. (2014)	
.42	10–13	Berger and Rodkin (2012)	
-.11	10–12	Berger et al. (2015)	

Continued

Appendix. (Continued)

r	Age (year-old)	Source	Observations
.50	11	Blake, Kim, and Lease (2011)	
.37	10–12	Boor-Klip et al. (2015)	
.24	14	Cillessen et al. (2014)	
.00	11–13	Closson (2009)	Lk vs. impact
.54	13	De Bruyn and Cillessen (2006)	
.22	14	Dijkstra and Gest (2015)	
.24	13	Dijkstra et al. (2008)	
.64	9–11	Garandea et al. (2011)	
.73	11–13	Heilbron and Prinstein (2010)	
.34	14	Hawley (2003)	
.70	12	LaFontana and Cillessen (2002)	
.62	9–13	Lease, Musgrove, and Axelrod (2002)	
.32	13	Li and Wright (2014)	
.72	13–15	Litwack, Aikins, and Cillessen (2012)	
.50	6–10	Logis, Rodkin, Gest, and Ahn (2013)	
.22	14	Mayeux (2014)	
.39	14–17	Mayeux and Cillessen (2008)	
.51	9–11	McQuade, Achufusi, Shoulberg, and Murray-Close (2014)	
.71	7–9	Neal and Cappella (2012)	
.25	14	Pronk et al. (2016)	
.60	13–15	Puckett et al. (2008)	
.48 & .55	20	Ruschoff et al. (2015)	
.59	10–12	Sainio, Veenstra, Huitsing, and Salmivalli (2011)	
.74	10–13	Sandstrom and Cillessen (2006)	
.33	14–15	Schwartz, Lansford, Dodge, Pettit, and Bates (2013)	
.51 & .44	10–11 & 14–15	Sijtsema et al. (2009)	
.33	11–17	Vaillancourt and Hymel (2006)	
.25	17	Van den Broek et al. (2016)	
.42	12	Wolters et al. (2014)	Acc vs. Pp
.11	8–11	Zimmer-Gembeck et al. (2015)	Lk vs. impact
.15	14	Zwaan et al. (2013)	
Correlations between popularity, aggression, victimization, and prosocial behaviour			
.12	8–9	Ahn et al. (2010)	Pp vs. Ag
.17	9–10	Ahn et al. (2014)	Pp vs. Ag
.26 & .33	10–14	Andrews, Hanish, Updegraff, Martin, and Santos (2016)	Prestige vs. Ag
.34	10–13	Berger and Rodkin (2012)	Pp vs. Ag
.44	10–12	Berger et al. (2015)	Pp vs. Ag
.18	11	Blake et al. (2011)	Pp vs. Ag
.12	10–12	Boor-Klip et al. (2015)	Pp vs. Ag
.34	14	Cillessen et al. (2014)	Pp vs. Ag
.28	13	De Bruyn and Cillessen (2006)	Pp vs. Ag
.18	9–11	Garandea et al. (2011)	Pp vs. Ag
.26 & .33	12	LaFontana and Cillessen (2002)	Pp vs. Ag
.47	6–10	Mayeux (2014)	Pp vs. Ag

Continued

Appendix. (Continued)

r	Age (year-old)	Source	Observations
.16	7–9	Neal & Capella (2012)	Pp vs. Ag
.23	12–14	Ojanen and Findley-Van Nostrand (2014)	Pp vs. Ag
.13	9	Peters et al. (2010)	Pp vs. Ag
.76 & .88	16	Prinstein and Cillessen (2003)	Pp vs. Ag
.22	14	Pronk et al. (2016)	Pp vs. Ag
.47	13–15	Puckett et al. (2008)	Pp vs. Ag
.48	10–13	Sandstrom and Cillessen (2006)	Pp vs. Ag
.25 & .31	11–17	Vaillancourt and Hymel (2006)	Pp&Power vs. Ag
.33&.88	9	Waasdorp, Baker, Paskewich, and Leff (2013)	Pp vs. Ag
–.42	8–9	Ahn et al. (2010)	Pp vs. Vt
–.17 & –.33	10	Dawes et al. (2017)	Pp vs. Vt
–.56	13	De Bruyn and Cillessen (2006)	Pp vs. Vt
–.14	6–13	Meter y Card (2016)	Pp vs. Vt
–.43	7–9	Neal and Cappella (2012)	Pp vs. Vt
–.27 & .32	16	Prinstein and Cillessen (2003)	Pp vs. Vt
–.14	8–9	Pronk et al. (2016)	Pp vs. Vt
–.10	10–12	Sainio et al. (2011)	Pp vs. Vt
–.28	10–13	Sandstrom and Cillessen (2006)	Pp vs. Vt
.36	10–13	Berger and Rodkin (2012)	Pp vs. Ps
.12	10–12	Berger et al. (2015)	Pp vs. Ps
.07 & .29	10	Dawes et al. (2017)	Pp vs. Ps
.15	13	De Bruyn and Cillessen (2006)	Pp vs. Ps
.39	12	LaFontana and Cillessen (2002)	Pp vs. Ps
.51	7–9	Neal & Capella (2012)	Pp vs. Ps
.48	9	Peters et al. (2010)	Pp vs. Ps
.42	13–15	Puckett et al. (2008)	Pp vs. Ps
.24	17	Van den Broek et al. (2016)	Pp vs. Ps
.23	10–12	Boor-Klip et al. (2015)	Pp vs. Ps
.21	12	Wolters et al. (2014)	Pp vs. Ps
–.19	14	Cillessen et al. (2014)	Pp vs. Ps
–.06	11–13	Closson (2009)	Impact vs. Ps
–.05	10–13	Sandstrom and Cillessen (2006)	Pp vs. Ps
Correlations between likeability and aggression			
–.26	8–9	Ahn et al. (2010)	Lk vs. Ag
–.27	9–10	Ahn et al. (2014)	Lk vs. Ag
–.26	10–13	Berger and Rodkin (2012)	Lk vs. Ag
–.11	10–12	Berger et al. (2015)	Lk vs. Ag
–.27	11	Blake et al. (2011)	Lk vs. Ag
–.58	10–12	Boor-Klip et al. (2015)	Lk vs. Ag
.06	12	Casper, Card, Bauman, and Toomey (2017)	Acc vs. Ag
–.17	13–16	Chung-Hall and Chen et al. (2009)	Acc vs. Ag
–.11 & –.18	12–13	Dijkstra et al. (2008)	Acc vs. Ag
–.27	9–11	Garandau et al. (2011)	Lk vs. Ag
–.24	7–10	Jia and Mikami (2015)	Lk vs. Ag

Continued

Appendix. (Continued)

r	Age (year-old)	Source	Observations
-.15 & -.22	12	LaFontana and Cillessen (2002)	Lk vs. Ag
-.39	14	Mayeux (2014)	Lk vs. Ag
.00	7-9	Neal and Cappella (2012)	Lk vs. Ag
-.21	12-14	Ojanen and Findley-Van Nostrand (2014)	Lk vs. Ag
-.45	9	Peters et al. (2010)	Lk vs. Ag
-.29 & -.35	16	Prinstein and Cillessen (2003)	Lk vs. Ag
-.32	14	Pronk et al. (2016)	Lk vs. Ag
-.07	13-15	Puckett et al. (2008)	Acc vs. Ag
.00	8-9	Ruschoff et al. (2015)	Acc vs. Ag
-.46 & -.52	20	Sandstrom and Cillessen (2006)	Lk vs. Ag
-.15	8-9	Schwartz (2000)	Acc vs. Ag
-.13	8-9	Sentse, Veenstra, Kiuru, and Salmivalli (2015)	Acc vs. Ag
-.19 & -.24	10-15	Sijtsema et al. (2009)	Lk vs. Ag
-.23 & -.28	11-17	Vaillancourt and Hymel (2006)	Lk vs. Ag
-.36	17	Van den Broek et al. (2016)	Lk vs. Ag
-.12 & -.17	9	Waasdorp et al. (2013)	Lk vs. Ag
-.50	12	Wolters et al. (2014)	Acc vs. Ag
-.46	16	Woodhouse et al. (2012)	Lk vs. Ag
-.29 & -.30	8-11	Zimmer-Gembeck et al. (2015)	Lk vs. Ag
Correlations between likeability and victimization			
-.31	8-9	Ahn et al. (2010)	Lk vs. Vt
-.56	13	De Bruyn and Cillessen (2006)	Lk vs. Vt
.44	10-13	Isaacs et al. (2013)	Rej vs. Vt
-.19	7-10	Jia and Mikami (2015)	Lk vs. Vt
.51	9-11	Karna et al. (2010)	Rej vs. Vt
-.24	9	Kawabata, Tseng, and Crick (2014)	Acc vs. Vt
-.25	6-12	Meter and Card (2016)	Lk vs. Vt
-.36	7-9	Neal & Capella (2012)	Lk vs. Vt
-.31 & -.55	16	Prinstein and Cillessen (2003)	Lk vs. Vt
-.23	14	Pronk et al. (2016)	Lk vs. Vt
-.13	10-12	Sainio et al. (2011)	Acc vs. Vt
-.34	10-13	Sandstrom and Cillessen (2006)	Lk vs. Vt
.80	14-15	Schwartz, Lansford, et al. (2013)	Rej vs. Vt
-.18	10	Schwartz (2000)	Acc vs. Vt
-.27	13	Sentse et al. (2007)	Lk vs. Vt
.42	8-9	Serdiouk et al. (2015)	Rej vs. Vt
-.40	16	Woodhouse et al. (2012)	Acc vs. Vt
Correlations between likeability and prosocial behaviour			
.32	10-13	Berger and Rodkin (2012)	Lk vs. Ps
.63	10-12	Boor-Klip et al. (2015)	Lk vs. Ps
.29	13-16	Chang (2004)	Acc vs. Ps

Continued

Appendix. (Continued)

R	Age (year-old)	Source	Observations
.56	10	Chung-Hall and Chen (2010)	Acc vs. Ps
.23	11–13	Closson (2009)	Lk vs. Ps
.55	12	LaFontana and Cillessen (2002)	Lk vs. Ps
.40	10	LaFontana and Cillessen (1998)	Lk vs. Ps
.52	7–9	Neal and Capella (2012)	Lk vs. Ps
.56	9	Peters et al. (2010)	Lk vs. Ps
.49	13–15	Puckett et al. (2008)	Lk vs. Ps
.71	20	Ruschoff et al. (2015)	Acc vs. Ps
.50	10–13	Sandstrom and Cillessen (2006)	Lk vs. Ps
.24	17	Van den Broek et al. (2016)	Lk vs. Ps
.56	12	Wolters et al. (2014)	Acc vs. Ps
.64	16	Woodhouse et al. (2012)	Acc vs. Ps
.60	8–11	Zimmer-Gembeck et al. (2015)	Lk vs. Ps

Note. Acc = acceptance; Ag = aggression; Lk = likeability; Pp = popularity; Ps = prosocial behaviour; Rej = rejection; Vt = victimization.