Moral judgment, self-serving cognitive distortions, and peer bullying among secondary school adolescents

Daniel Brugman, Kevin van der Meulen & John C. Gibbs

Published online: 17 May 2023.

Submit your article to this journal ⬚

Article views: 323

View related articles ⬚

View Crossmark data ⬚

Routledge
Taylor & Francis Group

🔓 OPEN ACCESS | Check for updates

Moral judgment, self-serving cognitive distortions, and peer bullying among secondary school adolescents

Daniel Brugman [ID][a], Kevin van der Meulen [ID][b] and John C. Gibbs[c]

[a]Department of Psychology, Universiteit Utrecht, Utrecht, The Netherlands; [b]Faculty of Psychology, Universidad Autónoma de Madrid, Madrid, Spain; [c]Department of Psychology, Ohio State University, Columbus, Ohio, USA

ABSTRACT

This study examined whether and how moral judgment components (moral reasoning and moral value evaluation) combined with self-serving cognitive distortions are related to peer bullying (including associated participant roles) among adolescents. A total of 522 adolescents (49% males) from grades 1 to 4 of three public secondary schools in Spain (M_{age} = 14.6 years, range 12–18 years) completed questionnaires on moral judgment, self-serving cognitive distortions, and bullying. Bullies and bully-victims showed the lowest levels of moral judgment and the highest levels of self-serving cognitive distortions. In contrast, moral judgment was highest and self-serving cognitive distortions lowest for defenders and bystanders. Self-serving cognitive distortions mediated completely the relationship between moral reasoning and bullying, and partially between moral evaluation and bullying. Multigroup analyses indicated that the strength of the relationships between the moral judgment components and self-serving cognitive distortions varied across adolescents' role. Anti-bullying intervention programs should include the facilitation of moral reasoning and valuing as well as the reduction of self-serving cognitive distortions.

The contribution of self-serving cognitive distortions (SSCD) and related constructs such as moral disengagement to bullying has been extensively investigated (e.g., Gini et al., 2014; Killer et al., 2019). These constructs refer to rationalizing attitudes and beliefs to neutralize or disable self-regulatory functions, thereby protecting the self from blame or guilt and negative self-worth (Bandura, 2016; Gibbs, 2019). Few studies, however, have included the moral factor in its own right, i.e., moral judgment (Brugman et al., 2023; Patrick et al., 2019; Romera et al., 2019). Yet moral judgment and its relationship to SSCD may importantly contribute to the understanding and treatment of peer bullying. Accordingly, the present study examined whether and how moral judgment and SSCD differentially relate to bullying and associated participant roles among adolescents in secondary schools. The literature distinguishes six participant roles in bullying: bully, victim, bully-victim, bystander, victim defender, and bully-ally. Bullies could be expected

to evidence the lowest levels of moral judgment as well as the highest levels of SSCD. The opposite levels might be expected for defenders, with less specified expectations for other roles.

The present study is the first to examine the contribution made by both moral judgment and self-serving cognitive distortions in accounting for bullying behavior and associated roles in secondary schools. The measures and methods utilized were innovative in several ways. Moral judgment was measured in terms of not only moral reasoning but also moral evaluation. To examine not only direct but also indirect relationships with bullying, a process model was tested encompassing both moral judgment components, SSCD, and bullying. Furthermore, we examined the invariance of a process model with moral judgment components and SSCD across the distinct bullying roles. Finally, beyond the definitional procedures used in extant literature, we used an empirical method, i.e., discriminant analysis, to distinguish participant roles in bullying.

Moral judgment: reasoning and evaluation

Moral judgment is a reasoned or justified and prescriptive evaluation of values or decisions concerning matters of social right and wrong, benevolence and harm (Gibbs, 2019, pp. 45, 302). Gibbs's neo-Kohlbergian theory focuses on individuals' development of moral reasoning which is characterized by immature and mature levels—and within those levels, moderately coherent stages. Mature moral reasoning entails an understanding of the mutualistic basis of interpersonal relationships and social systems. Less studied in the (neo-) Kohlbergian tradition is the evaluation of values or decisions as right or wrong.

Social domain theorists have studied moral evaluation as moral acceptability. According to the social domain theory, children construct knowledge in the moral, conventional, and personal areas of the social domain. Moral acceptability provides one of the criteria people use to distinguish moral transgressions from those in other domains (Nucci, 2001; Tisak, 1995; Turiel, 2008). Children consider transgressions in the moral domain as more serious and less acceptable than transgressions in the conventional and personal domains. Less studied in social domain theory has been moral reasoning development.

The present study is based on the Sociomoral Reflection Measure—Short Form Objective (SRM-SFO; Brugman et al., 2023; see, Gibbs et al., 2019), an instrument that assesses moral reasoning maturity as well as moral evaluation. The SRM-SFO is a dilemma-free, multiple-choice questionnaire to measure moral judgment and is particularly useful in large-scale research on adolescents. To induce moral reasoning, the SRM-SFO uses moral evaluation questions such as, 'How important is it for people to keep promises, if they can, to friends?' or 'Is it right or wrong for people to keep promises, if they can, to friends?' In this study, we used the latter question because moral reasoning clarifies *why* keeping promises is evaluated as right or wrong. Given its inclusion of both reasoning and evaluation components, the present study of moral judgment may contribute to cognitive developmental as well as social domain literatures. It is worth noting that the SRM-SFO does not evaluate norm transgressions, e.g., bullying, as is usual in social domain research, but rather value-based behaviors, e.g., keeping promises.

Within moral judgment, moral reasoning and moral evaluation interrelate. Moral reasoning is a developmental construct to which moral evaluation can be related (cf., Lourenço, 2014). Kohlberg (1984, pp. 517, 537) argued, for example, that a moral evaluation or decision should ideally be derived from rational moral principles. Gibbs (2019) noted that bystanders can take the perspective of victims and empathize with them in their situation. Hence, as they gain in moral reasoning maturity, bystanders' moral evaluation may change and their role may accordingly shift from reinforcing the bully to defending the victim. However, it is generally accepted that in everyday life the relationship between moral reasoning and evaluation is bidirectional (Blasi, 2009). Elementary school-aged children evaluate bullying as wrong (e.g., Thornberg et al., 2016). This can be supported with increasingly mature understanding as they grow beyond the superficial in their social perspective-taking and moral reasoning.

Beyond moral reasoning and evaluation, other individual and group factors may influence a participant's role and situational actions. Noted in the literature have been moral courage, educational and temperamental characteristics, group-related motivations such as communal (feeling part of the group, making friends) or agentic (being admired or influential) goals (e.g., Gibbs et al., 1986; Salmivalli, 2010; van der Meulen et al., 2019).

Moral reasoning and evaluation in relationship to peer bullying

The transition from the immature to the mature level is considered to be crucial in adolescents' moral development. Developmental delay in attaining the mature level is a serious risk factor for delinquency, aggression, and other types of antisocial behavior (Gibbs et al., 2007; Stams et al., 2006). Bullying is distinguished from other forms of aggressive behavior as it implies an interpersonal interaction of systematic abuse and imbalance of power (Olweus, 1993; Smith, 2014). Peer bullying in schools is typically a group phenomenon entailing students' participation in one or more roles. Besides bullies (perpetrators) and victims, bystanders constitute a third role. Commonly, these bystanders are present during bullying episodes (Jones et al., 2015), but even those who are not present are usually aware of the abusive relationship. Some bystanders (bully-allies) participate by joining or encouraging the bully or bullies, and some stay passive (and do nothing), whereas others actively defend the victim (Patrick et al., 2019; Salmivalli et al., 1996). Bully-victims are individuals who across different situations take the role of bully or are themselves a victim.

Research on the relationship between moral reasoning and bullying behavior in adolescents has produced inconclusive results (Levasseur et al., 2017; Patrick et al., 2019; Thornberg & Jungert, 2013). Gini et al. (2011) found that bullies showed an enhanced level of moral reasoning relative to victims but lacked moral compassion. Von Grundherr et al. (2017) found a negative relationship between moral reasoning competence and aggressive roles in bullying. Patrick et al. (2019) found an inverse relationship between moral reasoning level and antisocial responses of bystanders in bullying situations.

Beyond its negative relationship to antisocial behavior such as bullying, moral reasoning may positively relate to behaviors like helping, volunteering, or defending the victim of bullying (e.g., Carlo, 2014; Goethem et al., 2012). Studies of the direct relationship of

moral reasoning to defending behavior have yielded mixed results, with some indicating positive relations (e.g., Pozzoli et al., 2017; van Noorden et al., 2015) and others negative or no relations (Patrick et al., 2019; van der Ploeg et al., 2017; von Grundherr et al., 2017). The differing results may be due partly to the use in these studies of different instruments to measure moral reasoning: notably, the Moral Competence Test (MCT, von Grundherr et al., 2017; cf., Lind, 2002), the Prosocial Moral Reasoning Measure (PROM, Carlo et al., 1992), and the Sociomoral Reflection Measure—Short Form (SRM-SF, Gibbs et al., 1992). These instruments have different theoretical backgrounds and measure slightly different constructs.

Few studies investigated the relationship between moral evaluation and bullying. Thornberg et al. (2016) showed that elementary school children judged bullying behavior in hypothetical situations as morally wrong, independently of school rules. In a follow-up study, Thornberg et al. (2017) found additionally that non-bullies judged bullying as more wrong than bullies.

Self-serving cognitive distortions and moral disengagement in relation to bullying

SSCD and moral disengagement (Bandura, 2016) do not stem not from cognitive-developmental theory but instead from sociological neutralization theory (Sykes & Matza, 1957; cf., Barriga et al., 2000; Paciello et al., 2013). According to Ribeaud and Eisner (2010) SSCD, moral disengagement, and neutralization techniques capture the same cognitive processes or mechanisms. The classification of these processes differ, however. Cognitive distortions have been defined as 'inaccurate or biased ways of attending to or conferring meaning upon experiences' (Barriga et al., 2001). These distortions are labeled self-serving when justifying externalizing behavior such as aggression (Barriga et al., 2000). For example, a bully may justify aggression by minimizing/ mislabeling, like: 'It was only a joke.' Four types of SSCD are distinguished, but given the high correlations between the distortions, one overall mean score is justified (cf., Barriga et al., 2001).

Recently, Patrick et al. (2019) and van der Meulen et al. (2019) reported higher levels of SSCD in bullies and bully-victims than in victimized and non-involved students, with boys scoring higher than girls. Owens et al. (2014) found similar findings among 13- to 16-year-olds. However, gender was not found to be a moderator in the relationship between SSCD and bullying.

In several studies SSCD was found to mediate the relationship between moral reasoning and antisocial behavior (Barriga et al., 2001; Beerthuizen & Brugman, 2013) or bullying (von Grundherr et al., 2017). The mediation role demonstrates that moral reasoning is not moral courage; situational factors are more important in determining behavioral outcomes. In addition to empathy, SSCD also attenuates the relationship between moral reasoning level or evaluation and externalizing behavior, including bullying (e.g., Beerthuizen & Brugman, 2013).

The results of SSCD on bullying are quite similar to the results of studies using moral disengagement. Bullies typically showed high levels of moral disengagement (e.g., Gini et al., 2014; Killer et al., 2019) as well as allies of bullies (e.g., Bjärehed et al., 2020; Gini, 2006; Sjögren et al., 2021), whereas defenders of victims showed low levels (Killer et al., 2019; Mazzone et al., 2016). Also, these researchers viewed moral disengagement as

a mediator between individuals' moral judgment and bullying or externalizing behavior. Furthermore, Gini et al. (2014) reported that males scored higher than females on moral disengagement, but no moderator effect was found for gender on the relationship between moral disengagement and aggressive bullying. Gender does not seem to play a role in the association between moral disengagement and bullying (cf., also Bjärehed et al., 2021).

Present study

This study entailed two primary aims. The first was to examine whether levels of moral reasoning and evaluation differed across adolescents' participant roles in peer bullying situations. We hypothesized that of all participant roles, bullies would show the lowest levels of moral reasoning and evaluation, and defenders the highest (e.g., Patrick et al., 2019; Thornberg et al., 2017). The second aim was to determine how moral reasoning and evaluation, in addition to SSCD, relate to adolescents' role in peer bullying. We hypothesized that the contributions of moral reasoning and evaluation on one hand and SSCD on the other would differ depending on adolescents' role in bullying. The participant roles show different behaviors, thus the strength of the relationships between the underlying processes of moral judgment and SSCD should also differ.

The recent availability of the moral reasoning maturity index in the SRM-SFO (Brugman et al., 2023) provided the opportunity to examine the usefulness of this measure in relation to bullying. The present study extends the findings of van der Meulen et al. (2019) on the relations of bullying roles to moral reasoning and evaluation in traditional bullying. At the time of van der Meulen et al.'s study, the moral reasoning index was under construction. In line with the empirical findings of other studies, van der Meulen et al. (2019) showed differences in self-serving cognitive distortions across adolescents' participant roles in peer bullying. Bullies and bully-victims showed higher levels of self-serving cognitive distortions than victims and bystanders. Furthermore, females showed lower levels of self-serving cognitive distortions (cf., Gini et al., 2014). Van der Meulen and colleagues found no gender difference in adolescents' roles in traditional bullying.

We first examined the relationships of moral reasoning and evaluation to demographics. For moral reasoning, we expected a gender difference favoring young adolescent females. In addition, we expected moral reasoning to relate positively to age and grade level. We also expected a moderate positive relationship between moral reasoning and moral evaluation. Because moral evaluation is not a developmental construct, no relationship was expected between moral evaluation and age or grade level. A higher level of moral evaluation of moral values was expected in females than in males (for these expectations, see, Brugman et al., 2023).

Method

The sample and most instruments were described in more detail in van der Meulen et al. (2019).

Participants

A total of 568 adolescents (282 males, 286 females; M age = 14.6; SD = 1.4; range 12–18 years) participated in the research. The adolescents were from three state-funded secondary schools in and around the city of Madrid, all with a similar middle-class socio-economic status student population. Students of two classrooms from each of four consecutive grades (first to fourth grades) participated in the study, resulting in a total of six classrooms per grade and 24 classrooms in total. Forty-six participants (8.0%), 26 males and 20 females, were excluded, because the minimum required responses on moral reasoning was not achieved (see Measures), resulting in a final sample of 522 participants. No selective dropout was found for gender, age, grade, or school.

Procedure

Permission to conduct the study was asked from the respective school boards. Students and their families were informed about the study. Parents or other caretakers who wanted to know more about the research before participating were informed to contact the researchers. Students participated on a voluntary basis. The questionnaires were administered in the classroom during school hours. The researchers involved in the data collection first explained the procedure, then distributed the forms and answered students' questions about completion of the questionnaires.

Measures

Sociomoral reasoning maturity (SRMP)

The SRM-SFO (Brugman et al., 2023) consists of 10 item sets, organized in four value areas: Contract & Truth (item set 1–4), Affiliation (5), Life (6–7), Property, Law and Legal Justice (8–10). Following the introductory stem is an item regarding the evaluation of a value like 'keeping promises' (e.g., 'Is it right or wrong for people to keep promises, if they can, to friends?'). Subsequently, items are listed for support of the evaluation of that value (e.g., If you had to give a reason WHY it is (at least sometimes) RIGHT to keep a promise to a friend, if you can, what reason would you give?) followed by a reason (e.g., Because your friend may have done things for you, and you need friends). Reasons are offered in an array of four stage-keyed statements, representing stages one to four in a random order that are rated and ranked. The Sociomoral Reflection Maturity Percentage (SRMP) is the mean percentage of respondents' accepted mature responses from the total number of potential mature responses. The percentage of mature responses can vary between 0 (completely immature) and 100 (completely mature). The score on an item set is considered missing when a response is missing or responses within an item set are inconsistent. When more than 3 item set scores are missing, the total score is considered missing. Psychometric properties concerning reliability and validity of mature moral reasoning were examined in samples of adolescents in the Netherlands (Brugman et al., 2023). Reliability was adequate in our sample (Table 1).

Table 1. Descriptive statistics for the variables $(473 < N < 523)$; Reliability (Omega, ω); Zero-order Pearson correlations between variables. SRMP = Sociomoral Reflection Maturity Percentage; ME = Moral Evaluation; SSCD = Self-serving Cognitive Distortions; OBB = Observed Bullying Behavior; SVB = Self-reported Victimized Bullying; SBB = Self-reported Bullying Behavior; SDB = Self-reported Defending Behavior; SAB = Self-reported Ally Bullying.

	M	SD	ω	Gender	Age	Grade	SRMP	ME	SSCD	OBB	SVB	SBB	SDB	SAB
Gender	.51	.50	-	-										
Age	14.56	1.40	-	.017	-									
Grade	2.49	1.10	-	.083	.859***	-								
SRMP	66.70	18.50	.759	.124**	.082	.195***	-							
ME	2.42	.44	.677	.122**	-.070	.019	.497***	-						
SSCD	2.19	.76	.941	-.203***	.052	-.083	-.344***	-.431***	-					
OBB	1.86	.52	.894	-.096*	-.014	-.079	-.042	-.083	.302***	-				
SVB[1]	1.07	.11	.846	-.095*	-.112*	-.131**	-.110*	-.197***	.310***	.399***	-			
SBB[1]	1.07	.10	.891	-.074	.093*	.015	-.233***	-.394***	.521***	.254***	.452***	-		
SDB	.37	.48	-	.017	-.038	-.030	.097*	.122**	-.184***	-.101*	.018	-.125**	-	
SAB	1.20	.51	-	-.053	.059	-.016	-.120**	-.270***	.395***	.256***	.284***	.528***	-.072	-

$*p < .05$, $**p < .01$, $***p < .001$ (2-tailed).
[1]Normalized score.

Moral evaluation (ME)

A 4-point Likert scale ('right', 'a little right', 'a little wrong', 'wrong') was used to assess participants' evaluation of each statement. The mean ME score is based on the 10 evaluation ratings. The ME score was calculated after reversing the scores (wrong = 0; a little wrong = 1; a little right = 2; right = 3). A higher score means a higher acceptance of the moral value, for example, it is more right that people keep their promises to a friend, if they can. Following the 70% rule, the mean score was considered missing when more than 3 scores were missing. Reliability was sufficient for research purposes (Table 1).

Self-serving cognitive distortions (SSCD)

The How-I-Think Questionnaire (Barriga et al., 2001; Nas et al., 2008) contains 54 6-point Likert items varying from totally agree to totally disagree, 39 of which can be clustered in the four types of cognitive distortions: self-centered orientation, minimizing/mislabeling, assuming the worst, and blaming others. Empirically, these four types are highly interrelated. Several studies (Bacchini et al., 2016; Barriga et al., 2001; Nas et al., 2008) showed good reliability and construct validity of the measure. We used the total mean score only. Reliability was high (Table 1).

Anomalous response (AR)

This social desirability scale of the How I Think Questionnaire is designed to screen for suspect responding, and was used as a control variable. Participants responded along a six-point Likert scale from 'disagree strongly' to 'agree strongly'. The reversed AR (AR-true, 7 items) was used. The reliability was adequate (Table 1). We checked whether high scoring participants on AR (5% scored higher than 5.50) affected the relationships in our sample. Excluding high-scoring participants affected twice as many females as males. Moreover, effects were negligible and lowered somewhat expected relationships (cf., also Nas et al., 2008). All respondents were included in the analyses.

Participant role in peer bullying (PRB)

An adapted version (van der Meulen et al., 2019) of the Olweus Bully-Victim Questionnaire (Olweus, 1996; Solberg & Olweus, 2003) was used, which has shown good psychometric properties, i.e., construct validity and reliability (e.g., Green et al., 2013; Kyriakides et al., 2006; Solberg & Olweus, 2003). The PRB starts with 10 items concerning the observation of all forms of traditional bullying in school (ignoring, not allowing someone to join in, insulting, calling someone bad names, speaking badly about someone, hiding someone's belongings, damaging someone's belongings, stealing someone's belongings, hitting, and threatening). This variable is called Observed Bullying Behavior in School (OBB). Next, the same behaviors were asked from two different perspectives, i.e., victim and bully. These variables are respectively called Self-reported Victimized Bullying (SVB) and Self-reported Bullying Behavior (SBB). The frequency of behavior was reported on a four-point Likert scale. The reliabilities of these three scales (observed bullying behavior in school, victimized, and bullying behavior) were adequate (Table 1).

Six roles were distinguished: bystanders, victims, bullies, bully-victims, defenders, and bully allies. Based on their self-reported frequency of bullying or victimized behaviors, individuals got attributed a role as bully, victim or bully-victim. The involvement in two

Table 2. Adolescents' roles in traditional bullying, number of participants, raw Mean score (M) and Standard deviation (SD) of moral reasoning, moral evaluation, self-serving cognitive distortions (SSCD), and observed bullying behavior (OBB).

	n	% male	Moral reasoning		Moral evaluation		SSCD		OBB	
			M	SD	M	SD	M	SD	M	SD
Bystander	326	42.9	68.0	17.1	2.497	0.360	1.970	0.613	1.901	0.529
Defender	31	61.3	72.9	13.3	2.589	0.342	1.904	0.696	1.913	0.702
Bully ally	29	55.2	67.8	17.9	2.451	0.386	2.310	0.571	2.254	0.616
Victim	57	63.2	63.5	19.9	2.311	0.492	2.423	0.685	2.604	0.710
Bully	52	57.7	60.9	21.5	2.115	0.549	3.039	0.824	2.411	0.536
Bully-victim	27	55.6	60.6	25.7	2.128	0.623	3.003	0.829	2.570	0.524

role-typed behaviors was used as a cut-off score. Adolescents who were neither victims nor bullies nor bully-victims got the role of bystander. Defending behavior contained only 1 item ('What do you do when another student is bullied? I intervene even if it's not my friend') and was reported on a binary yes-no scale. Pro-bullying behavior contained also one item ('Have you helped a group or one pupil to pick on someone this year?') and was scored on a 4-point Likert scale. Victim defenders and bully-allies (individuals showing pro-bullying behavior) were only distinguished in the group of bystanders. The numbers of participants in each role are presented in Table 2.

Analyses

Differences in moral reasoning and evaluation, self-serving cognitive distortions, and observed bullying behavior between adolescents' roles in bullying were examined by multivariate analysis. Discriminatory analysis was used to examine whether the different bullying roles as suggested by the cutoff scores applied to the PRB could be distinguished based on their score profiles on moral reasoning and evaluation, self-serving cognitive distortions, and observed bullying behavior. Structural equation modeling (SEM) was used to analyze a process model including the sociomoral-cognitive processes and observed bullying. Model fit was assessed using the ratio of chi-square (χ^2) to degrees of freedom (*df*), comparative fix index (*CFI*), Tucker-Lewis index (*TLI*), and the root mean square error of approximation (*RMSEA*). For an acceptable fit, the ratio (CMIN/DF) should be less than 5, the values of C*FI and TLI* should be greater than 0.90, and the threshold for *RMSEA* should be less than 0.08; for a good fit these latter values are respectively, 0.95 and 0.05 (Byrne, 2016). How these variables affected the perception of bullying in school in the distinguished bullying roles was examined by a multiple group analysis. To find out whether the contribution of moral reasoning and evaluation was invariant across groups (gender, role) the paths with these variables were constrained. Analyses were executed in SPSS28 and AMOS27 (Arbuckle, 2013).

Results

Summary statistics and relationships between variables

Means and standard deviation of the variables and their reliability are reported in Table 1. The score distribution of the moral-cognitive variables was normal. Skewness
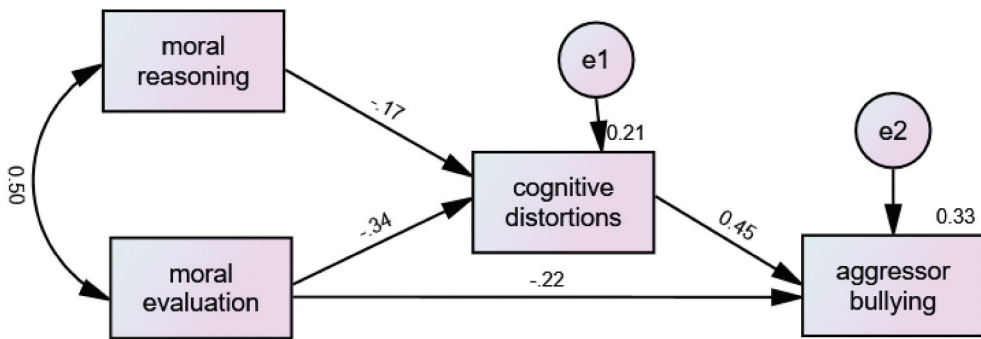
Figure 1. Path model of moral reasoning, evaluation, SSCD and bullying as perpetrator, total group ($n = 522$). Standardized estimates. Note. All relations $p < .001$

and kurtosis of the moral reasoning and evaluation mean scores were between -2 and $+2$, respectively -1.192, 1.277, and -0.915, 0.515, and for SSCD, 0.986, 0.894. However, two behavioral variables (bullying and victimized behavior) were skewed, and peaked. A square-root transformation normalized these variables.

Generally, the bivariate correlations were in the expected direction. A correlation between age and moral reasoning was found in females ($r(258) = 0.138$, $p = .026$), but not in males ($r(247) = 0.031$, $p = .632$). As expected, no relationship was found between age and moral evaluation. Adolescents from higher grades showed higher levels of moral reasoning maturity, but not higher levels of moral evaluation (Table 1).

Females showed higher levels of moral reasoning maturity than males ($M_{\text{males}} = 64$, $SD = 19$; $M_{\text{females}} = 69$, $SD = 17$, $F(1, 520) = 8.14$, $p = .005$), and higher levels of moral evaluation ($M_{\text{males}} = 2.35$, $SD = .48$; $M_{\text{females}} = 2.47$, $SD = .39$, $F(1, 561) = 9.89$, $p = .002$).

Of specific interest are the relationships between the moral-cognitive variables and the behavioral variables. Note that the correlations between moral evaluation and the behavioral variables are larger than between moral reasoning and these variables.

We constructed and analyzed a unidirectional path model including self-reported bullying behavior as perpetrator, in line with previous research on moral-cognitive processes (Barriga et al., 2001; Beerthuizen & Brugman, 2013). The analysis showed that the relationship between moral reasoning and bullying was fully mediated by SSCD, whereas the relationship between evaluation and bullying was only partially mediated. Thus the relationship between moral reasoning and bullying was indirect, while the relationship between moral evaluation and bullying was partly indirect and partly direct. The model showed an excellent fit ($\chi^2(1) = .718$, $p = .397$; CMIN/DF = .718; CFI = 1.000; TLI = 1.096; RMSEA = .000; Figure 1).

By including moral reasoning and evaluation in the model, the amount of explained variance in bullying increased from 29% to 33%. Moreover, the positive relationship between SSCD and bullying decreased from .55 to .45. A multi-group analysis for gender and constraining all relationships with the moral judgment components showed the model was invariant across gender (respectively, $\chi^2(2) = 2.574$, $p = .275$; CMIN/DF = 1.287; CFI = .999; TLI = .986; RMSEA = .023; ΔCFI < .010; and $\chi^2(5) = 8.551$, $p = .128$; CMIN/DF = 1.710; CFI = .992; TLI = .966; RMSEA = .037; ΔCFI < .010).

Differences between adolescents' bullying roles on moral reasoning, moral evaluation, self-serving cognitive distortions, and observed bullying in school

A MANOVA using moral reasoning and evaluation as dependent variables, participants' role in bullying and gender as independent variables, and grade as a covariate, showed multivariate effects for grade, role, gender, and the interaction of role by gender. Tests between subjects showed a medium effect of grade on moral reasoning (F (1,509) = 19.810, $p < .001$, $\eta_p^2 = 0.037$), a small effect of participants' role on moral reasoning ($F(5,509) = 2.557$, $p = .027$, $\eta_p^2 = 0.025$) and a large effect of role on moral evaluation ($F(5,509) = 11.370$, $p < .001$, $\eta_p^2 = 0.100$). Pairwise comparison showed that bullies, bully-victims, and victims showed lower levels on moral reasoning in comparison to defenders. Bullies showed also lower levels compared to bystanders. On moral evaluation, bullies, bully-victims and victims scored lower levels than bystanders and defenders. Bullies scored also lower than victims. Bully allies scored higher than bullies and bully-victims. No differences were found on other comparisons, for example, between defenders and bully allies (Table 2). The gender effect showed that females had higher levels than males on moral reasoning ($F(1,509) = 10.895$, $p < .001$, $\eta_p^2 = 0.021$) and moral evaluation ($F(1,509) = 5.623$, $p = .018$, $\eta_p^2 = 0.011$). The interaction effect of role by gender was found on moral reasoning ($F(1,509) = 3.628$, $p = .003$, $\eta_p^2 = 0.034$). Female bully-victims scored much higher than male bully-victims.

A second MANOVA using SSCD and observed bullying as dependent variables, participants' roles and gender as independent variables, and grade as covariate, showed multivariate effects for role and gender. Tests between subjects showed a large effect of role on SSCD ($F(5,482) = 28.416$, $p < .001$, $\eta_p^2 = 0.228$) and on observed bullying (F (5,482) = 25.692, $p < .001$, $\eta_p^2 = 0.210$). A gender effect was found on SSCD (F (1,482) = 14.421, $p < .001$, $\eta_p^2 = 0.029$). Pairwise comparison showed that bullies, bully-victims, victims, and bully allies showed higher levels on SSCD than bystanders and defenders. Victims showed lower levels on SSCD than bullies and bully-victims. Bullies and bully-victims showed also higher levels on SSCD than bully allies. No differences were found on other pairwise comparisons (Table 2). Observed bullying showed a similar picture. Bystanders and defenders reported less observed bullying than bullies, bully-victims, bully allies, and victims. Victims reported not only higher levels of observed bullying than bystanders and defenders, but also than bullies and bully allies (Table 2). The lack of differences between diverse roles was an invitation to examine the empirical status of these roles in the current sample (cf., Stein & Jimerson, 2020).

Discriminatory analysis

A stepwise linear discriminatory analysis was conducted to examine whether participants' role membership based on the PRB cutoff scores would be predicted by the demographic, moral-cognitive and observed behavior variables (cf., Haynie et al., 2001). Two discriminant functions were calculated. Only two variables were included in the analysis: SSCD and observed bullying (Table 3).

By plotting the group centroids (the distance on the function the predicted mean for each group is from the overall mean) it was possible to depict the extent to which each function separated the groups or roles. As can be seen in Figure 2, on the horizontal

Table 3. Discriminant functions analyses: Standardized canonical discriminant function coefficients.

Variable	Function 1	Function 2
OBB	.561	.841
SSCD	.750	−.677
% Variance	90.6	9.4
Canonical correlation	.568	.217
Wilk's lambda	.645	.953
Chi-square	225.554	24.804
df	10	4
p	<.001	<.001

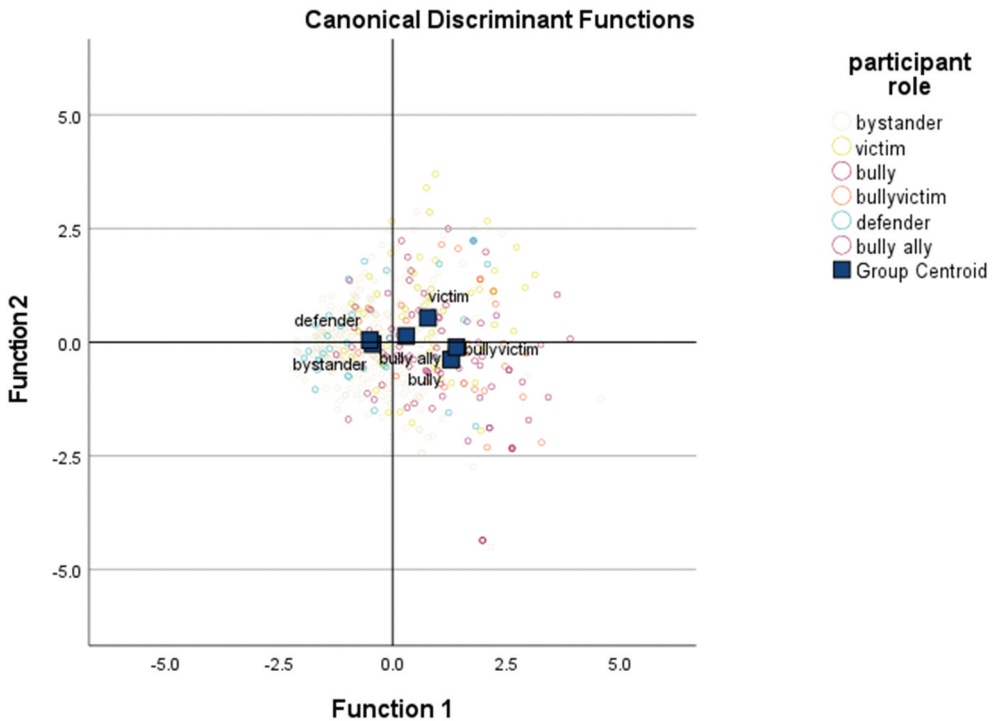(OBB = Observed Bullying Behavior; SSCD = Self-serving Cognitive Distortions).

Figure 2. Plot of group centroids on the functions resulting from the discriminant analysis depicting the distance between the group means.

dimension three or four groups can be distinguished, i.e., the groups of the roles defender and bystander overlap, and the groups bully and bully-victim overlap partly. The second dimension separates the victims from the other groups, specifically the bully-allies. Pairwise comparison showed that the groups bystander and defender as well as bully and bully-victim did not differ from each other. Thus only four groups are distinguishable: (a) bully and bully-victim; (b) victim; (c) bystander and defender; (d) bully-ally.

Classification results showed that mainly the bystanders were correctly classified and partly victims and bullies.
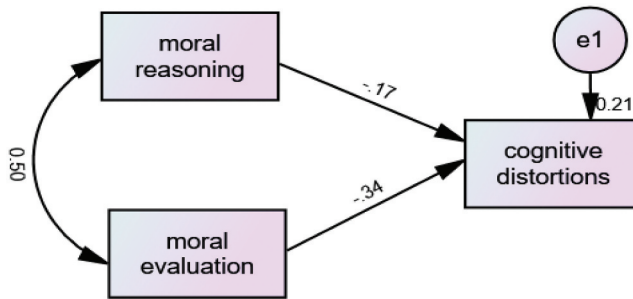
Figure 3. Path model of moral judgment and SSCD, total group (n = 522). Standardized estimates. Note. All relations $p < .001$.

Invariance of a multi-process model across gender and bullying role

We examined whether the multi-process model was invariant across gender and bullying role. Direct paths from moral reasoning or moral value evaluation to observed bullying were nonsignificant. The trimmed model showed a good fit ($\chi^2(2)$ = 2.505, p = .286; CMIN/DF = 1.253; CFI = 0.998; TLI = .992; RMSEA = .022) (Figure 3, Table 4).

To examine whether the path model was equivalent across bullying roles we first examined the equivalence of the model across gender, because the gender composition differed between the roles (Table 2). All possible relations between the variables were allowed to exist (Figure 3) and no degrees of freedom were available to calculate fit indices. A multigroup analysis showed that the model was equivalent across gender (Table 4) as the CFI value reached its maximum. With all relations constrained, the fit of the model worsened (Table 4), as the CFI difference between the original and the constrained model was larger than 0.010 (Byrne, 2016). With an unconstrained covariance, however, the model fit was equivalent across gender. To examine the equivalence of the model across role the covariance between moral reasoning and evaluation will be unconstrained, i.e., may vary between groups.

Next we examined the equivalence of the path model across role. The relatively small group of bully allies was not included in the first multigroup analysis. The unconstrained multigroup analysis showed that the model was invariant across role (bystanders/defenders; victims; bullies and bully-victims). However, when the relations with moral reasoning and evaluation were constrained, while the covariance was unconstrained, the model

Table 4. Goodness-of-fit indices for the path models. MR = Moral Reasoning; ME = Moral Evaluation.

	χ^2	df	p	CMIN/DF	CFI	TLI	RMSEA	Δ CFI
Total sample, n = 522	.000	0	-	-	1.000	-	-	
Gender multigroup, unconstrained	.000	0	-	-	1.000	-	-	<.010
MR, ME constrained[1]	5.978	3	.113	1.993	.988	.976	.044	>.010
MR, ME constrained[2]	1.982	2	.371	0.991	1.000	1.000	.000	.000
Bullying role multigroup								
Three levels, unconstrained	.000	0	-	-	1.000	-	-	.000
MR, ME constrained[2]	6.277	4	.179	1.569	.988	.973	.034	>.010
Four levels, unconstrained	.000	0	-	-	1.000	-	-	.000
MR, ME constrained[2]	9.171	6	.164	1.529	.984	.967	.032	>.010

[1]Direct path and covariances constrained.
[2]Direct path only constrained.

was no longer equivalent across role (Table 4). With the relationship between moral reasoning and evaluation free to vary between the groups, moral reasoning and evaluation combined had different effects on cognitive distortions depending on the role. When the ally group was included in the analysis, the same effect appeared (Table 4). Moral reasoning and evaluation combined explained in the bystander group 11% of the variance, in the victim group 18%, in the bully group also 18%, and in the ally group 13%. Interestingly, the relationship between moral reasoning and evaluation was relatively weak in the bystanders (0.41) and relatively strong in the victims (0.56) and bullies (0.60). Also, the relationship between moral evaluation and SSCD varied somewhat more than between moral reasoning and SSCD (respectively, between −.21 and −.27, and between −.19 and −. 21).

Relevance of moral judgment

To investigate whether, in addition to SSCD (or moral disengagement), moral reasoning/judgment is relevant in the study of participants' roles in bullying, we created four groups with high or low moral reasoning/judgment, and high or low SSCD. Because females showed higher levels of moral reasoning and lower levels of SSCD, we selected 30% of the highest and 30% of the lowest scores on each variable for males and females separately. Roughly, the highest 30% moral reasoning mean scores (respectively, for males and females SRMP ≥76.67, ≥80.00) represent mature moral reasoning level according to Gibbs' theory (Brugman et al., 2023), while the 30% highest SSCD mean scores are close to or in the borderline/clinical range of self-serving cognitive distortions (respectively, for males and females HIT ≥2.71, ≥2.31, Barriga et al., 2001). Table 5 presents the number of adolescents in participant roles for each group of low/high level of moral reasoning and SSCD.

Of the total of 44 bullies and bully-victims, 43 have a high level of SSCD. However, in the high moral reasoning level group we find 12, and in the low moral reasoning level group 31 participants. One would expect equal numbers beforehand in each high SSCD group, if moral reasoning is not relevant. A 2×2 contingency table with 22 individuals in each SSCD group expected and 8 and 21 observed, showed a significant effect (χ^2 (1,87) = 4.4586, p = .0347). We can reject the hypothesis that moral reasoning is irrelevant when studying bullying by using SSCD only.

Table 5. Number of adolescents in participant roles of (I) the 30% lowest or highest scores on Moral Reasoning (MR) and Self-serving Cognitive Distortions (SSCD), and (II) the 30% lowest or highest scores on Moral judgment (MJ, Moral Reasoning and Evaluation) and Self-serving Cognitive Distortions (SSCD).

	Bystander/Defender		Victim		Bully/Bully-victim		Ally		Total	
Groups MR (I), MJ (II)	I	II	I	II	I	II	I	II	I	II
High MR/MJ, low SSCD	53	31	5	4	1	1	2	1	61	37
High MR/MJ, high SSCD	13	6	7	3	12	4	2	2	34	15
Low MR/MJ, low SSCD	17	7	1	1	0	0	1	1	19	9
Low MR/MJ, high SSCD	31	13	12	9	31	27	2	0	76	49
Total	114	57	25	17	44	32	7	4	190	110

We hypothesized that not only low moral reasoning, but also low moral evaluation is of importance in bullying. Hence bullies were expected to be in the low level of moral judgment (moral reasoning and evaluation)/ high level SSCD group. The same analysis was conducted for moral judgment instead of moral reasoning. To that end, we added the criterion of 30% highest moral evaluation scores and did not include mixed levels of moral reasoning and evaluation (Table 5). For moral judgment, the difference was much stronger than for moral reasoning (χ^2 (1,79) = 10.001, p = .0157), which confirms the relevance of moral judgment in research on bullying in addition to SSCD.

Discussion

This study aimed to provide a more comprehensive picture of the morally relevant variables involved in bullying among adolescents in secondary school. We examined whether and how moral judgment combined with self-serving cognitive distortions (SSCD) relates to peer bullying and associated participants' roles. Previous studies on moral judgment and bullying were mostly limited to moral reasoning, whereas studies using SSCD or related constructs like moral disengagement seldom included any moral judgment component.

To assess the reasoning and evaluation components of moral judgment, we used a new measure, the SRM-SFO, a dilemma-free questionnaire based on Gibbs' neo-Kohlbergian theory of moral development (Gibbs, 2019). A moderate to strong positive relationship was found between moral reasoning and evaluation. Relationships between both moral judgment components, SSCD, and demographic variables were in the expected direction. A gender difference favoring females was evident on both moral judgment components and SSCD (cf., Brugman et al., 2023). Contrary to our expectation, however, the moral judgment gender difference on both components extended beyond early adolescents to the entire age range (12–18 years). Moral reasoning related to grade level, but to age only among females.

We first examined the relationship between moral reasoning, evaluation, SSCD and the continuous scale for aggressors' bullying. The negative relationship between moral reasoning and bullying reported in the literature (e.g., Patrick et al., 2019) was confirmed, as was the negative relationship between moral evaluation and bullying (Thornberg et al., 2017, 2016). SSCD mediated completely the relationship between moral reasoning and bullying and partly the relationship between moral evaluation and bullying. Both moral judgment components, but particularly moral evaluation, contributed to the amount of explained variance in aggressors' bullying beyond the impact of SSCD.

On moral reasoning, bullies showed lower levels than bystanders and defenders. For moral evaluation, bullies, victims, and bully-victims showed lower levels than did bystanders and defenders. The effect of moral value evaluation was larger than the effect of moral reasoning. The lower levels of moral evaluation demonstrated particularly by the bullies and bully-victims might be interpreted as tendencies of a moral-nonmoral domain shift (Leenders & Brugman, 2005). The bully dominates the situation (Sutton et al., 1999) and might minimize a moral transgression into the direction of a conventional transgression (cf. minimizing/mislabeling in the self-serving cognitive distortions typology). Discriminatory analysis showed that four roles could effectively be

distinguished in this sample: (a) bully and bully-victim; (b) victim; (c) bystander and defender; (d) bully-ally.

Subsequently, we examined whether the path model including moral reasoning, evaluation and SSCD, showed a different impact depending on participants' role in bullying. Because the gender composition differed between the roles, we first examined whether the process model was invariant across gender. Multigroup analysis showed invariance of the model across gender when the relationship between moral reasoning and evaluation was unconstrained. Multigroup analysis showed that under the same conditions the process model differed across role. These results demonstrate that the strength of the relationships between both moral judgment components and SSCD differ across adolescents' roles in bullying.

In a final analysis, we found that bullies and bully-victims both generally evidence a low or superficial level of moral reasoning as well as a high level of SSCD. However, some bullies and bully-victims showed relatively mature levels of moral reasoning and even of moral judgment overall (moral reasoning and evaluation). This result could shed light on some puzzling findings regarding the relation between moral reasoning level and bullying. Future research should examine the differences between bullies and bully-victims with high levels of SSCD but with low or high levels of moral judgment.

Taking the complexities of the bivariate relationships in our model into account, one can infer that promoting adolescents' moral judgment development may help to decrease peer bullying in school. It is important for interventions in their program materials to explicitly identify bullying behavior as morally wrong and hurtful. In anti-bullying practices such as Circle of Friends (O'Connor, 2016), No Blame Approach (Sullivan et al., 2003), or EQUIP (DiBiase et al., 2005; cf., Potter et al., in press), the moral elements involved in (possible) bullying situations are discussed.

The present study has several advantages compared to other studies on moral reasoning and bullying. First, we fully operationalized moral judgment in terms of both of its components: moral reasoning and evaluation. Our operationalization of moral evaluation extends the operationalization of norm transgressions in the social or moral domain literature. Second, we used a measure for moral reasoning, the SRM-SFO, with strong psychometric properties. Third, we examined not only the direct relationship between moral reasoning and bullying and its related roles, but also indirect or mediated relationships via self-serving cognitive distortions.

This study also entails several limitations. The cross-sectional design means that causal direction could not be established; determining the direction of the relationships would of course require an experimental or longitudinal design. Second, all measures used self-reported or self-attributed attitudes, reasoning, and behavior; accordingly, analytic results could have been inflated by shared method variance (Gini et al., 2014), particularly when the same type of scale is used (Likert). Despite contributing to this limitation, the bullying self-report questionnaire (PRB) was preferred above peer nomination procedures such as the Participant Role Questionnaire (PRQ, Salmivalli et al., 1996) given ethical concerns that included students' lack of assent to participate as nominators (Casper et al., 2015; Felix et al., 2011). Additionally, and in contrast with the PRQ, the PRB allows for differentiating students who are involved as both bully and victim. The individual may take different roles depending on contextual factors (Casper et al., 2015). The obvious disadvantage is that the PRB self-report measures are subject to under- and over-reporting, due to social desirability bias

(Furlong et al., 2010). We used a social desirability scale to check for suspicious responses but did not find legitimate reasons for the exclusion of respondents. The scale might well be relevant for a delinquent population but not for regular middle-class adolescents. Other studies found small social desirability effects on moral reasoning and evaluation in regular adolescents (Brugman et al., 2023). Moral disengagement has been found to be important in participants' roles whether these were based on self-report scales or nomination procedures (Killer et al., 2019; Obermann, 2011). Third, the small number of classes per grade prevented a multilevel analysis; the small number of schools prevents generalizability of the results beyond these schools. However, the results of the Spanish schools on moral disengagement, school climate, and bullying were comparable to similar schools in The Netherlands (van der Meulen et al., 2019), suggesting potential generalizability.

Although we could not discriminate empirically between bullies and bully-victims, or between bystanders and defenders, other studies have done so (e.g., Haynie et al., 2001; Salmivalli, 2010). The PRB needs more items to discriminate effectively between passive bystanders, defenders of victims, and bully-allies. Future research could focus on the developmental dynamics of the relationships between moral reasoning, moral evaluation, and SSCD in bullying roles. Several researchers (e.g., Romera et al., 2021) pointed out that moral disengagement is a multifaceted construct and that not all mechanisms are equally important. The same may hold for SSCD as well. Constructing an instrument to measure SSCD related to bullying behavior could be fruitful.

Conclusion

Moral judgment (reasoning and evaluation) and self-serving cognitive distortions both help to account for bullying behavior. Their combination evidences a differential impact across situational participant roles in the peer bullying that takes place among adolescents in secondary schools. Both moral judgment (delay, low evaluation) and self-serving cognitive distortions should be addressed in anti-bullying intervention programs.

Acknowledgments

Disclosure statement

Notes on contributors

Daniel Brugman (Ph.D., Leiden University, The Netherlands, 1988) is emeritus professor in developmental psychological aspects of interventions in youth care at the Department of Psychology at Utrecht University. His research concerns individuals' moral development relating to the socio-moral climate in which they find themselves and their behavior.

Kevin van der Meulen graduated in Psychology from the University of Nijmegen (The Netherlands, 1996) and received his PhD from the Universidad Autónoma de Madrid (2003),

where he is Associate Professor in the Faculty of Psychology since 2009. He has completed research on peer bullying in schools, emotional and identity development in adolescence as well as intervention programs in secondary education, aimed at improving school climate and promoting adolescents' personal development. He provides advice and training to schoolteachers and is currently involved in participatory research with adolescents.

John C. Gibbs (Ph.D., Harvard University, 1972) is Professor of Developmental Psychology at The Ohio State University. His work has concerned developmental theory, assessment of social cognition and moral judgment development, and interventions with conduct-disordered adolescents. He has been a member of the State of Ohio Governor's Council on Juvenile Justice and is a faculty associate of the Ohio State University Criminal Justice Research Center. He received the Association for Moral Education's 2016 Kuhmerker Outstanding Career Award. His and coauthors' EQUIP program won the 1998 Reclaiming Children and Youth Spotlight on Excellence Award. His authored or co-authored books include *The EQUIP Program, Aggression Replacement Training, Moral Maturity*, and *Moral Development and Reality: Beyond the Theories of Kohlberg, Hoffman, and Haidt.*

ORCID

Daniel Brugman http://orcid.org/0000-0002-0697-7678
Kevin van der Meulen http://orcid.org/0000-0002-0916-1551

References

Arbuckle, J. L. (2013). *IBM SPSS AMOS 22 user's guide*. Amos Development Corporation.

Bacchini, D., Di Angelis, G., Affuso, G., & Brugman, D. (2016). The structure of self-serving cognitive distortions: A validation of the "How I Think" questionnaire in a sample of Italian adolescents. *Measurement and Evaluation in Counseling and Development*, 49(2), 163–180. https://doi.org/10.1177/0748175615596779

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

Barriga, A. Q., Landau, J. R., Stinson, R. L., II, Liau, A. K., & Gibbs, J. C. (2000). Cognitive distortion and problem behaviors in adolescence. *Criminal Justice and Behavior*, 27(1), 36–56. https://doi.org/10.1177/0093854800027001003

Barriga, A. Q., Morrison, E. M., Liau, A. K., & Gibbs, J. C. (2001). Moral cognition: Explaining the gender difference in antisocial behavior. *Merrill-Palmer Quarterly*, 47(4), 532–562. https://doi.org/10.1353/mpq.2001.0020

Beerthuizen, M. G. C. J., & Brugman, D. (2013). Moral value evaluation: A neglected motivational concept in externalizing behaviour research. In K. Heinrichs, F. Oser, & T. Lovat (Eds.), *Handbook of moral motivation: What makes people act morally right?* (pp. 365–384). Sense Publishers.

Bjärehed, M., Thornberg, R., & 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

Bjärehed, M., Thornberg, R., Wänström, L., & Gini, G. (2021). Moral disengagement and verbal bullying in early adolescence: A three-year longitudinal study. *Journal of School Psychology*, 84, 63–73. https://doi.org/10.1016/j.jsp.2020.08.006

Blasi, A. (2009). The moral functioning of mature adults and the possibility of fair moral reasoning. In D. Narvaez & D. K. Lapsley (Eds.), *Personality, identity, and character. Explorations in moral psychology* (pp. 396–440). Cambridge University Press.

Brugman, D., Beerthuizen, M. G. C. J., Helmond, P. E., Basinger, K., & Gibbs, J. C. (2023). Assessing moral judgment maturity using the Sociomoral Reflection Measure – Short Form

Objective (SRM-SFO). *European Journal of Psychological Assessment*, *39*(2), 85–95. https://doi.org/10.1027/1015-5759/a000680

Byrne, B. M. (2016). *Structural equation modeling with AMOS. Basic concepts, applications, and programming* (3rd ed.). Routledge.

Carlo, G. (2014). The development and correlates of prosocial moral behaviors. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 208–234). Psychology Press.

Carlo, G., Eisenberg, N., & Knight, G. P. (1992). An objective measure of adolescents' prosocial moral reasoning. *Journal of Research on Adolescence*, *2*(4), 331–349. https://doi.org/10.1207/S15327795JRA0204_3

Casper, D. M., Meter, D. J., Card, N. A., & Rose, C. A. (2015). Addressing measurement issues related to bullying involvement. *School Psychology Review*, *44*(4), 353–371. https://doi.org/10.17105/spr-15-0036.1

DiBiase, A. M., Gibbs, J. C., Potter, G. B., & Spring, B. (2005). *EQUIP for educators. Teaching youth (Grades 5–8) to think and act responsibly*. Research Press.

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

Furlong, M. J., Sharkey, J. D., Felix, E. D., Tanigawa, D., & Greif Green, J. (2010). Bullying assessment. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 329–345). Routledge.

Gibbs, J. C. (2019). *Moral development & reality: Beyond the theories of Kohlberg, Hoffman, and Haidt* (4th ed.). Oxford University Press.

Gibbs, J. C., Basinger, K. S., & Fuller, D. (1992). *Moral maturity: Measuring the development of sociomoral reflection*. Erlbaum.

Gibbs, J. C., Basinger, K. S., Grime, R. L., & Lee, D. (2019). Moral judgment maturity: From clinical to standard measures. In S. J. Lopez & M. W. Gallagher (Eds.), *Handbook of positive psychological assessment* (2nd) ed., pp. 333–346). American Psychological Association Books.

Gibbs, J. C., Basinger, K. S., Grime, R. L., & Snarey, J. R. (2007). Moral judgment development across cultures: Revisiting Kohlberg's universality claims. *Developmental Review*, *27*(4), 443–500. https://doi.org/10.1016/j.dr.2007.04.001

Gibbs, J. C., Clark, P. M., Joseph, J. A., Green, J. L., Goodrick, T. S., & Makowski, D. G. (1986). Relations between moral judgment, moral courage, and field Independence. *Child Development*, *57*(1), 185–191. https://doi.org/10.2307/1130650

Gini, G. (2006). Social cognition and moral cognition in bullying: What's wrong? *Aggressive Behavior*, *32*(6), 528–539. https://doi.org/10.1002/ab.20153

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

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*(1), 56–68. https://doi.org/10.1002/ab.21502

Goethem, A. A. J., van Hoof, A., van Aken, M. A. G., Raaijmakers, Q. A. W., Boom, J., & Orobio de Castro, B. (2012). The role of adolescents' morality and identity in volunteering. Age and gender differences in a process model. *Journal of Adolescence*, *35*(3), 509–520. https://doi.org/10.1016/j.adolescence.2011.08.012

Green, J. G., Felix, E. D., Sharkey, J. D., Furlong, M. J., & Kras, J. E. (2013). Identifying bully victims: Definitional versus behavioral approaches. *Psychological Assessment*, *25*(2), 651–657. https://doi.org/10.1037/a0031248

Haynie, D. L., Nabsel, T., Eitel, P., Crump, A. D., Saylor, K., Yu, K., & Simons-Morton, B. (2001). Bullies, victims, and bully/victims. Distinct groups of at-risk youth. *The Journal of Early Adolescence*, *21*(1), 29–49. https://doi.org/10.1177/0272431601021001002

Jones, L. M., Mitchell, K. J., & Turner, H. A. (2015). Victim reports of bystander reactions to in-person and online peer harassment: A national survey of adolescents. *Journal of Youth and Adolescence*, *44*(12), 2308–2320. https://doi.org/10.1007/s10964-015-0342-9

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*(4), 450–462. https://doi.org/10.1002/ab.21833X

Kohlberg, L. (1984). *The psychology of moral development*. Harper & Row.

Kyriakides, L., Kaloyirou, C., & Lindsay, G. (2006). An analysis of the Revised Olweus Bully/Victim Questionnaire using the Rasch measurement model. *British Journal of Educational Psychology*, *76*(4), 781–801. https://doi.org/10.1348/000709905X53499

Leenders, I., & Brugman, D. (2005). The moral/non-moral domain shift in relation to delinquent behaviour in adolescents. *British Journal of Developmental Psychology*, *23*(1), 65–79. https://doi.org/10.1348/026151004X20676

Levasseur, C., Desbiens, N., & Bowen, F. (2017). Moral reasoning about school bullying in involved adolescents. *Journal of Moral Education*, *46*(2), 158–176. https://doi.org/10.1080/03057240.2016.1268113

Lind, G. (2002). *Ist Moral lehrbar? Ergebnisse der modernen moralpsychologischen Forschung* [Can morality be taught? Research findings from modern moral psychology] (2nd ed.). Logos Verlag.

Lourenço, O. (2014). Domain theory: A critical review. *New Ideas in Psychology*, *32*(1), 1–17. https://doi.org/10.1016/j.newideapsych.2013.08.001

Mazzone, A., Camodeca, M., & Salmivalli, C. (2016). Interactive effects of guilt and moral disengagement on bullying, defending and outsider behavior. *Journal of Moral Education*, *45*(4), 419–432. https://doi.org/10.1080/03057240.2016.1216399

Nas, C., Brugman, D., & Koops, W. (2008). Measuring self-serving cognitive distortions with the How I Think questionnaire. *European Journal of Psychological Assessment*, *24*(3), 181–189. https://doi.org/10.1027/1015-5759.24.3.181

Nucci, L. P. (2001). *Education in the moral domain*. Cambridge University Press.

Obermann, M. L. (2011). Moral disengagement in self-reported and peer-nominated school bullying. *Aggressive Behavior*, *37*(2), 133–144. https://doi.org/10.1002/ab.20378

O'Connor, E. (2016). The use of 'Circle of Friends' strategy to improve social interactions and social acceptance: A case study of a child with Asperger's Syndrome and other associated needs. *Support for Learning*, *31*(2), 138–147. https://doi.org/10.1111/1467-9604.12122

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

Olweus, D. (1996). *The revised Olweus bully/victim questionnaire*. Research Center for Health Promotion (HEMIL Center), University of Bergen.

Owens, L., Skrzypiec, G., & Wadham, B. (2014). Thinking patterns, victimisation and bullying among adolescents in a South Australian metropolitan secondary school. *International Journal of Adolescence and Youth*, *19*(2), 190–202. https://doi.org/10.1080/02673843.2012.719828

Paciello, M., Fida, R., Cerniglia, L., Tramontano, C., & Cole, E. (2013). High cost helping scenario: The role of empathy, prosocial reasoning and moral disengagement on helping behavior. *Personality & Individual Differences*, *55*(1), 3–7. https://doi.org/10.1016/j.paid.2012.11.004

Patrick, R. P., Rote, W. M., Gibbs, J. C., & Basinger, K. S. (2019). Defend, stand by, or join in? The relative influence of moral identity, moral judgment, and social efficacy on adolescents' bystander behaviors in bullying situations. *Journal of Youth and Adolescence*, *48*(10), 2051–2064. https://doi.org/10.1007/s10964-019-01089-w

Potter, G. B., Gibbs, J. C., Robbins, M., & Langdon, P. E. (in press). *EQUIP for high-risk adolescents: A comprehensive cognitive-behavioral program for high-risk adolescents in community and residential agencies* (rev. and expanded ed.). Research Press.

Pozzoli, T., Gini, G., & Thornberg, R. (2017). Getting angry matters: Going beyond perspective taking and empathic concern to understand bystanders' behavior in bullying. *Journal of Adolescence*, *61*(1), 87–95. https://doi.org/10.1016/j.adolescence.2017.09.011

Ribeaud, D., & Eisner, M. (2010). Are moral disengagement, neutralization techniques, and self-serving cognitive distortions the same? Developing a unified scale of moral neutralization of aggression. *International Journal of Conflict and Violence*, *4*(2), 298–315. urn:nbn:de:0070-ijcv-20102101

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 on online and offline bullying. *Psychosocial Interventions*, *30*(2), 85–93. https://doi.org/10.5093/pi2020a21

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., Lagerspetz, K., Björkqvist, K., Östermalm, K., & Kaukiainen, A. (1996). Participant roles and their relations to social status within the group. *Aggressive Behavior*, *22*(1), 1–15. https://doi.org/10.1002/(SICI)1098-2337(1996)22:1<1::AID-AB1>3.0.CO;2-T

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. (2014). *Understanding school bullying: Its nature and prevention strategies*. Sage.

Solberg, M. E., & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. *Aggressive Behavior*, *29*(3), 239–268. https://doi.org/10.1002/ab.10047

Stams, G. J. M. M., Brugman, D., Dekovic, M., Van Rosmalen, L., van der Laan, P., & Gibbs, J. C. (2006). The moral judgment of juvenile delinquents: A meta-analysis. *Journal of Abnormal Child Psychology*, *34*(5), 697–713. https://doi.org/10.1007/s10802-006-9056-5

Stein, J., & Jimerson, S. (2020). An examination of bullying roles and moral disengagement using latent analysis. *Journal of School Violence*, *19*(4), 485–498. https://doi.org/10.1080/15388220.2020.1738943

Sullivan, G., Cleary, M., & Sullivan, K. (2003). *Bullying in secondary schools*. Sage.

Sutton, J., Smith, P. K., & Swettenham, J. (1999). Social cognition and bullying: Social inadequacy or skilled manipulation? *British Journal of Developmental Psychology*, *17*(3), 435–450. https://doi.org/10.1348/026151099165384

Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review*, *22*(6), 664–670. https://doi.org/10.2307/2089195

Thornberg, R., & Jungert, T. (2013). Bystander behavior in bullying situations: Basic moral sensitivity, moral disengagement and defender self-efficacy. *Journal of Adolescence*, *36*(3), 475–483. https://doi.org/10.1016/j.adolescence.2013.02.003

Thornberg, R., Pozzoli, T., Gini, G., & Hong, J. S. (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

Tisak, M. S. (1995). Domains of social reasoning and beyond. In R. Vasta (Ed.), *Annals of Child Development* (Vol. 11, pp. 95–130). Jessica Kingsley Publishers.

Turiel, E. (2008). The development of children's orientations toward moral, social, and personal orders: More than a sequence in development. *Human Development*, *51*(1), 21–29. https://doi.org/10.1159/000113154

van der Meulen, K., Brugman, D., Hoyos, O. L., & Delbarrio, C. (2019). Peer bullying, self-serving cognitive distortions and school moral climate perception in Spanish and Dutch secondary school students. *Infancia Y Aprendizaje, Journal for the Study of Education and Development*, *42*(2), 337–373. https://doi.org/10.1080/02103702.2019.1578923

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

van Noorden, T. H., Haselager, G. J., Cillessen, A. H., & Bukowski, W. M. (2015). Empathy and involvement in bullying in children and adolescents: A systematic review. *Journal of Youth and Adolescence*, *44*(3), 637–657. https://doi.org/10.1007/s10964-014-0135-6

von Grundherr, M., Geisler, A., Stoiber, M., & Schäfer, M. (2017). School bullying and moral reasoning competence. *Social Development*, *26*(2), 278–294. https://doi.org/10.1111/sode.12199