INVITED REVIEW

WILEY

Positive reappraisal moderates depressive symptomology among adolescent bullying victims

Louise Ferraz de Camargo 👂 | Kylie Rice 👂

University of New England, Armidale, New South Wales, Australia

Correspondence

Louise Ferraz de Camargo, University of New England, Armidale, NSW, Australia. Email: louisecamargo@bigpond.com

Abstract

Objective: Recent research has identified three distinct types of bullying-victimisation; overt, reputational, and relational. While bullying-victimisation as a single construct is known to be associated with depression among adolescents, this relationship is unclear when applied to distinct types. The aim of the present study is to investigate the relationship between overt, reputational, and relational types of bullying-victimisation and depressive symptomology among adolescents. Further, the cognitive coping strategy "positive reappraisal" is explored as a moderating factor in these relationships.

Method: Data were collected through online surveys completed by 338 adolescents aged 12–18 years. Data were analysed through multiple regression and moderation analysis.

Results: It was found that bullying as a single construct predicted levels of depression. As unique constructs, reputational and relational bullying-victimisation were demonstrated to be associated with depression symptomology while overt bullying-victimisation was not. Positive reappraisal was found to moderate the relationships between reputational and relational bullying-victimisation and depression, but not between overt bullying-victimisation and depression.

Conclusion: This study highlights the importance of considering subtypes of bullying-victimisation in future research regarding adolescent's mental health. That positive reappraisal was found to be helpful in reducing depressive symptomology among adolescent bullying victims suggests investigation of other cognitive coping strategies is warranted.

KEYWORDS

adolescents, Australia, bullying-victimisation, depression, positive reappraisal

1 | INTRODUCTION

Bullying-victimisation, or "peer-victimisation" is a serious public health problem (Olweus, 1978; Srabstein & Leventhal, 2010) and is defined as exposure to repetitive and harmful actions by one or more other persons over a period of time (Olweus, 1978; Siegel, La Greca, &

Harrison, 2009; Srabstein & Leventhal, 2010). An imbalance of power is an essential component; as the bully gains power, the victim loses power (Griffin & Gross, 2004; Menesini & Salmivalli, 2017). Power is gained from physical strength, social status, and by using a person's vulnerabilities (e.g., appearance, learning disability) to cause harm (Menesini & Salmivalli, 2017).

Consequently, victims typically struggle to counter the situation.

The relationship between bullying-victimisation and depressive symptomology among adolescents is well established (Moore et al., 2017). However, effective preventative and treatment intervention requires comprehensive understanding of the effects of distinct forms of bullying at the individual level (Hawker & Boulton, 2000; Swearer & Espelage, 2004). This article adopts a cognitive-behavioural model for conceptualising the relationship between overt, relational, and reputational bullying-victimisation and depressive symptomology and the moderating role of positive reappraisal.

2 | INTERNATIONAL AND AUSTRALIAN PREVALENCE RATES

Estimates suggest one in four Australian school students 8–14 years frequently experience victimisation (Ford, King, Priest, & Kavanagh, 2017). Additionally, the Victorian Adolescent Health and Wellbeing Survey of 10,273 students aged 12-16 years found 31% experienced verbal bullying, 11% physical bullying, 14% were socially excluded, and 18% had rumours spread about them (Thomas et al., 2016). International prevalence rates of approximately 16% were demonstrated in a large-scale study in 40 countries (Craig et al., 2009). The variability of reported prevalence rates is suggested to reflect factors including differences in measurement strategies and adopted definitions (Cook, Williams, Guerra, & Kim, 2010).

3 | BULLYING-VICTIMISATION: LINKAGES WITH DEPRESSION

Bullying-victimisation is associated with somatic problems such as colds, headaches, and stomach aches, psychosomatic problems, internalising problems, school absenteeism, and increased risk of non-suicidal self-harm and suicide ideation (see Wolke & Lereya, 2015, for a detailed overview). Moreover, strong associations have consistently been found between bullying-victimisation and depression (Hawker & Boulton, 2000; Kaltiala-Heino & Frojd, 2011), one of the most prevalent mental health issues among Australian adolescents (Lawrence et al., 2015).

Unfortunately, past research offers little clarification regarding aspects of bullying behaviour that are more likely to be associated with depressive symptomology. For example, studies suggest specific forms of bullying

What is already known about the topic

- Bullying-victimisation is associated with depression among adolescents.
- Previous research has identified three unique bullying-victimisation sub-types; overt, reputational, and relational.
- Positive reappraisal is negatively associated with depressive symptomology among adolescents, adults, and older adults.

What this topic adds

- Covert types of bullying-victimisation, being reputational and relational, are associated with depressive symptomology.
- The relationships between reputational and relational bullying-victimisation and depression are moderated by positive reappraisal.
- Overt bullying-victimisation is not associated with depressive symptomology and this relationship is not moderated by positive reappraisal.

are more detrimental to mental health than others (Siegel et al., 2009), however bullying behaviour is typically conceptualised as a single construct (Moore et al., 2017).

4 | FORMS OF BULLYING

Long recognised overt bullying involves physical aggression (e.g., hitting, kicking) or verbal threats (Olweus, 1978). More recently recognised covert bullying includes reputational bullying and relational bullying (De Los Reyes & Prinstein, 2004; Siegel et al., 2009).

Reputational bullying involves damaging a peer's reputation through means such as rumour spreading (Siegel et al., 2009). Relational bullying refers to using one's relationship to harm another peer within the peer group through malicious manipulation of a relationship, enlisting others to dislike a peer, damaging reputation, threatening to end friendships, and social exclusion (De Los Reyes & Prinstein, 2004; Siegel et al., 2009). That relational bullying occurs within the teenager's own friendship group is an important differentiating factor due to the close, personal relationship between the bully and the victim.

Despite calls for more complex research into the cause of victims' distress (Hawker & Boulton, 2000), only one study to date has included the three forms of bullying as distinct constructs in relation to adolescents' mental health. The research involving 228 adolescents aged 14–19 years (Mage = 16 years; SD = .91) found all three forms to be associated with social anxiety, with relational bullying being most strongly related (Siegel et al., 2009). Siegel et al. (2009) suggest results may be explained by the threat of rejection or exclusion from close, personal friendship groups being particularly distressing due to the increased importance of friendships during this developmental phase. Considering that depression during adolescence is associated with experiences of peer exclusion (Jankowski et al., 2018), extending this research to include depressive symptomology is needed.

5 | THE COGNITIVE-BEHAVIOURAL MODEL OF BULLYING-VICTIMISATION

Bullying behaviour has typically been conceptualised within a social-ecological framework with family, school, peers, community, and culture considered influencing factors (Swearer & Espelage, 2004). Consequently, development of psychological based interventions is challenging and establishing ways for the individual to cope has been called for (Garnefski & Kraaij, 2014). Applying a cognitive-behavioural therapy (CBT) model (Beck, 1976) suggests distorted thoughts associated with bullying-victimisation are key in maintaining depressive symptomology. Based on the CBT model, the extent to which adolescents use adaptive or maladaptive cognitive coping styles in response to bullying-victimisation is likely to influence their experience of distorted cognitions and related psychological distress.

6 | THE MODERATING ROLE OF COGNITIVE COPING STRATEGIES

Cognitive coping strategies, defined as conscious, mental strategies used to manage the processing of emotionally charged stimuli, (Garnefski, Kraaij, & Spinhoven, 2001) have been found to regulate emotions and to be associated with healthier patterns of affect, social functioning, and wellbeing (John & Gross, 2004). Various studies have found strong relationships between the use of these strategies and emotional issues with results suggesting that maladaptive strategies leave individuals more vulnerable to emotional problems than others, while adaptive styles leave individuals less vulnerable (Garnefski

et al., 2001; Garnefski, Boon, & Kraaij, 2003; Garnefski & Kraaij, 2014).

The focus of the current study is positive reappraisal which refers to cognitively reinterpreting a negative event as more positive, thus changing the associated emotional response (John & Gross, 2004; Mc Rae, Ciesielski, & Gross, 2012). Positive reappraisal has been found to be associated with greater experience of positive emotion and less negative emotion, better interpersonal functioning, and increased well-being (Buhle et al., 2014; John & Gross, 2004). This is suggested to be due to increases of resilience in stressful situations and to the seeking of positive factors in the face of stressful life events (Garnefski, Kraaij, & Spinhoven, 2002; John & Gross, 2004).

For example, a comparative study of five samples including adolescents, adults and older adults found positive reappraisal to be negatively related to depressive symptoms across samples (Garnefski & Kraaij, 2006). In the case of bullying-victimisation, initial investigations suggest that higher positive reappraisal lowers the association between bullying-victimisation and anxiety symptoms (Garnefski & Kraaij, 2014). However, although a direct negative relationship was demonstrated between positive reappraisal and depression, a significant interaction effect for positive reappraisal was not found in this relationship. A possible explanation is that bullying-victimisation incorporated both overt and covert forms and it is unclear whether positive reappraisal is effective in the face of physical bullying.

The extent to which adolescents use positive reappraisal is suggested to vary due to this skill being in the process of development (Garnefski & Kraaij, 2006). For example, early adolescents have been found to use cognitive coping strategies significantly less often than late adolescents or adults while late adolescents were found to engage in six of the nine strategies less often than adults (Garnefski & Kraaij, 2006). Thus, although positive reappraisal is well-known to help combat depressive symptomology, this relationship is unclear in the context of bullying-victimisation during the adolescent years.

7 | RATIONALE

Bullying-victimisation is a common and wide spread phenomenon that is well-known to be associated with depressive symptomology among adolescents. Despite more than 40 years of psychological research in the area, adolescents' mental health continues to suffer in relation to bullying-victimisation (Olweus, 1978; Rey, Quintana-Orts, Merida-Lopez, & Extremera, 2019; Srabstein &

Leventhal, 2010). Considering bullying behaviour is expected to continue, research aimed at helping individuals better cope with bullying experiences is needed.

Initial attempts at doing so suggest that cognitive coping strategies have been found to moderate the effects of bullying on the mental health of victims. The next step is to integrate and extend these initial findings by exploring different forms of bullying in relation to depression, and by determining whether specific cognitive coping strategies, such as positive reappraisal, may help alleviate related experiences of depression.

8 | AIMS AND HYPOTHESES

The aim of the present study is to investigate the relationship between overt, reputational, and relational bullying-victimisation, symptoms of depression and positive reappraisal. It is hypothesised that there will be unique, significant, positive relationships between overt, reputational, and relational bullying-victimisation and depressive symptomology. Secondly, it is hypothesised that overt, reputational, and relational bullying-victimisation will uniquely predict levels of depressive symptomology. Finally, it is hypothesised that positive reappraisal will moderate the relationships between overt, reputational, and relational bullying-victimisation and depression.

9 | METHOD

9.1 | Participants

To reduce the possibility of sample-specific bias, participants were recruited from three High Schools in Melbourne, Australia. Students from year 7 to year 12 were invited to take part and both parental and participant consent were obtained. Participation was restricted to those who had experienced bullying during the past school year that consisted of approximately 3 school terms or 8 months. Usable data were obtained from

349 participants. Respondents' age ranged from 12–18 years ($M=14.25,\ SD=1.51$). Of these, 50.3% were male and 49.4% were female. The following measures were used in the present study. Internal reliabilities (Cronbach's α), ranges, means and standard deviations for the following measures are presented in Table 1. Total and scale scores for these measures were created by obtaining the summed total for each measure.

9.2 | Measures

The study consists of an online self-report battery that measures adolescents' experience of overt, reputational, and relational bullying-victimisation, positive reappraisal use, and depressive symptomology.

9.3 | Bullying victimisation

Overt, relational, and reputational bullying-victimisation were assessed using the Revised Peer Experiences Questionnaire (RPEQ; De Los Reyes & Prinstein, 2004; Prinstein, Boergers, & Vernberg, 2001). The victimisation subscales consist of nine items representing three different peer victimisation experiences. The frequency of each victimisation experience is rated on a five-point Likert scale (1 = never, 5 = a few times a week). Higher scores reflect higher levels of bullying-victimisation. In accordance with Prinstein et al. (2001), questions were introduced with:

For the next questions, please think about things that might have happened to you at school, or out of school since the beginning of this school year. Include texts, Facebook etc. as well as face-to-face contact. Do not include things that happened with your close family members (such as brothers and sisters).

Internal consistency estimates (Cronbach's alpha) for the subscales have been reported to be: relational = .84, reputational = .83, and overt = .78 (De Los Reyes & Prinstein, 2004).

TABLE 1 Means, SD, theoretical ranges, observed ranges, and Cronbach's α among the main study variables (N = 349)

Variables	Mean	SD	Theoretical range	Observed range	Cronbach's α
Overt bullying-victimisation	4.1	1.6	3–15	3–10	.76
Reputational bullying-victimisation	5.1	2.6	3–15	3–15	.88
Relational bullying-victimisation	5.1	2.3	3–15	3–15	.80
Positive reappraisal	10.7	4.3	4–20	4–20	.81
Depressive symptomology	18.1	6.4	10-40	10-40	.91

9.4 | Positive reappraisal

Positive reappraisal use was measured by the Cognitive Emotion Regulation Questionnaire (CERQ). The CERQ is a 36-item questionnaire, consisting of the following nine conceptually and psychometrically distinct subscales: Self-blame, Other-blame, Acceptance, Rumination, Catastrophising, Refocus on Planning, Putting into Perspective, Positive Reappraisal, Positive Refocusing (Garnefski et al., 2001, 2002). For the purpose of this study, only the positive reappraisal subscale was used. The positive reappraisal subscale consists of four items and refers to what someone thinks after the experience of a threatening or stressful life event: Items are rated on a 5-point Likert scale from 1 ([almost] never), to 5 ([almost] always) with higher scores reflecting higher use.

To assess positive reappraisal adolescents reported in response to "being maltreated by a peer," the following instruction was provided:

> Everyone who experiences being maltreated by a peer responds to this in his or her own way. The following questions are about what you think if someone treats you unpleasantly.

All items were stated in the present tense, referring to current thoughts about the indicated events. Research on positive reappraisal, as measured by the CERQ, has shown good internal consistency with Cronbach's alpha ranging from .72 to .76 (Garnefski et al., 2001, 2002).

9.5 | Depressive symptomology

The Revised Child Anxiety and Depression Scale (RCADS; Chorpita, Ebesutani, & Spence, 2015) is a 47-item, youth self-report questionnaire with subscales including: separation anxiety disorder, social phobia, generalised anxiety disorder, panic disorder, obsessive compulsive disorder, and major depressive disorder (MDD). For the purpose of this study, the MDD subscale was used to assess anxiety symptomology. The MDD subscale includes 6 items (e.g., "I feel sad or empty"). Items are rated on a 4-point Likert-scale from 0 ("never") to 3 ("always").

The RCADS has proven to be a reliable and valid measure for the assessment of depression in general and clinical populations of children and adolescents (Chorpita, Moffitt, & Gray, 2005; Chorpita, Yim, Moffitt, Unemoto, & Francis, 2000; De Ross, Gullone, & Chorpita, 2002). Internal consistency estimates (Cronbach's alpha) for the MDD subscale has been reported to be .82 (range = .63 to .94) (Piqueras, Martin-Vivar, Sandin, San

Luis, & Pineda, 2017). Scale descriptives are presented in Table 1.

10 | PROCEDURE

Three Melbourne High Schools were chosen for the study based on the schools being co-educational thus offering a good ratio of male and female participants. Further, that the schools cater to students of diverse cultural backgrounds was considered helpful in combating sample bias. Permission was obtained from the schools' Principals. Ethics approval was obtained from the Human Research Ethics Committee at the University of New England and the Department of Education and Training Victoria.

A web-based survey was created using Qualtrics survey software. Parental consent was obtained through the distribution of an online ethical statement on the password protected parent portal of each school. Students who had parental consent were then invited to participate through the distribution of an online ethical statement to the password protected student portal of each school. Participating students were provided with a link to access the ethical statement and survey. Students were informed that participation was anonymous and voluntary, and contact details for counselling and follow up were offered. Students' participation was overseen by a school staff member and submission indicated consent.

In order to screen out participants that may be experiencing mental health issues, two screening questions were asked: "Do you see a psychologist or doctor for help with your emotions?" and "Is it likely that answering questions about being a victim of bullying will be highly upsetting for you?". A positive response to either question redirected the participant to the end of the survey. Participants provided demographic information including gender, age, and year level. Contact details for Kids Helpline, Child and Youth Mental Health Service (CYMHS), and the School Counsellor were supplied in the case that participants felt upset about the survey.

11 | STATISTICAL ANALYSIS

A power analysis using an alpha of .05, a power level of .95, a medium effect size ($f^2 = .15$), and 4 predictors suggests 129 participants for this study. Subsequently, data from a sample of 526 participants was collected. Cases that did not progress to the survey include; 134 cases (25.5%) due to giving positive responses to the screening questions, 25 cases (4.7%) due to not agreeing for the study to be published and 12 cases (2.3%) due to not

agreeing to participate in the study. A further six cases (1.1%) were deleted due to discontinuation. Overall, usable data were obtained from 349 participants (66.34%). No missing values were detected. Bivariate correlations were used to investigate intercorrelations among study variables. Examination of the hypothesised relationships were conducted through linear multiple regression and moderation analysis. These analyses were performed using IBM SPSS 25 (IBM Corp., 2017).

12 | RESULTS

12.1 | Correlation results

Visual inspection of the histograms indicated positively skewed data on all variables, thus the relationship between overt, relational, and reputational bullying victimisation (as measured by the RPEQ) and depressive symptomology (as measured by the RCADS), was investigated using Spearman's rank-order correlation.

There was a small, positive correlation between overt bullying-victimisation and depressive symptomology, rs = .30, n = 349, p < .001, with high levels of overt

bullying-victimisation associated with higher levels of depressive symptomology. There was a medium, positive correlation between reputational bullying-victimisation and depressive symptomology, rs = .40, n = 349, p < .001, with high levels of reputational bullying-victimisation associated with higher levels of depressive symptomology. There was a medium, positive correlation between the relational bullying-victimisation and depressive symptomology, rs = .43, n = 349, p < .001, with high levels of relational bullying-victimisation associated with higher levels of depressive symptomology. Results are presented in Table 2.

12.2 | Multiple regression results

Multiple regression was used to assess the ability of overt, reputational, and relational bullying-victimisation to predict levels of depression. The regression model was statistically significant F(3, 345) = 30.491, p < .001. Overt, reputational, and relational bullying-victimisation together predicted 21% (20.3% adjusted) of the variance in levels of depression with a medium to large effect size of $f^2 = 0.27$ (Cohen, 1988). The predictor that accounted for the most unique variance in levels of depression was

Scale	1	2	3	4	5
1. Overt bullying-victimisation	-				
2. Relational bullying-victimisation	.398**	-			
3. Reputational bullying-victimisation	.500**	.585**	-		
4. Positive reappraisal	064	050	078	-	
5. Depression	.299**	.425**	.404**	135*	_

TABLE 2 Spearman correlations between depression and predictor variables

TABLE 3 Regression analysis summary predicting depression

Variable	b	95% CI	SE	β	T	sr² (unique)	p
Constant	10.816	8.994, 12.637	.296		11.679		.000
Overt bullying-victimisation	.257	172, .686	.218	.065	1.180	.00	.239
Relational bullying-victimisation	.619	.292, .947	.167	.226	3.718	.03	.000
Reputational bullying-victimisation	.607	.301, .914	.156	.247	3.901	.03	.000

Note: $R^2 = .21$, (N = 349).

TABLE 4 Linear model of predictors of depression: overt bullying-victimisation

Variable	b	95% CI	SE	t	p
Constant	18.010	17.352, 18.668	.335	53.801	.000
Positive reappraisal	289	461,117	.088	-3.302	.001
Overt bullying-victimisation	.888	.415, 1.361	.240	3.693	.000
Overt bullying-victimisation \times positive reappraisal	131	280, .017	.075	.082	.082

Note: $R^2 = .11$, (N = 349).

^{**}p < .01 (2-tailed).; *p < .05 (2-tailed).

relational bullying-victimisation, accounting for 3.2% of the variance, β = .226, t (345) 3.72, p < .001. Reputational bullying-victimisation also accounted for a significant amount of unique variance in depressive symptomology within this model (3.5% of the variance, β = .247, t (345) 3.90, p < .001). However, overt bullying-victimisation did not uniquely predict a significant amount of variance β = .065, t (345) 1.18, p = .239 (see Table 3).

12.3 | Moderated multiple regression results

To test the hypothesis that depressive symptomology is associated with multiple risk factors, and more specifically whether positive reappraisal moderates the relationship between overt, relational, and reputational bullying-victimisation and depressive symptomology, PROCESS moderation analysis was conducted (Preacher, Rucker, & Hayes, 2007). Assumptions were met with the exception of a number of multicollinearity outliers (approximately 7–10 for each analysis). Removal did not change results, as such they were retained (Field, 2013).

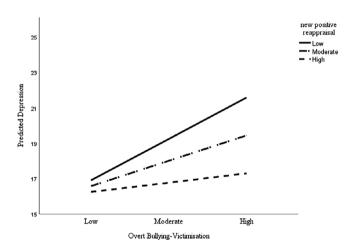


FIGURE 1 Mean depression scores predicted by level of overt bullying-victimisation with positive reappraisal as the moderating variable

12.4 | Overt bullying-victimisation

As shown in Table 4, the relationship between overt bullying-victimisation and depressive symptomology was not found to be moderated by cognitive reappraisal, b = -.132, 95% CI [-.280, .017], t = .082, p = .082. These relationships are depicted in Figure 1.

12.5 | Relational bullying-victimisation

As shown in Table 5, the overall model indicates that the relationship between relational bullying-victimisation and depressive symptomology is moderated by use of positive reappraisal, b = -.117, 95% CI [-.193, -.041], t = -3.04, p = .003.

When positive reappraisal is low, there is a significant positive relationship between relational bullying-victimisation and depression b=1.472, 95% CI [1.059, 1.885], t=7.01, p<.001. At the mean value of positive reappraisal, there is a significant positive relationship between relational bullying-victimisation and depression b=.973, 95% CI [.670, 1.275], t=6.33, p<.001. When positive reappraisal is high, there is a significant positive relationship between relational bullying-victimisation and depression, b=.473, 95% CI [.002, .943], t=1.98, p=.049. These relationships are depicted in Figure 2.

12.6 | Reputational bullyingvictimisation

As shown in Table 6, the overall model indicates that the relationship between reputational bullying-victimisation and depressive symptomology is moderated by use of positive reappraisal, b = -.108, 95% CI [-.180, -.035], t = -2.92, p = .004.

When positive reappraisal is low, there is a significant positive relationship between reputational bullying-victimisation and depression b = 1.351, 95% CI [.950, 1.752], t = 6.625, p < .001. At the mean value of positive reappraisal, there is a significant positive relationship

TABLE 5 Linear model of predictors of depression: relational bullying-victimisation

Variable	b	95% CI	SE	t	p
Constant	18.00	17.388, 18.613	.311	57.840	.000
Positive reappraisal	272	425,119	.078	-3.483	.001
Reputational bullying-victimisation	.973	.670, 1.275	.154	6.332	.000
Reputational bullying-victimisation \times positive reappraisal	117	193, .041	.039	-3.037	.003

Note: $R^2 = .21$, (N = 349).

between relational bullying-victimisation and depression b = .891, 95% CI [.643, 1.139], t = 7.08, p < .001. When positive reappraisal is high, there is a significant positive relationship between relational bullying-victimisation and depression, b = .431, 95% CI [.039, .823], t = 2.16, p = .031 (see Figure 3).

While the relationships between relational and reputational bullying-victimisation with depression remain positive, the moderating effects of positive reappraisal use is seen in higher use being associated with reduced depressive symptomology (see Figure 2 and Figure 3). These moderating effects are supported by associated negative t-scores (see Table 5 and Table 6).

13 | DISCUSSION

The present study focused on the role that positive reappraisal plays in the relationship between bullying-victimisation and symptoms of depression. The first hypothesis was supported with positive relationships found between overt, reputational, and relational bullying-victimisation and depressive symptomology,

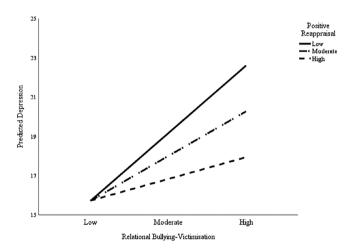


FIGURE 2 Mean depression scores predicted by level of relational bullying-victimisation with positive reappraisal as the moderating variable

confirming results of previous studies (Hawker & Boulton, 2000; Kaltiala-Heino & Frojd, 2011). The second hypothesis was partially supported. Taken together, the three forms of bullying-victimisation accounted for 20% of the variance in depression. Both relational and reputational bullying-victimisation were significant individual predictors uniquely accounting for 3.2% and 3.5% of the variance, respectively. However, overt bullying-victimisation was not found to predict a significant amount of unique variance.

The current models were consistent with the hypothesis that positive reappraisal significantly moderates the relationship between bullying-victimisation and depressive symptomology, however this was only supported for relational and reputational bullying-victimisation but not overt. Considering reputational and relational bullying victimisation, results suggest that higher levels of positive reappraisal are associated with lower levels of endorsement of depressive symptomology. These findings support results of previous studies suggesting that by using positive reappraisal, adolescents may be more resilient (Garnefski et al., 2001).

13.1 | Overt versus covert bullying

These results once again confirm the on-going detrimental effects of bullying-victimisation on the mental health of adolescents. Moreover, that overt bullying did not add a significant amount of explained variance of depression suggests that reputational and relational forms of bullying-victimisation are associated with symptoms of depression. These results extend previous research that has typically considered all forms of bullying-victimisation as a unique construct (Moore et al., 2017).

Considering these results within a developmental framework offers insight to these findings. Although caregivers remain important at this crucial developmental stage, adolescents increasingly rely on their peers for social support (Brauer & De Coster, 2015). Therefore, relational bullying which uses this increased intimacy to share personal information told in confidence may be

TABLE 6 Linear model of predictors of depression: relational bullying-victimisation

Variable	b	95% CI	SE	t	p
Constant	17.972	17.362, 18.583	.310	57.908	.000
Positive reappraisal	281	440,122	.081	-3.479	.001
Reputational bullying-victimisation	.891	.643, 1.39	.126	7.075	.000
Reputational bullying-victimisation \times positive reappraisal	108	180, .035	.037	-2.923	.004

Note: $R^2 = .21$, (N = 349).

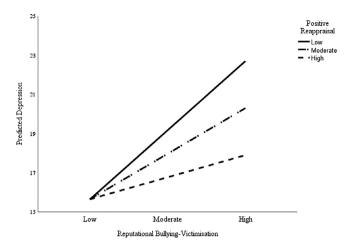


FIGURE 3 Mean depression scores predicted by level of reputational bullying-victimisation with positive reappraisal as the moderating variable

particularly traumatic. Moreover, overt bullying is more easily detected meaning the victim may receive support from friends and others, and the perpetrator is more likely to be punished. This may help combat the imbalance of power that defines bullying and may increase the victim's ability to defend themselves (Olweus, 1993). Conversely, difficulty distinguishing relational bullying from accepted, natural conflict among friends may result in less outside support and is more likely to be disregarded (Besag, 2006). Indeed, relational bullying is less likely than physical bullying to be defined in school antibullying policies (Smith, Smith, Osborn, & Samara, 2008). Considering that psychological research has typically focused on overt bullying for decades (De Los Reyes & Prinstein, 2004), these results highlight the importance of investigating covert bullying in future research. Further, these findings suggest value in practitioners, teachers, and care givers being alert for reputational and relational bullying.

13.2 | Moderating effects of positive reappraisal

The results demonstrating that higher use of positive reappraisal was found to lessen depressive symptomology among victims of relational and reputational bullying offers support for adopting a cognitive-behavioural model of bullying-victimisation. According to the model, positive reappraisal modifies the cognitive distortions that are associated with depressive symptoms to more adaptive thoughts (Beck, 1976). Within this model, more helpful thinking is related to adaptive behaviour (e.g., seek support, positive self-talk) and more helpful emotions (e.g., lift in mood, positivity), thus breaking the

depressive cycle (Samoilov & Goldfried, 2000). The relationship between bullying-victimisation and depression is suggested to be due to victims perceiving bullying as ongoing conflict or frustration, abuse, and as a traumatic event; factors that are known to moderate or mediate experiences of depression (Birmaher & Brent, 2007). Therefore, reinterpreting the meaning of bullying through positive reappraisal use changes the response from negative to more positive and increases resilience (John & Gross, 2004). For example, by engaging in positive reappraisal use the victim could change the meaning of rumour spreading from a personal attack to the perpetrator engaging in attention seeking due to vulnerability on their part.

A possible explanation for positive reappraisal not being found to lessen depressive symptomology in overt bullying situations is the Depression-Distortion Hypothesis (De Los Reyes & Prinstein, 2004). The theory posits that adolescents with high levels of depressive symptoms may be vulnerable to misperceptions of their social experiences among peers, including perceiving stressful events from ambiguous peer experiences (De Los Reyes & Prinstein, 2004; Prinstein, Cheah, & Guyer, 2005). Thus, it is possible that covert bullying is more prone to misperception and distortion by depressed adolescents and as such positive reappraisal may be more effective in relational and reputational bullying situations.

13.3 | Future research

Bullying behaviour is likely to continue and establishing ways for individuals to cope is paramount. Based on the current study, three key factors that may be helpful in achieving this goal are: (a) increased understanding of the relationships between distinct forms of bullying-victimisation and mental health outcomes; (b) increased understanding of the role of specific cognitive coping strategies; (c) adoption of an individual orientated conceptualisation of bullying-victimisation.

Information gained could help protect the mental health of vulnerable adolescents by enabling them to better cope with bullying situations through learning to shift from unhelpful to helpful thinking styles (Beck, 2005; Beck, Rush, Shaw, & Emery, 1979; Garnefski & Kraaij, 2014). Moreover, determining subtypes of bullying that are more harmful to adolescents' mental health add to this knowledge and could be used to inform targeted prevention, treatment intervention, and school anti-bullying programs. Indeed, that cognitive reappraisal is a skill that can be learnt is demonstrated in Beck's ubiquitous cognitive therapy (Beck, 2005; Beck et al., 1979). Considering

that bullying-victimisation is one of the most modifiable causes of adolescent mental health issues (Scott, Moore, Sly, & Norman, 2014), future research in this area has the potential to substantially improve the psychological health of this population.

13.4 | Limitations

This study addresses several important questions regarding the mental health of adolescent bullying-victims however limitations should be considered. The detection of depressive symptomology, use of cognitive reappraisal, and assessment of bullying-victimisation was made on basis of self-report and social desirability bias should be considered when interpreting results. Future research would benefit from incorporating qualitative methods such as interviews with parents and students. Additionally, as this study was based on cross-sectional data, causality cannot be assumed and longitudinal research is called for to clarify directions or influence.

14 | CONCLUSION

Adolescents victims of reputational and relational bullying are vulnerable to being overlooked by caregivers and teachers due to the covert nature of the bullying and consequently may not receive the support they need. Psychologists hold an important position in being able to identify and provide psychological intervention for victims. Depressed adolescents could be effectively screened for experiences of covert bullying-victimisation by being asked targeted questions such as "Have your friends been excluding you in any way?" (relational bullying) and "Have your friends been spreading rumours about you?" (reputational bullying). Identifying experiences of covert bullying-victimisation would allow for targeted treatment intervention through teaching positive reappraisal skills. Further, teaching such skills to adolescents in anticipation of possible covert bullyingvictimisation could be a powerful preventative measure. Given that cognitive based interventions fall within the domain of psychologists, the potential for psychologists to improve the mental health of adolescents is significant.

ACKNOWLEDGEMENTS

The first author gratefully acknowledges the Victorian Department of Education and Training and the Melbourne High Schools where the data were collected. In particular, thanks are extended to the Assistant Principles for their approval and endorsement of the project.

ORCID

Louise Ferraz de Camargo https://orcid.org/0000-0002-4241-9358

Kylie Rice https://orcid.org/0000-0002-7072-5619

REFERENCES

- Beck, A. T. (1976). Cognitive therapy and the emotional disorders. New York: International Universities Press.
- Beck, A. T. (2005). The current state of cognitive therapy: A 40 year retrospective. *Archives of General Psychiatry*, 9, 953–959. https://doi.org/10.1001/archpsyc.62.9.953
- Beck, A. T., Rush, A. J., Shaw, B. G., & Emery, G. (1979). In A. T. Beck (Ed.), *Cognitive therapy of depression*. New York, NY: The Guilford Press.
- Besag, V. E. (2006). Bullying among girls: Friends or foes? *School and Psychology International*, 27, 589–600.
- Birmaher, B., & Brent, D. (2007). AACAP work group on quality issues parameter for the assessment and treatment of children and adolescents with depressive disorders. *Journal of American Academy of Child and Adolescent Psychiatry*, 46, 1503–1526. https://doi.org/10.1097/chi.0b013e318145ae1c
- Brauer, J. R., & De Coster, S. (2015). Social relationships and delinquency: Revisiting parent and peer influence during adolescence. *Youth & Society*, 47, 374–394. https://doi.org/10.1177/ 0044118X12467655
- Buhle, J. T., Silvers, J. A., Wager, T. D., Lopez, R., Onyemekwu, C., Kober, H., ... Ochsner, K. N. (2014). Cognitive reappraisal of emotion: A meta-analysis of human neuroimaging studies. *Cerebral Cortex*, 11, 2981–2990. https://doi.org/10.1093/cercor/bht154
- Chorpita, B. F., Ebesutani, C., & Spence, S. H. (2015). *Revised children's anxiety and depression scale: User's guide*. Available from www.childfirst.ucla.edu.
- Chorpita, B. F., Moffitt, C., & Gray, J. (2005). Psychometric properties of the revised child anxiety and depression scale in a clinical sample. *Behaviour Research and Therapy*, 43, 309–322. https://doi.org/10.1016/j.brat.2004.02.004
- Chorpita, B. F., Yim, L., Moffitt, C. E., Unemoto, I. A., & Francis, S. E. (2000). Assessment of symptoms of DSM-IV anxiety and depression in children: A revised child anxiety and depression scale. *Behaviour Change*, 19, 90–101.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Cook, C. R., Williams, K. R., Guerra, N. G., & Kim, T. E. (2010). Variability in the prevalence of bullying and victimization: A cross-national and methodological analysis. In S. R. Jimerson, S. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 347–362). New York: Routledge.
- Craig, W., Harel-Fisch, Y., Fogel-Grinvald, H., Dostaler, S., Hetland, J., & Simons-Morton, B. (2009). A cross-national profile of bullying and victimization among adolescents in 40 countries. *International Journal of Public Health*, *54*(Suppl. 2), 216–224. https://doi.org/10.1007/s00038-009-5413-9
- De Los Reyes, A., & Prinstein, M. J. (2004). Applying depression-distortion hypotheses to the assessment of peer victimization in adolescents. *Journal of Clinical and Adolescent Psychology*, 33, 325–335. https://doi.org/10.1207/s15374424jccp3302_14

- De Ross, R. I., Gullone, E., & Chorpita, B. F. (2002). The revised child anxiety and depression scale: A psychometric investigation with Australian youth. *Behaviour Change*, 19, 90–101.
- Field, A. (2013). Discovering statistics using IBM SPSS statistics (C. M. Ed. 4th ed. London: Sage Publications Ltd.
- Ford, R., King, T., Priest, N., & Kavanagh, A. (2017). Bullying and mental health and suicidal behaviour among 14- to 15-year-olds in a representative sample of Australian children. *Australian & New Zealand Journal of Psychiatry*, *51*, 897–908. https://doi.org/10.1177/0004867417700275
- Garnefski, N., Boon, S., & Kraaij, V. (2003). Relationships between cognitive strategies of adolescents and depressive symptomology across different types of life events. *Journal of Youth and Adolescence*, 32, 401–408. https://doi.org/10.1023/A: 1025994200559
- Garnefski, N., & Kraaij, V. (2006). Relationships between cognitive emotion regulation strategies and depressive symptoms: A comparative study of five specific samples. *Personality and Individual Differences*, 40, 1659–1669. https://doi.org/10.1016/j.paid. 2005.12.009
- Garnefski, N., & Kraaij, V. (2014). Bully victimisation and emotional problems in adolescents: Moderation by specific cognitive coping strategies. *Department of Clinical Psychology*, 37, 1153–1160. https://doi.org/10.1016/j.adolescence.2014.07.005
- Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). Negative life events, cognitive emotion regulation and emotional problems. Personality and Individual Differences, 30, 1311–1327. https://doi.org/10.1016/S0191-8869(00)00113-6
- Garnefski, N., Kraaij, V., & Spinhoven, P. (2002). CERQ: Manual for the use of the cognitive emotion regulation questionnaire: A questionnaire measuring cognitive coping strategies. Leiderdorp, The Netherlands: DATEC.
- Griffin, R. S., & Gross, A. M. (2004). Childhood bullying: Current empirical findings and future directions for research. Aggression and Violent Behaviour, 9, 379–400. https://doi.org/10.1016/ S1359-1789(03)00033-8
- Hawker, D. S. J., & Boulton, M. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A metaanalytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 41, 441–455.
- IBM Corp. (2017). IBM statistics for windows version 25. Armonk, NY: IBM Corp.
- Jankowski, K. F., Batres, J., Scott, H., Smyda, G., Pfeifer, J. H., & Quevedo, K. (2018). Feeling left out: Depresssed adolescents may atypically recruit emotional salience and regulation networks during social exclusion. Social Cognitive and Affective Neuroscience, 13, 863–876. https://doi.org/10.1093/scan/nsy055
- John, O. P., & Gross, A. M. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality*, 72, 1301–1333. https://doi.org/10.1111/j.1467-6494.2004.00298.x
- Kaltiala-Heino, R., & Frojd, S. (2011). Correlation between bullying and clinical depression in adolescent patients. *Adolescent Health, Medicine and Therapeutics*, 2, 37–44. https://doi.org/10. 2147/AHMT.S11554
- Lawrence, D., Johnson, S., Hafekost, J., Boterhoven De Haan, K., Sawyer, M., Ainley, J., & Zubrick, S. R. (2015). The mental health of children and adolescents: Report on the second

- australian child and adolescent survey of mental health and well being, Canberra: Department of Health.
- Mc Rae, K., Ciesielski, B., & Gross, J. J. (2012). Unpacking cognitive reappraisal: Goals, tactics, and outcomes. *Emotion*, *12*, 250–255. https://doi.org/10.1037/a0026351
- Menesini, E., & Salmivalli, C. (2017). Bullying in schools: The state of knowledge and effective interventions. *Psychology, Health & Medicine*, 22(Supp. 1), 240–253. https://doi.org/10.1080/13548506.2017. 1279740
- Moore, S. E., Norman, R. E., Suetani, S., Thomas, H. J., Sly, P. D., & Scott, J. G. (2017). Consequences of bullying victimization in childhood and adolescence: A systematic review and meta-analysis. World Journal of Psychiatry, 7, 60–76. https://doi.org/10.5498/wjp.v7.i1.60
- Olweus, D. (1978). Agression in the schools: Bullies and whipping boys. New York, NY: Hemisphere Publishing.
- Olweus, D. (1993). Bullying at school: What we know and what we can do. Oxford, UK: Blackwell Publishers.
- Piqueras, J. A., Martin-Vivar, M., Sandin, B., San Luis, C., & Pineda, D. (2017). The revised child anxiety and depression scale: A systematic review and reliability generalization meta-analysis. *Journal of Affective Disorders*, 218, 153–169. https://doi.org/10.1016/j.jad.2017.04.022
- Preacher, J. K., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated medication hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioural Research*, 42, 185–227. https://doi.org/10.1080/00273170701341316
- Prinstein, M. J., Boergers, J., & Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child Psychology*, 2001(30), 479–491. https://doi.org/10.1207/S15374424JCCP3004_05
- Prinstein, M. J., Cheah, C. S. L., & Guyer, A. E. (2005). Peer victimization, cue interpretation, and internalizing symptoms: Preliminary concurrent and longitudinal findings for children and adolescents. *Journal of Clinical Child and Adolescent Psychology*, 34, 11–24.
- Rey, L., Quintana-Orts, C., Merida-Lopez, S., & Extremera, N. (2019). Being bullied at school: Gratitude as potential protective factor for suicide risk in adolescents. *Frontiers in Psychology*, 10, 1–10. https://doi.org/10.3389/fpsyg.2019.00662
- Samoilov, A., & Goldfried, M. R. (2000). Role of emotion in cognitive-behaviour therapy. *Clinical Psychology: Science and Practice*, 7, 373–385. https://doi.org/10.1093/clipsy.7.4.373
- Scott, J. G., Moore, S. E., Sly, P. D., & Norman, R. E. (2014). Bullying in children and adolescents: A modifiable risk factor for mental illness. *Australian & New Zealand Journal of Psychiatry*, 48, 209–212. https://doi.org/10.1177/0004867413508456
- Siegel, R. S., La Greca, A. M., & Harrison, H. M. (2009). Peer victimisation and social anxiety in adolescents: Prospective and reciprocal relationships. *Journal of Youth and Adolescence*, 38, 1096–1109. https://doi.org/10.1007/s10964-009-9392-1
- Smith, P. K., Smith, C., Osborn, R., & Samara, M. (2008). A content analysis of school anti-bullying policies: Progress and limitations. *Educational Psychology Practice*, 24, 1–12. https://doi.org/ 10.1080/02667360701661165
- Srabstein, J. C., & Leventhal, B. L. (2010). Prevention of bullyingrelated morbidity and mortality: A call for public health

policies. *Bulletin of the World Health Organisation*, 88, 403–403. https://doi.org/10.2471/BLT.10.077123

Swearer, S. M., & Espelage, D. L. (2004). Introduction: A social-ecological framework of bullying among youth. In D. L. Espelage & S. M. Swearer (Eds.), Bullying in American schools: A social-ecological perspective on prevention and intervention. Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Thomas, H. J., Chan, G. C., Scott, J. G., Connor, J. P., Kelly, A. B., & Willians, J. (2016). Association of different forms of bullying victimisation with adolescents' psychological distress and reduced emotional wellbeing. *Australian & New Zealand Journal of Psychiatry*, 50, 371–379. https://doi. org/10.1177/0004867415600076 Wolke, D., & Lereya, S. T. (2015). Long-term effects of bullying. Archives of Disease in Childhood, 100, 879–885. https://doi.org/10.1136/archdischild-2014-306667

How to cite this article: Ferraz de Camargo L, Rice K. Positive reappraisal moderates depressive symptomology among adolescent bullying victims. *Aust J Psychol.* 2020;1–12. https://doi.org/10.1111/ajpy.12288