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Bystander behaviour in peer victimisation: moral disengagement, defender self-efficacy and student-teacher relationship quality

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ABSTRACT
The aim of this study was to examine how different bystander roles in peer victimisation situations relate to moral disengagement, defender self-efficacy, and student-teacher relationship quality. Self-reported survey data were collected from 333 middle and junior high school students (10–15 years of age) from four schools in Sweden. Random intercept model analyses of factor scores revealed that, when witnessing peer victimisation, students high in moral disengagement and low in defender self-efficacy were more inclined to act as reinforcers or outsiders, and that students high in defender self-efficacy and student-teacher relationship quality were more inclined to act as defenders. Furthermore, examining these relationships within and between classes revealed that reinforcer and outsider behaviours were more common among students who, compared to their classmates, were higher in moral disengagement and lower in defender self-efficacy, whereas defending was more common among students who, compared to their classmates, were higher in defender self-efficacy. The results enrich the knowledge of factors related to different bystander behaviours, which has potential implications for prevention and intervention work.

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KEYWORDS
Peer victimisation; bystander behaviour; moral disengagement; defender self-efficacy; student-teacher relationship quality

Introduction
Peer victimisation here refers to the experience among children of being a target of any form (e.g. physical, verbal, and relational) of harmful behaviour perpetrated by other children (see also Finkelhor, Turner, and Hamby 2012; Hawker and Boulton 2000). Such harmful behaviours have mostly been studied under the label of bullying. As Finkelhor and colleagues (2012) point out, however, bullying is a subset of peer victimisation involving repeated harmful behaviours carried out with an intention to harm within the context of a power imbalance. Thus, by focusing too narrowly on bullying we exclude many harmful behaviours that can have serious negative consequences for those being victimised. In line with Noret, Hunter, and Rasmussen (2018), we have used the term
Peer victimisation to encompass both peer victimisation and bullying since we treat it as a broader and more inclusive concept than bullying (see also Finkelhor et al. 2012).

Peer victimisation is a widespread phenomenon both in Sweden (Swedish National Agency for Education 2013), in which the current study is located, and elsewhere (Modecki et al. 2014). Among researchers, it has increasingly been conceptualised as a socially complex phenomenon. Therefore, current research seeks to incorporate various social, institutional, and societal factors in order to understand the nature of peer victimisation and bullying (Hong and Espelage 2012). In particular, the peer group plays a crucial role, because peer victimisation episodes most often occur in the presence of witnesses who are themselves not directly involved, at least not initially, in the situation (Atlas and Pepler 1998; O’Connell, Pepler, and Craig 1999). These witnesses are often referred to as bystanders and constitute the third party in the so-called ‘bullying triangle’ (McNamee and Mercurio 2008), in addition to the bully and the victim. Bystanders do not, however, constitute a homogenous group where each member acts in the same way; they can assume different social roles (Salmivalli 1999; Salmivalli et al. 1996). According to the participant role approach (Salmivalli et al. 1996), there are four main social roles that bystanders can assume: assistants, who join in with the bully; reinforcers, who encourage or incite the bully; outsiders, who remain passive or stay outside bullying situations; and defenders, who help or support the victim.

Within a given social context, such as a classroom or a school, the prevalence of peer victimisation is related to which bystander roles the students assume. Specifically, peer victimisation has been shown to be more common in school contexts with many reinforcers and fewer defenders (Denny et al. 2015; Kärnä et al. 2010; Salmivalli, Voeten, and Poskiparta 2011; Thornberg and Wänström. 2018). However, while there is a growing body of empirical research on the correlates of these bystander roles (e.g. Barchia and Bussey 2011a; Gini, Pozzoli, and Bussey 2015; Salmivalli 2010; Pozzoli and Gini 2010; Salmivalli 2010), we still need to fully grasp the complex pattern of individual and interpersonal factors that can explain different bystander students’ reactions to peer victimisation episodes. Mainly drawing on the social-cognitive theory of human agency (Bandura 1986), the main purpose of this study was to expand our knowledge of factors that are associated with how students react when they witness peer victimisation events. The examined factors were moral disengagement, defender self-efficacy, and student-teacher relationship quality of the bystander, which will be addressed next. The current study extends prior work by introducing student-teacher relationship quality as a possible contextual factor that might be associated with bystander behaviour, and by focusing on the bystander (rather than the bullying) role.

**Moral disengagement**

*Moral disengagement* refers to a set of self-regulatory socio-cognitive processes that can be activated to deal with incongruences between individuals’ moral standards and their actual conduct (Bandura 1999). Moral disengagement reduces or inhibits discomforting self-sanction (e.g. guilt, remorse, or shame) associated with reprehensible acts. Bandura has described eight mechanisms, divided into four broader categories or loci, upon which the disengagement can be centred (see Bandura 2002, 2016 for detailed reviews). The first category is labelled ‘cognitive restructuring (the behavioural locus) which holds three
potential disengagement mechanisms: *moral justification* (portraying the conduct as warranted), *euphemistic labelling* (labelling the conduct in a way that makes it sound less negative), and *advantageous comparison* (comparing the conduct to an even worse conduct). The second category regards minimising one’s agentive role (the agency locus), through any of the mechanisms *displacement of responsibility* (holding someone else responsible for the conduct) or *diffusion of responsibility* (diluting one’s responsibility due to the involvement of others). The third category (the effects locus) deals with *disregard or distortion of consequences* (minimising, ignoring, or misconstruing the consequences of the conduct). The fourth and final category consists of victim attribution (the victim locus), either by *dehumanisation* (stripping the victim of human qualities) or *attribution of blame* (blaming the victim and claiming that he or she deserved the treatment).

High levels of moral disengagement have been linked to various aggressive behaviours among children and youths (Gini, Pozzoli, and Hymel 2014), including bullying (e.g. Gini 2006; Thornberg and Jungert 2014). Importantly, the link between moral disengagement and bullying remains significant even after controlling for other predictors (e.g. aggression efficacy, rule perception, or parenting) of such behaviour (Barchia and Bussey 2011b; Caravita, Gini, and Pozzoli 2012; Pelton et al. 2004). Comparatively less attention, however, has been given to possible links between moral disengagement and bystander behaviours in peer victimisation situations. Peer victimisation is more likely to occur when bystanders, for example, perceive the victim as someone deserving of bullying, perhaps because of personal characteristics; minimise the consequences of the aggression; or diffuse responsibility within the peer group (Hymel et al. 2010; Pozzoli, Gini, and Vieno 2012). Conversely, the act of defending the victim requires an assumption of personal responsibility for the intervention and the recognition that the peer who is victimised does not deserve to be treated in that way (e.g. Pozzoli and Gini 2010). Therefore, moral disengagement is likely to be an important process to explain not only aggressive behaviour, but also bystander reactions.

A few studies have consistently shown that moral disengagement is indeed positively associated with pro-aggressive behaviour (e.g. Gini 2006; Pozzoli, Gini, and Vieno 2012) and negatively associated with defender behaviour (e.g. Doramajian and Bukowski 2015; Gini 2006; Pozzoli, Gini, and Thornberg 2016; Thornberg and Jungert 2013a; Thornberg et al. 2015). Conversely, findings on the relationship between moral disengagement and outsider behaviour are mixed, with both positive (Doramajian and Bukowski 2015; Thornberg et al. 2017), negative (Gini 2006; Thornberg and Jungert 2013a), and even null (Gini, Pozzoli, and Bussey 2015) associations found. Note also that both Gini (2006) and Obermann (2011) found outsiders to have higher levels of moral disengagement than defenders, although this only held for so-called ‘unconcerned bystanders’ as opposed to ‘guilty bystanders’ in the case of Obermann. Based on these previous findings, we hypothesised a positive association between moral disengagement and reinforcer behaviour and, conversely, a negative association between moral disengagement and defender behaviour. As reviewed above, there have been mixed findings on the association between outsider behaviour and moral disengagement. Hence, no specific directional hypothesis was put forth for this association.
**Defender self-efficacy**

Self-efficacy is the belief in one’s ability to carry out successfully the actions needed to reach a certain goal (Bandura 1997). According to Bandura’s social cognitive theory (Bandura 1986), people’s self-efficacy regarding a certain action is linked to their motivation and behaviour. In the case of peer victimisation, even if bystanders would like to defend the victim, it may thus be that they will remain passive (i.e. take on the outsider role) unless they feel confident of succeeding, or in other words are high in defender self-efficacy. Students low in defender self-efficacy might fail to defend victims for several reasons, including (a) lack of knowledge about what to do; (b) thoughts of being victimised when intervening; or (c) thoughts of causing an even worse situation for the victim (see also Gini et al. 2008).

Recent research has indeed found defender self-efficacy to be positively associated with defender behaviour (e.g. Barchia and Bussey 2011a; Pronk et al. 2013; Salmivalli 2010; Pöyhönen, Juvonen, and Salmivalli 2012) and negatively associated with outsider behaviour (Thornberg and Jungert 2013a; Thornberg et al. 2017). Similarly, social self-efficacy – a more general self-perception of being competent in social situations – has been positively linked to defender behaviour (Cappadocia et al. 2012; Gini et al. 2008) and negatively linked to outsider behaviour (Gini et al. 2008). In line with these findings, we hypothesised defender self-efficacy to be positively associated with defender behaviour and negatively associated with outsider behaviour.

**Student-teacher relationship quality**

Beyond individual dimensions, such as tendency to morally disengage and self-efficacy beliefs about defending, bystander reactions to peer victimisation incidents – like any other social behaviour – may also be related to contextual factors, including quality of interpersonal relationships with significant others in that context (Bandura 1986). Relationships are indeed social processes that influence and regulate social behaviour and over time, individual outcomes (Pianta 2006). Teachers can be influential agents in youths’ development and can act as social referents for personal and social evaluations, i.e. adolescents often use cues from relationships with teachers to appraise themselves, others and the surrounding social context (e.g. Chang 2003; Ladd et al. 2012; McAuliffe, Hubbard, and Romano 2009).

In the present study, we focused on the concept of student-teacher relationship quality, which refers to the degree of caring, warm, supportive and respectful student-teacher relationships and interaction patterns. In contrast to the two individual factors presented above, student-teacher relationships belong to the so-called microsystem (Bronfenbrenner 1994). Focusing on classroom microsystem factors is fundamental in order to gain a richer understanding of peer victimisation (Hong and Espelage 2012; Orpinas and Horne 2006), and it is also in line with social-cognitive theory, which emphasises that human functioning is a product of the interplay of personal, behavioural, and environmental factors (Bandura 1986, 1997).

Previous research has demonstrated a significant link between the quality of student-teacher relationships and peer victimisation prevalence. There are fewer victimisation and aggression events in school contexts characterised by more positive student-teacher
relationships (Henry et al. 2011; Murray-Harvey and Slee 2010; Raskauskas et al. 2010; Richard, Schneider, and Mallet 2011; Wang et al. 2015; but see null results in Elsaesser, Gorman-Smith, and Henry 2013; Wang et al. 2016). Furthermore, Wang et al. (2015) found that bullies have poorer relationships with their teachers compared to bystanders in general. Bystanders, however, were not divided into sub-categories but were simply defined as students who witnessed bullying without having bullied others or having been bullied themselves. To our knowledge, only one study (Jungert, Piroddi, and Thornberg 2016) has yet investigated how students’ perceptions of their individual relationships with their teachers are linked to bystander behaviours in peer victimisation situations. They found that warm student-teacher relationships were positively associated with defending victims and that conflictual student-teacher relationships were negatively associated with passive bystanding as well as with pro-bullying behaviour (mediated by extrinsic motivation). Furthermore, student-teacher relationship quality has been shown to be negatively associated with peer aggression (Henry et al. 2011; Raskauskas et al. 2010; Richard, Schneider, and Mallet 2011) and positively associated with prosocial behaviour (Jennings and Greenberg 2009; Raskauskas et al. 2010). Based on these findings, we hypothesised that student-teacher relationship quality was positively associated with defending behaviour and negatively associated with reinforcer behaviour.

**Aim of the present study**

The aim of the present study was to examine the role of moral disengagement, self-efficacy, and student-teacher relationship quality in bystander behaviour in peer victimisation situations. Based on tenets of social-cognitive theory and previous research, we had several hypotheses. First, we hypothesised moral disengagement to be positively associated with reinforcer behaviour and negatively associated with defender behaviour. Second, we hypothesised that defender self-efficacy would be positively associated with defender behaviour and negatively associated with outsider behaviour. Third, we hypothesised that student-teacher relationship quality would be positively associated with defender behaviour and negatively associated with reinforcer behaviour. Other possible associations between the correlates and bystander behaviours were examined in an exploratory fashion.

Because social-cognitive theory (Bandura 1997, 2016) emphasises that behaviours are produced by interdependent associations between several factors, we also examined possible interaction effects. Caring, warm and supportive student–teacher relationships have been linked to less aggressive and greater prosocial behaviours. Therefore, we hypothesised that higher student–teacher relationship quality might function as a protective relational factor, weakening the positive relationship between moral disengagement and reinforcer behaviour and strengthening the negative relationship between moral disengagement and defender behaviour. Moreover, we hypothesised that students with low moral disengagement would be less inclined to take an outsider role if they displayed high defender self-efficacy, whereas defender self-efficacy would not play a crucial role in outsider behaviours if students displayed high moral disengagement. Other possible interactions between the correlates were examined in an exploratory fashion.

In addition, we included gender and age as control variables because previous research has found that the frequency of different bystander behaviours may differ between genders.
and ages. Regarding gender, we expected girls to be more inclined than boys to defend victims, whereas boys would be more inclined than girls to reinforce peer victimisation (Pöyhönen, Juvonen, and Salmivalli 2010; Salmivalli and Voeten 2004; Thornberg and Jungert 2013a). As for age, we expected defender behaviour to be more common among younger students (Pöyhönen, Juvonen, and Salmivalli 2010; Salmivalli and Voeten 2004).

**Method**

**Participants**

We invited 547 students (290 girls, 257 boys) to participate in the study on a voluntarily basis. A member of the research team visited the school classes and informed the students about the study. Those students who wanted to participate were asked to take home a letter of parental consent to be signed and returned to school. Active parental consent was obtained for all participating students. Two hundred and fourteen students did not participate, resulting in a participant rate of 61%, due to different reasons: lack of parental consent (185 students), insufficient language or reading skills as evaluated by their teachers (8 students), and absence on the day of data collection (21 students). The remaining sample consisted of 333 students (207 girls, 126 boys, $M_{\text{age}} = 12.62$ years, $SD = 1.35$, age range: 10–15 years) in fourth to eighth grades from 23 classes in four middle and junior high schools. Sixteen students left all items unanswered on at least one of the study scales and were therefore excluded from the final sample. In relation to the original sample of 547 students, there was a higher participant rate among girls (71%) than among boys (49%), and for younger students compared to older students (from 72% in fourth grade to 41% in eighth grade).

In Sweden, students typically begin middle school (fourth grade) the year they turn 10, junior high school (seventh grade) the year they turn 13, and they graduate from junior high school (finishing ninth grade) the year they become 16 years old. Both in middle and junior high school, Swedish students remain with the same peers for much of the school day. However, older students have more subject-specific classrooms, and thereby to a higher extent have different teachers than do younger students.

Socioeconomic data were not gathered on an individual level. However, the sample was drawn from middle-class neighbourhoods in towns with fewer than 20,000 inhabitants. Eighty-eight percent of the sample, compared with 78% of the whole population (Swedish National Agency for Education 2016), had a Swedish ethnic background (i.e. they were born in Sweden with at least one Swedish-born parent).

**Procedure**

Students answered a web-based questionnaire on tablets in their ordinary classroom settings in the presence of a member of the research team. He or she explained the study procedure, assured students of confidentiality, and assisted the participants who needed help (e.g. gave reading support and clarified particular items or words of the questionnaire). The average completion time of the questionnaire was about 30 minutes.
Measures

Bystander behaviours
We developed a three-dimensional, 12-item scale to measure students’ bystander behaviours in peer victimisation situations. For the purposes of this study, the scale was expanded from the 8-item Student Bystander Behaviour Scale (SBBS), which previously demonstrated good factorial validity and reliability (Thornberg and Jungert 2013a). The scale started with the following question: ‘Try to remember situations in school in which you have seen one or several students harm another student (for example teasing, ridiculing, threatening, beating or ostracising). What do you usually do?’ Then followed the 12 items: two of them depicted reinforcer behaviour (e.g. ‘I laugh and cheer the peer victimisers on’), five items depicted defender behaviour (e.g. ‘I help the victimised student’), and five items depicted outsider behaviour (e.g. ‘I just walk away’). Students indicated how well the described behaviours corresponded with their own acting as bystanders on a four-point scale (1 = strongly disagree to 4 = strongly agree). Because we intended to measure participants’ self-reports of how they typically responded when they had witnessed peer victimisation, the items were provided on an ‘agree–disagree’ scale, as opposed to a ‘never–always’ scale. The latter type of wording might increase the risk of confounding with the perceived frequency of witnessing peer victimisation (a never–always scale was used in the original SBBS but also problematised by Thornberg and Jungert 2013a on these terms).

Research on bystander roles in bullying originally categorised bystanders into fixed social roles (Salmivalli et al. 1996). However, more recent research has found that these roles may vary within and between peer victimisation episodes depending on the social context (i.e. Gumpel, Zioni-Koren, and Bekerman 2014; Huitsing and Veenstra 2012), making it more appropriate to view the roles as situated on a continuum (Levy and Gumpel 2017). During a certain peer victimisation episode a student may defend the victim or remain passive, while in another setting he or she may reinforce the victimiser. Therefore, we considered the bystander roles as fluid and did not categorise participants as belonging to one of the roles.

As all our response scales were ordered categorical, we consequently used diagonal weighted least squares (DWLS, see Li 2016) robust estimation for estimating the confirmatory factor analysis (CFA) models. For our bystander scale, the CFA supported the three-dimensional solution for our sample (CFA: $\chi^2(51) = 183.854$, $p < .001$, CFI$_{\text{robust}} = .990$, RMSEA$_{\text{robust}} = .065$; 90% CI [.06, .08]). Cronbach’s alphas were .80 and .81 for defender and outsider behaviour, respectively. As the reinforcer scale was constituted by only two items, the Spearman–Brown reliability estimate was used instead (Eisinga, Grotenhuis, and Pelzer 2013) and was calculated as .64.

Moral disengagement
Moral disengagement was measured by the 18-item Moral Disengagement in Bullying Scale (MDBS) that has been previously validated by Thornberg and Jungert (2013b, 2014). MDBS starts with the main question, ‘How well do you agree with the following statements?’ followed by the 18 items. Example items include ‘If my friends begin to bully a classmate, I can’t be blamed for being with them and bullying that person too’, ‘People who get teased don’t really get too sad about it’, and ‘If you can’t be like everybody else,
you have to blame yourself if you get bullied.’ Students rated each item on a seven-point scale (1 = *strongly disagree* to 7 = *strongly agree*). The items in MDBS cover all eight mechanisms but due to exploratory factor analysis (EFA), dehumanisation and attribution of blame were merged into one factor, resulting in a seven-factor solution (Thornberg and Jungert 2013b), also supported by a follow-up CFA (Thornberg and Jungert 2014), and can be used to measure moral disengagement as a global construct (Thornberg et al. 2015) as well as the seven mechanisms of it (Thornberg and Jungert 2014). A higher order CFA supported the global construct of moral disengagement as a general factor and the seven mechanisms of moral disengagement as first-order factors for our sample (CFA: $\chi^2(128) = 356.135$, $p < .001$, $\text{CFI}_{\text{robust}} = .987$, $\text{RMSEA}_{\text{robust}} = .056$; 90% CI [.05, .06]). Cronbach’s $\alpha$ of the MDBS was .87.

**Defender self-efficacy**

A 5-item scale (Thornberg et al. 2017) measured students’ belief in their ability to intervene successfully in victimisation situations, i.e. their defender self-efficacy. The students were asked to estimate how true the following statements were, starting with ‘I feel that I’m very good at . . .’ which was then followed by the five items (e.g. ‘. . . telling off/standing up to students who are mean towards another student’ and ‘. . . helping students who are bullied’). As in the moral disengagement scale, the response options for each item were on a seven-point scale (1 = *strongly disagree* to 7 = *strongly agree*). The unidimensionality of the scale was confirmed (CFA: $\chi^2(5) = 9.61$, $p = .087$, $\text{CFI}_{\text{robust}} = .999$, $\text{RMSEA}_{\text{robust}} = .026$; 90% CI [.00, .05]). Cronbach’s $\alpha$ was .87.

**Student-teacher relationship quality**

A 9-item scale was developed to measure student-teacher relationship quality because no previously validated scales were available. Specifically, items assessed students’ perceptions of the quality of their individual relationships with their teachers. Example items include ‘My teachers really care about me’, ‘My teachers like me’, and ‘My teachers listen to me when I have a problem). Some items were inverted before creating the index variable so that high scores corresponded to positive relationships. Students selected from among alternatives on a four-point scale (1 = *strongly disagree* to 4 = *strongly agree*). The unidimensionality of the scale was confirmed (CFA: $\chi^2(27) = 72.60$, $p < .001$, $\text{CFI}_{\text{robust}} = .999$, $\text{RMSEA}_{\text{robust}} = .042$; 90% CI [.03, .05]). Cronbach’s $\alpha$ was .92.

**Control variables: age and gender**

At the end of the questionnaire, participants indicated their age and gender. In the analyses, boys were coded 0 and girls were coded 1.

**Data analysis**

Separate random intercept model analyses (see Bickel 2007) were performed for each of the three bystander roles. In all analyses, the regression intercepts were allowed to vary between classes. For the composite variables (i.e. moral disengagement, defender self-efficacy, student-teacher relationship quality, and the three bystander roles), we used factor scores computed from the confirmatory factor analyses described above, in order to give more weight to the items with higher loadings.
In model 1, the control variables gender and age were entered as predictors. Then the main predictors moral disengagement (MD), defender self-efficacy (DSE) and student-teacher relationship quality (STRQ) were added in model 2. Model 2 can be written as

\[ y_{ij} = \alpha_j + \beta_1 GENDER_{ij} + \beta_2 AGE_{ij} + \beta_3 MD_{ij} + \beta_4 DSE_{ij} + \beta_5 STRQ_{ij} + \epsilon_{ij} \]

where \( y_{ij} \) is the response for the \( i \)th child in the \( j \)th class, \( \alpha_j \) is the intercept for the \( j \)th class, \( \beta_1 - \beta_5 \) are the slopes for the predictors, and \( \epsilon_{ij} \) is the error term for the \( i \)th child in the \( j \)th class. Finally, interaction terms among the main predictors were included in model 3. All predictors, except for gender, were grand-mean centred.

Effect sizes were computed as \( b_k' = b_k \times s_{xk} / s_y \) where \( b_k \) is the unstandardised coefficient for variable \( k \), \( s_{xk} \) is the sample standard deviation for the explanatory variable \( k \), and \( s_y \) is the sample standard deviation for the dependent variable. We estimated the explained variance of each model using the conditional \( R^2 \) statistic appropriate for random intercept models (Nakagawa and Schielzeth 2013).

Results from analyses of the above models will indicate whether there are any associations between the predictors (moral disengagement, defender self-efficacy, and student-teacher relationship quality) and the different types of bystander behaviours. They will not, however, indicate whether the associations hold between classes, within classes, or both. We therefore conducted a second set of analyses in which each of the predictors were split into a between variable and a within variable. The between variable constituted the class mean and the within variable constituted the difference between each student’s individual score and his/her class mean. In model 4, we thus included the between and within variables for each main predictor, together with the control variables gender and age. Model 4 can be written as

\[
\begin{align*}
y_{ij} = & \alpha_j + \beta_1 GENDER_{ij} + \beta_2 AGE_{ij} + \beta_3 MD_{ij} + \beta_4 DSE_{ij} + \beta_5 STRQ_{ij} + \\
& \beta_6 (DSE_{ij} - DSE_{ij}) + \beta_7 (STRQ_{ij} - STRQ_{ij}) + \epsilon_{ij}
\end{align*}
\]

where \( y_{ij} \) is the response for the \( i \)th child in the \( j \)th class, \( \alpha_j \) is the intercept for the \( j \)th class, \( \beta_1 - \beta_8 \) are the slopes for the predictors, and \( \epsilon_{ij} \) is the error term for the \( i \)th child in the \( j \)th class. In model 5 we added interaction terms. Age was grand-mean centred, the between variables were centred around their respective overall means, and the within variables were class-mean centred.

**Results**

**Descriptive statistics and correlations**

Descriptive statistics and correlations, based on the original variables, for the study variables are presented in Table 1. We interpreted the significant correlation coefficients from .1 to .29 as weak, from .3 to .49 as moderate, and above .5 as strong (Cohen 1988). Moral disengagement was moderately positively correlated with reinforcer behaviour, weakly positively correlated with outsider behaviour, and weakly negatively correlated with defender behaviour. Defender self-efficacy displayed a strong positive correlation with defender behaviour and a moderate negative correlation with outsider behaviour. Student-teacher relationship quality was weakly negatively correlated with reinforcer behaviour and weakly positively correlated with defender behaviour. Among the
bystander roles, outsider behaviour had a weak positive correlation with reinforcing and a strong positive correlation with defending. Finally, gender and age were significantly correlated to a number of the other variables. However, all associations were weak, with the exception of the moderate negative correlation between age and defender self-efficacy, indicating that older students felt less confident in defending victims of peer victimisation.

Regressions of reinforcer behaviour

Nine percent of the variance in reinforcer behaviour was between classes, as shown by the intraclass correlation (ICC) in Table 2. Reinforcer behaviour was significantly negatively associated with gender, implying that boys reported to reinforce peer aggression more than girls (model 1). Gender and age together explained 16% of the variance in reinforcer behaviour. The effect of gender remained significant, although weakened, when we included the three main predictors: moral disengagement, defender self-efficacy, and student-teacher relationship quality (model 2). In addition, age was significant in model 2, suggesting that when controlling for the main predictors, younger students reinforced peer aggression more than older students. All three main predictors showed significant relationships: reinforcer behaviour was more common among students who were high in moral disengagement, low in defender self-efficacy, and who had poorer relationships with their teachers. The predictors explained 25% of the variance in reinforcer behaviour. When interactions among the main predictors were added (model 3), student-teacher relationship quality was no longer a significant predictor. Moreover, the relation between reinforcer behaviour and moral disengagement was significantly influenced by defender self-efficacy. In particular, students who were simultaneously low in moral disengagement and high in defender self-efficacy were especially unlikely to reinforce peer aggression (see Figure 1). Model 3 explained 27% of the variance in reinforcer behaviour. Effect size calculations showed that the strongest associations were observed for the main effects of moral disengagement and defender self-efficacy.

When the main predictors were broken down into effects between and within classrooms, shown in Table 3, we only found significant effects within classrooms. In model 4, which explained 26% of the variance, reinforcer behaviour was significantly associated with gender and within-classroom levels of moral disengagement and defender self-efficacy. More specifically, reinforcer behaviour was more common among boys and among

| Measure                      | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | M     | SD    |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. Gender                    | –     | –     | –     | –     | –     | –     | –     | –     | –     | –     |
| 2. Age                       | .13*  | –     | –     | –     | 12.65 | 1.35  |       |       |       |       |
| 3. Moral disengagement       | –.23***| –.05  | –     | –     | 1.76  | .77   |       |       |       |       |
| 4. Defender self-efficacy    | –.05  | –.32***| –.10 | –     | 4.64  | 1.42  |       |       |       |       |
| 5. Student-teacher relationship| –.01  | –.19***| –.14*| .11*  | 3.38  | .57   |       |       |       |       |
| 6. Reinforcer behavior       | –.20***| –.16**| .44***| .01   | –.12* | –     | 1.13  | 0.40  |       |       |
| 7. Defender behavior        | .08   | –.23***| –.15**| .72***| .21***| –.05  | –     | 3.01  | 0.63  |       |
| 8. Outsider behavior        | –.03  | .08   | .22***| –.49***| –.11  | .21***| –.60***| –     | 1.95  | 0.68  |

N = 317; Gender (girls = 0, boys = 1); *p < .05, **p < .01, ***p < .001.
### Table 2. Results of Random Intercept Models

| Predictor       | Est | SE  | Effect size | $R^2$ | Est | SE  | Effect size | $R^2$ | Est | SE  | Effect size | $R^2$ |
|-----------------|-----|-----|-------------|-------|-----|-----|-------------|-------|-----|-----|-------------|-------|
| **Model 1**     |     |     |             |       |     |     |             |       |     |     |             |       |
| Gender          | -0.18*** | 0.05 | -0.21       | 0.19* | 0.09 | 0.12 | -0.14*      | 0.07  | -0.11 |
| Age             | -0.01  | 0.02 | -0.03       | -0.13* | 0.05 | -0.22 | 0.06        | 0.04  | 0.13 |
| **Model 2**     |     |     |             |       |     |     |             |       |     |     |             |       |
| Gender          | -0.10*  | 0.04 | -0.12       | 0.12  | 0.07 | 0.07 | -0.06       | 0.06  | -0.05 |
| Age             | -0.04*  | 0.02 | -0.14       | 0.01  | 0.02 | 0.02 | -0.03       | 0.02  | -0.06 |
| MD              | 0.30*** | 0.05 | 0.31        | -0.11 | 0.08 | -0.06 | 0.22**      | 0.07  | 0.15 |
| DSE             | -0.08*** | 0.02 | -0.22       | 0.50*** | 0.03 | 0.70 | -0.31***    | 0.03  | -0.55 |
| STRQ            | -0.06*  | 0.03 | -0.11       | 0.10*  | 0.04 | 0.09 | -0.07       | 0.04  | -0.08 |
| **Model 3**     |     |     |             |       |     |     |             |       |     |     |             |       |
| Gender          | -0.11*  | 0.04 | -0.13       | 0.12  | 0.07 | 0.07 | -0.05       | 0.06  | -0.04 |
| Age             | -0.04*  | 0.02 | -0.14       | 0.01  | 0.02 | 0.01 | -0.02       | 0.02  | -0.05 |
| MD              | 0.28*** | 0.05 | 0.28        | -0.10 | 0.08 | -0.05 | 0.22**      | 0.07  | 0.15 |
| DSE             | -0.08*** | 0.02 | -0.22       | 0.50*** | 0.03 | 0.70 | -0.31***    | 0.03  | -0.55 |
| STRQ            | -0.06  | 0.03 | -0.10       | 0.10*  | 0.04 | 0.10 | -0.08       | 0.04  | -0.09 |
| MD x DSE        | 0.09*   | 0.04 | 0.11        | -0.07 | 0.07 | -0.04 | 0.12        | 0.06  | 0.09 |
| MD x STRQ       | -0.13   | 0.07 | -0.10       | 0.04  | 0.11 | 0.02 | 0.06        | 0.10  | 0.03 |
| DSE x STRQ      | 0.02    | 0.03 | 0.03        | -0.03 | 0.04 | -0.03 | 0.05        | 0.04  | 0.06 |
| ICC             | 0.09    | 0.13 |             |       |     |     |             |       |     |     |             |       |

$Note. *p < .05, **p < .01, ***p < .001; MD = moral disengagement; DSE = defender self-efficacy; STRQ = student-teacher relationship quality; Est = unstandardized coefficient; SE = standard error; ICC = intraclass correlation coefficient. All predictors except for gender were grand mean centred.$
students who, in comparison to their classmates, were high in moral disengagement and low in defender self-efficacy. These associations remained significant in model 5, in which interactions among the within-classroom level variables were added. We also found that student-teacher relationship quality alters the association between reinforcer behaviour and moral disengagement. Those who, in comparison to their classmates, scored higher on moral disengagement and had poorer relationships with their teachers were especially inclined to reinforce peer victimisation (see Figure 2). Model 5 explained 29% of the variance in reinforcer behaviour. The strongest association was the main effect of moral disengagement within classrooms (see effect sizes).

**Regressions of defender behaviour**

Thirteen percent of the variance in defender behaviour was between classes (Table 2). As shown in Table 2, defender behaviour was significantly associated with gender and age, explaining 15% of the variance (model 1). Girls and younger students reported to defend victims of peer victimisation more than did boys and older students. When adding the main predictors, the effects of gender and age were no longer significant (model 2). Defender behaviour was more common among students who were high in defender self-efficacy and who had better relationships with their teachers. The predictors of the second model explained 53% of the variance. The main effects of model 2 remained significant when the interaction terms were included (model 3). No significant interaction effects were found. Both the second and the third model explained 53% of the variance in defender behaviour.

When the main predictors were broken down into effects between and within classrooms (see Table 3), significant effects were found for gender and within-classroom levels of defender self-efficacy (model 4). Defender behaviour was more common among girls and among students who, in comparison to their classmates, believed more in their ability to stop peer victimisation. Again, no significant interaction effects were found.

![Figure 1. Moral disengagement (MD) x defender self-efficacy (DSE); (Est = .09***).](image-url)
Table 3. Results of Random Intercept Models with Explanatory Variables Broken Down into Between- and Within-classroom Variables

| Predictor      | Reinforcer |                  |  | Defender |                  |  | Outsider |                  |
|----------------|------------|------------------|---|----------|------------------|---|-----------|------------------|
|                | Est        | SE               | R² | Est      | SE               | R² | Est       | SE               |
| Model 4        |            |                  |  |          |                  |  |           |                  |
| Gender         | -0.12**    | 0.04             | 0.26 | 0.15*    | 0.07             | 0.09 | -0.10    | 0.06             |
| Age            | -0.04      | 0.03             | -0.14 | 0.03     | 0.03             | 0.05 | -0.05    | 0.03             |
| MDₜᵣ          | 0.53       | 0.33             | 0.59 | -0.15    | 0.43             | -0.08 | 0.35     | 0.40             |
| MDᵪₜᵣ         | 0.28***    | 0.05             | 0.56 | -0.09    | 0.08             | -0.09 | 0.19**   | 0.07             |
| DSEₜᵣ          | -0.04      | 0.07             | -0.17 | 0.06     | 0.09             | 0.12 | -0.05    | 0.08             |
| DSEᵦₜᵣ         | -0.07***   | 0.02             | -0.23 | 0.49**** | 0.03             | 0.83 | -0.29*** | 0.03             |
| STRQₜᵣ          | 0.04       | 0.11             | 0.08 | 0.10     | 0.14             | 0.08 | -0.14    | 0.13             |
| STRQᵦₜᵣ         | -0.05      | 0.03             | -0.07 | 0.06     | 0.05             | 0.04 | -0.02    | 0.04             |
| Model 5        |            |                  | 0.29 |          |                  | 0.53 |           |                  |
| Gender         | -0.14**    | 0.04             | -0.16 | 0.16*    | 0.07             | 0.10 | -0.10    | 0.06             |
| Age            | -0.04      | 0.03             | -0.13 | 0.02     | 0.04             | 0.04 | -0.04    | 0.03             |
| MDₜᵣ          | 0.59       | 0.35             | 0.66 | -0.22    | 0.43             | -0.11 | 0.41     | 0.41             |
| MDᵦₜᵣ         | 0.25***    | 0.05             | 0.50 | -0.06    | 0.08             | -0.07 | 0.18*    | 0.07             |
| DSEₜᵣ          | -0.02      | 0.07             | -0.11 | 0.04     | 0.09             | 0.09 | -0.04    | 0.08             |
| DSEᵦₜᵣ         | -0.07***   | 0.02             | -0.24 | 0.49**** | 0.03             | 0.83 | -0.29*** | 0.03             |
| STRQₜᵣ          | 0.03       | 0.11             | 0.06 | 0.11     | 0.14             | 0.09 | -0.13    | 0.14             |
| STRQᵦₜᵣ         | -0.05      | 0.03             | -0.06 | 0.07     | 0.05             | 0.05 | -0.02    | 0.05             |
| MDᵦₜᵣ x DSEᵦₜᵣ | 0.06       | 0.05             | 0.06 | -0.04    | 0.08             | -0.02 | 0.11     | 0.07             |
| MDᵦₜᵣ x STRQᵦₜᵣ | -0.23***  | 0.08             | -0.16 | 0.19     | 0.12             | 0.07 | -0.04    | 0.11             |
| DSEᵦₜᵣ x STRQᵦₜᵣ | -0.01      | 0.03             | -0.03 | -0.02    | 0.05             | -0.02 | 0.01     | 0.05             |

Note. *p < .05, **p < .01, ***p < .001; MDₜᵣ, DSEₜᵣ, and STRQₜᵣ constituted class means, and MDᵦₜᵣ, DSEᵦₜᵣ, and STRQᵦₜᵣ constituted the differences between each student’s individual scores and his/her class means; Est = unstandardized coefficient; SE = standard error. Age was grand-mean centered, the between variables were centered around their respective overall means, and the within variables were class-mean centered.
Both the fourth and fifth models explained 53% of the variance in defender behaviour. Effect size calculations revealed that the strongest associations were observed for defender self-efficacy, both as the students’ individual score and as the difference between students’ class mean and their individual score.

**Regressions of outsider behaviour**

Ten percent of the variance in outsider behaviour was between classes (Table 2). Model 1, which explained 13% of the variance, revealed that outsider behaviour was significantly negatively associated with gender, implying that bystander boys reported to remain passive more than bystander girls. However, adding the main predictors made this effect decrease and become nonsignificant (model 2). Here we found that outsider behaviour was more common among students who were high in moral disengagement and low in defender self-efficacy. The predictors of the second model explained 36% of the variance in outsider behaviour. No significant interaction effects were revealed in model 3, which explained 37% of the variance.

When the main predictors were broken down into effects between and within classrooms (Table 3), significant effects were found for within-classroom levels of moral disengagement and defender self-efficacy (model 4), which were the only significant effects when the interaction terms were subsequently added (model 5). The effects imply that students with high levels of moral disengagement and low levels of defender self-efficacy, in comparison to their classmates, more often remain passive when witnessing peer victimisation. Both the fourth and fifth model explained 37% of the variance in outsider behaviour. Examining the effect sizes, it can be seen that the associations between outsider behaviour and defender self-efficacy were stronger than those between outsider behaviour and moral disengagement.

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**Figure 2.** Moral disengagement within classrooms (MDw) x student-teacher relationship quality within classrooms (STRQw); (Est = –.23*).
Discussion

Peer victimisation often occurs in the presence of bystanders. As bystanders are able to influence the course of the victimisation (e.g. Salmivalli, Voeten, and Poskiparta 2011), it is crucial to learn about underlying factors that are associated with how students behave when they witness peer victimisation events. In the current study, we examined the role of moral disengagement, defender self-efficacy, and student-teacher relationship quality in bystander behaviour in peer victimisation situations.

Our findings were, for the most part, in line with our hypotheses. Moral disengagement mechanisms protect people from discomforting feelings (e.g. guilt, remorse or shame) after having carried out reprehensible acts (Bandura 1999). Consistent with our hypothesis and previous studies (Gini 2006; Pozzoli, Gini, and Vieno 2012; Thornberg and Jungert 2013a), we found that students with higher levels of moral disengagement, both overall and in relation to their classmates, to a greater extent reinforced peer aggression. We also found two interaction effects implying (i) that students who were simultaneously low in moral disengagement and high in defender self-efficacy were especially unlikely to reinforce peer aggression, and (ii) that students who, in comparison to their classmates, scored higher on moral disengagement and had poorer relationships with their teachers were especially inclined to reinforce peer victimisation. Thus, the findings suggest that defender self-efficacy and student–teacher quality might function as protective factors that weaken the positive associations between moral disengagement and reinforcer behaviour.

In accordance with our hypotheses and previous studies (Doramajian and Bukowski 2015; Gini 2006; Thornberg and Jungert 2013a; Thornberg et al. 2015, 2017), zero-order correlation analysis showed a negative association between moral disengagement and defender behaviour. However, when included together with the other predictors in the regression analyses, moral disengagement was not a significant correlate in the model. A possible explanation might be that the defender self-efficacy is a far more important individual characteristic than moral disengagement to explain defender behaviour (Thornberg and Jungert 2013a; Thornberg et al. 2017), and when included together in the same model, the association between moral disengagement and defender behaviour was not sufficiently strong to be significant in the present sample.

Only a few studies have investigated the relationship between moral disengagement and outsider behaviour, and the findings have been inconsistent (e.g. Doramajian and Bukowski 2015; Gini 2006). Our results indicated that high moral disengagement, both overall and in relation to one’s classmates, is associated with greater outsider behaviour, even when other variables in the regression models were included. As proposed in the social-cognitive framework (Bandura 2016), moral disengagement makes it easier for people not only to do harm personally, but also to refrain from helping and protecting a person in need as it becomes easier for them to interfere with their moral judgement and deactivate their moral self-sanctions. These findings complement recent research showing that moral disengagement is a unique risk factor, beyond other personal characteristics, not only for different aggressive behaviours (Gini, Pozzoli, and Hymel 2014), but also for bystander responses that support and encourage peer victimisation (Thornberg and Jungert 2013a; Thornberg et al. 2017).
Moreover, the results supported our hypotheses and previous research in that defender self-efficacy, both overall and in relation to one’s classmates, was found to be positively associated with defender behaviour (Barchia and Bussey 2011a; Pronk et al. 2013; Pöyhönen, Juvonen, and Salmivalli 2010, 2012) and negatively associated with outsider behaviour (Thornberg and Junger 2013a; Thornberg et al. 2017), even after controlling for other variables. According to Bandura (1997), self-efficacy beliefs constitute the key factor of human agency, and ‘if people believe they have no power to produce results, they will not attempt to make things happen’ (p. 3), and thus remain passive and stay outside. However, it should be stressed that the correlational nature of our data makes it impossible to infer what causes what. For instance, students who often defend victims may feel more confident about succeeding, and hence that it is something else that had them to defend victims of peer victimisation in the first place. Nevertheless, our results suggest that students low in defender self-efficacy, both overall and in relation to their classmates, not only more often remain passive but also reinforce peer victimisation.

We did not hypothesise an association between reinforcer behaviour and defender self-efficacy as we did not find clear empirical or theoretical support for this supposition. Whereas it is intelligible (e.g. Bandura 1997) that students who doubt their ability to defend victims may refrain from trying to intervene, it is less obvious why they rather reinforce the victimisation event. Nevertheless, we found defender self-efficacy to be associated with less reinforcer behaviour, although these associations were weaker as compared to the two other bystander behaviours. Furthermore, low moral disengagers were even less inclined to respond as reinforcers if they displayed higher defender self-efficacy. However, this interaction effect was relatively weak.

Taken together, our findings on the individual variables suggest that defender self-efficacy is strongly associated with defender behaviour (positively) and outsider behaviour (negatively), and weakly negatively associated with reinforcer behaviour. All these associations exist both in general, when all students are analysed together as a single sample, and when each individual’s level is compared to the class mean. For reinforcer behaviour, moral disengagement is the strongest correlate, especially as a measure of the difference between the student’s class mean and his/her individual score. In particular, whereas doubting one’s ability to intervene successfully primarily increases the risk of remaining passive and staying outside the bullying situation as a bystander, greater moral disengagement primarily increases the risk of reinforcer behaviour, even if it is also linked with outsider behaviour. Poor defender self-efficacy tells the students that they are not capable of defending the victim, and moral disengagement tarnishes their moral judgement.

Furthermore, we hypothesised that warm, caring, supportive and respectful student-teacher relationships were positively associated with defending behaviour and negatively associated with reinforcer behaviour. In line with Jungert, Piroddi, and Thornberg (2016), we found a positive association between student-teacher relationship quality and defender behaviour. However, when controlling for students nested in classes by breaking down the correlates into between-class and within-class variables, the association was no longer significant. Moreover, the correlation analysis revealed a weak, negative association between relationship quality and reinforcer behaviour. In the regressions, the relationship quality had no unique association with reinforcer behaviour in the final models.
Nonetheless, the interaction term between relationship quality and moral disengagement in relation to one’s classmates was significant. In sum, our results suggest that student-teacher relationship quality was relatively weakly associated with students’ bystander behaviours. Given the scarcity of investigations on how the quality of students’ individual relationships with their teachers is possibly associated with bystander behaviours, the evidence is insufficient to draw strong conclusions. Nevertheless, a potential weak association between student-teacher relationship and bystander behaviours could be understood by considering that bullying usually takes place in the informal settings of peer groups and without teacher presence (Atlas and Pepler 1998; O’Connell, Pepler, and Craig 1999). The teachers, then, could be said not to be part of the microsystem but merely of the mesosystem (Bronfenbrenner 1994) in relation to what is happening in the peer groups outside the classroom and beyond the teacher presence. For instance, Thornberg et al. (2017) found at the class level that student-student relationship quality was significantly associated with defender behaviour, whereas student-teacher relationship quality was not.

Limitations and implications

Some limitations of this study should be noted. First, the study had a cross-sectional design, which implies that the correlations we found may go in either, or both, directions. For instance, do better student-teacher relationships lead to more defender behaviour, or does more defender behaviour lead to better relationships? Other types of studies, for example longitudinal and interventional studies, are needed to discern such causal pathways. Second, all analyses were based on self-report data and consequently there may be some overestimations due to shared method variance. For instance, students with positive attitudes might report more willingness to deter and more positive relationships with teachers. Moreover, the estimates might have been biased due to social desirability or intentionally exaggerated responses (Cornell and Bandyopadhyay 2010). Since all questionnaire sessions were guided by a member of the research team – who told the students about the purpose of the study and encouraged them to answer according to their actual standpoints and experiences – we assume that the effects of these biases were minimised. Nevertheless, future research could benefit from using other complementary methods as well, such as peer nominations and observation techniques. Our data could also have been affected by participation bias. Importantly, among the students we invited to participate, boys and older students joined to a lesser extent than girls and younger students. Third, the bystander behaviour scale assumes that the participants have witnessed physical, verbal or relational aggression among their peers, which might not always be the case. However, considering the prevalence of peer victimisation and harassment among students in Swedish schools (Swedish National Agency for Education 2013), it is unlikely that the participants had never observed such events. Fourth, the sample employed here may not be representative of the populations of interest for all readers of this article. Only further investigations making use of samples from diverse cultural backgrounds will be able to examine to what extent the current findings are generalisable to different contexts. Some of our findings, however, replicate previous research that has been conducted on participants in other, although exclusively western, countries.
Regardless of these limitations, the current findings enrich the knowledge of bystander behaviours in peer victimisation situations that, in turn, has potential implications for prevention and intervention work. Our results suggest that peer victimisation prevention and intervention programmes may benefit from paying attention to moral disengagement, defender self-efficacy, and student-teacher relationship quality. Moral disengagement would be crucial to fostering a perpetual sense of personal responsibility among the students. A first step in this could be increasing the students’ awareness of people’s widespread tendency to morally disengage in all kinds of everyday situations (see Bandura 2002, 2016), including aggression and peer victimisation situations. Although our results in themselves do not support a causal pathway in a direction from moral disengagement to bystander behaviours, there is longitudinal support that moral disengagement levels at a preceding time point are able to influence subsequent bystander behaviour (Doramajian and Bukowski 2015) and aggressive behaviour (Barchia and Bussey 2011b; Hyde, Shaw, and Moilanen 2010; Paciello et al. 2008). Thus, challenging and counteracting the tendency to morally disengage could steer bystanders away from reinforcer and outsider behaviour. In order to further decrease outsider behaviour as well as increase defender behaviour, however, our results suggest that it is also crucial to work for enhancing students’ beliefs in their ability to intervene successfully in victimisation situations.

Consistent with the classic bystander model (Latané and Darley 1968), there are several reasons why students choose not to intervene in such situations (see Gini et al. 2008; Pozzoli and Gini 2012). For instance, those who intervene might risk being future targets of victimisation or they might feel a lack of knowledge about what to do. Consequently, it seems important to heighten students’ defender self-efficacy by offering them efficient strategies to intervene. Programmes and training that focus on increasing knowledge about and competence in efficient defender strategies may include watching and discussing video scenarios of peer interventions (role modelling) as well as roleplay sessions. Defending strategies may concern either direct interventions by the students themselves, or more indirect interventions in which the students go and get help from teachers or other members of the school staff. In the latter case, fostering good relationships between students and teachers would likely play a part. Students who perceive their teachers as caring, warm and supportive will most probably be more inclined to get help from them, as compared to students who perceive poorer relationships with their teachers. In addition, teachers should be aware of how social hierarchies, peer norms and social expectancies may affect defender self-efficacy. Bystanders, who perceive that the perpetrators are more powerful and have higher social status than than themselves, may experience lower defender self-efficacy, intervention as more risky, and a fear of getting victimised themselves or losing social status if they defended the victim, which together inhibit and demotivate them to intervene (Forsberg et al. 2018; Thornberg, Landgren, and Wiman 2018). Therefore, to increase defender self-efficacy and defending, efforts should be made to increase equality and collective efficacy, which refers to a shared belief that students and teachers can work together to efficiently stop peer victimisation (Barchia and Bussey 2011a).

To conclude, influencing students’ bystander behaviour is not an easy matter, and is probably best accomplished by applying a range of different techniques targeting different factors – individual as well as contextual – rather than focusing on single elements.
Based on our findings, moral disengagement, defender self-efficacy and student-teacher relationship quality are three promising factors to include in peer victimisation prevention and intervention work.

**Note**

1. No significant between-classroom effects were found for either of the three bystander variables. We therefore only added interaction terms for the within-classroom variables in model 5.

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