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Why are Some Victims Also Bullies? The Role of Peer Relationship Management and Anger Regulation in Traditional Bullying

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# **Why are some victims also bullies? The role of peer relationship management and anger regulation in traditional bullying**

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**Abstract**

There is ample evidence of bullying victimisation-perpetration association. However, little is known about the role of socioemotional variables in reinforcing or mitigating it. There is a need to delve deeper into what victims feel and do that leads them to bully. This study aimed to analyse the moderating role of peer relationship management and anger regulation in the victimisation-perpetration association, controlling gender and age. This cross-sectional study involved 874 Spanish middle school students (47.8% girls) aged 11-18 years ( $M = 13.92$ ,  $SD = 1.45$ ). The results revealed that the perpetration was positively related to victimisation and negatively related to peer relationship management and anger regulation. In addition, peer relationship management can moderate the victimisation-perpetration association, acting as a protective factor, when the ability of victims to regulate anger is sufficiently trained. These findings highlight the importance of designing effective prevention based on socio-emotional development to fully curb bullying.

*Keywords:* bullying, victimisation, perpetration, peer relationships, anger management

### **Why are some victims also bullies? The role of peer relationship management and anger regulation in traditional bullying**

Having suffered and/or perpetrated some intentional and repeated peer aggression under a power imbalance (Smith, 2016; Ybarra et al., 2014) can be a common problem in the school career of many students around the world (Baldry et al., 2017). This phenomenon of peer violence is named <<bullying>> (Volk et al., 2017) and has devastating consequences (Halliday et al., 2021). To date, victimisation appears to be more frequent than perpetration (Chudal et al., 2021; Guo, 2021; Llorent et al., 2021). Recent findings showed a prevalence of approximately 18%-33% for victims and 14%-22% for perpetrators (Eyuboglu et al., 2021; Husky et al., 2020). In addition, there are other students who are victims and perpetrators, adopting the dual role of bully-victim, with a prevalence of 12.7%-19.0% (Eyuboglu et al., 2021; Husky et al., 2020).

Bullying can be a complex psychosocial phenomenon, especially when adolescents experience victimisation and perpetration simultaneously or progressively (Guy et al., 2019). Indeed, there is ample evidence of the strong association between victimisation and perpetration (Walters, 2020a,b). That is, it seems that victims are more likely than nonvictims to become perpetrators (Malamut & Salmivalli, 2021; Walters, 2020a,b). In particular, the association between victimisation and perpetration is often recognised in cross-sectional studies to identify dual role involvement (Baldry et al., 2017; Husky et al., 2020; Llorent et al., 2021). **This joint occurrence may be because victims and perpetrators' psychological, family, and school profiles have certain similarities (Chan & Wong, 2015a), for instance, low levels of empathy and prosociality, weak family attachment, low school connectedness (Chan & Wong, 2015b), repeating the same pattern for bullying through digital devices or cyberbullying (Chan & Wong, 2020). Moreover, the victimisation-perpetration association is also**

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3 **examined** in longitudinal studies to identify future involvement in the opposite role –  
4  
5 e.g., from victim to perpetrator– (Malamut & Salmivalli, 2021).  
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8         Studies focused on identifying the keys to the association between victimisation  
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10 and perpetration have demonstrated that, in addition to being explained by its direct  
11 effect (Walters, 2020a,b), it can be better explained by the indirect effects of other  
12 variables that may act as risk or protective factors (Camacho et al., 2021). Some authors  
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14 have paid particular attention to some socio-emotional mechanisms of victims in  
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16 response to their involvement (Choi & Park, 2020; Falla et al., 2020; Fang et al., 2020;  
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18 Kaynak et al., 2015). Along with the experience of violence itself (Zych et al., 2018a),  
19  
20 victimisation has negative socioemotional consequences on victims that increase their  
21  
22 risk of participating in perpetration (Halliday et al., 2021; Khong et al., 2019). Some of  
23  
24 the most relevant variables refer to their difficulties relating to peers (Antoniadou et al.,  
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26 2019; Navarro et al., 2015) and in regulating their emotions (Estévez et al., 2020),  
27  
28 especially anger, which is one of the primary emotional reactions to victimisation (Ak et  
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30 al., 2015; Ortega-Ruiz et al., 2012). Paradoxically, these socioemotional damages  
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32 increase the risk **of negative coping with peer victimisation (e.g., aggressive coping),**  
33  
34 **thus increasing the risk of involvement in perpetration** (Malamut & Salmivalli, 2021),  
35  
36 **as well as in the case of cybervictimisation and cyberperpetration (Chan & Wong,**  
37  
38 **2017).** Therefore, there is still a need to better understand what exactly the role of the  
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40 socioemotional profile is in turning victims into perpetrators as well.  
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49         Peer and emotion-related variables have been widely identified as playing an  
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51 essential role for victims in perpetration involvement (Cañas et al., 2020; Llorent et al.,  
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53 2021; Shaheen et al., 2019), but from two opposing perspectives. Some studies indicate  
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55 that victims' scarcities in forging bonds with peers put them at risk of engaging in  
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57 perpetration (Ho et al., 2021; Zych et al., 2021). This difficulty could be explained by  
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3 the poor social skills of the victims, perceived in the problems they experience in  
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5 integrating into the peer group effectively (Gómez-Ortiz et al., 2017). Furthermore,  
6  
7 another weakness that stands out among victims is the inability to channel anger,  
8  
9 precisely related to the development of aggressive behaviours (Oh et al., 2018), which  
10  
11 can turn into perpetration (Malamut & Salmivalli, 2021; Walters, 2020b; Wright, 2017).  
12  
13 Victims commonly experience this lack of anger regulation through the development of  
14  
15 rumination on the attacks they have suffered (Chu et al., 2018b; Fang et al., 2020),  
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17 increasing the desire for revenge (Runions et al., 2018).  
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21 However, other studies suggest that victims tend to be prosocial, developing  
22  
23 behaviours such as helping (Gómez-Ortiz et al., 2017). Therefore, it would be expected  
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25 that victims' good management of peer relationships –e.g., feeling close or in  
26  
27 confidence with peers– (Zhou & Ee, 2012) could mitigate the risk of becoming  
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29 perpetrators. In this sense, anger regulation could reinforce positive peer relationships  
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31 (Ho et al., 2021; Kaynak et al., 2015). Anger regulation is known to help victims cope  
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33 with their distress by protecting them from the development of rumination (Chu et al.,  
34  
35 2018b) that would lead to inappropriate relationship with peers through impulsive or  
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37 aggressive behaviours (Pabian & Vandebosch, 2016).  
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### 42 **Current study**

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44 Peer relationship management, together with anger regulation, has been scarcely  
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46 studied in the association between victimisation and perpetration in traditional bullying.  
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48 **However, understanding the role of these socioemotional variables in the overlap of**  
49  
50 **victimisation and perpetration could have relevant implications for practice to interrupt**  
51  
52 **the cycle of violence. In this sense, if it is shown that peer relationship management and**  
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54 **anger regulation have a protective role in the victimisation-perpetration association,**  
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56 **they constitute a key to designing more effective prevention and intervention measures**  
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3 **against continued involvement in bullying.** Therefore, in the present study, we analyse  
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5 the joint role of these socioemotional variables in the victimisation-perpetration  
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7 association.  
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10 This study aimed to analyse the moderating role of peer relationship  
11 management and anger regulation in the association between bullying victimisation and  
12 bullying perpetration among adolescents, considering gender and age. The decision to  
13 include gender and age as covariates in this study is based on the existing literature that  
14 boys and girls are not equally involved in perpetration, as well as by age. In terms of  
15 gender, boys appear to be more involved in the perpetration than girls (Chan & Wong,  
16 2019). In terms of age, although overall involvement in bullying tends to decrease  
17 (Cross et al., 2015), involvement in perpetration has curvilinear trends over adolescence  
18 (WHO, 2020).  
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30 Our research hypotheses are specified below.  
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### 32 ***Direct effects***

33 Hypothesis 1 (H1): victimisation of bullying is positively related to perpetration  
34 of bullying.  
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39 Hypothesis 2 (H2): peer relationship management is negatively related to  
40 bullying perpetration.  
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44 Hypothesis 3 (H3): anger regulation is negatively related to bullying  
45 perpetration.  
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### 49 ***Indirect effects***

50 Hypothesis 4 (H4): peer relationship management negatively moderates the  
51 association between bullying victimisation and bullying perpetration.  
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55 Hypothesis 5 (H5): anger regulation negatively moderates the association  
56 between bullying victimisation and bullying perpetration.  
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3 Hypothesis 6 (H6): anger regulation negatively moderates the association  
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5 between peer relationship management and bullying perpetration.  
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8 Hypothesis 7 (H7): anger regulation negatively moderates the conditional  
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10 influence of peer relationship management in the association between bullying  
11  
12 victimisation and bullying perpetration.  
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15 Regarding gender and age, and in line with previous findings, it is expected that  
16  
17 boys have a higher risk of becoming perpetrators (Chan & Wong, 2019; Smith et al.,  
18  
19 2018; WHO, 2020; Zych et al., 2021), as well as with increasing age (WHO, 2020).  
20

21  
22 In our model, we hypothesized that a direct association between bullying  
23  
24 victimisation and bullying perpetration would be moderated by peer relationship  
25  
26 management and, in turn, moderated by anger regulation (see Figure 1). These  
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28 socioemotional variables, acting as risk or protective factors, have been considered  
29  
30 relevant variables to explain the involvement directly or indirectly in bullying (Gómez-  
31  
32 Ortiz et al., 2017; Zych et al., 2018a), and particularly the involvement in perpetration  
33  
34 (Ak et al., 2015). In this line, the relevance of peer relationship management in the  
35  
36 association between victimisation and perpetration has not been explored as much as  
37  
38 anger regulation (Kaynak et al., 2015; Zych et al., 2021).  
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41  
42 **Specifically,** most studies have focused on inadequate anger channelling and  
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44 expression of victims' anger and how this could lead them to become perpetrators, for  
45  
46 example, as revenge (Ak et al., 2015; Navarro et al., 2015), **but these** findings are not  
47  
48 conclusive. Some studies suggest that lack of anger regulation plays a relevant role in  
49  
50 the relationship between victimisation and perpetration (Malamut & Salmivalli, 2021)  
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52 and others suggest that it does not (Walters & Espelage, 2018). Furthermore, no studies  
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54 have analysed the interaction of adequate competences between anger regulation (i.e.,  
55  
56 emotional competence) and peer relationship management (i.e., social competence), **and**  
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3 **whether this joint role** could represent a protective factor for victims against their  
4  
5 participation in perpetration. **This contribution would make progress for knowing how**  
6  
7 **to support victims from a social and emotional perspective to enable them to cope better**  
8  
9 **with victimisation, and to prevent further involvement in the phenomenon through the**  
10  
11 **perpetration.**  
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15 For this purpose, a theoretical model was hypothesized in which bullying  
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17 victimisation was the focal predictor, with peer relationship management the first  
18  
19 moderator and anger regulation the second moderator on bullying perpetration, adding  
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21 gender and age as covariates (see Figure 1). First, this study would allow us to delve  
22  
23 deeper into a variable that has been scarcely analysed in the involvement in the opposite  
24  
25 bullying role, i.e., peer relationship management, and its interaction with anger  
26  
27 regulation. Second, progress in this line of research would provide some clues as to why  
28  
29 some victims are at greater risk than others of becoming perpetrators and how  
30  
31 prevention and intervention should be addressed.  
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34  
35 [Figure 1]  
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## 37 **Materials and Methods**

### 38 **Participants and Procedure**

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41 The present study was approved by the Andalusian Biomedical Research  
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43 Ethics Coordinating Committee (blinded code for review). To conduct this cross-  
44  
45 sectional study, purposive accessibility sampling was carried out in middle  
46  
47 schools in Southern Spain. Collaboration was requested through telephone calls to  
48  
49 the middle school executive teams and those who confirmed their participation  
50  
51 were included in the study. The consent of the families regarding the potential  
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53 participation of the adolescents was also requested. Students who were authorised  
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55 participated in the study. Students were informed of the voluntary, anonymous,  
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3 and confidential nature of participation in the survey, which was only for research  
4 purposes, as well as the possibility of withdrawing from participation at any time.  
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6 They were asked to answer honestly. The questionnaire was administered in paper  
7  
8 format during the school day and lasted 15-20 minutes, being supervised by the  
9  
10 teaching staff and by the research team. **The response rate was 96%.**

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15 This cross-sectional study involved 874 students (52.2% boys, 47.8% girls) from  
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17 five middle schools in the Andalusia region (Spain). The age ranged from 11 to 18 years  
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19 ( $M = 13.92$ ,  $SD = 1.45$ ). Of the total number of participants, 27.2% were in Year 1,  
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21 27.8% in Year 2, 19.0% in Year 3, and 26.0% in Year 4. **Regarding country of origin,**  
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23 **93.3% were Spanish adolescents with Spanish parents, 5.5% were Spanish adolescents**  
24  
25 **with migrant parents, and 1.3% were migrant adolescents with migrant parents. Among**  
26  
27 **migrants, 56.3% were South American, 25% from another European country, 10.4%**  
28  
29 **African and 8.3% Asian.**

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33 **The sample described is composed of the valid cases from a larger data**  
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35 **collection ( $N = 911$ ), after removing the missing values for all variables under study.**  
36  
37 **Little's MCAR test was calculated to verify that these missing values were randomly**  
38  
39 **distributed ( $\chi^2 = 32.773$ ;  $df = 23$ ;  $p = .085$ ).**

## 40 41 42 **Measures**

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45 In the survey, participants were asked to indicate their gender, age, and academic  
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47 year. In addition to these sociodemographic data, three validated scales were  
48  
49 administered.

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52 *Bullying.* The Spanish version of the *European Bullying Intervention Project*  
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54 *Questionnaire, EBIP-Q* (Ortega-Ruiz et al., 2016) was used to assess involvement in  
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56 bullying in the last two months. This scale was composed of 7 double Likert-type items  
57  
58 with five response options (where 0 = “never” and 4 = “more than once a week”)  
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3 assessing the involvement in victimisation and perpetration based on aggressive  
4 behaviours (e.g., kicking, insults, or threats) (e.g., see Feijóo et al., 2021). Good overall  
5 reliability was obtained (Cronbach's  $\alpha = .87$ ), as well as partial reliability for  
6 victimisation (Cronbach's  $\alpha = .83$ ) and perpetration (Cronbach's  $\alpha = .81$ ).  
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12 *Peer relationship management.* To assess peer relationship management, a  
13 subscale of the *Social Emotional Competence Questionnaire, SEC-Q* (Zhou & Ee,  
14 2012) was used. This subscale contained 5 Likert-type items with five response options  
15 (from 0 = "nothing really" to 4 = "totally true"). The item statements referred to  
16 behaviours towards peers such as apologising, being supportive, not criticising, being  
17 tolerant of mistakes, and defending oneself without insulting (e.g., see Nasaescu et al.,  
18 2021). The reliability index was acceptable for the subscale used (Cronbach's  $\alpha = .76$ ).  
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30 *Anger regulation.* Anger regulation competence was measured through the  
31 adaptation of the *Emotional Quotient Inventory: Youth Version*, by Bar-On & Parker  
32 (2000). This one-dimensional scale was composed of 8 Likert-type items with five  
33 response options (where 0 = "never" and 4 = "always"), referring to typical expressions  
34 of anger and the difficulties in regulating it (e.g., "I get into fights with people", or "I  
35 get angry easily") (e.g., see Méndez et al., 2019). Good reliability was obtained  
36 (Cronbach's  $\alpha = .84$ ).  
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#### 44 **Data Analysis**

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47 After coding the data, descriptive analyses of the sample were carried out.  
48 According to the original scale of anger regulation, a high score indicated a lack  
49 of anger regulation, so the values of the variable were reversed by recoding to  
50 facilitate understanding of the results in this study. Then, the mean of all the  
51 variables studied was calculated: victimisation, perpetration, peer relationship  
52 management, and anger regulation, being all these continuous variables.  
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3 Exploratory analyses of the variables were performed prior to the main  
4 analyses to verify the assumptions of linearity, normality (skewness and kurtosis),  
5 homoscedasticity, and multicollinearity. As  $H_0$  on the normality of the distribution  
6 was rejected, bivariate correlations were performed using the Spearman  
7 coefficient (see Table 1), according to the results of the Kolmogorov-Smirnov  
8 normality test, where  $p < .001$ .  
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10  
11  
12 To address the hypotheses formulated in the present study, a theoretical  
13 model was designed that included the interaction of two moderating variables  
14 (i.e., peer relationship management and anger regulation) on the relationship  
15 between victimisation (independent variable) and perpetration (dependent  
16 variable). Thus, a moderated moderation model was designed (see Figure 1).  
17 SPSS macro PROCESS version 4.0 (Hayes, 2017) was used to test Model 3. First,  
18 the bootstrapping resampling method was selected with a 95% confidence interval  
19 for 10,000 samples. Second, heteroscedasticity-consistent standard error  
20 estimators (HC3) were included in the model (Davidson & MacKinnon, 1993;  
21 Hayes, 2017) to analyse the direct and indirect interaction effects of the variables.  
22 Third, it was decided to centre the independent and moderating variables at a  
23 mean of 0 to make the effects interpretable (Hayes, 2017). To run the model, the  
24 Johnson & Neyman technique was also included, which would allow studying the  
25 functioning of interactions in their region of significance together with their  
26 simple slopes (Carden et al., 2017). Gender (1 = boys, 2 = girls) and age (in years)  
27 were added as covariates in the model, given previous evidence on their relevance  
28 for the involvement of bullying in adolescents (Kurki-Kangas et al., 2018; Smith  
29 et al., 2018; WHO, 2020). Direct and indirect effects with  $p < .05$  were considered  
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3 significant when the 95% confidence interval did not contain 0 in either the lower  
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5 or upper limit (Hayes, 2017). Version 26 of IBM SPSS Statistics was used.  
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### 8 **Results**

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10 The model shown in Figure 1 was statistically significant,  $F(9,862) = 36,30, p$   
11  $< 0.01, R^2 = .51$ , which explained 51.1% of the variability in the data. Gender showed a  
12 significant negative effect on perpetration ( $\beta = -.083, p < .001$ ), revealing that boys had  
13 a higher risk of being perpetrators than girls. Age showed a significant positive effect on  
14 the perpetration ( $\beta = .019, p = .005$ ), revealing that the risk of being a perpetrator  
15 increased with age.  
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23 The means, standard deviations, and correlations among the variables studied are  
24 shown in Table 1.  
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### 28 **Direct effects**

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30 As shown in Table 1, perpetration was positively related to victimisation ( $r =$   
31  $.61, p < .001$ ), and negatively related to peer relationship management ( $r = -.29, p <$   
32  $.001$ ) and anger regulation ( $r = -.35, p < .001$ ). As shown in Table 2, the ordinary least  
33 squares (OLS) regression analyses revealed that victimisation [ $\beta = .388, t(9,862) = 9.03,$   
34  $p < .001$ ], peer relationship management [ $\beta = -.106, t(9,862) = -6.81, p < .001$ ] and  
35 anger regulation [ $\beta = -.070, t(9,862) = -4.53, p < .001$ ] had a significant direct effect on  
36 perpetration. In other words, high scores on victimisation and low scores on peer  
37 relationship management and anger regulation were strongly associated with  
38 perpetration. Therefore, the research hypotheses regarding direct effects (H1, H2, and  
39 H3) were confirmed (see Figure 1).  
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53 [Table 1]

54 [Table 2]

### 55 **Indirect effects**

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3 The next set of hypotheses addressed the moderation of peer relationship  
4 management and anger regulation in the association between victimisation and  
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The next set of hypotheses addressed the moderation of peer relationship management and anger regulation in the association between victimisation and perpetration (H4-H6).

In the OLS model of these indirect effects, the two-way analyses revealed a negative moderation of peer relationship management in the association between victimisation and perpetration [ $\beta = -.153$ ,  $t(9,862) = -2.56$ ,  $p < .05$ ; see Table 2], confirming the research hypothesis 4 (H4). In other words, low scores on peer relationship management moderate the association between victimisation and perpetration.

By employing the overall three-way interaction model (moderated moderation), and as hypothesised in H7, the moderating role of anger regulation (i.e., second moderator) was estimated in the conditional influence of peer relationship management (i.e., first moderator) on the association between victimisation and perpetration. In the OLS model of this three-way, the results indicated a negative moderation of peer relationship management and anger regulation in the association between victimisation and perpetration [ $\beta = -.131$ ,  $t(9,862) = -2.02$ ,  $p = .044$ ; see Table 2]. Therefore, research hypothesis 7 (H7) was confirmed (see Figure 1).

Furthermore, the analysis of simple slopes showed a significant effect of the interaction between victimisation and peer relationship management on perpetration was found for medium ( $\beta = -.153$ ,  $p < .05$ ) and high levels of anger regulation ( $\beta = -.257$ ,  $p < .001$ ) (see Figure 2). In other words, peer relationship management acted as a moderator between victimisation and perpetration when anger regulation is sufficiently developed. As shown in Figure 2, the lowest level of perpetration was obtained for the lowest scores on victimisation and the highest scores on peer relationship management and anger regulation, suggesting that low involvement in victimisation and good

competences in these socio-emotional skills protect against involvement in perpetration. In contrast, the highest level of perpetration was obtained for the highest scores on victimisation and the lowest scores on peer relationship management and anger regulation, revealing that high involvement in victimisation and lack of competence in these socio-emotional skills increase the risk of involvement in perpetration.

[Figure 2]

### **Discussion**

The present study aimed to explore whether socioemotional factors could explain a higher or lower risk of association between victimisation and perpetration in traditional bullying. In particular, we analysed whether peer relationship management and anger regulation moderated the association between victimisation and perpetration, controlling gender and age.

Regarding the direct effects on perpetration, we find a strong association between victimisation and perpetration when victims have high levels of victimisation and poor competences in managing peer relationships and regulating anger. In other words, victims' risk of involvement in perpetration is higher when they are severely involved in victimisation and when the competences to relate to peers and regulate anger are not developed. In contrast, this risk is lower when victimisation is not as severe and when victims know how to relate positively to peers and how to manage anger effectively. Therefore, our results are consistent with previous studies (Ho et al., 2021; Oh et al., 2018; Walters, 2020a,b; Zych et al., 2021).

On the one hand, we know that there is ample evidence that being a victim strongly predicts involving in bullying perpetration (Malamut & Salmivalli, 2021). Therefore, it seems that suffering aggressions in a face-to-face environment increases the risk of victimised adolescents reacting negatively against their peers (Ak et al.,

2015; Aricak & Ozbay, 2016). In this sense, some authors suggest that the change of role from victim to perpetrator does not often occur in a short period due to the power imbalance present in bullying (Chu et al., 2018a; Ybarra et al., 2014), which determines the status of the current victim and the perpetrator (Olweus et al., 2019; Smith, 2016). However, we know that minors could be involved in the bullying phenomenon with a dual role, i.e., bully-victim.

On the other hand, the direct effects of the socioemotional variables analysed on the perpetration are consistent with previous research. We know that the profile of adolescents who commit aggressions is characterised by low social adjustment (Gómez-Ortiz et al., 2017; Wang et al., 2012) and by developing hostile behaviour towards their peers (Walters & Espelage, 2018). In line with expectations, problems in managing social relationships and one's own emotions, including anger, cause some adolescents to repeatedly and intentionally bully others regardless of the harm caused (Candelaria et al., 2012).

The results obtained in the present study on involvement in the perpetration by gender and age confirm our hypotheses. Our study reveals that boys tend to be more involved in traditional perpetration than girls, as well as older adolescents. The results on gender support the findings of the systematic review by Smith et al. (2018), which indicates that boys occupy the role of perpetrator in the bullying phenomenon, and this continues throughout adolescence. In addition, our results show that the risk of engaging in perpetration increases with age. Considering that our sample consists of adolescents aged 11-18 years, this result is consistent with the findings of the latest report on Health Behavior in School-aged Children (HBSC), where the highest incidence of involvement in bullying perpetration appears to be reached at the age of 13-15 years (WHO, 2020). However, it should be noted that other longitudinal studies



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2  
3 that have identified adolescents involved in the perpetration highlight that this form of  
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5 involvement remains stable in adolescence (Zych et al., 2018b) or tends to decrease  
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7 (Pouwels et al., 2018), but does not increase over the years.  
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10       Regarding the indirect effects on the association between victimisation and  
11  
12 perpetration, our study adds new consideration to the previous literature. Considering  
13  
14 peer relationship management and anger regulation as single moderators, only the  
15  
16 former appears to be significant. In fact, low competence in managing peer relationships  
17  
18 moderates the association between victimisation and perpetration. By contrast, anger  
19  
20 regulation does not appear to explain this association by itself.  
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24       The fact that the variable related to social relationships plays the most  
25  
26 substantial role makes sense, given that it represents a global rather than a specific  
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28 competence –e.g., not criticising or defending without insulting– (Zhou & Ee, 2012).  
29  
30 We also know that peer relationships and social support are relevant at these ages  
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32 (Shaheen et al., 2019) to establish good relationships and mitigate the negative  
33  
34 consequences of victimisation (Healy & Sanders, 2018). Furthermore, bullying is a  
35  
36 group phenomenon conditioned by the type of interactions that occur within the peer  
37  
38 group (Smith, 2016).  
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42       Specifically, the moderating role of peer relationship management varies in the  
43  
44 function of anger regulation, as suggested by the triple interaction of the victimisation-  
45  
46 perpetration association. It seems clear, for example, that for victims to defend  
47  
48 themselves without using insults when attacked, victims need to know how to regulate  
49  
50 the anger they feel when confronted with such a negative situation to deal with it  
51  
52 effectively (Zhou & Ee, 2012). In this sense, according to the results of our study, peer  
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54 relationship management is a relevant moderator between victimisation and perpetration  
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56 only when the ability of victims to regulate anger is sufficiently trained. That is, it  
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3 appears that the way victims manage peer relationships plays a more important role in  
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5 mitigating the association of victimisation and perpetration when this competence  
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7 interacts with good anger regulation skills.  
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10 Our study highlights the need to support and provide victims with strategies to  
11  
12 improve the way they manage relationships with peers, but also to channel anger  
13  
14 (Gómez-Ortiz et al., 2017; Kaynak et al., 2015; Zych et al., 2021). Developing these  
15  
16 socioemotional skills could help victims cope with victimisation effectively, and it  
17  
18 could be useful to protect against involvement in the phenomenon through perpetration  
19  
20 (Antoniadou et al., 2019; Cañas et al., 2020). However, it is still necessary to delve  
21  
22 deeper into what other keys may explain the victimisation-perpetration association. We  
23  
24 know that while it is dangerous to engage as a victim, it is even more dangerous to  
25  
26 engage as a bully-victim (Arseneault, 2018), as bully-victims suffer higher levels of  
27  
28 stress and psychoemotional severe problems (Wolke & Lereya, 2015). Therefore, the  
29  
30 need for further research in this line to curb bullying (Baldry et al., 2017) is even greater  
31  
32 if we consider that socioemotional problems are among the main effects of victimisation  
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34 and, in turn, these types of problems lead to further bullying involvement (Reijntjes et  
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36 al., 2019).  
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#### 41 **Limitations**

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44 The progress of this study must be seen in light of some limitations. Among the  
45  
46 main limitations, the type of sampling chosen, namely purposive sampling by  
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48 accessibility, has restricted data collection to a single geographical region of Spain. It  
49  
50 would be interesting to extend this data collection to other national regions and other  
51  
52 countries. In addition, a cross-sectional study has been designed, and it would be  
53  
54 advisable to contrast the results of the moderated moderation proposed in future  
55  
56 longitudinal studies to **clarify whether these socioemotional factors act more as a cause**  
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3 or more as an effect of both victimisation and perpetration, as well as their association  
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5 over time (e.g., change of role from victim to perpetrator) (Liu et al., 2020; Volk et al.,  
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7 2017). Another interesting line of research would focus on understanding the role of  
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9 socio-emotional development by interchanging the position of the bullying variables,  
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11 i.e., perpetration as independent and victimisation as dependent. In this sense, the  
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13 measures were self-reported, with a risk of response under social desirability, especially  
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15 in the self-assessment of anger regulation. For this reason, it would be useful to include  
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17 other types of measures, such as direct observations or teacher reports. Finally, only two  
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19 socioemotional factors have been used as moderators, and there is a need to delve  
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21 deeper into other factors, such as the level of resilience (McVie, 2013). Future research  
22  
23 should address what other factors could be related to continued involvement in bullying  
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25 and/or cyberbullying (Camacho et al., 2021; Chan & Wong, 2017, 2020; Li et al., 2021;  
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27 Zsila et al., 2018b).

### 32 33 **Conclusions**

34  
35 This study provides new evidence and important advances in understanding the  
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37 association between victimisation and perpetration in traditional bullying. Our study  
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39 shows that managing peer relationships and regulating anger can protect victims from  
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41 further involvement in the perpetration.  
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45 Thus, our study shows that, while it is true that victims are more likely to start  
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47 perpetrating against their peers than nonvictims, there are mechanisms that would help  
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49 to reduce this risk. Specifically, improving competence in socioemotional skills, such as  
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51 peer relationship management and anger regulation, would help victims better cope with  
52  
53 their involvement and prevent it from spreading to perpetration. This aggressive  
54  
55 response to one's own victimisation may be due to the perception that the characteristics  
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57 of the new victim or target are less resistant to victimisation, to wanting to obtain or  
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3 manipulate them, or to reacting with unpleasant emotions such as jealousy (Finkelhor,  
4 2007). This is an important contribution for educational institutions and all  
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6 professionals working with adolescents, supporting the need to work directly with  
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8 victims to empower them respond more effectively to peer victimisation (Chan &  
9  
10 Wong, 2015b; Falla et al., 2020). Based on the results of our study, an effective strategy  
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12 to help victims to overcome these processes could be to enhance their socioemotional  
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14 development, thereby reducing victims' current involvement in bullying, or prevent  
15  
16 them from starting to bully others (Chan & Wong, 2015b; Smith & Low, 2013).  
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18 Therefore, psychoeducational prevention and intervention programmes should focus on  
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20 how adolescents establish peer relationships and manage their emotions, especially  
21  
22 anger. And, given that the mechanisms appear to be similar, this would also serve to  
23  
24 prevent the association of cybervictimisation and cyberperpetration (Campbell et al.,  
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26 2012), avoiding aggressive coping with peer victimisation (Chan & Wong, 2017). To  
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28 conclude, more effective prevention and intervention strategies need to be designed  
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30 from a whole-school perspective (i.e., coordination of parents, caregivers, school  
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32 administrators, teachers, and social workers) to break the cycle of violence (Chan &  
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34 Wong, 2015a), making it possible for victims to stop being involved in the bullying  
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36 phenomenon in any of its forms, whether as perpetrator or bully-victim.  
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## SOCIO-EMOTIONAL FACTORS AND BULLYING ROLES

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**Table 1***Descriptive analyses and correlations for studied variables*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Victimisation	.53	.66	-					
2. Perpetration	.27	.46	.61***	-				
Peer relationship management	2.94	.83	-.04	-.29***	-			
4. Anger regulation	2.65	.79	-.26***	-.35***	.28***	-		
5. Gender	-	-	-.04	-.14***	.11***	-.14***	-	
6. Age	13.88	1.42	-.10***	-.01	.03	.01	.02	-

*Note.* Cell entries are zero-order Spearman correlation coefficients.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

## SOCIO-EMOTIONAL FACTORS AND BULLYING ROLES

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**Table 2***Direct and interaction effects*

Effect	<i>B</i>	<i>SE</i>	95% CI	
			LL	UL
Victimisation	.388***	.043	.304	.473
Peer relationship management	-.106***	.016	-.144	-.075
Anger regulation	-.070*	.016	-.101	-.040
Victimisation x Peer relationship management	-.153***	.060	-.270	-.036
Victimisation x Anger regulation	-.039	.084	-.203	.126
Peer relationship management x Anger regulation	-.026	.018	-.062	.010
Victimisation x Peer relationship management x Anger regulation	-.131*	.065	-.258	-.004
Gender	-.083***	.020	-.122	-.043
Age	.019**	.007	.006	.032

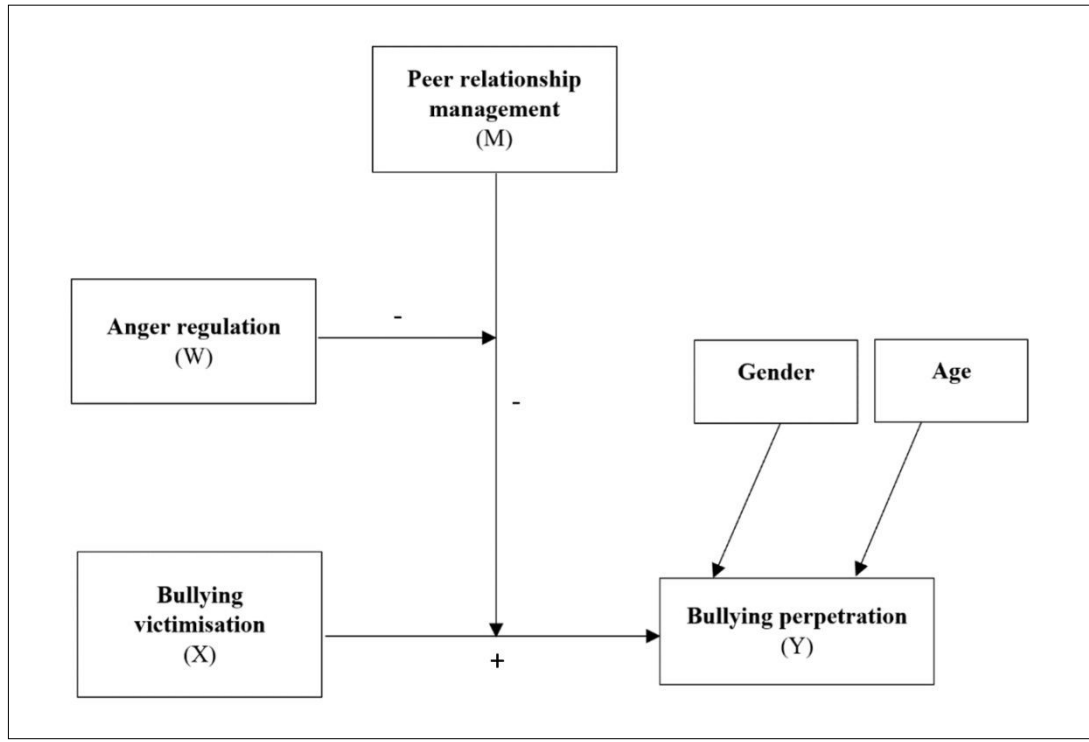
*Note.* Analyses performed using the PROCESS macro for SPSS (Model 3; Hayes, 2013).

Abbreviations: CI, confidence interval; LL, lower limit; UL, upper limit.

*Note:* \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Figure 1**

*Theoretical model with two moderators. Three-way interaction effect of peer relationship management and anger regulation on the victimisation-perpetration association*

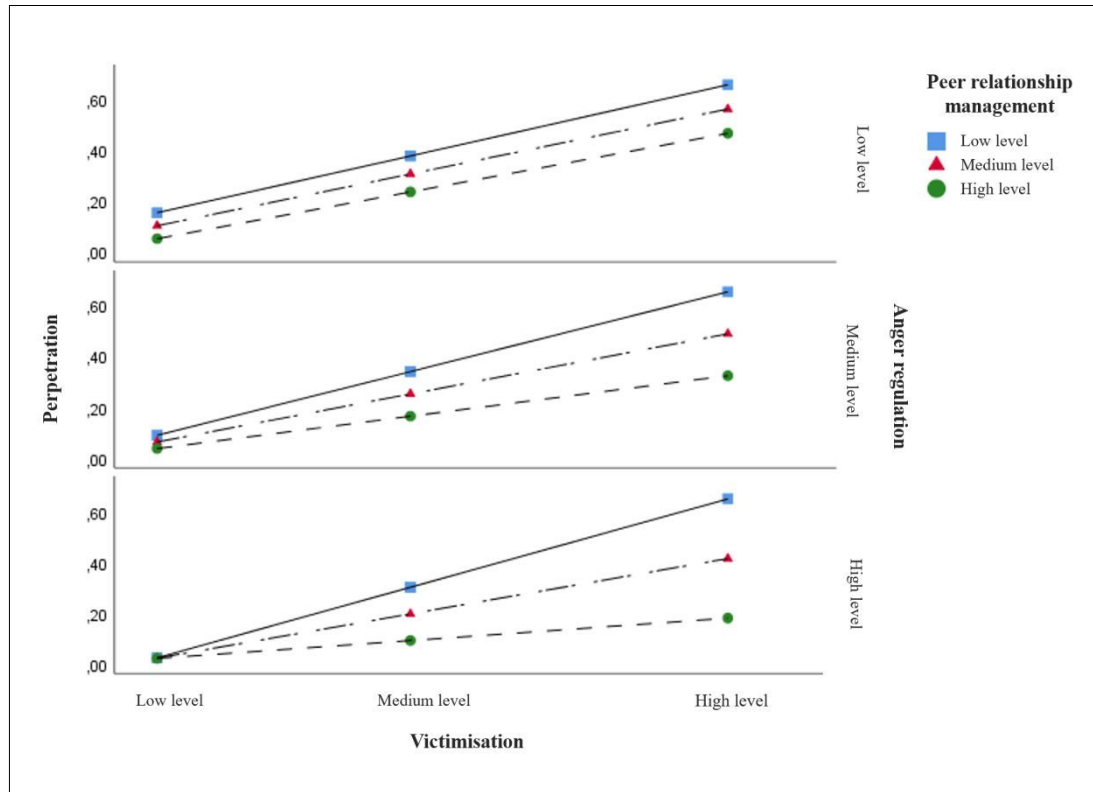


Note. X = independant variable; Y = dependant variable; M = first moderator; W = second moderator.

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**Figure 2**

*Three-way interaction plot of victimisation, peer relationship management, and anger regulation on perpetration*



*Note.* Moderating role of anger regulation in the conditional influence of peer relationship management on the victimisation-perpetration association.