Psychosocial Intervention

Psychosocial Intervention
ISSN: 1132-0559
ISSN: 2173-4712
Colegio Oficial de la Psicología de Madrid

Carmona-Rojas, Manuel; Ortega-Ruiz, Rosario; Romera, Eva; Bravo, Ana

Aggressive and Defensive Behaviour, Normative, and Social Adjustment in the Complex Dynamics of School Bullying

Psychosocial Intervention, vol. 32, no. 3, 2023, pp. 165-175
Colegio Oficial de la Psicología de Madrid

DOI: https://doi.org/10.5093/pi2023a11

Available in: https://www.redalyc.org/articulo.oa?id=179876328003

Psychosocial Intervention (2023) 32(3) 165-175

Psychosocial Intervention

https://journals.copmadrid.org/pi

Aggressive and Defensive Behaviour, Normative, and Social Adjustment in the Complex Dynamics of School Bullying

Manuel Carmona-Rojas, Rosario Ortega-Ruiz, Eva Romera, and Ana Bravo

Universidad de Córdoba, Spain

ARTICLE INFO

Received 25 January 2023
Accepted 14 April 2023
Available online 27 June 2023

Keywords:
Bullying
Latent class analysis
Social adjustment
Normative adjustment
Pro-sociality

A B S T R A C T

Bullying is a group phenomenon in which schoolchildren take on different roles. Although certain contextual elements play a key role in its evolution, very few longitudinal studies have been carried out to date which investigate how these factors interact. This study aims to explore the different class groupings as regards bullying norms and to examine the effect of the type of norm, social, and normative adjustment and pro-sociality, also of the interaction of group norms with involvement in aggression and victim defence in bullying situations. A total of 3,358 secondary school students (50.71% girls, M_{age} = 13 years, *SD* = 1.34) participated in the study. Four groups of norms towards bullying were identified: anti-bullying, anti-bullying but not actively defending, indifference, and pro-bullying. Univariate linear regression models showed that normative adjustment and the type of norms had a direct inverse effect on both types of behaviour, while pro-sociality only had an effect on defence. In groups with pro-bullying norms, a greater effect of normative adjustment was observed for involvement in defence and aggression, and pro-social skills were associated with aggression. These results suggest the need to work on moral, social and emotional elements to improve school climate in schools.

La conducta agresiva y de defensa, y el ajuste normativo y social en las complejas dinámicas de acoso escolar

Palabras clave:
Acoso escolar
Análisis de clases latentes
Ajuste social
Ajuste normativo
Prosocialidad

R E S U M E N

El acoso escolar es un fenómeno grupal en el que los escolares asumen roles diferentes. Aunque determinadas características contextuales juegan un papel fundamental en su evolución, aún son escasos los estudios longitudinales que exploran cómo interactúan dichos factores. El presente estudio tiene como objetivos explorar los diferentes tipos de agrupamientos de clases según las normas de acoso escolar y examinar el efecto del tipo de norma, el ajuste social y normativo y la prosocialidad, así como la interacción de las normas del grupo con la implicación en la agresión y defensa de la víctima en situaciones de acoso. Un total de 3,358 escolares de secundaria (50.71 % chicas, M_{edad} = 13 años, *DT* = 1.34) participaron en el estudio. Se identificaron cuatro grupos de normas hacia el acoso: antibullying, en contra del acoso, en contra pero sin defender activamente, neutral y a favor del acoso. Los modelos de regresión lineal univariados mostraron que el ajuste normativo y el tipo de normas tenían un efecto directo inverso en ambas conductas, mientras que la prosocialidad solo tuvo un efecto inverso sobre la conducta de defensa. En los grupos con normas antiacoso se observó un mayor efecto del ajuste normativo en la implicación en la defensa y agresión y que las habilidades prosociales se asociaban con la agresión. Los resultados sugieren que es necesario trabajar los aspectos morales, sociales y emocionales para mejorar el clima escolar.

The phenomenon of school bullying appears to be a complex problem which, despite being more widespread among boys and girls in primary schools, takes on its cruellest forms during adolescence. The latest report issued by UNESCO in 2019 states that one in three students (32%) claims to have been bullied by their classmates at school at least once in the last month. Bullying has been defined as the sustained abuse of power between peers, featuring violent physical, verbal, and psychological behaviour of aggressors towards their victims, who are incapable of defending themselves (Olweus, 2007). It constitutes, therefore, a deeply immoral phenomenon which

Cite this article as: Carmona-Rojas, M., Ortega-Ruiz, R., Romera, E., & Bravo, A. (2023). Aggressive and defensive behaviour, normative, and social adjustment in the complex dynamics of school bullying. *Psychosocial Intervention*, *32*(3), 165-175. https://doi.org/10.5093/pi2023a11

Funding: This study was supported by the Spanish National Research Agency, Ministerio de Ciencia e Innovación (PID2020-113911RB-I00) PI: Eva M. Romera (www.ciencia.gob.es).
Correspondence: eva.romera@uco.es (Eva Romera).

threatens the well-being of those who fall victim to it (Ortega-Ruiz, 2020).

The abusive dynamics of bullying often begin as a conflict in which an imbalance of power and control is quickly established by the aggressor over their victim. One of the key factors in how this phenomenon begins, disappears, or gets worse, and in the consequent degree of victimization of the student who is bullied, is the social climate prevalent in the classroom, and more specifically, the system of explicit and implicit rules by which the students establish what is acceptable or unacceptable behaviour in relationships (Saarento et al., 2015). Although contextual characteristics, such as explicitly-stated norms about bullying, and individual characteristics, such as each individual student's social skills or their competence in resolving conflicts and tricky situations, play an important role in the evolution of bullying dynamics, to date, very few studies have looked into the effects of the interaction of these two factors on the dynamics of the bullying process and, most interestingly here, the aggressive and defensive behaviour involved (Gaffney et al., 2021; Huitsing et al. al., 2019). The present study aims to explore whether the effects of the type of norm, social, and normative adjustment and pro-sociality stimulate aggressive behaviour, and its counterpart, defensive behaviour.

Group Structure and its Role Dynamics

According to previous research, bullying is a group phenomenon in which the participants take on a series of roles depending on their degree of involvement, with the main protagonists being the role of victim and aggressor. Although schoolchildren are aware of ill-treatment and abuse as a familiar social occurrence, the way they interpret what is happening and the different social roles they play when faced with problem varies, and it never goes unnoticed in the social context. Some schoolchildren support the aggressor by encouraging them to continue their behaviour, or by applauding and showing their approval of the situation; others help the victim, in one way or another; others remain silent and, by their silence, grant their consent; and others finally quietly walk away (Hong & Espelage, 2012; Salmivalli, 2010). The labels of victim, aggressor, spectator, defender, or aggressor reinforcer refer to the role that each child plays in this phenomenon of interpersonal violence, which is a more accurate definition of what this school problem really is (Zych et al., 2020).

Among the different roles of involvement in bullying, aggressors and defenders play the key roles, for the contrasting effects they have on the evolution and maintenance of these classroom dynamics (Pouwels et al., 2018). The aggressors are usually schoolchildren who display socially dominant impulses and a proactive attitude towards the use of violence, in addition to having a dominant position within the hierarchical structure of the classroom, albeit a less favourable one on an affective level (Romera et al., 2019; Wiertsema et al., 2023; Zych et al., 2019). Defenders are usually schoolchildren who try to support the victim of bullying by consoling and protecting them, asking an adult for help, or confronting the bully in an assertive way (Ma et al., 2019). The social role these schoolchildren play constitutes a basic component of the socio-ecological environment in which they are integrated and helps reduce the occurrence of bullying (Espelage & Swearer, 2009; Laursen & Veenstra, 2021).

Although individual, motivational, and social differences are factors which subtly affect the dynamics of abuse, there are important indications that the specific characteristics of the classroom group and of group subsystems, such as the implicit norms of the peer group, play a key role (Benner & Crosnoe, 2022; Garandeau et al., 2019; Laninga-Wijnen & Veenstra, 2021; Pouwels & Garandeau, 2021). A set of conventions form implicitly shared beliefs, which regulate the behaviour of the group members and can enable or modify the dynamics of abuse. These implicit norms are accepted by the majority, and members of the group often make great efforts to follow them in their attempt to achieve the social acceptance they crave at these ages (Laninga-Wijnen et al., 2018; Rambaran et al., 2013).

Implicit norms also play a highly relevant role when it comes to judging and evaluating episodes of bullying and are used to a great extent as a guide by which certain behaviour is deemed appropriate and valued, rewarded, or socially sanctioned (Forsberg et al., 2018; Laninga-Wijnen, & Veenstra, 2021; Ma et al., 2019). As with other behaviour, when adolescents are involved in bullying dynamics within a group, they establish beliefs about what type of behaviour will be reinforced and supported by their peer group.

In this context, higher levels of bullying have been found in groups in which mistreatment, humiliation, or harm to other people is accepted and/or valued, compared to those groups where pro-social behaviour is supported (Berger & Caravita, 2016; Romera et al., 2019). Previous studies have shown that in classrooms in which the spectators act as mere witnesses to bullying, its frequency is reinforced, while in classrooms where bystanders support the victims or express their rejection of unfairly aggressive behaviour, aggressors have a less sympathetic audience and tend to reiterate their behaviour less often (Garandeau et al., 2019; Gini et al., 2011; Pozzoli & Gini, 2010). In the complex social phenomenon of bullying, we therefore need to explore how implicit norms influence and interact, with aggressive or defensive behaviour being encouraged in some peer groups and rejected in others.

Psycho-social Variables Related with Bullying

Among the individual characteristics which can guide and account for aggressive and defensive behaviour, the most important are those which determine the type of social interaction between schoolchildren, including normative adjustment, social adjustment, and pro-social behaviour.

Normative adjustment involves the development of behaviour and attitudes of respect and tolerance towards the explicit norms established in the school context which foster school climate (Herrera-López et al., 2017). Social adjustment is defined as the extent to which a person develops socially accepted behaviour which allows their behaviour to fit in with their immediate social context (Gómez-Ortiz et al., 2017; Vaughn et al., 2009). Previous research has recognized the role of social adjustment and normative adjustment in involvement in bullying (Romera, Carmona-Rojas et al., 2022; Romera, Luque-González et al., 2022), identifying an inverse relationship between levels of social and normative adjustment and the phenomena of aggression. However, there has not been much research into this relationship as regards defensive behaviour. Although it has been shown that most students recognize bullying as immoral behaviour in which the victims should be defended (Pouwels et al., 2019; van der Ploeg et al., 2017), less than half of adolescents who witness such situations assume a defensive role (Ma et al., 2019). In addition, recent research shows that defending the victim could lead to negative social consequences if that behaviour is rejected in the implicit norms of the peer group (Pouwels et al., 2020).

Supporting the victim is pro-social behaviour. Pro-social behaviour involves an individual developing voluntary strategic behaviour which has a positive impact on others (Eisenberg et al., 2006). It is a social skill in which the individual gets involved in other people's problems to help them and provide socially-accepted responses (García-Fernández et al., 2022). Previous studies have identified low levels of pro-sociality as a predictor of involvement in aggression in bullying situations (Zych et al., 2018). In fact, pro-social behaviour evolves with age and is influenced by the social and moral factors that condition adolescent behaviour, such as the emotional support that students receive in the classroom (Dereli, 2019). In relation to bullying, it has been observed that when defenders against bullying

help and support the victim, they can be exposed to aggression themselves (García-Fernández et al., 2022). However, it has also been found that bullies can make use of pro-social strategies to gain control over social and material resources (Roberts et al., 2020).

Regarding the effects of gender and age, important differences have been identified. Recent cross-cultural studies and meta-analyses have pointed to a greater involvement of boys in aggressive behaviour (Smith et al., 2019) and girls in defensive behaviour (Ma et al., 2019), while the involvement in both type of behaviours tends to decrease as the adolescent gets older (Cho & Lee, 2020). In general, boys tend to show lower levels of social and normative adjustment than girls (Bjärehed et al., 2020; Jiménez & Estévez, 2017; Longobardi et al., 2018), while the opposite occurs in the case of pro-social skills (Roberts et al., 2020). Also, across adolescence, it has been showed that social and normative adjustment and pro-social skills decrease and rebound in late during the transition to adulthood (Carlo & Padilla-Walker, 2020; Jiménez & Estévez, 2017). Due to the main role of gender and age in the variables of study, they were included as covariates to control their effects.

The Present Study

Although there is an extensive body of research into class group norms and their effect on behaviour, two key issues must be taken into consideration: firstly, that group behaviour is not usually polarised towards the extremes of pro-bullying and anti-bullying, but tends to take the middle ground (Waasdorp & Bradshaw, 2018); and secondly, that the perceptions of the class group might not be shared by all its members (Bass et al., 2022; Veenstra & Lodder, 2022). To overcome these limitations, the present study uses the latent class analysis (hereinafter, LCA) to explore whether different types of groups exist in the perceptions of peer norms towards bullying. This type of analysis represents an alternative to previous group classification procedures (Nylund-Gibson & Choi, 2018).

This analysis focuses on the individual and enables us to identify subgroups within the same classification, associate similar behaviour patterns between subjects, and compare them with other subgroups which present a different profile (Collins & Lanza, 2009; Lanza & Rhoades, 2013). In this way, we overcome the limitations of dichotomized categorization systems based on cut-off points, which, although justified, tend to be rather arbitrary and produce statistical errors (Coyle et al., 2021; Kubiszewski et al., 2015). This type of analysis will, in turn, allow us to form new groups. In this case, we expect to identify not only the types of group norms which have previously been recognized (pro-bullying and anti-bullying), but also a mixed type and a 'not-involved/indifferent' group (Hypothesis 1).

Social adjustment, normative adjustment and pro-social behaviour also appear to be relevant psychosocial variables to help us understand and predict aggressive and defensive behaviour. To date, there have been few longitudinal studies which have simultaneously explored these variables, especially in defensive behaviour sustained over time (Lambe et al., 2019). In order to overcome these limitations, the second objective of the study was to analyse the influence of psychosocial variables (social adjustment, normative adjustment, and pro-social behaviour) on the development of aggressive and defensive behaviour, depending on the type of class norms. We put forward the hypothesis that social and normative adjustment and pro-social behaviour, as well as group norms of an anti-bullying nature (T1), will have a positive association with defensive behaviour (T2) and a negative association with aggressive behaviour (T2) (Hypothesis 2).

Our third objective was to explore the interaction between group norms and social and normative adjustment and pro-sociality, following previous studies which point to the moderating role of implicit peer norms (Laninga-Wijnen et al., 2020). Group norms are expected to moderate the relationship between psychosocial variables and involvement in defensive and aggressive behaviours (Hypothesis 3). Figure 1 shows the proposed hypothetical model in diagram form.

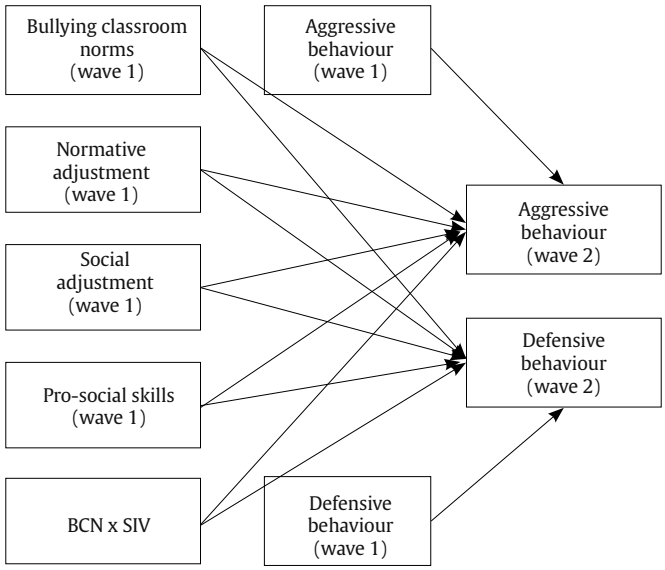

Figure 1. Theoretical Model Proposed in the Present Study.
Note. BCN = bullying classroom norms; SIV = social individual variables (normative adjustment, social adjustment, pro-social skills).

Method

Participants

The data of this research were collected from a Spanish longitudinal study, whose aim was to analyse and deepen our knowledge of the protective and risk factors, both in individuals and in the group, which influence the development and maintenance of bullying dynamics. A total of 13 secondary schools in southern Spain participated in the study. Data were collected during one school year (six months apart). The sample was composed of 3,338 students (50.71% girls), with ages ranging from 11 to 17 (M = 13.53 years, SD = .34). The distribution for levels was: 947 students (28.2%) in 7th grade; 872 students (25.97%) in 8th grade; 776 students (23.11%) in 9th grade; and 763 students (23.72%) in 10th grade.

Instruments

Bullying Classroom Norms (wave 1)

Bullying classroom norms (wave 1) were measured with the Participant Role Questionnaire (PRQ; Salmivalli & Voeten, 2004). This questionnaire presents five situations in which students are asked to imagine what their classroom group would do if a classmate behaved in the following ways: (1) befriending a victim of bullying; (2) laughing with others when someone is being bullied; (3) telling the teacher about a bullying incident; (4) participating in bullying; and (5) making others laugh by continually teasing a classmate. Eight response options were presented to the participants, and they were asked to choose only one per situation. The chosen responses were classified into three groups: (a) the "nothing would happen" option was categorized as 2 in all situations; (b) the "others would think they are a good person", "others would show them approval", and "others would feel admiration for them" options were categorized in situations 1 and 3 as anti-bullying attitudes (value 1) and in situations

2, 4, and 5 as pro-bullying attitudes (value 2); (c) the "others would start avoiding them", "others would think they are stupid", and "others would show them that they do not agree with them" options were classified in situations 1, 2, and 3 as pro-bullying attitudes (value 2) and in situations 2, 4 and 5 as anti-bullying attitudes (value 1). Option 8, "Would something different happen? If so, indicate what would happen", was used to obtain free responses, which were subsequently ranked using the same criteria. The scale showed a good internal consistency (ω_{T1} = .57).

Normative and Social Adjustment (wave 1)

Normative and social adjustment (wave1) were measured with the self-report scale of the Spanish version of the Adolescent Multidimensional Social Competence Questionnaire (AMSC-Q; Gómez-Ortiz et al., 2017). It consists of 13 items and is divided into two subscales: 5 items measure normative adjustment (e.g., "I take care of the material and the school facilities/equipment"), while 8 items measure social adjustment (e.g., "My classmates feel comfortable working with me"). Responses were on a 7-point Likert scale (1 = *not at all true* to 7 = *very true*). A single score for each subscale was created by adding the score for each item and dividing it by the total number of items. Both subscales showed good internal consistency (normative adjustment subscale: ω_{T1} = .82 and social adjustment subscale: ω_{T1} = .87).

Social Competence (wave 1)

Social competence (wave 1) was measured with the self-report scale of the Spanish version of the Perceived Social Competence Scale II (Anderson-Butcher et al., 2016; Gómez-Ortiz et al., 2017). It consists of 5 items in which students should report how true the statements in each item are for them (e.g., "I show concern for others"). Responses were measured on a 5-point Likert scale (from 1 = *definitely not true* to 5 = *totally true*). The internal consistency was adequate (ω_{T1} = .86).

Bullying Behaviour (both waves)

Bullying behaviour (both waves) was measured with the self-report subscale of the Spanish version of the European Bullying Intervention Project Questionnaire (EBIPQ; Ortega-Ruiz et al., 2016). It consists of 7 items in which students should indicate on a 5-point Likert scale (from 0 = *no* to 4 = *yes, more than once a week*) how often they have displayed the aggressive behaviour described by the items (e.g., "I have pushed aside or not let another classmate play with us"). A single score was created by adding the score for each item and dividing it by the total number of items. The internal consistency of the scale was good (ω_{T1} = .80, ω_{T2} = .78).

Defensive Behaviour (both waves)

Defensive behaviour (both waves) was measured using the Participant Role Questionnaire (PRQ; Salmivalli & Voeten, 2004). It encompasses 3 items in which students should indicate on a 5-point Likert scale (from 0 = *never* to 4 = *always*) how often they have displayed the defensive behaviour described by the items (e.g., "I tell classmates to stop or tell them that bullying is silly"). As in other studies, the questionnaire was self-reported (Barchia & Bussey, 2011; e.g., Troop-Gordon et al., 2019). The items were translated into Spanish following a parallel back translation process. A single score was created by adding the scores for each item and dividing it by the total number of items. The internal consistency of the scale was good (ω_{T1} = .81, ω_{T2} = .82).

Demography Control Variables

Gender was coded as a binary variable (0 = boys, 1 = girls), and age was categorized in two groups, the first group comprised students from 9 to 13 years old (early adolescence), while the second group comprised students from 14 to 17 (mid-adolescence) (Garrison & Felice, 2009; World Health Organization, 2014).

Procedure

The schools were selected based on accessibility. The schoolchildren's participation was approved by the school principal, and express parental informed consent was obtained. Only 1% (n = 48) of participants' parents did not agree to their child taking part in the study. Data were collected in 2 waves, 6 months apart, one at the beginning (October-November) and the other at the end (May-June) of the 2018-2019 school year. Data were collected by trained and experienced interviewers during regular lessons. The voluntary, confidential, and anonymous nature of the questionnaire was emphasized, and any doubts were resolved. Participants were asked to create their own personal code with the initial letters of their name and date of birth in order to ensure data anonymity and linking surveys over time. On average, the participants completed the questionnaires in 40 minutes. Ethical approval was obtained from the corresponding Ethics Committee.

Analytical Plan

Little's (1988) test of the study variables was significant (p < .001) ,which means that data were not missing completely at random (MCAR). Nevertheless, the chi-square (χ^2) test is sensitive to sample size, and so the normalised version of χ^2 should be used to adjust the results. Normalised χ^2 (χ^2/df = 1.43) was under 3 for the study data (Bollen, 1989), which means that data were missing at random (MAR). Given these results, full information maximum likelihood (FIML) estimation was used to handle the missing data. FIML uses all the available data, thus allaying any concerns regarding traditional missing data techniques, such as listwise and pairwise exclusion (Enders, 2010).

Descriptive analyses were performed to explore the study variables, and bivariate Pearson correlations between variables were calculated to determine the direction and degree of association between the study variables. A Student's t-test was conducted to explore whether there were differences in study variable levels based on gender or age group. Cohen's d test was considered to control the effect size (Cohen, 1992). After that, different analyses were run to answer the study objectives. First, latent class analysis (LCA) was conducted to classify individuals into groups with similar response patterns about their bullying classroom norms. LCA aims to describe classes or clusters which simultaneously maximizes between-class heterogeneity and within-class homogeneity (Jung & Wickrama, 2008; Masyn, 2013). As LCA is a model-testing process, multiple models are made to fit with the various classes. Each model is compared against the previous models (k-class minus 1). Different statistical fit indices should be compared to choose model which provides the best solution (Masyn, 2013; Nylund et al., 2007) as follows: a) Akaike information criterion (AIC), Bayesian information criterion (BIC), and sample-adjusted Bayesian information criterion (SABIC), with smaller values indicating better fit; b) two statistical tests for model comparisons: the Lo-Mendell-Rubin likelihood ratio test (LMR-LRT; Lo et al., 2001) and the bootstrap likelihood ratio test (BLRT; McLachlan, 1987), in which significant p-values indicate a significant improvement in the model fit when adding an additional class; and c) entropy, with values ranging from 0 to 1 (as a perfect fit). The minimum percentage of participants which must be included in each group was set at 5%.

All LCA were conducted using Mplus version 8.7 (Muthén & Muthén, 2017), and the models were estimated using robust maximum likelihood estimates (MLR), which enabled us to use FIML missing data analysis. Gender and age effects were controlled.

Secondly, we performed multiple linear regression analysis (MLRA in advance) to identify the effect strength of the independent variables (social adjustment, normative adjustment, pro-social skills, and bullying classroom norms) on the dependent variables (bullying and defensive behaviour). Four-step multivariate MLRAs were performed to determine the effect of the independent variables on the two dependent variables. In the first step, gender and age were added to the model, as well as the dependent variable from the previous time. In the second step, we added the normative and social adjustment and pro-social skills variables. In the third step, bullying classroom norms were added. In the final step, the moderation of bullying classroom norms were tested for the three independent variables. Bullying classroom norms were included in an independent step (step 3) due to their moderate character. Next, we carried out univariate MLRAs for each dependent variable following the same four-step procedure. In linear regression, four assumptions should be made to accept the adequacy of the model: a) "normality" – the errors should be normally distributed; b) "linearity" – the relation between the predictors and the dependent variable should be linear; c) "absence of homocedasticity" – the variance of the residuals should be homogeneous across the levels of the predicted values; and d) "absence of multicollinearity" – predictors should not be highly related to each other. Many graphical methods and numerical tests have been developed to check that these assumptions, including the normal predicted probability (P-P) plot, which is normally used to test the first assumption. The assumption is accepted when the observed data conforms closely to the diagonal normality line indicated on the plot. We used a scatterplot of the residuals and a LOESS curve to test the linearity and homoscedasticity assumptions. The linearity assumption is met when the relationship between the response variable and predictors is zero, while the heteroskedasticity assumption is satisfied when there is no pattern to the residuals plotted against the fitted values. Finally, the absence of multicollinearity is tested with two indicators: the variance inflation factor (VIF), where scores between 1 and 10 indicate that there is no multicollinearity between the independent variables included in the model, and the tolerance (T) measures, which indicate the extent to which beta coefficients are affected by the presence of other predictor variables in a model. It is associated with each independent variable and ranges from 0 to 1, though there is no strict cut-off point. T values below .40 are a cause for concern, while levels below .20 suggest severe multicollinearity in the model (Weisburd & Britt, 2014). Besides these four assumptions, the Durbin-Watson statistic should be considered to examine correlation errors. Scores between 1.5 and 2.5 or thereabouts indicate that the errors are independent (Durbin & Watson, 1971). The analysis uses restricted maximum likelihood estimation (REML) of the covariances. REML estimates of the covariances were used to obtain the generalized least squares (GLS) estimates of regression coefficients and their standard errors. All models were fitted using the lm() function from the "stats" package (version 4.2) in R software.

Finally, simple slope tests were performed to evaluate characteristics (direction and effect separately, according to the type of rules) of significant interactions in univariate analyses (Aiken & West, 1991). All simple slope tests were performed using the "sim slopes" function from the "interactions" package (version 1.1.5) and plots were obtained using the "plot model" function from the sjPlot package (version 2.8.11), both in R software.

Results

Descriptive Results

Descriptive statistics, correlation analysis, and Student's *t*-test results for the study variables of gender and age groups (early vs. mid-adolescence) are shown in Table 1. Low levels of bullying and high levels of defensive behaviour were found in the adolescents in both waves (see mean levels in Table 1). The correlation results of the relationship between bullying behaviour (wave 1) and social adjustment (*r*s = -.12), normative adjustment (*r*s = -.36), and pro-social skills (*r*s = -.24) were low, negative, and significant, while those of the correlational analyses between defensive behaviour (wave 1) and social adjustment (*r*s = .26), normative adjustment (*r*s = .25), and pro-social skills (*r*s = .43) were low, positive, and significant. Secondly, social adjustment and normative adjustment showed a low, positive significant correlation (*r*s = .24), while pro-social skills showed a moderate, positive, and significant correlation with both (social adjustment: *r*s = .43 and normative adjustment: *r*s = .39). Lastly, correlation within bullying and defending variables over time was positive, high-moderate and significant for both (bullying: *r*s = .45; and defending: *r*s = .60).

Finally, Student's *t*-test showed, on the one hand, that boys reported significantly higher implication in bullying behaviour than girls (*M* = 0.25-0.24 vs. *M* = 0.14-0.16 in both waves respectively), while girls reported significantly higher implication in defending than boys (*M* = 3.18-3.14 vs. *M* = 2.87-2.84 in both waves, respectively) (see Table 1). Moreover, girls scored

Table 1. Descriptive Variables and Student's *t*-test Results for Study Variables between Gender and Age Groups

	Whole sample							Gender differences				Age differences			
	Descriptive variables	Correlations						Boys (*n* = 1,624)	Girls (*n* = 1,703)	Comparative analyses		Early (*n* = 1,683)	Middle (*n* = 1,667)	Comparative analyses	
	M (*SD*)	1	2	3	4	5	6	*M* (*SD*)	M (*SD*)	*t*	*d*	*M* (*SD*)	*M* (*SD*)	*t*(*df*)	*d*
1. Bw1⁺	0.19 (0.37)	-						0.25 (0.44)	0.14 (0.27)	8.56***	0.30	0.17 (0.34)	0.22 (0.39)	-4.13***	0.14
2. Bw2⁺	0.20 (0.35)	.45	-					0.24 (0.39)	0.16 (0.83)	5.82***	0.12	0.19 (0.36)	0.21 (0.34)	-1.79	0.06
3. Dw1	3.03 (0.92)	-.16	-.11	-				2.87 (0.98)	3.18 (0.83)	-9.61***	0.30	3.16 (0.89)	2.9 (0.93)	8.22***	0.29
4. Dw2	3.00 (0.93)	-.14	-.20	.60	-			2.84 (0.99)	3.14 (0.84)	- 8.33***	0.33	3.07 (0.93)	2.92 (0.92)	4.50***	0.16
5. SAw1	5.69 (0.94)	-.12	-.08	.26	.19	-		5.57 (0.97)	5.80 (0.90)	-6.84***	0.25	5.78 (0.93)	5.61 (0.94)	5.08***	0.18
6. NAw1	5.93 (0.97)	-.36	-.30	.25	.24	.24	-	5.73 (1.03)	6.11 (0.88)	-11.07***	0.36	6.09 (0.92)	5.79 (1.00)	8.75***	0.31
7. PSw1	4.11 (0.73)	-.24	-.15	.43	.33	.43	.39	3.95 (0.77)	4.26 (0.66)	-12.47***	0.43	4.21 (0.73)	4.02 (0.73)	7.58***	0.26

Note. B = bullying; D = defending; SA = social adjustment; NA = normative adjustment; PS = pro-social skills; w1 and w2 = wave 1 and wave 2; *M* = mean; *SD* = standard deviation; *t* = Student's *t*-test; *d* = Cohen's *d*.
Skewness and kurtosis analyses for bullying behaviour at both waves (Sk = 3.59-3.53, K = 17.36-19.4, respectively) showed a higher than acceptable asymmetry, which is to be expected when we consider that bullying constitutes non-normative behaviour.
All correlations had a *p*-value < .001; All Cohen's *d* statistic effect sizes were low (< .50).
⁺*p* < .05. ⁺⁺*p* < .01. ⁺⁺⁺*p* < .001.

Table 2. Summary of LCA Model Fit

M	Log likelihood	AIC	BIC	SABIC	LMRT	BLRT	Meaning	Entropy	PR	%
1	-13905.14	27830.28	27891.47	27859.70						
2	-12681.40	25404.79	25533.29	25466.57	< .001	< .001	2 > 1	.80	91-95	24
3	-12384.02	24832.05	25027.86	24926.18	< .001	< .001	3 > 2	.82	87-94	12
4	-12310.05	24706.10	24969.22	24832.59	.001	< .001	4 > 3	.67	69-87	10
5	-12211.42	24530.84	24861.27	24689.69	.999	.999	5 > 4	.63	62-92	10

Note. M = k-class for model; AIC = Akaike information criterion; BIC = Bayesian information criterion; SABIC = sample-adjusted Bayesian information criterion; LMRT = *p*-value of the Lo-Mendell-Rubin test; BLRT = *p*-value of the bootstrap likelihood ratio test; PR = probability range (%); grey line indicates chosen model.

significatively higher than boys in social adjustment (M = 5.8 vs. M = 5.57), normative adjustment (M = 6.11 vs. M = 5.73), and pro-social skills (M = 4.26 vs. M = 3.95). On the other hand, Student's *t*-test was not significant for bullying behaviour between early and mid-adolescence in wave 2. However, the results were significant for wave 1, with mid- adolescents showing a significantly higher implication in bullying behaviour than early adolescents (M = 0.22 vs. M = 0.17 respectively). Defensive behaviour was higher for early than mid-adolescents (M = 3.16-3.07 vs. M = 2.9-2.92 in both waves, respectively). Lastly, early adolescents also scored significatively higher than middle adolescents in social adjustment (M = 5.78 vs. M = 5.61), normative adjustment (M = 6.09 vs. M = 5.79), and pro-social skills (M = 4.21 vs. M = 4.02). The effect size (Cohen's d) was low (< 0.50) in all the Student's t analyses (see Table 1).

Bullying Classroom Norm Groups

Model fit statistics are shown in Table 2. The five-class model solution showed non-significant LMRT and BLRT values, which means that a less parsimonious model (more *k*-classes) would not be significantly better than the previous one, that is the more parsimonious model (fewer *k*-classes). Moreover, the entropy value was worse than for the 4-classes model. In summary, the 4-classes model was the final solution chosen.

Table 3 shows the percentage of participants in each group that scored in each of the three levels of the five types of behaviour for which they were evaluated. Higher percentages enable us to know the general tendency of the participants of each group (for example, participants in the first group showed higher percentages in anti-bullying attitudes for the five types of behaviour). According to their characteristics, participants assigned to the "anti-bullying attitudes" group (48%, n = 1,617) were more likely to perceive anti-bullying attitudes in their classmates for the five types of behaviour. Most of participants were included in this group. Participants assigned to the "anti-bullying but not actively defensive" group (27%, n = 917) were more likely to perceive anti-bullying attitudes in their classmates when the behaviour involved aggression (behaviour types 2, 4, and 5), but their perceptions were the opposite for behaviour which involved active defence of the victim (behaviour types 1 and 3). Participants assigned to the "indifferent" category (15%, n = 501) were more likely to perceive that their class would do nothing in the situations described. Lastly, participants assigned to the pro-bullying attitudes group (10%, n = 323) were more likely to perceive pro-bullying attitudes in their classmates for the five types of behaviour. Some differences were found in the distribution by gender and age group. The anti-bullying group only presented age differences with respect to the indifferent group (β = .54, SE = .23, p = .021), while the latter group presented differences for age compared with the 'indifferent' (β = .94, SE = .15, p < .001), and pro-bullying groups (β = .59, SE = .18, p = .001).

Multivariate Regression of Bullying and Defensive Behaviour

To simplify the reporting of the study results and given that the models were replicated separately for bullying and defensive behaviour, only the results of multivariate MLRA step 4 are summarized below, $F(2, 1887) = 343.111$, Wilks' $\lambda = .733$, $p < .001$, with $h^2 = .27$. The levels of significance or non-significance of the variables were maintained throughout the successive steps. Specifically, gender but not age, showed a significant association with the dependent variables, with both dependent variables showing a significant association at the previous time. In addition, all three independent variables and the type of bullying classroom norms showed significant associations

Table 3. Item Probability for Each Latent Class according to Behaviour Type, and Descriptive of the Sudy Variables by Bullying Classroom Norm Groups

	Anti-bullying (n = 1,617, 48%)			Anti-bullying but not actively defending (n = 917, 27%)			Indifference (n = 501, 15%)			Pro-bullying (n = 323, 10%)		
Type of behaviour	1	2	3	1	2	3	1	2	3	1	2	3
Befriending a victim of bullying	65.6	22.7	11.8	35.6	15.9	48.6	15.9	60.5	23.7	23.8	22.9	53.4
Laughing with others	91.1	3.6	5.3	87.5	6.4	6.1	20.3	75.4	4.3	23.8	23.1	53.1
Telling teacher about bullying	82.1	17.9	0	46.2	5.7	48.1	20.7	47.4	31.9	36.9	7 .4	55.7
Participating in bullying	99.0	0.07	0.03	93.5	2.5	4.0	33.9	65.6	0.05	20.4	26.0	53.6
Helping the bully	91.7	6.90	1.4	79.9	10.4	9.6	16.5	78.5	5.1	11.9	15.0	73.1
Study variables	*M*	*SD*		*M*	*SD*		*M*	*SD*		*M*	*SD*	
Bullying wave 1	0.14	0.28		0.23	0.39		0.22	0.39		0.34	0.58	
Bullying wave 2	0.16	0.29		0.22	0.38		0.24	0.34		0.32	0.51	
Defending wave 1	3.20	0.81		3.08	0.87		2.57	1.03		2.74	1.06	
Defending wave 2	3.14	0.86		3.00	0.90		2.65	1.01		2.83	1.00	
Social Adjustment	5.83	0.84		5.67	0.93		5.42	1.03		5.43	1.15	
Normative Adjustment	6.04	0.89		5.93	0.95		5.71	1.12		5.74	1.08	
Pro-social skills	4.21	0.67		4.12	0.72		3.91	0.80		3.95	0.86	

Note. 1 = anti-bullying attitudes; 2 = indifference attitudes; 3 = pro-bullying attitudes; M = media; SD = standard deviation.

Table 4. Summary of Univariate Regression for Variables Associated with Bullying and Defensive Behaviour

	Bullying						Defending					
	R^2	ΔR^2	β_u	*SE*	β	*t*	R^2	ΔR^2	β_u	*SE*	β	*t*
Model 1	.191						.368					
Gender			-.034	.013	-.050	-2.652**			.125	.031	.068	4.046***
Age			-.002	.013	-.003	-0.142			.008	.031	.004	0.260
VP			.457	.020	.430	22.947***			.597	.017	.594	34.776***
Model 2	.216	.026					.377	.01				
Gender			-.017	.013	-.024	-1.267			.088	.031	.048	2.832**
Age			-.017	.013	-.024	-1.311			.032	.031	.017	1.025
VP			.404	.021	.379	19.479***			.557	.019	.554	29.727***
SA			-.002	.007	-.005	-0.226			.003	.018	.003	0.162
NA			-.067	.008	-.179	-8.618***			.069	.018	.070	3.883***
PS			.008	.010	.017	0.799			.077	.026	.061	2.983**
Model 3	.220	.004					.379	.002				
Gender			-.019	.013	-.027	-1.452			.094	.031	.051	3.012**
Age			-.018	.013	-.026	-1.406			.033	.031	.018	1.076
VP			.396	.021	.372	18.991***			.548	.019	.545	28.803***
SA			.001	.008	.003	0.168			-.002	.018	-.002	-0.126
NA			-.067	.008	-.178	-8.594***			.067	.018	.069	3.790***
PS			.010	.010	.021	0.986			.077	.026	.060	2.972**
Norm			.022	.007	.062	3.292**			-.041	.016	-.045	-2.616**
Model 4	.222	.003					.38	.002				
Gender			-.020	.013	-.029	-1.534			.097	.031	.053	3.104**
Age			-.017	.013	-.024	-1.303			.029	.031	.016	0.947
VP			.399	.021	.375	19.083***			.544	.019	.540	28.475***
SA			.000	.008	.001	0.031			.006	.019	.006	0.331
NA			-.064	.008	-.170	-8.109***			.059	.018	.060	3.250**
PS			.007	.011	.014	0.633			.076	.026	.060	2.923**
Norm			.022	.007	.063	3.371**			-.043	.016	-.047	-2.722**
SA x Norm			-.001	.007	-.003	-0.147			-.013	.017	-.014	-0.759
NA x Norm			-.016	.007	-.043	-2.188*			.047	.017	.050	2.765**
PS x Norm			.024	.010	.052	2.446*			-.006	.023	-.005	-0.254

Note. All independent variables (except gender and age) are grand mean centred; R^2 = adjusted R^2; ΔR^2 = R^2 change; β_u = beta for unstandardized coefficients; *SE* = standard error for unstandardized coefficients; β = beta for standardized coefficients; VP = bullying/defending in the previous time measure; SA = social adjustment; NA = normative adjustment; PS = pro-social skills.
$^*p < .05$, $^{**}p < .01$, $^{***}p < .001$.

with the dependent variables. Finally, the interaction between all three and the bullying classroom norms was also significant.

Univariate Regression Analysis of Bullying and Defending

Statistics for MLRAs in the four proposed models for bullying and defensive behaviour are summarized in Table 4. Models from 1 to 4 are included for comparative purposes, showing that the levels of R^2 change were significant when comparing each model with the previous one. Based on the significance of the change in R^2, Model 4 was selected, with an adjusted R^2 value of .22 for bullying, R^2 change = .003, $F(3, 2347) = 2.841$, $p = .037$, and an adjusted R^2 value of .38 for defending, R^2change = .002, $F(3, 2289) = 2.761$, $p = .041$. Before exploring the models, the graphical methods and numerical tests were reviewed to verify that the four assumptions were satisfied in the regression model. The normal predicted probability (P-P) plot, the scatterplot of the residuals and the LOESS curve allowed us to confirm the assumptions of normality, linearity and heteroskedasticity. There was no evidence of multicollinearity for any of the predictors for bullying: social adjustment (T = .76, VIF = 1.32), normative adjustment (T = .75, VIF = 1.33), pro-social skills (T = .69, VIF = 1.45), and bullying classroom norms (T = .94, VIF = 1.06); nor for defending (T = .75, VIF = 1.33), normative adjustment (T = .79, VIF = 1.26), PS (T = .64, VIF = 1.56) or bullying classroom norm groups (T = .92, VIF = 1.09). Finally, the Durbin-Watson statistics were 2.043 (bullying) and 1.958 (defending), indicating that the errors were independent among the independent variables.

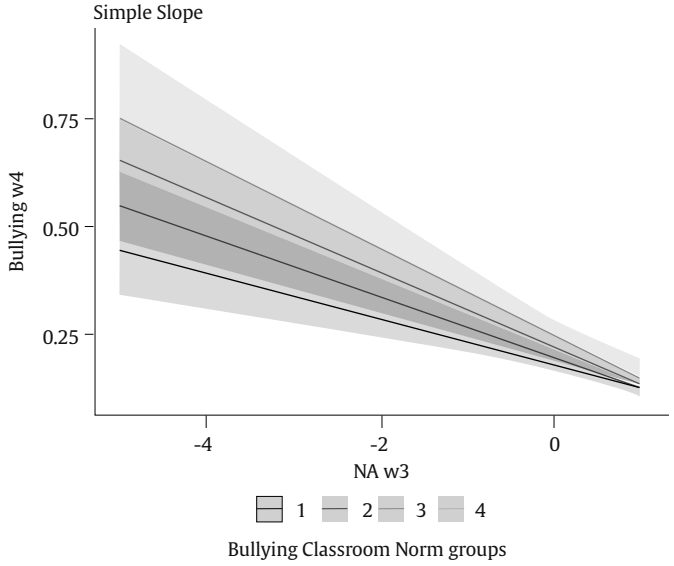

Figure 2. Simple Slope Plot for Interaction between Bullying Classroom Norm Group and Normative Adjustment in relation to Bullying Behaviour.

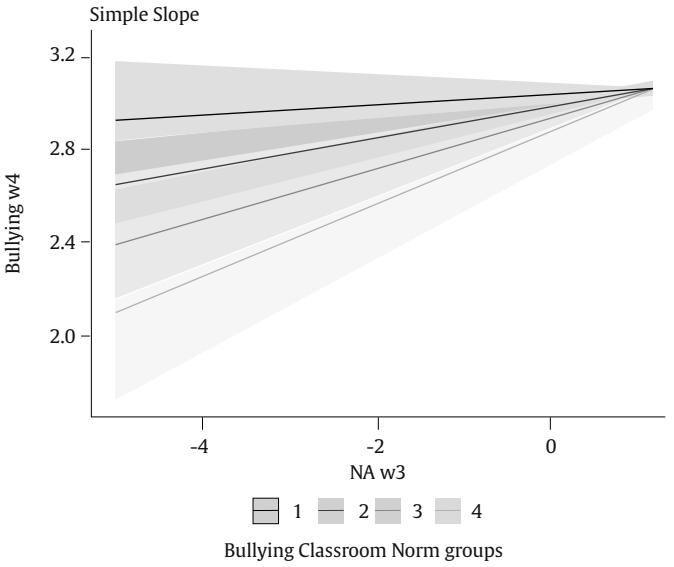

Figure 3. Simple Slope Plot for Interaction between Bullying Classroom Norm Group and Normative Adjustment in relation to Defensive Behaviour.

After confirming the model assumptions, the results from Model 4 (see Table 4) showed that gender was an only significantly associated with defensive behaviour, while age was not significantly associated with either bullying or defending. Normative adjustment was negatively associated with bullying and positively with defending, while pro-social skills were only associated with defending, with a positive association. The type of bullying classroom norms was associated positively with bullying, and negatively with defending.

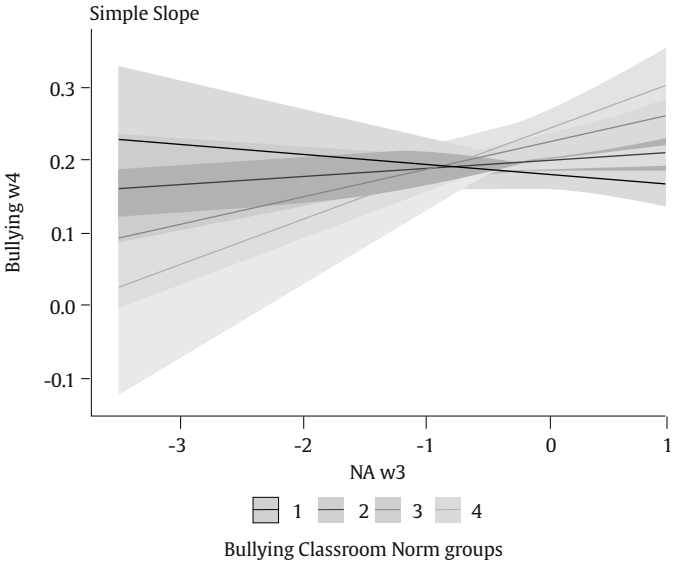

Figure 4. Simple Slope Plot for Interaction between Bullying Classroom Norm Group and Pro-social Skills in relation to Bullying Behaviour.

The interaction between bullying classroom norm groups and normative adjustment was significant for bullying (β = -.043, p = .029) and defensive behaviour (β = .05, p = .006), whereas the interaction with pro-social skills was only significant for bullying behaviour (β = .052, p = .015; see Table 4). The results of the simple slope analysis showed a negative association between bullying and normative adjustment for the four bullying classroom norm groups (anti-bullying: β = -.05, SE = .01, t = -4.85, p < .001; anti-bullying but not actively defending: β = -.07, SE = .01, t = -8.69, p < .001; indifferent: β = -.08, SE = .01, t = -7.9, p < .001; and pro-bullying: β = -.10, SE = .02, t = -6.08, p < .001, see Figure 2). Meanwhile, the results of the simple slope analysis showed a positive association between defending and normative adjustment for three of the bullying classroom norm groups (anti-bullying: β = .02, SE = .03, t = 0.8, p = .43; anti-bullying but not actively defending: β = .07, SE = .02, t = 3.74, p < .001; indifferent: β = .11, SE = .02, t = 4.66, p < .001; and pro-bullying: β = .16, SE = .04, t = 4.22, p < .001; see Figure 3). Lastly, the results of the simple slope analysis showed a positive association between bullying and pro-social skills for two of the bullying classroom norm groups (anti-bullying: β = -.01, SE = .01, t = -0.94, p = .35; anti-bullying but not actively defending: β = .01, SE = .01, t = 1.11, p =.27; indifferent: β = .04, SE = .01, t = 2.63, p = .01; and pro-bullying: β = .06, SE = .02, t = 2.86, p < .001; see Figure 4).

Discussion

This study used LCA to analyse whether the perceptions of group norms towards bullying allow different types of groups to be formed and how these norms, together with the variables of social and normative adjustment and pro-sociality, influence and interact with the probability of fostering aggressive and defensive behaviour in bullying.

The first research objective was to study the classification of peer group norms, using an LCA, thus overcoming the limitations imposed by the traditional 'pro-bullying' and 'anti-bullying' dichotomy (Garandeau et al., 2022). Our results confirmed the theory that there were differences in the students' perception of bullying norms, and allowed us to identify two new types of group normative configurations to add to those already identified in previous research: 'anti-bullying but without active defence', in which the idea of supporting and helping the aggressor is rejected, but no active involvement in defence (e.g., trying to be friendly towards the victim or reporting the incident to the teacher) is observed; and "neutral/indifferent", in which no specific position is defined.

Further analysis of the impact of psychosocial variables on aggressive and defensive behaviour over time showed that normative adjustment was negatively associated with aggressive behaviour and positively associated with defensive behaviour. This finding reveals that both aggressive and defensive behaviour is influenced by the level of compliance with the norms regulating the quality of peer relationships (Romera, Carmona, et al., 2022). However, pro-social behaviour was only positively associated with defence, which supports previous research results linking pro-social behaviour to defensive behaviour (Imuta et al., 2022). Class group norms were associated positively with aggressive behaviour and negatively with defence. Thus, adolescents who belonged to groups with higher levels of pro-bullying perceptions were associated, in the next time period, with higher levels of aggressive behaviour, while those who belonged to groups with more anti-bullying characteristics were associated to a greater extent with defensive behaviour. These results partially confirm our initial hypothesis 2, in which we expected to find a positive association with defensive behaviour and a negative association with aggressive behaviour for all the variables.

As regards the interaction between the type of group norms and the individual variables, we confirmed our third hypothesis and found two effects. Firstly, the group norms were related to normative adjustment. Adolescents with greater normative adjustment showed a lower tendency to develop aggressive behaviour, regardless of the type of group norms, whereas students with a lower normative adjustment were more influenced by these norms. This leads us to infer that adolescents with lower levels of normative adjustment develop aggressive behaviour if they perceive that their group norms dictate acceptance or moral indifference towards such behaviour.

Likewise, these results suggest that individuals who have a greater adjustment to the norms are more likely to show defensive behaviour in the future, regardless of the type of group norms they were affected by (Laninga-Wijnen et al., 2020; Romera, Carmona-Rojas et al., 2022; Romera, Luque-González et al., 2022).

However, schoolchildren with a low level of normative adjustment tend to depend on group norms to exhibit defensive behavioural patterns towards the victim when involved in bullying. It therefore follows that adolescents with low normative adjustment in anti-bullying groups tend to develop more defensive behaviour than those in pro-bullying groups. In other words, the degree of normative adjustment seems to play a relevant role in the development of defensive behaviour only in those groups with greater acceptance or attitudes of indifference towards bullying. Therefore, normative adjustment can affect the conditions of the group and change its behaviour. In fact, encouraging normative adjustment could serve as a positive stimulus for all groups to assume defensive behaviour and depend less on the perceptions of the group as a whole (Dillon & Lochmann, 2022).

Regarding the effect of pro-social behaviour on the development of aggressive behaviour, we found that in groups with low anti-bullying sensitivity, higher levels of pro-sociality predicted a greater likelihood of exhibiting aggressive behaviour in the future. These results suggest that in groups with pro-bullying attitudes or which are not very sensitive to the immoral nature of bullying, even pro-social schoolchildren can use their social skills as a strategy to do harm and as a means of gaining prestige within the group (Dereli, 2019; García-Fernández et al., 2022; Suárez-García et al., 2020).

Taken together, these findings highlight the idea that individual and group variables interact and affect the characteristics of the aggressive and defensive roles. The relevant role of group norms, normative adjustment and pro-sociality in bullying and the way they are interconnected are crucial factors when analysing the contrasting dynamics of bullying based on the interaction of individual and group variables.

Although this study shows important strengths, such as the large sample size, being a longitudinal study or the use of a methodology with considerable statistical power, it also has important limitations which should be taken into account when interpreting the results and planning future studies. Firstly, the fact that participants belong to only one region of a country makes it difficult to generalise the results of this study. Also, it would be better to analyse the whole cycle of Secondary Education to identify differences associated with age. Secondly, further longitudinal studies should be conducted that allow us to find out what changes occur as the students go through the different school years and what effect joining a new class or staying in the same one could have. In addition, the Bullying Classroom Norms scale showed an internal consistency value close to the recommended values, but low. Therefore, further studies involving this scale, or the development of new measurement instruments, would be an important research goal to evaluate this complex construct.

Nevertheless, the results of this research provide key insights to help us to understand the interaction of the personal dimension (individual factors) and the group dimension of bullying, thus providing added guidance for preventive and palliative intervention programs tackling bullying in schools. Not only do they deal with support for the perceptive deficits in the nature of group norms, but also with the group norms themselves, which depend both on individuals and on school climate and educational practices. In addition, our results support the theory put forward in previous studies which describes bullies as socially competent students who are adept at using their social skills to gain social rewards (García-Fernández et al., 2022). This perception focuses our attention on the need to work on the moral, social, and emotional aspects which can foster a greater tendency towards ethical behaviour of schoolchildren.

Conflict of Interest

The authors of this article declare no conflict of interest.

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage Publications, Inc.

Anderson-Butcher, D., Amorose, A. J., Lower, L. M., Riley, A., Gibson, A., & Ruch, D. (2016). The case for the Perceived Social Competence Scale II. *Research on Social Work Practice, 26*(4), 419-428. https://doi.org/10.1177/1049731514557362

Barchia, K., & Bussey, K. (2011). Predictors of student defenders of peer aggression victims: Empathy and social cognitive factors. *International Journal of Behavioral Development, 35*(4), 289-297. https://doi.org/10.1177/0165025410396746

Bass, E. C., Saldarriaga, L. M., Velasquez, A. M., Santo, J. B., & Bukowski, W. M. (2022). Unpacking the misfit effect: Exploring the influence of gender and social norms on the association between aggression and peer victimization. *International Journal of Behavioral Development, 46*(5), 372-381. https://doi.org/10.1177/0165025421992867

Benner, A. D., & Crosnoe, R. (2023). Schooling from adolescence through early adulthood. In L. J. Crockett, G. Carlo, & J. E. Schulenberg (Eds.), APA handbook of adolescent and young adult development (pp. 275 -291). American Psychological Association. https://doi.org/10.1037/0000298-017

Berger, C., & Caravita, S. C. (2016). Why do early adolescents bully? Exploring the influence of prestige norms on social and psychological motives to bully. *Journal of Adolescence, 46*(1), 45-56. https://doi.org/10.1016/j.adolescence.2015.10.020

Bjärehed, M., Thornberg, R., Wänström, L., & Gini, G. (2020). Mechanisms of moral disengagement and their associations with indirect bullying, direct bullying, and pro-aggressive bystander behavior. *The Journal of Early Adolescence, 40*(1), 28-55. https://doi.org/10.1177/0272431618824745

Bollen, K. A. (1989). *Structural equations with latent variables*. John Wiley & Sons, Inc. https://doi.org/10.1002/9781118619179

Carlo, G., & Padilla-Walker, L. (2020). Adolescents' prosocial behaviors through a multidimensional and multicultural lens. *Child Development Perspectives, 14*(4), 265-272. https://doi.org/10.1111/cdep.12391

Cho, S., & Lee, J. R. (2020). Joint growth trajectories of bullying perpetration and victimization among Korean adolescents: Estimating a second-order growth mixture model–factor-of-curves with low self-control and opportunity correlates. *Crime and Delinquency, 66*(9), 1296-1337. https://doi.org/10.1177/0011128719890271

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155-159. https://doi.org/10.1037/0033-2909.112.1.155

Collins, L. M., & Lanza, S. T. (2009). *Latent class and latent transition analysis: With applications in the social, behavioral, and health sciences* (Vol. 718). John Wiley & Sons.

Coyle, S., Cipra, A., & Rueger, S. Y. (2021). Bullying types and roles in early adolescence: Latent classes of perpetrators and victims. *Journal of School Psychology, 89*(2), 51-71. https://doi.org/10.1016/j.jsp.2021.09.003

Dereli, E. (2019). The relationship between prosocial behaviours, aggression types and moral-social rule knowledge in preschool children. *Cypriot Journal of Educational Sciences, 14*(1), 42-55.

Dillon, C. E., & Lochman, J. E. (2022). Correcting for norm misperception of anti-bullying attitudes. *International Journal of Behavioral Development, 46*(5), 443-452. https://doi.org/10.1177/0165025419860598

Durbin, J., & Watson, G. S. (1971). Testing for Serial Correlation in Least Squares Regression. III. *Biometrika, 58*(1), 1-19. https://doi.org/10.2307/2334313

Eisenberg, N., Fabes, R. A., & Spinrad. T. L. (2006). Prosocial development. In W. Damon & R. Lerner (Eds.), *Handbook of child psychology. Vol.3: Social, emotional, and personality development* (6th ed., pp.646-718). John Wiley & Sons. https://doi.org/10.1002/9780470147658.chpsy0311

Enders, C. K. (2010). *Applied missing data analysis*. Guilford Press.

Espelage, D. L., & Swearer, S. M. (2009). A social–ecological model for bullying prevention and intervention: Understanding the impact of adults in the social ecology of youngsters. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 61-72). Routledge. https://doi.org/10.4324/9780203842898

Forsberg, C., Wood, L., Smith, J., Varjas, K., Meyers, J., Jungert, T., & Thornberg, R. (2018). Students' views of factors affecting their bystander behaviors in response to school bullying: A cross-collaborative conceptual qualitative analysis. *Research Papers in Education, 33*(1), 127-142. https://doi.org/10.1080/02671522.2016.1271001

Gaffney, H., Ttofi, M. M., & Farrington, D. P. (2021). What works in anti-bullying programs? Analysis of effective intervention components. *Journal of School Psychology, 85,* 37-56. https://doi.org/10.1016/j.jsp.2020.12.002

Garandeau, C. F., Vermande, M. M., Reijntjes, A. H., & Aarts, E. (2019). Classroom bullying norms and peer status: effects on victim-oriented and bully-oriented defending. *International Journal of Behavioral Development, 46*(5), 401-410. https://doi.org/10.1177/0165025419894722

Garandeau, C. F., Vermande, M. M., Reijntjes, A. H., & Aarts, E. (2022). Classroom bullying norms and peer status: Effects on victim-oriented and bully-oriented defending. *International Journal of Behavioral Development, 46*(5), 401-410. https://doi.org/10.1177/01650254198947 22

García-Fernández, C. M., Romera, E. M., Monks, C. P., & Ortega-Ruiz, R. (2022). Peer aggression and victimisation: social behaviour strategies in early childhood in Spain. *Early Childhood Education Journal,* Advance online publication. https://doi.org/10.1007/s10643-022-01348-9

Garrison, W., & Felice, M. E. (2009). Adolescence. In C. W. A. Crocker, E. Elias, W. Coleman, & H. Feldman (Eds.), *Developmental-behavioral pediatrics* (4th edition) (pp. 62-73). Elsevier. https://doi.org/10.1016/B978-1-4160-3370-7.00006-7

Gini, G., Pozzoli, T., & Hauser, M. (2011). Bullies have enhanced moral competence to judge relative to victims but lack moral compassion. *Personality and Individual Differences, 50*(5), 603-608. https://doi.org/10.1016/j.paid.2010.12.002

Gómez-Ortiz, O., Romera-Felix, E. M., & Ortega-Ruiz, R. (2017). Multidimensionality of social competence: Measurement of the construct and its relationship with bullying roles. *Revista de Psicodidáctica (English ed.), 22*(1), 37-44. https://doi.org/10.1387/RevPsicodidact.15702

Herrera-López, M., Gómez-Ortiz, O., Ortega-Ruiz, R., Jolliffe, D., & Romera, E. M. (2017). Suitability of a three-dimensional model to measure empathy and its relationship with social and normative adjustment in Spanish adolescents: A cross-sectional study. *BMJ Open, 7*(9), Article e015347. https://doi.org/10.1136/bmjopen-2016-015347

Hong, J. S., & Espelage, D. L. (2012). A review of research on bullying and peer victimization in school: An ecological system analysis. *Aggression and violent behavior, 17*(4), 311-322. https://doi.org/10.1016/j.avb.2012.03.003

Huitsing, G., Lodder, G. M. A., Oldenburg, B., Schacter, H. L., Salmivalli, C., Juvonen, J., & Veenstra, R. (2019). The healthy context paradox: Victims' adjustment during an anti-bullying intervention. *Journal of Child and Family Studies, 28*(9), 2499-2509. https://doi.org/10.1007/s10826-018-1194-1

Imuta, K., Song, S., Henry, J. D., Ruffman, T., Peterson, C., & Slaughter, V. (2022). A meta-analytic review on the social-emotional intelligence correlates of the six bullying roles: Bullies, followers, victims, bully-victims, defenders, and outsiders. *Psychological Bulletin, 148*(3-4), 199-226. https://doi.org/10.1037/bul0000364

Jiménez, T. I., & Estévez, E. (2017). School aggression in adolescence: Examining the role of individual, family and school variables. *International Journal of Clinical and Health Psychology, 17*(3), 251-260. https://doi.org/10.1016/j.ijchp.2017.07.002

Jung, T., & Wickrama, K. A. S. (2008). An introduction to latent class growth analysis and growth mixture modeling. *Social and Personality Psychology Compass, 2*(1), 302-317. https://doi.org/10.1111/j.1751-9004.2007.00054.x

Kubiszewski, V., Fontaine, R., Potard, C., & Auzoult, L. (2015). Does cyberbullying overlap with school bullying when taking modality of involvement into account? *Computers in Human Behavior, 43,* 49-57. https://doi.org/10.1016/j.chb.2014.10.049

Lambe, L. J., Della Cioppa, V., Hong, I. K., & Craig, W. M. (2019). Standing up to bullying: A social ecological review of peer defending in offline and online contexts. *Aggression and Violent Behavior, 45,* 51-74. https://doi.org/10.1016/j.avb.2018.05.007

Laninga-Wijnen, L., Harakeh, Z., Dijkstra, J.K., Veenstra, R., & Vollebergh, W. (2018). Aggressive and prosocial peer norms: Change, stability, and associations with adolescent aggressive and prosocial behavior development. *The Journal of Early Adolescence, 38*(2), 178-203. https://doi.org/10.1177%2F0272431616665211

Laninga-Wijnen, L., Steglich, C., Harakeh, Z., Vollebergh, W., Veenstra, R., & Dijkstra, J. K. (2020). The role of prosocial and aggressive popularity norm combinations in prosocial and aggressive friendship processes. *Journal of Youth and Adolescence, 49*(3), 645-663. https://doi.org/10.1007/s10964-019-01088-x

Laninga-Wijnen, L., & Veenstra, R. (2021). Peer similarity in adolescent social networks: Types of selection and influence, and factors contributing to openness to peer influence. *Encyclopedia of Child and Adolescent Health, 3*, 196-206.

Lanza, S. T., & Rhoades, B. L. (2013). Latent class analysis: An alternative perspective on subgroup analysis in prevention and treatment. *Prevention Science, 14*(2), 157-168. https://doi.org/10.1007/s11121-011-0201-1

Laursen, B., & Veenstra, R. (2021). Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research. *Journal of Research on Adolescence, 31*(4), 889-907. https://doi.org/10.1111/jora.12606

Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association, 83*(404), 1198-1202. https://doi.org/10.1080/01621459.1988.10478722

Lo, Y., Mendell, N. R., & Rubin, D. B. (2001). Testing the number of components in a normal mixture. *Biometrika, 88*(3), 767-778. https://doi.org/10.1093/biomet/88.3.767

Longobardi, C., Iotti, N. O., Jungert, T., & Settanni, M. (2018). Student-teacher relationships and bullying: The role of student social status. *Journal of Adolescence, 63*(1), 1-10. https://doi.org/10.1016/j.adolescence.2017.12.001

Ma, T. L., Meter, D. J., Chen, W. T., & Lee, Y. (2019). Defending behavior of peer victimization in school and cyber context during childhood and adolescence: A meta-analytic review of individual and peer-relational characteristics. *Psychological Bulletin, 145*(9), 891-928. https://doi.org/10.1037/bul0000205

Masyn, K. E. (2013). Latent class analysis and finite mixture modeling. In T. D. Little & (Eds) (Eds.), *The Oxford handbook of quantitative methods* (pp. 551-611). Oxford University Press.

McLachlan, G. J. (1987). On bootstrapping the likelihood ratio test stastistic for the number of components in a normal mixture. *Applied Statistics, 36*(3), 318-324. https://doi.org/10.2307/2347790

Muthén, B., & Muthén, L. (2017). Mplus. In W. J. van der Linden (Ed.), *Handbook of item response theory* (pp. 507-518). Chapman and Hall/CRC.

Nylund-Gibson, K., & Choi, A. Y. (2018). Ten frequently asked questions about latent class analysis. *Translational Issues in Psychological Science, 4*(4), 440-461. https://doi.org/10.1037/tps0000176

Olweus, D. (2007). *Bullying: hechos y medidas de intervenciones.* Ponencia presentada en el Encuentro Europeo por la Convivencia. Madrid. www.educa.madrid.org/binary/20/DAN_OLWEUS.pdf

Ortega- Ruiz, R. (2020). La dimensión moral en las redes: Cyberbullying y la educación ética para la ciudadanía. *Cuadernos de Pedagogía, 510*, 70-75.

Ortega-Ruiz, R., Del Rey, R., & Casas, J. A. (2016). Assessing bullying and cyberbullying: Spanish validation of EBIPQ and ECIPQ. *Psicología Educativa, 1*(22), 71-79. https://doi.org/10.1016/j.pse.2016.01.004

Pouwels, J. L., & Garandeau, C. F. (2021). The role of the peer group and classroom factors in bullying behavior. In P. K. Smith & J. O. Norman (Eds.), *The Wiley Blackwell handbook of bullying: A comprehensive and international review of research and intervention* (pp. 450-466). Wiley Blackwell.

Pouwels, J. L., Lansu, T. A., & Cillessen, A. H. (2018). A developmental perspective on popularity and the group process of bullying. *Aggression and Violent Behavior, 43*, 64-70. https://doi.org/10.1016/j.avb.2018.10.003

Pouwels, J. L., van Noorden, T. H. J., & Caravita, S. C. S. (2019). Defending victims of bullying in the classroom: The role of moral responsibility and social costs. *Journal of Experimental Social Psychology, 84*, Article 103831. https://doi.org/10.1016/j.jesp.2019.103831

Pozzoli, T., & Gini, G. (2010). Active defending and passive bystanding behavior in bullying: The role of personal characteristics and perceived peer pressure. *Journal of Abnormal Child Psychology, 38*(6), 815-827. https://doi.org/10.1007/s10802-010-9399-9

Rambaran, A. J., Dijkstra, J. K., & Stark, T. H. (2013). Status-based influence processes: The role of norm salience in contagion of adolescent risk attitudes. *Journal of Research on Adolescence, 23*(3), 574-585. https://doi.org/10.1111/jora.12032

Roberts, A. P., Monks, C. P., & Tsermentseli, S. (2020). The influence of gender and resource holding potential on aggressive and prosocial resource control strategy choice in early childhood. *Frontiers in Education, 5*, 1-11. https://doi.org/10.3389/feduc.2020.593763

Romera, E. M., Bravo, A., Ortega-Ruiz, R., & Veenstra, R. (2019). Differences in perceived popularity and social preference between bullying roles and class norms. *PloS one, 14*(10), Article e0223499. https://doi.org/10.1371/journal.pone.0223499

Romera, E. M., Carmona-Rojas, M., Ortega-Ruiz, R., & Camacho, A. (2022). Bidirectional association between normative adjustment and bullying perpetration in adolescence: A prospective longitudinal study. *Revista de Psicodidáctica, 2*(27), 132-140. https://doi.org/10.1016/j.psicoe.2022.03.001

Romera, E. M., Luque-González, R., García-Fernández, C. M., & Ortega-Ruiz, R. (2022). Competencia social y bullying: el papel de la edad y el sexo. *Educación XX1, 25*(1), 309-333. https://doi.org/10.5944/educxx1.30461

Saarento, S., & Salmivalli, C. (2015). The role of classroom peer ecology and bystanders' responses in bullying. *Child Development Perspectives, 9*(4), 201-205. https://doi.org/10.1111/cdep.12140

Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior, 15*(2), 112-120. https://doi.org/10.1016/j.avb.2009.08.007

Salmivalli, C., & Voeten, M. (2004). Connections between attitudes, group norms, and behaviour in bullying situations. *International Journal of Behavioral Development, 28*(3), 246-258. https://doi.org/10.1080/01650250344000488

Smith, P. K., López-Castro, L., Robinson, S., & Görzig, A. (2019). Consistency of gender differences in bullying in cross-cultural surveys. *Aggression and Violent Behavior, 45*, 33-40. https://doi.org/10.1016/j.avb.2018.04.006

Suárez-García, Z., Álvarez-García, D., Rodríguez, C., & de Lleida, U. (2020). Predictores de ser víctima de acoso escolar en Educación Primaria: una revisión sistemática. *Revista de Psicología y Educación, 15*(1), 1-15. https://doi.org/10.23923/rpye2020.01.182

Troop-Gordon, W., MacDonald, A. P., & Corbitt-Hall, D. J. (2019). Children's peer beliefs, friendlessness, and friendship quality: Reciprocal influences and contributions to internalizing symptoms.

Developmental Psychology, 55(11), 2428. https://doi.org/10.1037/dev0000812

van der Ploeg, R., Kretschmer, T., Salmivalli, C., & Veenstra, R. (2017). Defending victims: What does it take to intervene in bullying and how is it rewarded by peers? *Journal of School Psychology, 65*, 1-10. https://doi.org/10.1016/j.jsp.2017.06.002

Vaughn, B. E., Shin, N., Kim, M., Coppola, G., Krzysik, L., Santos, A. J., & Korth, B. (2009). Hierarchical models of social competence in preschool children: A multisite, multinational study. *Child Development, 80*(6), 1775 -1796. https://doi.org/10.1111/j.1467-8624.2009.01367.x

Veenstra, R., & Lodder, G. M. A. (2022). On the microfoundations of the link between classroom social norms and behavioral development. *International Journal of Behavioral Development, 46*(5), 453-460. https://doi.org/10.1177/01650254221100228

Waasdorp, T. E., & Bradshaw, C. P. (2018). Examining variation in adolescent bystanders responses to bullying. *School Psychology Review, 47*(1), 18-33. https://doi.org/10.17105/spr-2017-0081.v47-1

Weisburd, D., & Britt, C. (2014). Multivariate regression: Additional topics. In D. Weisburd & C. Britt (Eds.), *Statistics in criminal justice* (pp. 514-547). Springer US. https://doi.org/10.1007/978-1-4614-9170-5_17

Wiertsema, M., Vrijen, C., van der Ploeg, R., Sentse, M., & Kretschmer, T. (2023). Bullying perpetration and social status in the peer group: A meta-analysis. *Journal of Adolescence, 95*(1), 34-55. https://doi.org/10.1002/jad.12109

World Health Organization. (2014). *Health for the world's adolescents. A second chance in the second decade.* WHO Document Production Services.

Zych, I., Beltrán-Catalán, M., Ortega-Ruiz, R., & Llorent, V. J. (2018). Social and emotional competencies in adolescents involved in different bullying and cyberbullying roles. *Revista de Psicodidáctica (English ed.), 23*(2), 86-93. https://doi.org/10.1016/j.psicoe.2017.12.001

Zych, I., Farrington, D. P., & Ttofi, M. M. (2019). Protective factors against bullying and cyberbullying: A systematic review of meta-analyses. *Aggression and Violent Behavior, 45,* 4-19. https://doi.org/10.1016/j.avb.2018.06.008

Zych, I., Ttofi, M. M., Llorent, V. J., Farrington, D. P., Ribeaud, D., & Eisner, M. P. (2020). A longitudinal study on stability and transitions among bullying roles. *Child Development, 91*(2), 527-545. https://doi.org/10.1111/cdev.13195