



Moral disengagement in primary school children involved in cyberbullying, bullying, and cybergossip

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Abstract

Moral disengagement is a cognitive mechanism that seeks to avoid the feeling of guilt in the face of transgressive behaviors and seems to be present in behaviors such as cyberbullying, cybergossip or bullying in adolescence. Few studies have explored this connection in the primary school years, even though gossip, bullying and cyberbullying are also frequent during these early years. The aim of this study was to examine, in primary school children, the relationship of aggression in bullying, cyberbullying, and cybergossip with moral disengagement, over a time interval of 18 months. The longitudinal study was conducted through different questionnaires with a final sample consisting of 507 schoolchildren (48.5% girls; $M = 11.86$; $SD = 0.74$). The results showed that there was a direct, significant relationship between involvement as an aggressor in cyberbullying behaviors and moral disengagement, but this relationship was not significant in aggressive behaviors in bullying and cybergossip. These results are discussed in relation to the importance of the formation of moral judgment during these years and its educational implications.

Keywords Bullying · Cyberbullying · Cybergossip · Moral disengagement · Primary education · Longitudinal study

1 Introduction

In recent decades, studies on the ethical components of the aggressive behavior that takes place in bullying among peers at school, have gained relevance, especially in our understanding of its psycho-developmental nature (Menesini & Salmivalli, 2017). Moral judgment and sensitivity allow us to differentiate right from wrong and are believed to help control unjustified aggression, which is crucial both for the

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socialization of the individual and for the creation of a good school climate (Romera et al., 2019). In all educational stages, it is key that daily life, learning and teaching can take place in a positive, thriving social environment. But the primary school years are particularly important in this regard because they are critical for the development of moral competence (Wigelsworth et al., 2022). These are years of establishing affective bonds, in which new interests and experiences emerge and influence the consolidation of a moral criterion within the peer group (Nasaescu et al., 2023).

It is well known that aggressive behaviors known as bullying damage interpersonal relationships and impact the formation of fair moral criteria (Falla et al., 2023a, b). However, there are other online behaviors, such as cyberbullying, or cybergossip, which arises in all social systems and at all ages (Subramanian, 2013). Studies point out that these online and offline behaviors constitute a major problem due to their prevalence and the adverse effects they have on the pupils involved (Li et al., 2022).

Bandura's (1986) sociocognitive theory points out that there is a cognitive-emotional process of moral disengagement (MD) by which the aggressor, or the perpetrator of any transgressive behavior modifies their interpretation of their actions to avoid feelings of guilt or shame caused by this behavior (Bandura, 2016). This theory posits that MD operates in a bidirectional and reciprocal manner in relation to antisocial behaviors, while emphasizing its progressive and transformative character. MD does not immediately bring about a transformation of civic and ethical individuals into amoral people; rather, this process involves a gradual inhibition of civic values, influenced by the social environment and by personal experiences. Thus, MD seems to progressively reduce proactive control over transgressive behaviours, initially inhibiting mildly immoral behaviors, influenced by the fear of external sanctions or feelings of guilt. However, over time, depending on the environmental feedback, which either reinforces or punishes them, these mechanisms can lead to tolerance and inhibition of more serious transgressions (Bandura, 2016). Most studies have focused on demonstrating that MD is directly associated with bullying and cyberbullying (Killer et al., 2019) and suggest that it is a risk factor, as higher levels of MD may increase the likelihood of engaging in both immoral behaviors (Liu et al., 2023). However, there are currently few studies that have explored the reverse effect, that is, whether these aggressive online and offline behaviors, which are continuous, frequent, and intentional, are directly and positively related to MD. That is, whether these behaviors can increase the MD. Similarly, there are few papers measuring the relationship of MD with cybergossip, despite the fact that this behavior, although not initially having any harmful intentionality, has a close relationship with perpetration in cyberbullying (Kisfalusi et al., 2019). Research into MD in schools has focused on secondary school pupils through cross-sectional studies rather than on primary schools (Zych et al., 2015). However, it is essential to employ longitudinal studies to discover how moral judgment can be affected from the earliest stages of education. It is important to find out whether these immoral behaviors, both offline and online, may affect MD in the medium term in the early stages of schooling, as this is when they generally emerge (Mandira & Stoltz, 2021). This information can be crucial for prevention and intervention programs against aggressive behavior and in programs aimed at fostering moral criteria and ethical

values. Therefore, the aim of the present work was to test the possible relationship in the medium term between bullying, cyberbullying or cybergossip, with MD in the primary education stage.

1.1 Bullying, cyberbullying and cybergossip

Bullying occurs when a person or group physically and verbally mistreats, threatens, harasses, isolates or excludes one or more of their peers, in a repetitive manner, with intentionality and in a way that the victim feels helpless due to the superiority of the aggressor or aggressors (Menesini & Salmivalli, 2017). It is precisely the intent to harm the well-being of another person that makes it an immoral behaviour (Ortega-Ruiz, 2020). Our knowledge of the dynamics of bullying helps us see it as something more complex than a mere conflict, with a series of roles (aggressor, victim, and bystander) being formed within the peer group (Salmivalli, 2010).

The advent of new technologies has led to the appearance of new forms of harassment and intimidation, such as cyberbullying (Cuesta-Medina et al., 2020). Cyberbullying is considered a type of bullying in which perpetrators use digital media to inflict harm on another or on others (Smith et al., 2008). Cyberbullying behaviors can be perpetrated online, at any time, and with complete anonymity (Dennehy et al., 2020). The commonest types of aggressive behavior carried out by perpetrators of cyberbullying through the misuse of digital media and social networks include disclosing private information about the victims, sharing images or videos, throwing insults or spreading rumors (Ortega-Barón et al., 2017).

Basically, gossip is a form of group dialogue which presents a series of evaluative comments about an individual who is not present but is known by the rest of the group, and this is termed cybergossip when it is carried out online (Cebollero-Salinas et al., 2022; Foster, 2004). Seen in a favorable light, these comments or gossip can actually have a positive impact on relationships and social functioning, by providing information about those who do not comply with the established norms, and helping the person to become more integrated into the group (Bechtoldt et al., 2020). However, gossip sometimes includes a malicious bias that can be ambiguously interpreted as aggression on the part of both the aggressor and the victim. Some works highlight this aggressive bias, as gossip and cybergossip can become a tool for a bully to manipulate information or spread rumors, thus perpetrating relational aggression against others (Falla et al., 2021).

1.2 Moral disengagement and its relationship with bullying, cyberbullying, and cybergossip

Bandura's sociocognitive theory (2016) points out that MD constitutes the basis for the justification and legitimization of aggression and violence, and that there is a certain bidirectionality between the two. Thus, some works have examined MD as a risk factor for aggressive behaviors in adolescents (Chen et al., 2017), in other words, how the use of ideas of MD can generate or precipitate aggressive and bullying behaviors in schools and educational contexts (Smith, 2015). Similarly, other

studies have found these results with cyberbullying (Tanrikulu & Campbell, 2015). However, there have been much fewer studies into a possible inverse relationship, that is, that perpetration in bullying or cyberbullying is associated with an increase in MD. For example, Obermann (2013) found that bullying significantly influences MD and that MD levels rise when there is an increase in bullying. In contrast, the results are less consistent for longitudinal studies. For example, Sticca and Perren (2015) examined the longitudinal association between bullying and cyberbullying and the development of moral deficits (low moral responsibility and weak feelings of remorse) during the adolescent stage. In this study, the authors noted that initial levels of bullying were not associated with moral deficiencies, whereas initial levels of moral deficiency were positively associated with the development of bullying. It implies that bullying could be a trait that predicts bullying and cyberbullying, but not the other way around. Similarly, Wang et al. (2017) found a relationship between MD and bullying perpetration one year later, but not vice versa. Also, Romera et al. found no relationship between aggression in bullying and subsequent MD, although in this work the time waves were six months. Thornberg et al. (2019) examined the relationship between MD and bullying perpetration and found that it also predicts moral disengagement in the medium term. In addition to these discrepancies in findings, work on MD at the primary education stage has been scarce. Pozzoli et al. (2012) evaluated the four MD strategies and pro-bullying behavior in primary school through a cross-sectional study, finding a significant relationship between cognitive restructuring and pro-bullying behavior. However, to the best of our knowledge, no longitudinal studies have been conducted at this educational stage. In the case of cybergossip, only Falla et al. (2021) have found that cybergossip was related, six months later, to the four MD strategies in high school students.

1.3 Present study

The aim of this study was to analyze whether bullying, cyberbullying, and cybergossip aggression are directly related to MD in the medium term (18 months later) in primary school pupils. To achieve this, the following hypothesis was proposed:

A direct relationship will be found between aggression in bullying, cyberbullying and cybergossip with MD in Time 2. This hypothesis is supported by studies conducted with high school students that point to the existence of this association with bullying and cyberbullying (Thornberg et al., 2019), and with cybergossip (Falla et al., 2021).

2 Method

2.1 Participants

We used non-probability convenience sampling (Straits, 2005), with samples taken at two different times. At Time 1 (T1), the sample consisted of a total of 663 pupils who received primary education at ten state schools in southern Spain. The ages

of the sample (T1) were between 9 and 11, with a mean age of 10.46 ($SD=0.67$). There was a higher percentage of boys participating in the study, 52.12% ($n=345$), than girls, 47.88% ($n=318$). The sample (T1) was divided into two school years (grades), with 52.79% (5th grade) and 47.21% (6th grade).

After eighteen months (T2), the final sample was 507 students. The ages ranged from 10 to 13, with a mean age of 11.86 years ($SD=0.74$). A higher percentage of boys, 51.48% ($n=261$), participated in the study compared to girls, 48.52% ($n=246$). The sample for this second period (T2) was divided into three school years (grades), with 0.83% in 5th grade of primary school, 65.21% in 6th grade of primary school and 33.96% who had gone on to the first year of secondary school.

2.2 Instruments

In the present study, the European Bullying Intervention Project Questionnaire (EBIPQ) in its Spanish version by Ortega-Ruiz et al. (2016) was used to measure bullying. This instrument consists of 14 items, half of which are linked to victimization and the other half to perpetration (e.g., “I have hit, kicked or pushed someone”). Only the perpetration subscale in bullying was used in this study. Items were answered on a five-point Likert scale (0=no, 1=rarely, once or twice, 2=sometimes, once or twice a month, 3=many times, about once a week, 4=always, more than once a week). There were good reliability indices with the total sample for the bullying perpetration subscale ($\alpha=0.96$). Confirmatory Factor Analysis (CFA) with this sample showed optimal fit: (χ^2 S/B=45.03; $df=14$, $p<0.001$; NFI=0.99; NNFI=0.99; CFI=0.99; RMSEA=0.06, 90% CI=0.04–0.08).

The European Cyberbullying Intervention Project Questionnaire (ECIPQ; Del Rey et al., 2015) was used to measure cyberbullying. This instrument consists of 22 items, half of which measure cybervictimization (e.g., “Someone has threatened me through messages on the Internet, social networks or WhatsApp”), with the other half measuring cyberbullying perpetration (e.g., “I have posted compromising videos or photos of someone on the Internet”). The cyberbullying perpetration subscale was used for this study. Responses were on a five-point Likert scale (0=no, 1=rarely, 2=sometimes, 3=many times, 4=always). The cyberbullying perpetration subscale proved reliable with the current sample ($\alpha=0.98$). Also, the CFA in the study sample showed an excellent fit: (χ^2 S/B=57.20; $df=44$, $p<0.001$; NFI=0.99; NNFI=0.99; CFI=0.99; RMSEA=0.02, 90% CI=0.01–0.04).

To measure cybergossip, the *Cybergossip Questionnaire* (CGQ-P; Romera et al., 2018) was used. This is a unidimensional type of scale consisting of nine items (e.g., “I have made comments about other friends or classmates to get into a group on social networks or WhatsApp”). These items are measured with five Likert-type options (0=never, 1=almost never, 2=usually, 3=almost always, 4=always). Good reliability indices were found ($\alpha=0.95$). The CFA showed an excellent fit for the sample of this study: (χ^2 S/B=28.03; $df=27$, $p<0.001$; NFI=0.99; NNFI=0.99; CFI=0.99; RMSEA=0.01, 90% CI=0.01–0.03).

The *Moral Disengagement Scale* (MDS), in the Spanish version by Romera et al. (2023), was used to measure MD (e.g., “Kids who get mistreated usually do things

that deserve it”). The version for elementary school students consists of 14 items with five Likert-type response options (1 = *strongly disagree*; 2 = *somewhat disagree*; 3 = *neither disagree nor agree*; 4 = *somewhat agree*; 5 = *strongly agree*). The questionnaire presented good reliability for the present sample ($\alpha=0.90$). The CFA showed a good fit with the sample of this work: ($\chi^2/S/B=247.54$; $df=77$, $p < 0.001$; $NFI=0.94$; $NNFI=0.95$; $CFI=0.96$; $RMSEA=0.06$, $90\% CI=0.05-0.07$).

2.3 Procedure

This study was governed by the ethical principles of the Declaration of Helsinki concerning confidentiality, anonymity and the use of information for research purposes only, and the dignity, integrity and identity of the participants were respected at all times. The research was also approved by the Bioethics and Biosafety Committee of the University of Cordoba, a section of the Human Research Ethics Committee.

To initiate the fieldwork, the researchers contacted the schools located in southern Spain, explaining the objectives and study procedure, and were then invited by the school management to participate in the research. Next, several appointments were made with the schools that had agreed to participate. The researchers explained the ethical principles and the procedure for completing the questionnaires to the pupils. The questions were read, one by one, by one of the researchers and the points were explained when any uncertainties arose. The children could stop participating at any time they wished, and answers could be omitted given their voluntary nature. The questionnaires took approximately 30 min to complete.

2.4 Data analysis

First, Confirmatory Factor Analysis (CFA) was performed with EQS 7.0 to examine the psychometric properties of the scales, while Cronbach's Alpha was examined for reliability. The analyses were then handled and analyzed with SPSS software version 26. For each scale, the total score was computed as the average of the item scores. The mean and standard deviation were calculated, while Student's t-test was used to verify whether there were differences by gender, with Levene's test being performed beforehand to check the asymmetries of the variances and, subsequently, Cohen's d to calculate the effect size. Likewise, bivariate correlations were performed with Pearson's statistic to test the associations between the study variables. Finally, linear regressions were performed with the intro procedure, using MD as the dependent variable at Time 2 and the independent variables (bullying, cyberbullying and cybergossip) at Time 1. Before performing the regression analysis, the model validation hypotheses were verified. At the same time, the variables were standardized, and the gender and age variables were controlled. The models were compared using RStudio (version 2022.07.02) based on Akaike information criterion (AIC) and Bayesian information criterion (BIC). In both, the lowest values were considered to be the best fit of the model (Vrieze, 2012).

3 Results

3.1 Preliminary analysis

The analysis indicated that the mean in bullying perpetration scores was higher than that of cybergossip and cyberbullying at both Time 1 and Time 2. Student's *t*-test showed that boys reported significantly more perpetration in bullying, cyberbullying, cybergossip, and MD than girls at time 1. However, eighteen months later (Time 2) the differences in online behaviors, cyberbullying and cybergossip were no longer significant, while boys continued to show higher scores than girls for bullying and MD. The effect size was low to moderate for all variables (see Table 1).

Bivariate correlations indicated a significant and direct association between bullying, cyberbullying and cybergossip perpetration variables with MD, both at Time 1 and Time 2. The correlations varied with values ranging from 0.22 to 0.36. As regards age, significant correlations could only be observed with MD and cyberbullying perpetration at Time 2 (see Table 2).

3.2 Regression model for moral disengagement at time 2

The linear regression results for MD at T2 are shown in Table 3. In model 1, the explained variance accounted for 23%, while in model 2 it was 30%. The Bayesian Information Criterion (BIC) was 1113.97 for Model 1 and 838.14 for Model 2, while the Akaike Information Criterion (AIC) was estimated at 1096.59 for Model 1 and 808.65 for Model 2. Consequently, both criteria provide evidence that Model 2 exhibits a better fit. In this model, it was observed that there was a direct and significant relationship between the variables of cyberbullying perpetration at T1 ($t = 3.76$; $p < 0.001$) with MD at T2. The Durbin Watson test for the presence of autocorrelation in the regression residuals gave a value of 1.850 which, by being within the

Table 1 Means, standard deviations and Student *t* tests by gender for all variables

	Sample		Boys		Girls		t	df	d
	M	SD	M	SD	M	SD			
BP T1	0.26	0.55	0.38	0.70	0.13	0.27	6.02***	427.78	0.47
CP T1	0.10	0.43	0.16	0.55	0.04	0.26	3.44*	425.75	0.28
CG T1	0.21	0.46	0.25	0.57	0.16	0.30	2.49*	446.60	0.20
MD T1	1.61	0.64	1.74	0.73	1.48	0.50	5.09***	525.57	0.42
BP T2	0.16	0.32	0.21	0.38	0.10	0.22	4.15**	409.48	0.36
CP T2	0.03	0.10	0.04	0.12	0.03	0.09	1.38	397.34	0.22
CG T2	0.20	0.32	0.19	0.29	0.22	0.34	-1.02	430	0.10
MD T2	1.35	0.50	1.46	0.58	1.23	0.38	4.04**	268.03	0.47

d Cohen's *d*, *BP* Bullying Perpetration, *CP* Cyberbullying perpetration, *CG* Cybergossip, *MD* Moral Disengagement, *T1* Time 1, *T2* Time 2,

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 2 Correlations between the study variables

	1	2	3	4	5	6	7	8
1. Bullying perpetration (T1)	1							
2. Cyberbullying perpetration (T1)	0.59**	1						
3. Cybergossip (T1)	0.51**	0.59**	1					
4. MD (T1)	0.49**	0.37**	0.33**	1				
5. Bullying perpetration (T2)	0.39**	0.25**	0.30**	0.16**	1			
6. Cyberbullying perpetration (T2)	0.07	0.04	0.14**	0.06	0.35*	1		
7. Cybergossip (T2)	0.12*	0.02	0.25**	0.11*	0.39**	0.48**	1	
8. MD (T2)	0.35**	0.22**	0.36**	0.45**	0.47**	0.19**	0.28**	1
9. Age	-0.06	0.02	-0.02	-0.05	0.02	0.14**	0.06	0.20**

MD Moral Disengagement, T1 Time 1, T2 Time 2

* $p < 0.05$, ** $p < 0.001$

Table 3 Regression model for moral disengagement at Time 2

	Model 1			Model 2			Tolerance	VIF
	β	SE	t	β	SE	t		
Gender	-0.12	0.05	-2.02*	-0.08	0.05	-1.37	0.93	1.08
Age	0.15	0.06	2.61**	0.13	0.06	2.32**	0.96	1.04
Moral disengagement T1	0.42	0.04	7.22***	0.34	0.04	5.45***	0.78	1.28
Bullying Perpetration T1				0.03	0.07	0.44	0.57	1.76
Cyberbullying perpetration T1				0.33	0.14	3.76***	0.40	2.47
Cybergossip T1				0.05	0.08	0.61	0.51	1.95
R^2	0.23					0.30		
F	16.26***					23.04***		

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

range of 1.5 to 2.5, indicates that correlations between residuals in the model is not a cause for concern (Durbin & Watson, 1971).

4 Discussion

Previous research has shown that aggressive behaviors among peers, whether in person (offline) or using digital devices (online), produce a series of negative effects that counteract the socialization process (Garandau et al., 2021). Socialization is a complex process that unfolds in day-to-day social life throughout childhood, with the primary school years being of particular importance in the construction of critical judgment and moral sensitivity. However, most of the works in this regard are

focused on the secondary school stage (Estévez et al., 2019). There are studies that have revealed that MD is a risk factor for these behaviors (Chen et al., 2017), and that it remains so even among late adolescents (Sun et al., 2025). However, there are no specific works aimed at exploring the reverse phenomenon: whether offline or online behaviors of unjustified aggressiveness are directly and significantly related to MD. Thus, the aim of the study was to identify whether aggression in bullying and cyberbullying and cybergossip are directly and significantly related to MD in the medium term. Knowing the impact that unjustified aggression could have on moral reasoning in primary school would allow us to assess the importance of using educational interventions to try to stop bullying, cyberbullying and cybergossip before they go too far.

Preliminary analyses revealed that in the first half, boys showed higher scores compared to girls in aggression in bullying and cyberbullying, just like previous works conducted at this educational stage (Machimbarrena & Garaigordobil, 2018). However, they were also the ones who had higher scores in cybergossip, which is different to other studies which have found higher scores in girls (Oluwole, 2009). These differences in results may be due to cultural or age-related aspects of the participants. Interestingly, these differences in online behaviors (cyberbullying perpetration and cybergossip) ceased to be significant a year and a half later, while differences in bullying perpetration were maintained, with greater involvement of boys. Anonymity, which is easier to preserve online, could lead to gender differences leveling out over time, so that boys and girls are equally involved in aggressive behavior and online gossip. For MD, meanwhile, in this study, boys always had higher scores, in line with most research (Bjärehed et al., 2020; Gómez-Tabares et al., 2021).

The analysis found that there was a significant association between reported cyberbullying perpetration and MD 18 months later, even after controlling for previous MD. Previous research with high school students has shown that these online peer bullying behaviors were related twelve months later to MD, and that as cyberspace aggression increased, so did MD strategies (Falla et al., 2023a). The current results thereby extend these findings to also include elementary school students over a longer period of time. Therefore, the perpetration of cyberbullying by children at the end of the first stage of primary school may over time provoke a greater deactivation of moral self-sanctions through the use of MD. These findings suggest that screen-based aggressors experience a gradual disengagement of the moral impact of their online behavior, which could negatively affect their moral development. In line with previous studies, these results evidence the risk of a progression towards immoral behavior patterns among young cyberbullying perpetrators, which could lead to more severe antisocial behaviors in the future (Nasaescu et al., 2023), including a progressive and potentially dangerous decrease in ethical and civic behavior, inevitably affecting socialization processes (Falla et al., 2023b).

In the case of cybergossip, however, despite a concurrent correlation to MD at time 2, when the longitudinal relationship was checked, no significant association was found after controlling for previous MD. Therefore, the analysis indicates that cybergossip does not account for changes in MD one and a half year later. That is, children may become morally disconnected when they engage in this practice, but this does not lead to an increase in their MD in the medium term. This stands in

contrast to previous studies which have found a longitudinal relationship between cybergossip and MD in adolescence (Falla et al., 2021). The difference may be explained by the content of gossip, which, at these ages, could be more naive or innocuous, making it inconsequential to a person's moral reasoning, as well as by the greater importance given to groups in adolescence compared to childhood. However, new studies with more robust analyses and longitudinal samples that include both educational stages are needed to examine these differences.

Furthermore, no longitudinal relationship was found between offline bullying perpetration and MD eighteen months later, after controlling for prior MD. Previous results have been inconsistent in relation to this association between the offline aggressive behaviors found in bullying and disconnection or moral bias in the interpretation of transgressive behaviors. For this reason, some results have established that bullying aggression is related to MD in the medium term (Thornberg et al., 2019), whereas other studies have found no such relationship over time (Romera et al., 2021; Wang et al., 2017). The discrepancies between the results could therefore suggest that these relationships are caused by other variables and, therefore, more work is needed to obtain more conclusive results. For example, future studies could include contextual variables such as class moral disengagement (Thornberg et al., 2023) or peer pressure (Yang et al., 2022), which may be exerting a moderating or mediating role in these relationships.

This study has a number of limitations which should be taken into consideration in the future. First, the sample was taken from one geographical area in one single country. Similarly, although this is a longitudinal study, the sample had to be reduced, as some participants dropped out when they moved to another school. It would therefore be advisable to explore the relationships found in a larger study sample which included participants from other cultures and nationalities, thus allowing for a more robust analysis. Similarly, the longitudinal design could be extended to include secondary school, where important changes occur in adolescents' personality and self-esteem. Additionally, future research could utilize a Cross-Lagged Panel Model to examine potential reciprocal and cross-lagged relationships, for instance, in relation to cyberbullying perpetration, considering the findings of this study. Finally, the use of other instruments of a qualitative nature, such as a control group or structured interviews, could give us important complementary information about the phenomenon.

5 Conclusions

This work provides relevant information about how the transgressive offline and online behaviors that occur in the interpersonal relationships between primary school pupils can affect the moral judgment of the aggressors involved, through increased MD over time. Specifically, at this educational stage, online aggression contributes more to the disconnection of moral criteria in the future. The bias in reasoning and judgment with respect to ethical norms held by the perpetrator of cyberbullying, lead to an affective-cognitive dissonance that must be worked on especially in the school context, given the children's immaturity in social and moral development at

this stage and the progress that technologies and social networks have in childhood and later adolescence. Thus, the development of morality is fundamental to achieve more balanced and sustainable social relations in the future (Cabrera-Vázquez et al., 2022). From their earliest years of schooling, children should be taught to think for themselves and to make decisions based on moral criteria that respect conventional classroom rules and behaviours and foster good peer relations (Lintner et al., 2025).

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Data availability The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

Declarations

Conflict of interest The authors have no relevant financial or non-financial interests to disclose. The authors have no competing interests to declare that are relevant to the content of this article. All authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript. The authors have no financial or proprietary interests in any material discussed in this article.

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