Moral disengagement and bullying: Sex and age trends among Swedish students

Robert Thornberg, Ylva Bjereld & Simona C. Caravita

Published online: 19 Apr 2023.

Submit your article to this journal ↗

Article views: 506

View related articles ↗

View Crossmark data ↗

EDUCATIONAL PSYCHOLOGY & COUNSELLING | RESEARCH ARTICLE

Moral disengagement and bullying: Sex and age trends among Swedish students

Robert Thornberg[1]*, Ylva Bjereld[1] and Simona C. Caravita[2]

*Corresponding author: Robert Thornberg, Department of Behavioural Sciences and Learning, Linköping University, IBL Linköping 58183, Sweden
E-mail: robert.thornberg@liu.se

Abstract: Despite the fact that bullying has been consistently linked to moral disengagement among schoolchildren, research that distinguishes among the four loci of moral disengagement (cognitive restructuring, minimizing one's agentive role, distorting consequences, and victim attribution) to better understand bullying is scarce. The aim of this longitudinal study, conducted in Sweden, was to explore in both female and male students whether the four loci of moral disengagement are concurrently associated with bullying when students are around age 12 and then again around age 14, and whether the four loci of moral disengagement in age 12 predict bullying at age 14. The current paper is based on data from 1,053 students who completed a questionnaire both in sixth and then, two years later, in eighth grade to collect self-reported data on moral disengagement, traditional school bullying perpetration, sex and age. According to the findings, concurrent associations between moral disengagement loci and bullying vary across age and sex, but cognitive restructuring was consistently related to bullying in all conditions. Cognitive restructuring was the only moral disengagement locus from grade six that significantly predicted bullying in grade eight, but not when controlling for bullying in grade six. The results indicate the need to individualize intervention actions to address moral disengagement in terms of sex and age.

Subjects: Child Development; Primary/Elementary Education

Keywords: bullying; moral disengagement; sex difference; age difference; longitudinal

1. Introduction

School bullying is traditionally defined as repeated aggression directed at students who are less powerful (Olweus, 1993). A more recent definition suggests that bullying is any unwanted aggression enacted by a peer or a peer group that involves an observed or perceived power imbalance and is repeated or highly likely to be repeated (Gladden et al., 2014). It is a social phenomenon rather than an individual problem that occurs in peer groups and social contexts (Hymel et al., 2015). In addition, bullying is an unfair and immoral behavior (Romera et al., 2019) that interferes with school efforts to promote prosocial and democratic values, such as justice, care, fairness, compassion, and humanity and to create a positive, safe and healthy school climate. Donat et al. (2018) argue that bullying represents "a form of unjust and deviant behavior as bullying perpetrators break school rules and societal norms and violate the personal rights of victimized students, who undeservingly suffer from the negative consequences of such behavior" (p. 29). It conflicts with societal norms, human rights, and general conceptions of morality

(Romera et al., 2019). Accordingly, most students appear to understand that bullying is morally wrong (Thornberg et al., 2016, 2017), even among those who are bullies themselves (Thornberg et al., 2017).

In the current study, we investigated the moral standards—action gap in relation to school bullying. In Bandura's (2002, 2016) theorization, mechanisms that allow for a resolution of the possible dissonance between moral standards and actual actions are the self-justification processes of moral disengagement. The literature on bullying indicates a clear association between the bullying perpetration and the use of moral disengagement in general, but also report inconsistent results about the strengths of this relationship across sex and age, and only seldom distinguished between moral disengagement process types (for meta-analyses, see Gini et al., 2014; Killer et al., 2019 for a review, see Bussey, 2020). Studies also suggest that the four main processes (loci) of moral disengagement (Bandura, 2016) may be associated with bullying differently (e.g., Romera et al., 2021), but we need more studies investigating the variation of these associations across both age and sex. We examined whether the four loci of moral disengagement were associated with bullying when students attended primary school (grade 6) and then secondary school (grade 8), and investigated possible variations of this association across sexes. In the current study, we have delimited our focus on traditional school bullying (including physical, verbal, and relational bullying) because it has been found to be more prevalent than cyberbullying among children and adolescents, both in general (e.g., Olweus, 2017; Zych et al., 2017) and in Sweden (Health Agency of Sweden, 2018), where the current study was conducted.

1.1. Social-cognitive theory of moral disengagement

In the context of school bullying, moral disengagement refers to social-cognitive distortions that interfere with students' moral self-regulatory processes and make them justify, excuse, or explain away aggressive behavior. As a result, they can continue their aggressive behavior, such as bullying, without feelings of guilt, remorse, or self-condemnation (Bandura 2002, 2016). The construct is multidimensional and includes eight moral disengagement mechanisms organized into four main social-cognitive processes (Bandura, 2002) or so-called *loci* (Bandura, 2016). The current study focuses on the four loci.

The first locus, *cognitive restructuring* (also termed the *behavioral locus*), refers to cognitively changing one's perception of aggressive behavior, so one does not perceive it as wrong. This includes three mechanisms: referring to higher purposes or ends to justify aggressive actions (moral justification), labelling the behavior in a way that makes it sound less bad and more acceptable and respectable (euphemistic labelling), and comparing the behavior to a worse behavior so that it seems less negative and more acceptable (advantageous comparison).

The second locus is *minimizing one's agentive role* (also termed the *agency locus*), which means that a person obscures or detaches themselves from personal responsibility for the aggressive behavior. This encompasses two mechanisms: minimizing personal responsibility by attributing to authorities or others in charge (displacement of responsibility) or diluting personal responsibility due to the presence or involvement of other people (diffusion of responsibility).

The third locus, *distorting the consequences* (also called the *effects locus*), is about perceiving that no real harm has been done by perceptually ignoring, minimizing, or misconstruing the consequences of the behavior. Without seeing and acknowledging the harm or suffering one's behavior results in, there is no reason to feel guilt or to change one's actions. The fourth locus is *victim attribution* (also termed the *victim locus*), which means that the behavior is justified or explained away by focusing on the victim's characteristics. This includes two mechanisms: denying that the victim has human qualities and equal value (dehumanization), or thinking that the victim is responsible for their own suffering (victim blaming).

1.2. Moral disengagement and bullying

Meta-analyses have shown that primary and secondary students who are more prone to morally disengage are more often engaged in perpetrating school bullying (Gini et al., 2014; Killer et al., 2019). The social-cognitive theory (Bandura 2002, 2016) assumes a longitudinal link where change in moral disengagement and bullying perpetration is a gradual, reciprocal process that occurs over time. Despite this theoretical assumption, Bussey (2020) concludes in her review that research examining age trends in moral disengagement is scarce, and the findings are inconsistent.

A few longitudinal studies have demonstrated both stability and changes in moral disengagement over time (Caravita et al., 2014; Gini et al., 2022; Oberman, 2013; Paciello et al., 2008; Thornberg et al., 2019). As a result of social interactions, role-modelling, and socialization, moral disengagement can be learned and developed into trait-like habitual patterns, and a propensity for moral disengagement may become stable over time. It is a learnt habit—not a fixed and static personality trait—that can change due to personal, behavioral, and environmental factors (Bandura, 2016). For example, Thornberg et al. (2019) reported that changes in moral disengagement were positively associated with changes in bullying perpetration among primary students over a one-year period. Caravita et al. (2014) found that moral disengagement changed over time in late childhood and early adolescence, and that this change was influenced by peers' proneness to morally disengage in early adolescence.

However, due to few studies and mixed findings (Bussey, 2020), less is known about age trends regarding the relationship between moral disengagement and bullying. In their meta-analysis, Gini et al. (2014) found that the association between moral disengagement and aggression/bullying was stronger among secondary students compared to primary students. However, in a more recent meta-analysis (Killer et al., 2019), there was no association between the mean age of participants within samples and effect size of the relationship between moral disengagement and bullying. More research on possible age trends is therefore necessary.

While moral disengagement is (theoretically) a multidimensional construct that includes four loci, research in the field of bullying has most often studied and measured it as a unidimensional construct (Gini et al., 2014; Killer et al., 2019). To the best of our knowledge, only a few studies have examined associations between the four loci of moral disengagement and school bullying perpetration, and only one study has examined their associations with pro-bullying behavior.

Pozzoli et al. (2012) conducted a multilevel study to examine the latter, which they defined as a single category of bullying-related behaviors including ringleader bullying behavior, assisting the bully, and reinforcing bullying by laughing and cheering on. According to their findings, cognitive restructuring was positively associated with pro-bullying behavior at the individual level, while classroom means of minimizing one's agentive role and victim attribution were positively associated with pro-bullying at the class level. In a more recent study, Romera et al. (2021) found that both traditional bullying and cyberbullying were significantly related to higher levels of cognitive restructuring, distorting consequences, and victim attribution, where cognitive restructuring was the strongest correlate. Finally, in a short-term longitudinal study, Falla et al. (2020) showed that among the four loci of moral disengagement, only cognitive restructuring predicted bullying six months later.

1.3. Sex differences in bullying and moral disengagement

Previous research has shown that boys score higher than girls in bullying (for meta-analyses, see Cook et al., 2010; Mitsopoulou & Giovazolias, 2015) and in two (cognitive restructuring and distorting consequences; Pozzoli et al., 2012) or all four loci of moral disengagement (Falla et al., 2020; Romera et al., 2021). Gini et al. (2014) demonstrated in their meta-analysis that sex did not moderate the link between moral disengagement and aggression/bullying. The effect sizes from the two sex groups were identical. In contrast, Killer et al. (2019) found in their meta-analysis that studies that included a higher proportion of female participants showed a stronger positive

association between moral disengagement and bullying, suggesting that the association is higher among girls than boys. According to Romera and her colleagues' (2021) study, sex did not moderate any association between bullying and the loci of moral disengagement. However, research on sex differences on how moral disengagement loci are associated with bullying remains scarce, and further studies are needed.

1.4. Age differences in bullying and moral disengagement

There is still very little knowledge on how the four loci of moral disengagement might be linked with age. In their study, Romera et al. (2021) found that secondary students (14–17 years old) scored higher in cognitive restructuring and victim attribution than primary students (11–13 years old). Furthermore, studies on whether there are age differences in how bullying might be associated with different loci of moral disengagement are very scarce. Regarding the four loci of moral disengagement, Romera et al. (2021) revealed that age only moderated the link between cognitive restructuring and bullying. Primary students were more inclined than secondary students to bully others if they scored high on cognitive restructuring. Further research is required to investigate whether the relationships between the four loci of moral disengagement and bullying vary between boys and girls as a function of age.

The development from late childhood to adolescence also includes a transition from primary school to secondary school in Sweden. While primary school can be defined as "a school where the students have a few, close teachers" (Spernes, 2022, p. 303), including a homeroom teacher, they have several specialized school subject teachers and classrooms in secondary school. Previous literature (Caravita et al., 2014) found different trends of change of moral disengagement over time in upper primary school (slight decrease) and in secondary school (slight increase), with significant more change in secondary school. In Sweden, students enter upper primary school (grades 4–6) the year they turn 10, and lower secondary school (grades 7–9) the year they turn 13.

Considering these age and school-contextual differences, it is crucial to compare the links between the four loci of moral disengagement and bullying when students are attending primary school and when they later attend secondary school. In the Swedish school system, sixth grade (when students are around 12 years old) is the last grade level in primary school, whereas eighth level (when students are around 14 years old) is in the middle of the three levels of lower secondary school. We have, therefore, chosen these two grade levels in the current study. In Sweden, bullying has been found to be more prevalent in upper primary school (grades 4–6) than in lower secondary school (grades 7–9) (Friends, 2023; Swedish National Agency for Education, 2019). With reference to this age and grade level difference in bullying prevalence, and considering that boys engage more often in bullying behavior than girls across late childhood and adolescence (Cook et al., 2010; Cosma et al., 2022; Mitsopoulou & Giovazolias, 2015; Smith et al., 2019), there is a need to examine how the four loci of moral disengagement are related to bullying separately for boys and girls, when they attend primary school, and when they attend secondary school.

1.5. Aim, hypotheses, and research questions

The aim of the current study was to explore separately for female and male students whether the four loci of moral disengagement are concurrently associated with bullying when students attend sixth grade (around age 12) in primary school and then eighth grade (around age 14) in secondary school, and whether the four loci of moral disengagement in sixth grade predict bullying in eighth grade. Additionally, the study examined possible sex differences in moral disengagement loci and bullying. In line with previous literature, we hypothesized that boys score higher than girls in bullying and in all moral disengagement loci (Falla et al., 2020; Romera et al., 2021) or at least in cognitive restructuring and distorting consequences (Pozzoli et al., 2012). We further hypothesized that all four moral disengagement loci are correlated with bullying, and that cognitive restructuring and at least some of the other loci are concurrently associated with bullying when included in the same model (cf. Romera et al., 2021).

Research on whether the four moral disengagement loci are associated with bullying among primary and secondary students is underexplored. Furthermore, this is the first study to examine whether loci are related to bullying in separate male and female student groups in the primary and secondary school; therefore, we were not able to deduce proper hypotheses from the empirical literature to test prior to the study. Sex and age trends of these possible concurrent associations were therefore studied in an exploratory manner. With reference to the overall aim, we explored the following research question: Which of the four loci of moral disengagement are associated with bullying among female and male students when they attend primary school (around 12 years old) and then secondary school (around 14 years old)?

Finally, with reference to Falla et al.'s (2020) six-month longitudinal study, we hypothesized that among the four moral disengagement loci in grade six, only cognitive restructuring predicts bullying two years later (grade eight) when included in the same model. This hypothesis was, however, considered rather weak since, while Falla et al. (2020) tested the predictability across a period of six months, the current study tested the predictability across a period of two years (including a transition from primary school to secondary school). In addition, because of the lack of empirical research examining whether this longitudinal association holds for both boys and girls when examined as separate groups, the question of whether cognitive restructuring predicts bullying two years later in both sex groups was examined in an exploratory manner.

2. Method

2.1. Participants and procedure
This study is part of a longitudinal research project examining social and moral correlates of school bullying (e.g., Bjärehed et al., 2020; Sjögren et al., 2021; Thornberg et al., 2019). In the school year 2015/16, a total of 2408 students (48% girls) from 116 fourth-grade classrooms in 74 schools were invited to participate in the project and complete a questionnaire once a year. The current paper is based on data from the students who completed the questionnaire both in sixth and eighth grade. The sample included students from socio-economically and socio-geographically diverse sites in Sweden. In sixth grade, 823 students did not participate due to lack of parental consent. In addition, 74 students were absent on the day of data collection for various reasons (e.g., sickness). Hence, 1487 students (785 [53%] girls and 702 [47%] boys) participated. Among these, 1480 students reported data on moral disengagement and bullying perpetration (781 [52.8%] girls and 699 [47.2%] boys, $M_{age} = 12.58$, $SD = 0.35$; 19.9% migratory background (i.e., foreign born or having two foreign-born parents).

Of the 1480 students who completed both scales in sixth grade, 1053 also completed both scales in eighth grade. When the last part of the data collection in grade eight was carried out in Spring 2020, COVID-19 had begun to spread. During this period there was a high absence of children in schools, and 364 students did not participate, although they had parental consent to do so. Thus, 28.9% of the students that participated in sixth grade did not answer the questionnaire in eighth grade. The final sample used in the current study thus consisted of 1053 students (557 [52.9%] girls and 496 [47.1%] boys; 18.4% of whom had a migratory background). We limited our analyses to those who completed the scales in both waves to make sure that the same students were examined in sixth grade and in eighth grade, and thus ruled out selection bias between Time 1 and Time 2.

Active, informed parental consent and student consent were obtained from all participants. The students completed a web-based, self-report questionnaire on tablets in their regular classrooms. Either a member of the research team or a teacher was present in the classroom during data collection to be available to explain the study procedure and assist participants who needed help. Team members and teachers were instructed to neither look at nor interfere with participants' responses, but to clarify instructions, questions and words in the questionnaire if requested by students. This study was approved by the Regional Ethical Review Board in Linköping.

2.2. Measures

2.2.1. Moral disengagement
An 18-item scale was used to measure moral disengagement in peer victimization (Thornberg et al., 2019). Bandura (2016) argues that moral disengagement is "manifested differently depending on the sphere of activity" (p. 26), which is why we have used the current scale. It has been designed to measure moral disengagement in the sphere of activity or context of peer victimization, while, for instance, Bandura et al.'s (1996) scale has been designed to measure moral disengagement in antisocial behavior more generally and includes items not relevant to bullying or peer victimization.

Six items measured cognitive restructuring (e.g., "It's okay to freeze out a person from the group if you do that in order to get good fellowship in the group", "Pushing or kicking someone hard is just about 'joking a little' with the person", "Teasing a person is no big deal because it's much worse to hit and kick the person", Cronbach's α Time 1 and Time 2 = .75, .87). Four items measured minimizing one's agency (e.g., "If a student who is older, has more power or is more popular than me tells me to tease another student, then it's his/her fault if I do", "If my friends begin to tease a classmate, I can't be blamed for being with them and teasing that person too", Cronbach's α = .66, .83). Three items measured distorting the consequences (e.g., "People who get teased don't really get too sad about it", Cronbach's α = .58, .76). Five items measured victim attribution (e.g., "It's okay to tease and freeze out jerks, nerds, and others who are stupid", "If you can't be like everybody else, it is your own fault if you get bullied", Cronbach's α = .80, .90). Students rated each item on a seven-point scale (1 = strongly disagree to 7 = strongly agree).

2.2.2. Bullying
An 11-item self-report scale (Bjärehed et al., 2020) was used to measure bullying perpetration. The word "bullying" was not mentioned in the scale. Students might have various understandings of the word "bullying" (Frisén et al., 2008; Hellström et al., 2015) and there is scarce evidence that they would read and apply a provided definition in a scale instead of using their own pre-understanding of the word (Furlong et al., 2010; Huang & Cornell, 2015). The word is negatively value-loaded and stigmatizing, and if it is used in a bullying scale, it risks leading to under-reporting (Felix et al., 2011; Furlong et al., 2010). Therefore, the chosen scale did not provide the word "bullying" with an a priori definition. Instead, the students were asked, "Think about the past three months: How often have you done the following things towards someone who is weaker, less popular or less in charge in comparison to you?" This overall question, in which power imbalance was inbuilt, was followed by 11 items that included physical, verbal and relational bullying (e.g., "Beat or kicked someone in order to hurt him or her," "Teased and called the person mean names", and "Spread mean rumors or lied about the person"). For each item, the participants responded on a five-point scale from 1 (I have never done it) to 5 (Several times a week). Cronbach's α was .84 at Time 1, and .92 at Time 2. The scores for bullying were skewed (Time 1, skew = 5.07; Time 2, skew = 2.83). Therefore, the bullying index scores were natural log transformed to reduce skewness, even though it did not solve the entire issue of nonnormality. Natural log transformed bullying index Time 1, skew = 2.51; Time 2, skew = 2.11.

2.2.3. Sex and age
Participants completed a question about their sex (i.e., "I am" followed by "girl" or "boy") and a question about their age (i.e., "How old are you?" followed by, "I'm [scroll list with numbers] years and [scroll list with numbers] months.")

2.3. Analysis
Descriptive analyses were run to compare means and standard deviations of individual moral disengagement and bullying perpetration that were estimated for primary school (represented by sixth grade) and secondary school (represented by eighth grade) students. Sex differences were tested in each grade through Mann-Whitney U. Regression analyses were conducted separately for

boys and girls. The first regression model measured associations between bullying and the four loci of moral disengagement within grade six and eight separately. The second regression model examined the associations between bullying in grade eight and the four loci of moral disengagement in grade six. Multicollinearity was measured by variance inflation factors (VIF:1.4–2.2 grade six, 3.3–5.6 grade eight). Analyses were conducted in SPSS statistics 25.

3. Results

3.1. Descriptive statistics, sex differences, and intercorrelations
Boys scored significantly higher than girls on bullying and three of the four loci of moral disengagement in grade six and on all four loci in grade eight (Table 1). Boys scored significantly higher than girls on distorting consequences in secondary school, but not in primary school. In Table 2, intercorrelations among variables are reported separately for boys and girls. For both groups, all four loci of moral disengagement correlated significantly and positively with bullying and with each other in both primary school and secondary school.

3.2. Regression models of bullying in grade 6 and in grade 8
The regression models for each age and sex group used to test the concurrent associations are reported in Table 3. For girls, the model explained 38% of the variance in sixth grade, and 29% of the variance in eighth grade. This result suggests that, among girls, moral disengagement became a less important factor in explaining bullying perpetration as girls grow older and entered secondary school. For boys, the model explained 26% of the variance in the sixth grade, and 25% of the variance in the eighth grade, which suggests that the strength of the link between moral disengagement and bullying perpetration did not change over time among boys.

Nevertheless, the regression models presented in Table 3 demonstrated changes in the use of moral disengagement mechanisms over time as well as some sex differences. Cognitive restructuring was significantly related to bullying at both times for boys and girls. However, the link between cognitive restructuring and bullying was weaker for boys in grade eight compared to when they attended grade six, but was still significant. Minimizing one's agency was significantly related to bullying for boys and girls in grade six but not grade eight. Distorting consequences, in turn, was significantly related to bullying in grade six for girls. Finally, victim attribution was significantly related to bullying for girls in both primary and secondary school, and in primary school for boys.

3.3. Regression models predicting bullying in grade 8
The first model for each sex group, where the four loci of moral disengagement in grade six were included as predictors and bullying in grade eight was included as the dependent variable, is reported in Table 4. Only a very small variance in bullying was explained by each model (5% among girls and 3% among boys), which indicates low predictability. Furthermore, for both boys and girls, cognitive restructuring was the only moral disengagement locus from grade six that significantly predicted bullying in grade eight. In the second model, bullying in grade six was added as a control variable. A small variance in bullying in grade eight was explained by each model (14% among girls and 8% among boys). For both boys and girls, bullying significantly predicted bullying two years later, but cognitive restructuring no longer significantly predicted bullying two years later.

4. Discussion
In accordance with our hypothesis and previous research (Cook et al., 2010; Mitsopoulou & Giovazolias, 2015), boys were more likely to bully than girls in primary school (grade six) and secondary school (grade eight). In addition, boys displayed higher levels than girls in all four loci of moral disengagement at both times, with the exception for distorting consequences in grade six, where no sex difference was identified. A possible explanation of this exception might be that sex differences in perspective-taking and empathic concerns are smaller in grade six than in grade

cogent • education

Table 1. Means and Standard Deviations among Variables							
Total sample			**Girls**		**Boys**		
	M	**SD**	**M**	**SD**	**M**	**SD**	**Z**
Grade 6							
Bullying	12.73	3.09	12.41	2.43	13.08	3.67	−3.79***
Cognitive restructuring	1.46	0.66	1.33	0.53	1.61	0.75	−7.47***
Minimizing one's agentive role	1.53	0.84	1.47	0.78	1.61	0.90	−2.64**
Distorting consequences	1.32	0.65	1.28	0.57	1.37	0.73	−0.99
Victim attribution	1.23	0.56	1.17	0.57	1.28	0.65	−3.48***
Grade 8							
Bullying	13.57	4.89	12.71	3.99	14.54	5.58	−6.78***
Cognitive restructuring	1.88	1.11	1.57	0.88	2.22	1.22	−10.15***
Minimizing one's agentive role	1.63	1.02	1.45	0.85	1.82	1.16	−5.33***
Distorting consequences	1.62	1.03	1.41	0.79	1.85	1.21	−6.33***
Victim attribution	1.57	1.06	1.35	0.83	1.85	1.22	−7.65***

Note. Ms, SDs and Mann-Whitney U (Z) are based on untransformed scores. *$p < .05$.**$p < .01$.***$p < .001$.

eight. Both forms of empathy become more salient among girls than boys during adolescence (Van der Graaff et al., 2014), which might make girls in grade eight less inclined to distort the consequences (minimizing or ignoring that the victim is hurt, harmed, or distressed) compared to boys. This possible explanation merits investigation in future studies. Our current findings can be compared with a previous short-term longitudinal study that demonstrated, with a sample of secondary students, that male students scored higher than female students in all four loci at each measurement time (Falla et al., 2020). However, the current study stretched out two measurement times across two years and is the first, to the best of our knowledge, to examine sex differences in each locus of moral disengagement among students, first at primary school and then at secondary school, and thus, to demonstrate and confirm its consistency during this age period.

A possible explanation for the stability of sex differences in the moral disengagement loci and in bullying from primary to secondary school might be gender socialization, where boys and girls are exposed to and internalize different gender norms and expectations. As compared with girls, boys are socialized to be more competitive, aggressive, and dominant (Eisner & Malti, 2015), which makes them more inclined to engage in aggressive behaviors such as bullying and other forms of misconduct (Steinfeldt et al., 2012).

In the current study, we examined whether the four loci of moral disengagement were concurrently associated with bullying separately for female and male students when students attended sixth grade in primary school and then eighth grade in secondary school. While the regression models explain around a quarter of the variance in bullying during each time for boys, the explanatory power of the regression model was higher for girls (explaining 38% in sixth grade, and 29% in eight grade). Girls appear to decrease their use of moral disengagement with age when bullying others, whereas boys seem to use the same amount of moral disengagement across ages when bullying others.

Our findings might shed some light on the inconsistent findings regarding age in previous meta-analyses: Gini et al. (2014) demonstrated that the association between moral disengagement and

aggression/bullying was stronger among secondary students than primary students, while Killer et al. (2019) did not find any association between effect size and age. The present findings suggest that sex needs to be included in such analyses as the decrease only seems to be the case for girls as they grow older, but not for boys, at least in our sample. In the present study, we also examined separately for female and male students whether the four loci of moral disengagement in sixth grade predict bullying in eighth grade, and the regression models indicated weak predictability and only for cognitive restructuring.

4.1. Cognitive restructuring

While all four loci of moral disengagement correlated with bullying for both primary and secondary male and female students, when all loci were included in the regression analyses, we found that concurrent associations between the four loci and bullying vary across age and sex. Cognitive restructuring was, however, consistently related to bullying among girls and boys during both primary and secondary school. This result is in line with previous studies that have found that cognitive restructuring is associated with bullying (Falla et al., 2020; Romera et al., 2021) and pro-bullying behaviors (Pozzoli et al., 2012). At the same time, it contributes to the literature by showing that the relationship between cognitive restructuring and bullying is consistent across sex and age.

Additionally, it was shown that cognitive restructuring in grade six predicted bullying perpetration in grade eight, which confirms Falla et al.'s study (2020) where they found cognitive restructuring to be the only locus of moral disengagement that predicted bullying six months later among secondary students. Our results add to their study by following students from primary school to secondary school and demonstrating that cognitive restructuring predicted bullying even two years later. However, Falla et al. (2020) did not control for bullying, and when we included bullying in grade six as a control variable, cognitive restructuring no longer predicted bullying. A reasonable interpretation could be that cognitive restructuring is so "enmeshed" with bullying that when bullying is included as a control variable, bullying predicts itself over time, while obscuring the predictability of cognitive restructuring on bullying. It may also be possible to conclude that moral disengagement mechanisms are more relevant concurrently than as longitudinal predictors after two years, which in turn, proposes that these mechanisms and their links to bullying are more situated and changeable than stable.

4.2. Minimizing one's agency

Minimizing one's agency was associated with bullying but only in primary school. Our findings can be compared with Romera et al. (2021), who found that minimizing one's agency was not significantly associated with traditional bullying, and Pozzoli et al. (2012), who only found a significant relationship at the class level but not at the individual level regarding pro-bullying behavior. These inconsistencies may reflect possible methodological differences but also cultural differences, and favoring in some contexts more than others the displacement or diffusion of individuals' personal responsibility.

Our findings also suggest a possible explanation for these mixed findings by underscoring the importance of considering age differences to better understand the association between this locus of moral disengagement and school bullying. Minimizing one's agency can be seen as the moral disengagement locus that, in particular, deals with peer pressure and group conformity in bullying situations (cf. Thornberg et al., 2020). A possible explanation as to why minimizing one's agency was associated only with bullying among primary students could be that when students grow older, they increase in agency and learn to take responsibility for their actions. Adolescent development is associated with an increase in self-determination, including autonomy, self-regulation, pathway thinking, self-awareness, control expectancy, agency beliefs and causality beliefs (Wehmeyer et al., 2017). This development of self-determination might help to explain why students are less inclined to minimize their agentive role and ignore personal responsibility for

cogent · education

Table 2. Correlations Among Study Variables by School Grade and Gender										
	Boys					**Girls**				
School grade 6	**1**	**2**	**3**	**4**		**1**	**2**	**3**	**4**	
1. Bullying	-					-				
2. Cognitive restructuring	.49	-				.57	-			
3. Minimizing one's agentive role	.35	.47	-			.42	.52	-		
4. Distorting consequences	.37	.66	.50	-		.40	.47	.39	-	
5. Victim attribution	.44	.67	.49	.65	-	.54	.69	.48	.49	-
School grade 8	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	
1. Bullying	-					-				
2. Cognitive restructuring	.50	-				.50	-			
3. Minimizing one's agentive role	.42	.74	-			.49	.81	-		
4. Distorting consequences	.46	.80	.80	-		.46	.82	.76	-	
5. Victim attribution	.47	.87	.80	.83	-	.52	.83	.83	.80	-

Note. Correlations for bullying are based on natural log-transformed scores. All correlations were significant at $p < .001$.

their actions within their peer-to-peer relationships when they attend secondary school, as compared to when they attend primary school.

4.3. Distorting consequences

In the current findings, distorting consequences was only associated with bullying among girls in primary school. In a previous study, Romera et al. (2021) found that this locus of moral disengagement was positively associated with bullying, while another study showed that distorting consequences was linked with bullying among girls, but not among boys (Oliveira et al., 2019). Since some literature indicates that in early adolescence boys may be more prone to perpetrate overt bullying than girls, and girls are more likely to perpetrate relational bullying than boys (Griffin et al., 2006), girls may be more prone to minimizing bullying consequences, as the effects of relational or indirect bullying are less evident than those of overt bullying. Our study underscores the importance of taking both sex and age into consideration to gain a better understanding of the possible link between distorting consequences and bullying, as the present findings suggest that only younger female students tend to distort the consequences when they are engaged in bullying.

4.4. Victim attribution

In their study, Romera et al. (2021) showed that victim attribution was related to bullying. Similar to their findings, we found that victim attribution was consistently linked to bullying at primary school and secondary school for girls, and at secondary school among boys. Our results suggest that while victim attribution is almost as important as cognitive restructuring in helping to explain bullying in primary school, boys were not inclined to engage in victim attribution when engaging in bullying perpetration in secondary school (only in cognitive restructuring and in minimizing one's agentive role).

One possible explanation as to why victim attribution is a prevalent correlate to bullying across primary and secondary school and why it remains a significant correlate among girls and decreases to become insignificant among boys at secondary school in our study might be its link to empathy (Hoffman, 2000). A high level of empathy makes children and adolescents less inclined

to bully others (Zych et al., 2019). It is hard for students to be mean to a peer and unconcerned about their suffering if they empathize with them. Dehumanization and victim blaming are inter-linked (Bjärehed et al., 2020) and have been found to be powerful individual and social-psychological processes in reducing empathy toward victims of inhumane, degrading, or aggressive treatment in the literature (Cehajic et al., 2009; Haslam, 2006; Hoffman, 2000).

Van der Graaff et al. (2014) found that girls increased more in perspective-taking than boys during adolescence, and that girls' empathic concern remained stable across adolescence, while boys displayed a decrease from early to middle adolescence. Thus, girls who bully others might be more in need of and inclined to dehumanize and blame their victims than boys in upper secondary school are to avoid perspective-taking and empathic concerns in such situations. Girls may also be more prone to use victim attribution mechanisms, because they may be more easily used in the case of indirect bullying (more common among girls), which can be more easily attributed to the victim's behavior (e.g., isolating presented as victim's withdrawing).

5. Limitations

One limitation of this study is that it relied on self-reported data, and was therefore vulnerable to social desirability, careless marking, and exaggerated responses. When measuring bullying with self-reported techniques, there is a risk of underestimation due to social desirability bias and self-censorship. However, to decrease the risk of under-reporting, we did not include the term "bullying" in the bullying scale. Another limitation of only using self-reported data is that the relationships among variables might be overstated due to shared method variance. Thus, future research could benefit from using other complementary methods such as peer nominations and observation techniques. Moreover, the subscale distorting the consequences had fairly low internal reliability in grade six. Findings related to this variable should therefore be interpreted with great caution.

Another limitation is that the current study only examined sex in terms of boys and girls. Therefore, future studies should also examine students with nonbinary gender identification. However, rather than being the bullies, LGBTQ students, including transgender and nonbinary students, are more often victims as compared to their peers (Abreu et al., 2022; Myers et al., 2020). Finally, because our participants were recruited with a non-probability sampling procedure from specific areas in Sweden, we want to emphasize that the findings (like all research findings) are partial, provisional, and fallible estimations and approximations (Biesta & Burbules, 2003; Phillips & Burbules, 2000), and generalization should be considered with great caution as well.

6. Practical implications

These limitations aside, the present findings have some practical implications. Consistent with previous literature showing the connection between moral disengagement and bullying (Killer et al., 2019), our longitudinal data confirmed the need to address moral disengagement loci in teachers' actions to prevent bullying. In the bulk of programs proposed in the literature, however, moral disengagement has been addressed only rarely. Few exceptions are the intervention developed by Zanetti (2007), implementing the discussion of moral dilemmas at school, and the intervention by Wang and Goldberg (2017), who addressed moral disengagement among primary school children through the use of literature (also see Tolmatcheff et al., 2022).

In particular, our results show that the use of moral disengagement loci in bullying perpetration differs across sex and age groups. These differences clearly indicate the need to individualize intervention actions to address these social-cognitive moral distortions. Specifically, female bullies may benefit more from the implementation of interventions and actions designed to learn to identify and reject victim attribution, including recognizing and empowering their empathy. In this way, the tendency to blame and dehumanize the victim may be reduced, and with that, bullying. Moreover, educational interventions with the purpose of increasing primary students' agentive role and training them in knowing, revealing, and rejecting displacement and diffusion of responsibility seem to be crucial, since we found that primary students' bullying perpetration is partially linked to

Table 3. Regression Analysis of Bullying by School Grade, Presented Separately for Boys and Girls						
	Grade 6			**Grade 8**		
	B	**ß**	**R²**	**B**	**ß**	**R²**
Girls			.38			.29
Cognitive restructuring	.09	.31***		.04	.16*	
Minimizing one's agentive role	.02	.11**		.03	.10	
Distorting consequences	.03	.10*		.00	.00	
Victim attribution	.08	.23***		.08	.30***	
Boys			.26			.25
Cognitive restructuring	.09	.33***		.07	.30***	
Minimizing one's agentive role	.02	.12*		.00	.02	
Distorting consequences	−.00	−.02		.03	.15	
Victim attribution	.05	.17**		.02	.08	

Note. The models represent concurrent associations, i.e., moral disengagement loci in grade 6 are related to bullying in grade 6, and moral disengagement loci in grade 8 are related to bullying in grade 8. All independent variables are grand mean centred and the dependent variable is natural log transformed. *$p < .05$.**$p < .01$.***$p < .001$.

Table 4. Regression Analysis of Bullying Perpetration in grade 8, Predicted by the Four Loci of Moral Disengagement in grade 6, presented Separately for Boys and Girls						
	Bullying grade 8					
	Model 1			**Model 2**		
	B	**ß**	**R²**	**B**	**ß**	**R²**
Girls grade 6			.05			.14
Cognitive restructuring	.07	.18**		.03	.06	
Minimizing one's agentive role	.01	.02		−.01	−.02	
Distorting consequences	.03	.08		.02	.05	
Victim attribution	.01	.01		−.03	−.06	
Bullying	-	-		.54	.37***	
Boys grade 6			.03			.08
Cognitive restructuring	.05	.14*		.02	.06	
Minimizing one's agentive role	.01	.02		−.01	−.02	
Distorting consequences	.03	.06		.03	.07	
Victim attribution	−.01	−.01		−.03	−.06	
Bullying	-	-		.39	.27***	

Note. All independent variables are grand mean centred and the dependent variable is natural log transformed. *$p < .05$.**$p < .01$.***$p < .001$.

the agency locus of moral disengagement. In addition, there is a need to address all loci of moral disengagement when students are younger, while there seems to be wisdom in prioritizing among them when students are older. All four loci were linked to bullying among boys, and three of them were linked to bullying among girls in sixth grade, while cognitive restructuring was linked to bullying among both boys and girls, and victim attribution was linked to bullying among girls in eighth grade.

Finally, independent of sex and school level, the current findings suggest that all students may benefit from bullying prevention and intervention efforts aimed at making students aware of and more likely to condemn cognitive restructuring (moral justification, euphemistic labelling, and advantages comparison). Cognitive restructuring is a powerful locus of moral disengagement as it changes students' perception of the actual bullying behavior, so they do not perceive it as wrong. It is particularly important to implement efforts in decreasing cognitive restructuring among primary students because the current findings show that this was the only moral disengagement locus in the primary school that predicted bullying perpetration in secondary school, although the link became insignificant when bullying in grade six was added as a control variable.

Author details
Robert Thornberg[1]
E-mail: robert.thornberg@liu.se
ORCID ID: http://orcid.org/0000-0001-9233-3862
Ylva Bjereld[1]
ORCID ID: http://orcid.org/0000-0001-8755-6922
Simona C. Caravita[2]
ORCID ID: http://orcid.org/0000-0003-3108-1512
[1] Department of Behavioural Sciences and Learning, Linköping University, Linköping, Sweden.
[2] The Norwegian Centre for Learning Environment, University of Stavanger, Stavanger, Norway.

Disclosure statement
No potential conflict of interest was reported by the authors.

References
Abreu, R. L., Audette, L., Mitchell, Y., Simpson, I., Ward, J., Ackerman, L., Gonzalez, K. A., & Washington, K. (2022). LGBTQ student experiences in schools from 2009–2019: A systematic review of study characteristics and recommendations for prevention and intervention in school psychology journals. *Psychology in the Schools*, 59(1), 115–151. https://doi.org/10.1002/pits.22508

Bandura, A. (2002). Selective moral disengagement in the exercise of moral agency. *Journal of Moral Education*, 31(2), 101–119. https://doi.org/10.1080/0305724022014322

Bandura, A. (2016). *Moral disengagement: How people do harm and live with themselves*. Worth Publishers.

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71(2), 364–374. https://doi.org/10.1037/0022-3514.71.2.364

Biesta, G. J. J., & Burbules, N. C. (2003). *Pragmatism and educational research*. Rowman & Littlefield.

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

Bussey, K. (2020). Development of moral disengagement: Learning to make wrong right. In L. A. Jensen (Ed.), *The Oxford handbook of moral development: An interdisciplinary perspective* (pp. 306–326). Oxford University Press.

Caravita, S. C. S., Sijtsema, J. J., Rambaran, J. A., & Gini, G. (2014). Peer influences on moral disengagement in late childhood and early adolescence. *Journal of Youth and Adolescence*, 43, 193–207. https://doi.org/10.1007/s10964-013-9953-1

Cehajic, S., Brown, R., & Gonzalez, R. (2009). What do I care? Perceived ingroup responsibility and dehumanization as predictors of empathy felt for the victim group. *Group Processes & Intergroup Relations*, 12, 715–729. https://doi.org/10.1177/1368430209347727

Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly*, 25, 65–83. https://doi.org/10.1037/a0020149

Cosma, A., Bjereld, Y., Elgar, F. J., Richardson, C., Bilz, L., Craig, W., Augustine, L., Malinowska-Cieślik, M., & Walsh, S. D. (2022). Gender differences in bullying reflect societal gender inequality: A multilevel study with adolescents in 46 countries. *Journal of Adolescent Health*, 71(5), 601–608. https://doi.org/10.1016/j.jadohealth.2022.05.015

Donat, M., Knigge, M., & Dalbert, C. (2018). Being a good or a just teacher: Which experiences of teachers' behavior can be more predictive of school bullying? *Aggressive Behavior*, 44, 29–39. https://doi.org/10.1002/ab.21721

Eisner, M. P., & Malti, T. (2015). Aggressive and violent behavior. In R. M. Lerner & M. E. Lamb (Eds.), *Handbook of child psychology and developmental science: Socioemotional processes* (Vol. 3, 7th ed., pp. 794–841). John Wiley.

Falla, D., Ortega-Ruiz, R., Runions, K., & Romera, E. M. Why do victims become perpetrators of peer bullying? Moral disengagement in the cycle of violence. (2020). *Youth & Society*, 54(3), 397–418. Advance online

publication. https://doi.org/10.1177/0044118X20973702

Felix, E. D., Sharkey, J. D., Green, J. G., Furlong, M. J., & Tanigawa, D. (2011). Getting precise and pragmatic about the assessment of bullying: The development of the California bullying victimization scale. *Aggressive Behavior, 37*(3), 234–247. https://doi.org/10.1002/ab.20389

Friends. (2023). *Friendsrapporten 2022: 10 år av barnens röster* [Friend report 2022: Ten years of children's voices].

Frisen, A., Holmqvist, K., & Oscarsson, D. (2008). 13-year-olds' perception of bullying: Definitions, reasons for victimisation and experience of adults' response. *Educational Studies, 34*, 105–117. https://doi.org/10.1080/03055690701811149

Furlong, M. J., Sharkey, J. D., Felix, E. D., Tanigawa, D., & Green, J. G. (2010). Bullying assessment: A call for increased precision of self-reporting procedures. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 329–345). Routledge.

Gini, G., Pozzoli, T., & Hymel, S. (2014). Moral disengagement among children and youth: A meta-analytic review of links to aggressive behavior. *Aggressive Behavior, 40*, 56–68. https://doi.org/10.1002/ab.21502

Gini, G., Thornberg, R., Bussey, K., Angelini, F., & Pozzoli, T. (2022). Longitudinal links of individual and collective morality with adolescents' peer aggression. *Journal of Youth and Adolescence, 51*, 524–539. https://doi.org/10.1007/s10964-021-01518-9

Gladden, R. M., Vivolo-Kantor, A. M., Hamburger, M. E., & Lumpkin, C. D. (2014). *Bullying surveillance among youths: Uniform definitions for public health and recommended data elements. Version 1.0.* National Center for Injury Prevention and Control, Centers for Disease Control and Prevention and U.S. Department of Education.

Griffin Smith, R., & Gross, A. M. (2006). Bullying: Prevalence and the effect of age and gender. *Child & Family Behavior Therapy, 28*(4), 13–37. https://doi.org/10.1300/J019v28n04_02

Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review, 10*, 252–264. https://doi.org/10.1207/s15327957pspr1003_4

Health Agency of Sweden. (2018) . Skolbarns halsovanor i Sverige 2017/18: Grundrapport [Health Behavior in School-aged Children (HBSC) in Sweden 2017/18]. Folkhalsomyndigheten.

Hellstrom, L., Persson, L., & Hagquist, C. J. A. (2015). Understanding and defining bullying– adolescents' own views. *Archives of Public Health, 73*(1), Article 4. https://doi.org/10.1186/2049-3258-73-4.

Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice.* Cambridge University Press.

Huang, F. L., & Cornell, D. G. (2015). The impact of definition and question order on the prevalence of bullying victimization using student self-reports. *Psychological Assessment, 27*(4), 1484–1493. https://doi.org/10.1037/pas0000149

Hymel, S., McClure, R., Miller, M., Shumka, E., & Trach, J. (2015). Addressing school bullying: Insights from theories of group processes. *Journal of Applied Developmental Psychology, 37*, 16–24. https://doi.org/10.1016/j.appdev.2014.11.008

Killer, B., Bussey, K., Hawes, D. J., & Hunt, C. (2019). A meta-analysis of the relationship between moral disengagement and bullying roles in youth.

Aggressive Behavior, 45, 450–462. https://doi.org/10.1002/ab.21833

Mitsopoulou, E., & Giovazolias, T. (2015). Personality traits, empathy and bullying behavior: A meta-analytic approach. *Aggression and Violent Behavior, 21*, 61–72. https://doi.org/10.1016/j.avb.2015.01.007

Myers, W., Turanovic, J. J., Lloyd, K. M., & Pratt, T. C. (2020). The victimization of LGBTQ students at school: A meta-analysis. *Journal of School Violence, 19*(4), 421–432. https://doi.org/10.1080/15388220.2020.1725530

Obermann, M. -L. (2013). Temporal aspects of moral disengagement in school bullying? Crystallization or escalation? *Journal of School Violence, 12*(2), 193–210. https://doi.org/10.1080/15388220.2013.766133

Oliveira, E. A., Caravita, C. S., Colombo, B., Donghi, E., da Silva, J. L., & Silva, M. A. I. (2019). Self-justification processes related to bullying among Brazilian adolescents: A mixed methods study. *Frontiers in Psychology, 10*, Article1086. https://doi.org/10.3389/fpsyg.2019.01086

Olweus, D. (1993). *Bullying at school.* Blackwell.

Olweus, D. (2017). Cyberbullying: A critical overview. In B. J. Bushman (Ed.), *Aggression and violence: A social psychological perspective* (pp. 255). Routledge.

Paciello, M., Fida, R., Tramontano, C., Lupinetti, C., & Caprara, G. V. (2008). Stability and change of moral disengagement and its impact on aggression and violence in late adolescence. *Child Development, 79*, 1288–1309. https://doi.org/10.1111/j.1467-8624.2008.01189.x

Phillips, D. C., & Burbules, N. C. (2000). *Postpositivism and educational research.* Rowman & Littlefield.

Pozzoli, T., Gini, G., & Vieno, A. (2012). Individual and class moral disengagement in bullying among elementary school children. *Aggressive Behavior, 38*, 378–388. https://doi.org/10.1002/ab.21442

Romera, E. M., Casas, J. A., Gómez-Ortiz, O., & Ortega-Ruiz, R. (2019). Moral domain as a risk and protective factor against bullying: An integrating perspective review on the complexity of morality. *Aggression and Violent Behavior, 45*, 75–82. https://doi.org/10.1016/j.avb.2018.07.005

Romera, E. M., Ortega-Ruiz, R., Runions, K., & Falla, D. (2021). Moral disengagement strategies in online and offline bullying. *Psychosocial Intervention, 30*, 85–93. https://doi.org/10.5093/pi2020a21

Sjögren, B., Thornberg, R., Wänström, L., & Gini, G. (2021). Associations between students' bystander behavior and individual and classroom collective moral disengagement. *Educational Psychology, 41*(3), 264–281. https://doi.org/10.1080/01443410.2020.1828832

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

Spernes, K. (2022). The transition between primary and secondary school: A thematic review emphasising social and emotional issues. *Research Papers in Education, 37*(3), 303–320. https://doi.org/10.1080/02671522.2020.1849366

Steinfeldt, J. A., Vaughan, E. L., LaFollette, J. R., & Steinfeldt, M. C. (2012). Bullying among adolescent football players: Role of masculinity and moral atmosphere. *Psychology of Men & Masculinity, 13*, 340–353. https://doi.org/10.1037/a0026645

Swedish National Agency for Education. (2019). *Attityder till skolan 2018.* Skolverket. Attitudes toward school 2018.

Thornberg, R., Daremark, E., Gottfridsson, J., & Gini, G. (2020). Moral disengagement mechanisms in school bullying: A repeated within-subjects experimental study. *Frontiers in Psychology, 11*. Article 1101. https://doi.org/10.3389/fpsyg.2020.01101

Thornberg, R., Pozzoli, T., Gini, G., & Hong, S. J. (2017). Bullying and repeated conventional transgressions in Swedish schools: How do gender and bullying roles affect students' conceptions? *Psychology in the Schools, 54*(9), 1189–1201. https://doi.org/10.1002/pits.22054

Thornberg, R., Thornberg, U. B., Alamaa, R., & Daud, N. (2016). Children's conceptions of bullying and repeated conventional transgressions: Moral, conventional, structuring and personal-choice reasoning. *Educational Psychology, 36*(1), 95–111. https://doi.org/10.1080/01443410.2014.915929

Thornberg, R., Wänström, L., & Hymel, S. (2019). Classroom social-cognitive processes in bullying: A short-term longitudinal multilevel study. *Frontiers in Psychology, 10*, Article 1752. https://doi.org/10.3389/fpsyg.2019.01752 https://doi.org/10.3389/fpsyg.2019.01752

Tolmatcheff, C., Galand, B., Roskam, I. & Veenstra, R. (2022). The effectiveness of moral disengagement and social norms as anti-bullying components: A randomized controlled trial. *Child Development, 93* (6), 1873–1888. https://doi.org/10.1111/cdev.13828

Van der Graaff, J., Branje, S., De Wied, M., Hawk, S., Van Lier, P., & Meeus, W. (2014). Perspective taking and empathic concern in adolescence: Gender differences in developmental changes. *Developmental Psychology, 50*, 881–888. https://doi.org/10.1037/a0034325

Wang, C., & Goldberg, T. S. (2017). Using children's literature to decrease moral disengagement and victimization among elementary school students. *Psychology in the Schools, 54*(9), 918–931. https://doi.org/10.1002/PITS.22042

Wehmeyer, M. L, Shogren, K. A. ., Little, T. D, Lopez, S. J. (Eds.). (2017). *Development of self-determination through the life-course*. Springer.

Zanetti, A. (Eds.). (2007). *L'alfabeto dei bulli: Prevenire relazioni aggressive nella scuola*. Erickson.

Zych, I., Baldry, A. C., & Farrington, D. P. (2017). School bullying and cyberbullying: Prevalence, characteristics, outcomes, and prevention. In V. Van Hasselt & M. Bourke (Eds.), *Handbook of behavioral criminology* (pp. 113–138). Springer.

Zych, I., Ttofi, M. M., & Farrington, D. P. (2019). Empathy and Callous–Unemotional traits in different bullying roles: A systematic review and meta-analysis. *Trauma, Violence, & Abuse, 20*(1), 3–21. https://doi.org/10.1177/1524838016683456