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Understanding the Role of Emotion Regulation Strategies in Cybervictimization and Cyberaggression Over Time: It Is Basically Your Fault!

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Abstract

Adolescents involved in experiences of cybervictimization and cyberbullying are at increased risk of psychological maladjustment and ill-being. However, not all adolescents involved in cyberbullying roles experience similar consequences and cognitive emotion regulation (CER) might be a key factor. Despite growing interest in the role CER strategies play in cyberbullying behaviours, little is known about the predictive utility of these strategies in predicting cybervictimization and cyberbullying over time. Therefore, the aim of this prospective study was to test the incremental predictive validity of specific CER strategies in cybervictimization and cyberbullying in a sample of adolescents. To this end, data were collected in two waves four months apart from a sample of 841 adolescents (466 females) aged 12 to 18 ($M_{ageT1} = 13.77$, $SD_{T1} = 1.34$; M_{ageT2} = 13.71, SD_{T2} = 1.31). Participants filled out a set of questionnaires measuring cybervictimization, cyberbullying, and CER strategies. Main results showed blaming others as the unique strategy showing incremental predictive value to both cybervictimization and cyberbullying four months later, above and beyond previous cybervictimization and cyberbullying experiences. Overall, the results highlighted the need to account for CER strategies, such as blaming others, in relation to the potential initiation and development of cyberbullying and cybervictimization behaviours. These findings suggest possible future avenues for intervention efforts targeting the maintenance of online aggressive behaviours and victimization across time.

Keywords:

cyberbullying; cybervictimization; cognitive emotion regulation strategies; adolescents; prospective study

Introduction

Cyberbullying Victimization and Perpetration

With the massive use of communication technology and social networks, bullying has expanded through electronic devices and has become what is generally known as cyberbullying. In line with descriptions of traditional bullying, cyberbullying has been described as a phenomenon including repetitive and intentional harmful behaviours

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characterized by an imbalance of power between the victim and the aggressor(s) (Ortega-Ruiz et al., 2016). However, cyberbullying definitions also include some unique characteristics, such as the use of modern technological devices, the higher possibilities for anonymity of the perpetrator, the distress the victim feels as the consequences of cyberbullying, as well as the wider audience for the attacks and the little or the lack of respite for the victim who can suffer the perpetration 24 hours per day, seven days a week (Ding et al., 2020; Evangelio et al., 2022).

Globally, between 13% and 10% of adolescents reported cybervictimization and cyberbullying, respectively (Inchley et al., 2020). Thus, prior cross-cultural research has found that Spain reported lower rates of both cybervictimization and cyberbullying in comparison to Italy, France, Poland, Hungary, Cyprus, Greece, and Bulgaria (Sorrentino et al., 2019). Similarly, an international report study in more than thirty-five countries, have shown that Spain also reported lower rates of both situations (i.e., 5.5% and 6.5% for cybervictimization and perpetration, respectively; Inchley et al., 2020). However, during the last years, the global average incidence of cyberbullying and cybervictimization has increased among young people (Zhu et al., 2021). Specifically, in the Spanish adolescent population, a Spanish report have indicated that there was an increase of more than 20% of cyberbullying during 2020/2021 compared to the previous two years (Fundación Mutua Madrileña, & Fundación ANAR, 2021). Therefore, more longitudinal studies are needed to provide understanding of the phenomenon of cyberbullying in adolescents and strategies for prevention (e.g., Zhu et al., 2021).

A concerning number of adolescents and young people experience long-term cybervictimization or engage in acts of cyberbullying aggression over a long-standing period. Persistence levels of cybervictimization and cyberbullying are found to be independently associated with negative mental health indicators (e.g., depression or relational problems; Camerini et al., 2020; Gámez-Guadix et al., 2015; Strohmeier & Gradinger, 2022). More specifically, cybervictimized adolescents tend to report greater psychological, social, and academic problems in the short- and long-term (e.g., Camerini et al., 2020; Strohmeier & Gradinger, 2022). For instance, these adolescents typically reported increased depressive and anxiety symptoms, higher substance use and emotional problems, a poorer academic performance and lower levels of life satisfaction and self-esteem, among other consequences (Camerini et al., 2020; Evangelio et al., 2022; Strohmeier & Gradinger, 2022; Turliuc et al., 2020). With respect to cyberbullying, adolescents who cyberbully others also tend to experience short- and long-term negative consequences on mental health (e.g., Camerini et al., 2020; Strohmeier & Gradinger, 2022), reporting higher levels of academic, substance use, and relational problems (Camerini et al., 2020; Evangelio et al., 2022; Strohmeier & Gradinger, 2022). Relatedly, perpetrators of cyberbullying also have reported lower psychological adjustment, such as higher levels of depression, anxiety, and loneliness, and reduced levels of life satisfaction, self-esteem, and emotional control (Camerini et al., 2020; Evangelio et al., 2022; Strohmeier & Gradinger, 2022; Turliuc et al., 2020).

From an ecological framework, there are multiple individual factors that are posited to contribute to the prevention of cybervictimization and cyberbullying (Baldry et al., 2015; Camerini et al., 2020; Guo et al., 2021). Specifically, for cybervictimization, it has been found that high self-esteem and self-concept, or increased socioemotional competences (e.g., emotional management, social competence, and problem solving), would act as key personal dimensions that have been associated with reduced likelihood of suffering from cybervictimization (Camerini et al., 2020; Divecha & Brackett, 2020; Zych et al., 2019). For cyberbullying perpetration, lower moral disengagement, higher life satisfaction or being able to forgive are suggested to protect against cyberbullying in adolescence (Camerini et al., 2020; Quintana-Orts & Rey, 2018; Romera et al., 2021; Zych et al., 2019). However, still little is known about how adolescents may deal with the emotions arising during the period they are involved in processes of cybervictimization and cyberbullying, and how this may contribute to the trajectories of the phenomena over time. Advancing knowledge in this line may contribute to early identification of vulnerability profiles to detect individuals at greater risk of recurrent victimization or perpetration through online devices. Among the individual factors associated with cyberbullying, emotion regulation has been underscored as an important factor affecting both cybervictimization and cyberbullying (e.g., Arató et al., 2020; Camerini et al., 2020; Georgiou et al., 2021).

Cognitive Emotion Regulation Strategies as Individual Factors That Influence Cyberbullying

Emotion regulation is described as involving a sequence of internal and external processes by means of which individuals recognize and evaluate their own emotions, handle their intensity and frequency to maintain or inhibit emotional experience, and express emotions properly in order to accomplish their goals (Roberton et al., 2012; Roos et al., 2015). Garnefski et al. (2001) have developed an emotion regulation model underlining the relevance

of the cognitive aspect of emotion regulation that relates to plans that are made to take action without being necessarily conscious. This cognitive dimension of emotion regulation has been argued to be the antecedent of the process of taking action (the behavioural dimension of emotion regulation). From the perspective of intervention, Garnefski et al. (2001, p. 1313) noted that "it is more fruitful to teach people to plan their actions and subsequently act in a conscious way than to teach them to take immediate actions without focusing on the accompanying cognitions". Accordingly, they have conceptually introduced nine cognitive emotion regulation (CER) strategies, involving the conscious processes by which adolescents may deal with unpleasant events in their lives (Garnefski & Kraaij, 2018). On the one hand, maladaptive strategies include self-blame (thoughts of blaming oneself for what has being experienced), blaming others (focusing the blame of what you have experienced on others), rumination (thinking constantly about the feelings and thoughts generated by the situation), and catastrophizing (having recurring thoughts about the seriousness of the event, emphasizing the terror and how it is the worst experience that can happen). On the other hand, adaptive strategies comprise acceptance (the act of acknowledging what has occurred and accepting it, often involving a sense of resignation to the reality of the situation), refocus on planning (thinking about what next steps to take and how to manage the negative event), positive refocusing (focusing on joyful and pleasant issues or positive experiences instead of thinking about the actual situation), positive reappraisal (assigning a positive meaning to the negative situation in terms of personal growth), and putting into perspective (minimising the importance of the negative event by emphasizing its relativity when compared to other situations). Maladaptive strategies are associated with emotional and behavioural problems, while adaptive strategies are related to greater well-being and resilience in adolescents (Garnefski & Kraaij, 2018; Georgiou et al., 2021).

Although the available literature on general bullying has ongoing discussion regarding the importance of the different coping strategies to regulate emotions (Georgiou et al., 2021; Potard et al., 2022), there has been less attention paid to the associations among the cognitive emotional regulation strategies in relation to cybervictimization and cyberbullying over time. Due to the specific features of cyberbullying, it would be useful to understand which specific CER strategies could be contributing to the stability of cybervictimization and cyberbullying in the online context.

Cognitive Emotion Regulation and Cybervictimization

The experience of suffering from victimization is regarded as a chronic and severe stressor (e.g., Chua et al., 2022; Potard et al., 2022). According to the stress and coping model, coping is understood as the efforts that individuals direct to deal with environmental and/or internal demands and the resulting emotions that may arise as a consequence of the stressful encounter (Folkman et al., 1986). The bullying literature has shown that victimized adolescents typically use certain maladaptive strategies (e.g., rumination and self-blame) more frequently than their non-involved counterparts (e.g., Potard et al., 2022; Schacter et al., 2015) and similar patterns are observed in cybervictimization (Arató et al., 2020). In the bullying context, Garnefski and Kraaij (2014) have reported strong positive correlations between bullying victimization with maladaptive CER strategies including rumination, catastrophizing and self-blame, whereas they found moderate positive correlations with blaming others and with adaptive CER strategies such as acceptance and planning. More recently, Potard et al. (2022) found that bullying victimized students typically report greater use of self-blame and rumination. In the same context of bullying, Schacter et al. (2015) suggested that the continuity of victimization was mediated by self-blame. In Arató et al.'s (2020) study of cyberbullying, pure cybervictims scored significantly higher than non-involved participants on selfblame and rumination, while cyberbully-victims (i.e., a dual role involving victims and aggressors) scored higher than pure victims on blaming others. However, it is important to note that most of the literature on victimization and CER strategies has been conducted in bullying contexts, and the scarce studies on cybervictimization typically used a cross-sectional design, limiting understanding of the association between cybervictimization and CER over time.

Cognitive Emotion Regulation and Cyberbullying

A number of studies have stressed the importance of emotion regulation deficits in the engagement in various forms of aggressions (Herd & Kim-Spoon, 2021; Holley et al., 2017). Moreover, adolescence is a period with several changes in emotion, cognition, and social relationships that increase the risk of experiencing difficulties with emotion regulation (Herd & Kim-Spoon, 2021). Following the general model of aggression, it is argued that negative internal states may lead individuals to engage in aggressive behaviours directed toward others, with a relevant

role of those skills to manage such inner states (Anderson & Bushman, 2002). Accordingly, it has been found that those individuals experiencing unpleasant emotions, such as anger, behave aggressively more frequently as a way to avoid or repair the unpleasant cognitions and physiological states involving these negative emotional states (Roberton et al., 2012). Specifically, in a cyberbullying context, low cognitive reappraisal was associated with involvement in cyberbullying, thereby suggesting that adolescents who have difficulties in managing their emotions might have more difficulties to adaptively cope with demanding events and situations and may consider using externalizing behaviours including cyberbullying (Kokkinos & Voulgaridou, 2017).

The limited research in the cyberbullying literature has indicated that cyberbullies are generally less skilled in regulating their emotions (e.g., Quintana-Orts et al., 2021) and in using certain maladaptive CER strategies (e.g., Arató et al., 2020) than their non-aggressive peers. Indeed, Baroncelli and Ciucci (2014) found that cyberbullies might be poor regulators who are aware of their own deficits. Relatedly, cyberbullies are suggested to selectively implement CER strategies concerning disengagement of internal and moral standards in order to avoid negative emotional states such as guilt (Arató et al., 2020; Renati et al., 2012). For instance, Arató et al. (2020) found that blaming others was a significant strategy predicting cyberbullying. Despite these promising results regarding deficits in emotion regulation with online aggression, still little is known about the specific role of CER strategies regarding cyberbullying over time.

The Present Study

While the scientific literature has focused on the different coping strategies used by specific roles of cyberbullying (e.g., Arató et al., 2020), less attention has been paid to the role of particular CER strategies as protective and risk factors associated with cybervictimization and cyberbullying across time among adolescents.

Clarifying and disentangling the potential contributions of specific CER strategies in both trajectories would help to devise more tailored interventions to prevent the maintenance of cybervictimization and cyberbullying over time. Therefore, the main aim of the current work is to explore which specific CER strategies may account for additional unique variance in cybervictimization and cyberbullying using a prospective design, after accounting for previous levels of cybervictimization and cyberbullying. Specifically, this study presents two specific objectives. The first aim of our study was to determine which specific CER strategies might account for additional unique variance in cybervictimization over time. We hypothesized that higher maladaptive and lower adaptive CER strategies would significantly predict cybervictimization 16 weeks later, even after accounting for previous cybervictimization and cyberbullying. A second goal of this research was to evaluate which specific CER strategies might account for additional unique variance in cyberbullying over time. We also expected that higher maladaptive and lower adaptive CER strategies would significantly predict cyberbullying 16 weeks later, even after accounting for previous cyberbullying and cybervictimization.

Methods

Participants

The initial sample comprised 998 adolescents (542 females and 456 males) who completed the questionnaires at Time 1 (T1). Sixteen weeks later, a total of 841 participants (466 females and 375 males) from the same groups of adolescents completed the T2 cybervictimization and cyberbullying measures, so the attrition rate across measurement points was around 16% (15.73% with 157 missing participants from T1). Two reasons were found for missing data in T2. First, it is possible that these adolescents did not attend school on the day of T2. Second, it is also plausible that these adolescents did not write the code correctly to match their data in both times.

Participants' age was around 14 years (M_{ageT1} = 13.77, SD_{T1} = 1.34; M_{ageT2} = 13.71, SD_{T2} = 1.31) and ranged from 12 to 18 years at both times. Most of the respondents were born in Spain (97.1%), whereas 7 participants did not report their nationality. With respect to their academic course, the distribution by year regarding compulsory secondary education (first–fourth year) was: 28.3% in first (T1) and 27.9% in first (T2); 26.9% in second (T1) and 27.6% in second (T2); 21.5% in third (T1) and 22.4% in third (T2); 23.3% in fourth (T1) and 22.1% in fourth year (T2).

Regarding the time spent using internet devices during the week, 2.9% of adolescents reported not engaging in internet use, whereas 13.2% reported using the internet for less than 2 hours. A 18.4% of participants reported using internet devices between 2 and 3 hours, whereas a 29.8% of participants reported a use between 3 and 5

hours. Finally, 34.7% of adolescents reported using internet devices for more than 6 hours. Considering internet use during the weekend, 1.4% of participants reported not engaging in internet use, whereas 8.2 used the internet for less than 2 hours. 17.2% of participants used internet devices between 2 and 3 hours, whereas 32.6% of participants reported a use between 3 and 5 hours. Finally, 39.2% of adolescents reported using internet devices for more than 6 hours.

Adolescents reported that 4.2% of their mothers had educational levels lower than primary school, whereas 32.8% had primary education, 29.3% had high school, and 31.5% had university studies. Regarding the educational level of the parents, 5.1% reported that they had an educational level lower than primary school, 36.4% had primary education, 29.1% had high school, and 24.6% had university level education.

Measures

Cyberbullying

The European Cyberbullying Intervention Project Questionnaire (ECIPQ; Del Rey et al., 2015; Spanish validation by Ortega-Ruiz et al., 2016) was used to assess T1 and T2 cybervictimization and cyberbullying. Both dimensions consist of 11 items with a 5-point Likert ranging from 0 (*never*) to 4 (*more than once a week*) assessing frequency of either cybervictimization or cyberbullying behaviours in the last two months. On the one hand, the cybervictimization dimension includes a variety of behaviours directed to the respondent, such as threats, theft of private information, spreading of rumours or displays of private information. One example item is *Someone posted embarrassing videos or pictures of me online*. On the other hand, the cyberbullying dimension includes a similar variety of behaviours regarding cyberbullying aggression (e.g., *I threatened someone with messages on the Internet*). The Spanish version of this instrument has shown excellent reliability in samples of Spanish adolescents (Ortega-Ruiz et al., 2016). The internal consistency (Cronbach's alpha) was .85 for T1 cybervictimization, .89 for T2 cybervictimization, .85 for T1 cyberbullying, and .91 for T2 cyberbullying.

Cognitive Emotion Regulation Strategies

The Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2002; Spanish validation by Chamizo-Nieto et al., 2020) was used to assess T1 cognitive emotion regulation strategies in response to threatening or stressful life events. This instrument consists of 36 items using a 5-point Likert type scale ranging from 1 (almost never) to 5 (almost always). It evaluates two global factors, namely adaptive and maladaptive emotion regulation strategies, with a total of nine conceptually distinct subscales. The adaptive subscales include five strategies: putting into perspective; acceptance; positive refocusing; refocus on planning; and positive reappraisal. The maladaptive subscales include four strategies: self-blame; blaming others; catastrophizing; and rumination. The Spanish version of this instrument has shown adequate reliability in Spanish adolescent samples (Chamizo-Nieto et al., 2020). The internal consistency, Cronbach's alpha, ranged between .60 and .82 for each subscale: putting into perspective (.71); acceptance (.60); positive refocusing (.82); refocus on planning (.73); positive reappraisal (.72); self-blame (.62); blaming others (.73); catastrophizing (.67); and rumination (.72).

Procedure

Five secondary schools in southern Spain were contacted to ask for their voluntary participation in a larger research project on cyberbullying, psychological resources, and adolescent health. An informed consent was obtained by directors' education centres. Parents or legal guardians were asked by the school authorities to provide their informed consent before adolescents participated in the research. In four school centres the consent for the parents was written and in one secondary school the consent was requested passively. Moreover, participants were informed of the individual, voluntary and confidential nature of the study. The assessment was carried out in classrooms during the regular school schedule, with one of the researchers and at least one schoolteacher being present. There was a 16-week prospective interval between the two data collections (T1: January/February; T2: May/June) during the 2018/2019 academic year. The Declaration of Helsinki (2013) was followed, and the process was according to the Ethical Committee of the University of Málaga (62-2016-H).

Plan of Analyses

First, descriptive (i.e., descriptive statistics) and correlation analyses were conducted using SPSS 24.0. Second, we tested whether specific CER strategies explain variance in T2 cyberbullying after controlling for the effects of age, gender, T1 cyberbullying, and T1 cybervictimization. Likewise, it was examined whether specific CER strategies explain variance in T2 cybervictimization beyond the effects of age, gender, T1 cybervictimization, and T1 cyberbullying. Two independent hierarchical regression analyses were conducted separately for T2 cybervictimization or T2 cyberbullying as the dependent variable. In each regression model, variables were added in three steps. In the first step, age and gender were entered as covariates. In the second step, the scores in T1 cyberbullying and T1 cybervictimization were entered. In the third step, scores on all nine cognitive emotion regulation strategies were entered. Finally, Cohen's (1977) convention was followed for indicating whether the predictors accounted for a small ($f^2 = .02$), medium ($f^2 = .15$), or large ($f^2 = .35$) amount of variance in T2 cybervictimization and T2 cyberbullying scores.

Results

Descriptive Results

Cybervictimization was considered for responses of 2 or more (once or twice a month or more) to any item on cybervictimization and 0 (never) or 1 (yes, once or twice) to all the items on cyberbullying. The opposite criteria were applied to cyberbullying. The frequency for cybervictimization and cyberbullying in T1 were the following: 72.7% were non-involved and 11.9% were pure victims, whereas a 4.9% were bully-victims, and a 10.6% were cyberagressors. The frequency for cybervictimization and cyberbullying in T2 were the following: 74% were non-involved and 9.9% were pure victims, 4.8% were bully-victims, and 11.4% were cyberagressors.

Regarding correlation analyses among the main study variables, results are presented in Table 1.

2 3 4 5 6 7 8 10 11 12 Variables 1 13 1. T1 cybervictimization 2. T1 cyberbullying .71** 3. T1 self-blame .08* .06 .22** 4. T1 blaming others .16** .08* .12** .08** .55** .19** 5. T1 rumination .11** 6. T1 catastrophizing .15** .37** .39** .45** .30** .22** .19** .07* 7. T1 putting into perspective -.06 -.05 8. T1 acceptance -.03 .41** .07* .50** .26** .35** -.00 .21** -.07* .21** .15** .44** 9. T1 positive refocusing $-.07^*$.03 .08* -.09** .25** .16** .34** .07* .45** .32** 10. T1 refocus on planning -.05 .50** -.10** .63** -.11** .16** .26** .60** .46** 11. T1 positive reappraisal .14** .03 .33** .38** .10** .18** .12** 12. T2 cybervictimization .53** .16** .01 .07* -.04 -.02 -.02 .49** .17** .13** 13. T2 cyberbullying .35** .09* .08* -.01 .03 -.07*-.05 -.04.76** 3.41 3.40 3.56 Mean 0.27 0.17 2.79 2.21 3.16 2.52 3.02 3.39 0.27 0.19 Standard Deviation 0.43 0.35 0.84 0.87 0.97 0.93 0.96 0.86 1.12 0.94 0.98 0.47 0.44 .85 .62 .73 .72 .67 .71 .60 .82 .73 .72 Cronbach's alpha .85 .89 .91

Table 1. Descriptive Statistics and Bivariate Correlations Among Main Variables.

Note. $N_{T1} = 998$; $N_{T2} = 841. *p < .05, **p < .01.$

Regression Analyses With T2 Cybervictimization and T2 Cyberbullying as Outcomes

In order to test for the potential incremental validity effect of CER strategies in the prospective relationship between T1 and T2 scores in cybervictimization and in cyberbullying, two regression analyses were conducted.

Regarding results with T2 cybervictimization as outcome, results are shown in Table 2. As Table 2 shows, T1 cybervictimization was found to account for a large (f^2 = .39) amount of variance in T2 cybervictimization scores (β = .47, p < .001), whereas T1 cyberbullying was not a significant predictor of T2 cybervictimization (β = .05, p = .182). Further, blaming others emerged as the unique strategy linked to T2 cybervictimization. This variable showed a positive link with the dependent variable (β = .09, p = .009) and accounted for a small (f^2 = .018) but still a significant 1.8% of additional variance in T2 cybervictimization beyond the effects of T1 cybervictimization and T1 cyberbullying. The full model explained a 30% of variance in T2 cybervictimization, R^2 = .30, F(13, 827) = 27.14, p < .001.

Table 2. Multiple Regression Analysis on T2 Cybervictimization.

	R^2	ΔR^2	F	β	t	95% CI
Step 1	.01	.01**	5.73			
Age				.02	.60	[02, .03]
Gender				03	87	[08, .03]
Step 2	.28	.27***	81.78			
T1 cybervictimization				.47***	12.23	[.48, .67]
T1 cyberbullying				.05	1.34	[04, .21]
Step 3	.30	.02**	27.14			
Self-blame				.02	.63	[03, .05]
Blaming others				.09**	2.66	[.01, .09]
Rumination				02	47	[05, .03]
Catastrophizing				.05	1.44	[01, .06]
Positive refocusing				04	-1.15	[05, .01]
Positive reappraisal				.02	.55	[03, .05]
Refocus on planning				00	04	[04, .04]
Putting into perspective				.00	.08	[04, .04]
Acceptance				.05	1.27	[01, .07]

Note. Abbreviations: CI = confidence intervals. β = standardized regression coefficient for the final equation. $^{**}p < .01$, $^{***}p < .001$.

With regard to results with T2 cyberbullying as outcome, results are displayed in Table 3. As shown, T1 cyberbullying was a significant positive predictor (β = .43, p < .001) and was found to account for a medium (f^2 = .31) amount of variance in T2 cyberbullying scores. However, T1 cybervictimization was not a significant predictor of T2 cyberbullying (β = .05, p = .240). Regarding the CER strategies, blaming others was the sole strategy that was found to be predictive of T2 cyberbullying. This variable was a positive predictor of T2 cyberbullying scores (β = .07, p = .046) and accounted for a small (f^2 = .015) but a still significant 1.5% of incremental variance in the dependent variable beyond the effects of T1 cyberbullying and T1 cybervictimization. The full model accounted for a 25% of variance in T2 cyberbullying, R^2 = .25, F(13, 827) = 21.63, p < .001.

Table 3. Multiple Regression Analysis on T2 Cyberbullying.

Tubic	R ²	ΔR^2	F	β	t	95% CI
Step 1	.01	.01**	5.81	· ·		
Age				.01	.26	[02, .02]
Gender				03	-1.07	[09, .03]
Step 2	.24	.23***	65.42			
T1 cyberbullying				.43***	10.81	[.54, .78]
T1 cybervictimization				.05	1.18	[04, .14]
Step 3	.25	.02*	21.63			
Self-blame				.04	1.08	[02, .06]
Blaming others				.07*	2.00	[.001, .07]
Rumination				00	04	[04, .04]
Catastrophizing				.05	1.26	[01, .06]
Positive refocusing				07	-1.75	[05, .00]
Positive reappraisal				.04	.95	[02, .06]
Refocus on planning				05	-1.13	[06, .02]
Putting into perspective				.01	.22	[03, .04]
Acceptance				.00	.09	[04, .04]

Note. Abbreviations: CI = confidence intervals. β = standardized regression coefficient for the final equation. $^*p < .05, ^{**}p < .01, ^{***}p < .001.$

Discussion

Although prior studies reported significant differences between specific bullying and cyberbullying roles in the use of specific CER strategies (Arató et al., 2020; Potard et al., 2022; Shamsipour et al., 2018), there is limited evidence regarding the effects of CER strategies in relation to the trajectories of cyberbullying perpetration and victimization over time among adolescents. Taking this gap into consideration, the current prospective study was designed to examine which CER strategies contributed to the explanation of cybervictimization and cyberbullying over time after controlling for prior scores in both cybervictimization and cyberbullying. In general, these findings are in line with prior research, underlining that maladaptive strategies relate to the involvement in cyberbullying behaviours and make people more vulnerable to cybervictimization (Arató et al., 2020; Georgiou et al., 2021; Potard et al., 2022). Among the maladaptive strategies, the results showed that the maladaptive CER strategy of blaming others played the most salient role for prospectively and independently predicting cyberbullying and cybervictimization among adolescents, even after accounting for the previous experiences in both phenomena.

Previous research has linked self-blaming and rumination with different types of peer victimization, including cybervictimization (Arató et al., 2020; Potard et al., 2022). In our study, the same pattern regarding blaming others emerged within the CER strategies set in the prospective prediction models for cybervictimization and cyberbullying. Blaming others can be understood as an external attribution which has been related to emphasising self-protection (Wright et al., 2018). Based on previous research (Huitsing et al., 2012; Wright et al., 2018), both cybervictimized adolescents and cyberaggressors might use blaming others to mitigate some impairments in emotional well-being. Cybervictimized adolescents may use this maladaptive strategy for alleviating the psychological distress related to cybervictimization by attributing the blame to the psychological characteristics of their cyberbullies (Huitsing et al., 2012; Wright et al., 2018). Adolescents involved in cyberbullying may use this strategy for reducing anticipatory guilt through the justification of their actions by considering the victims responsible for their suffering (Arató et al., 2020; Romera et al., 2021). These attributions are found to promote the perpetration of aggressive behaviours over time (Wright et al., 2018).

On the one hand, our findings supported the predictive effect of blaming others on cybervictimization over time, even after controlling for previous cybervictimization and cyberbullying experiences. This finding accords with existing results, indicating that victims and bully-victims engage in maladaptive CER strategies (Potard et al., 2022). Self-blaming has been typically highlighted as a maladaptive strategy which is prevalent among victims (Arató et al., 2020; Garnefski & Kraaij, 2014; Potard et al., 2022). However, these results pointed out that blaming others played a key role in the maintenance of cybervictimization situations over 16 weeks later. Surprisingly, blaming

others, instead of self-blaming, seems to act as a relevant strategy associated with the duration of cybervictimization. These findings may suggest an empirical link between believing that another person caused the cyberbullying events and a greater risk of chronic cybervictimization among adolescents. From the learned helplessness model (Maier & Seligman, 2016), threatening events, such as aggressive behaviours, interact with a dysfunctional cognitive style between cybervictimized adolescents who might offer external, stable, and uncontrollable explanations for continued cyberbullying behaviours. The learned helplessness model (Maier & Seligman, 2016) suggests that when a negative occurs and it is perceived to be uncontrollable, the individual will come to believe that their efforts will be unrelated to outcomes and will feel a sense of helplessness. This approach explicitly consider that a pattern of repeated cyberbullying behaviours leads cybervictims to believe that they are powerless to change their situation (Maier & Seligman, 2016). Therefore, cybervictimized adolescents who attributed their helplessness to unpredictable and persistent causes (e.g., 'these problems will always be unsolvable' or 'little can be done to stop the perpetrator') would show long-term helplessness in that situation, thus becoming helpless and assuming that they have no control over their situations, using more passive cognitive strategies (e.g., blaming others). Such feelings and beliefs of lack of control over the cyberbullying behaviours may deter adolescents from resisting the cyberbullying.

Furthermore, an additional explanation could relate to the increase of negative emotions (e.g., sadness, frustration, etc.) and the tolerance of these related emotions, thereby creating a vicious cycle contributing to the high stability of cybervictimization 16 weeks later. Prior research has found that tolerating and accepting attitudes toward their own emotions experienced after negative events are associated with more negative emotions, and this, in turn, would predict later cybervictimization (Erreygers et al., 2018; Guo, 2016). It has been demonstrated that a strategy such as blaming others may increase the existing negative emotions individuals may experience, and, at the same time, it may allow one to display more positive and tolerating attitudes toward these emotions (Erreygers et al., 2018). Thus, it is possible that cybervictimized adolescents, by putting the blame of what they have experienced on others to deal with these situations, may also resign themselves to what has happened and tolerate their negative emotions, which would make them more vulnerable to remain cybervictimized after 16 weeks. Besides, it is plausible that experiencing negative emotions associated with blaming others (e.g., frustration or anger) may motivate cybervictimized adolescents to engage in risky online behaviours as a way to cope with these unpleasant affective states (Sadeh & Bredemeier, 2021), making them more vulnerable to continue becoming a target of cyberbullying (e.g., by disclosing personal information online; Peluchette et al., 2015). Although blaming others has been related to aggressive behaviours after victimization experiences (e.g., Falla et al., 2020), our results highlight that blaming others as a CER strategy also contributes to the persistence of cybervictimization. Undoubtedly, further research should explore the relationships among cybervictimization behaviours and blaming others in more depth. For instance, future studies should focus on these associations over longer periods and consider other relevant contextual and personal variables to enable a better understanding of these complex dynamics.

On the other hand, our results revealed the predictive role of blaming others on cyberbullying over time, after controlling for previous scores in cyberbullying. In line with previous studies, current findings show that people showing deficits in emotion regulation frequently engage in aggressive behaviours. Moreover, externalizing blame could be regarded as a moral disengagement strategy, which is also associated with behaving aggressively (Arató et al., 2020; Potard et al., 2022; Roos et al., 2015). Following the general model of aggression, it is reasonable that cyberbullies use some cognitive strategies and attributions concerning disengagement of internal and moral standards to avoid possible negative emotions they may experience, particularly when they feel unable to manage such unpleasant states (Baroncelli & Ciucci, 2014; Roberton et al., 2012). Aggressors using a CER strategy such as blaming others would find it easier to morally disengage from both emotional and cognitive self-sanction processes (e.g., anticipatory guilt) associated with their aggressive behaviours (Arató et al., 2020; Bandura et al., 1996). This finding opens new lines of research to look deeper into the links between blaming others and the chronification of cyberbullying through moral disengagement strategies.

Taken together, our results demonstrated the role of blaming others as a maladaptive CER strategy prospectively related to cyberbullying perpetration and cybervictimization, and accounting for variance in these phenomena even after controlling for the previous scores in both aggression and victimization behaviours. In sum, findings suggested that the use of this maladaptive CER strategy may impede the initiation of refocusing and problem-solving behaviours, thereby harming those adolescents suffering from perpetrating online violence. These results are worth receiving attention in further studies to help understand the persistence of cybervictimization and cyberbullying over time.

Implications for Practice

This study provides prospective empirical evidence to the limited knowledge on the associations between CER strategies and the cyberbullying phenomenon with a target both in the cyberbullies and in the cybervictims. Therefore, cybervictimized adolescents engaging in maladaptive CER strategies, such as blaming others, may try minimizing the negative overwhelming emotions that may arise in these situations. Given this strategy may lead victimized adolescents to maintain their status of victims and may even associate with the involvement in cyberbullying behaviours, these findings offer relevant implications for practice. On the one hand, these findings reinforce the idea that families should be attentive to the responses of adolescents when dealing with possible conflicts with their peers on the Internet. On the other hand, it may be relevant to develop alternative (adaptive) strategies when educating adolescents to cope with potential conflicts they may encounter when navigating on the Internet. For instance, to develop adaptive coping styles would make adolescents more likely to refocus on planning when addressing difficulties in online environments so they call adults for actions. In a similar vein, counsellors may benefit from findings in this line as they may guide adolescent cybervictims or cyberbullies to identify the adverse effect of their coping styles. Moreover, training adaptive strategies to handle the negative emotions arising in cyberbullying contexts may help to reduce the possible vicious cycles of perpetration and victimization (Divecha & Brackett, 2020).

Limitations

This study is not without its limitations. First, due to convenience sampling, our sample was not representative of the Spanish adolescent population. Second, future works should consider complementary measures for the selfadministered questionnaires used in this study. For instance, interviews or peer-report instruments may provide a richer picture of the cyberbullying phenomenon, as well as facilitate a greater insight regarding the role of CER strategies to either maintain or to reduce the status of victims and perpetrators. Relatedly, these complementary measures might address some potential limitations related to participant response bias due to the presence of the researcher during data collection. Third, there is a need for additional studies testing the relationships among CER strategies, cybervictimization, and cyberbullying over time. Considering current findings, it should be confirmed whether cybervictimized adolescents using blaming others as a strategy may experience greater negative emotions, such as anger or frustration, which, in turn, would lead them to engage in cyberbullying behaviours. Fourth, there is a need for research testing contextual factors that may account for variance in victimization and perpetration across time. For instance, the frequency and valence of affective events in adolescence may be tested as a potential factor eliciting emotions and the enactment of certain CER strategies. Also, it may be differences in the CER processes, depending on whether the bully is known or unknown (Chua et al., 2022). Last but not least, there is a need to examine stressful and negative events in adolescents' contexts that may exert cyberbullying aggressions (e.g., Herd & Kim-Spoon, 2021).

Conclusion

Despite these limitations, several strengths of the study must also be acknowledged. Firstly, as far as we know, this is the first study addressing the predictive role of CER strategies in the role of cybervictimization and cyberbullying over time, using a relatively large sample of adolescents. The present study filled in this gap by identifying blaming others as the most important CER strategy in the prospective relationship of cybervictimization and cyberbullying 16 weeks later, after controlling for previous experiences of cybervictimization and cyberbullying, respectively. Future research should therefore continue to delve into how specific coping emotion regulation strategies and other relevant variables (e.g., moral disengagement, attributions, etc.) are related in accounting for the chronification of cybervictimization and cyberbullying.

Conflict of Interest

The authors have no conflicts of interest to declare.

Authors' Contribution

Cirenia Quintana-Orts: conceptualization, investigation, writing—original draft, writing—review & editing. **Sergio Mérida-López:** methodology, formal analysis, writing—review & editing. **Lourdes Rey:** methodology, investigation, supervision, funding acquisition. **María Teresa Chamizo-Nieto:** methodology, investigation, writing—review & editing. **Natalio Extremera:** conceptualization, supervision, funding acquisition.

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References

Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology*, *53*(1), 27–51. https://doi.org/10.1146/annurev.psych.53.100901.135231

Arató, N., Zsidó, A. N., Lénárd, K., & Lábadi, B. (2020). Cybervictimization and cyberbullying: The role of socioemotional skills. *Frontiers in Psychiatry*, *11*, Article 248. https://doi.org/10.3389/fpsyt.2020.00248

Baldry, A. C., Farrington, D. P., & Sorrentino, A. (2015). "Am I at risk of cyberbullying"? A narrative review and conceptual framework for research on risk of cyberbullying and cybervictimization: The risk and needs assessment approach. *Aggression and Violent Behavior*, *23*, 36–51. https://doi.org/10.1016/j.avb.2015.05.014

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

Baroncelli, A., & Ciucci, E. (2014). Unique effects of different components of trait emotional intelligence in traditional bullying and cyberbullying. *Journal of Adolescence*, *37*(6), 807–815. https://doi.org/10.1016/j.adolescence.2014.05.009

Camerini, A.-L., Marciano, L., Carrara, A., & Schulz, P. J. (2020). Cyberbullying perpetration and victimization among children and adolescents: A systematic review of longitudinal studies. *Telematics and Informatics*, *49*, Article 101362. https://doi.org/10.1016/j.tele.2020.101362

Chamizo-Nieto, M. T., Rey, L., & Sánchez-Álvarez, N. (2020). Validation of the Spanish version of the Cognitive Emotion Regulation Questionnaire in adolescents. *Psicothema*, *32*(1), 153–159. https://doi.org/10.7334/psicothema2019.156

Chua, S. P., Yi, T. X., Choo, G. Y. C., Seng, T. C., Ai, J. T. T., Kim, L. S., & Lokithasan, K. A. P. (2022). Cybervictimization among adolescents: Its relationships with primary appraisal and coping strategies. *Vulnerable Children and Youth Studies*, *17*(4), 334–343. https://doi.org/10.1080/17450128.2021.2008077

Cohen, K. (1977). Statistical power for the behavioral sciences (rev. ed.). Academic Press.

Declaration of Helsinki. (2013). Ethical principles for medical research involving human subjects. *Journal of the American Medical Association*, *310*(20), 2191–2194. https://doi.org/10.1001/jama.2013.281053

Del Rey, R., Casas, J. A., Ortega-Ruiz, R., Schultze-Krumbholz, A., Scheithauer, H., Smith, P., Thompson, F., Barkoukis, V., Tsorbatzoudis, H., Brighi, A., Guarini, A., Pyzalski, J., & Plichta, P. (2015). Structural validation and cross-cultural robustness of the European Cyberbullying Intervention Project Questionnaire. *Computers in Human Behavior*, *50*, 141–147. https://doi.org/10.1016/j.chb.2015.03.065

Ding, Y., Li, D., Li, X., Xiao, J., Zhang, H., & Wang, Y. (2020). Profiles of adolescent traditional and cyber bullying and victimization: The role of demographic, individual, family, school, and peer factors. *Computers in Human Behavior*, 111, Article 106439. https://doi.org/10.1016/j.chb.2020.106439

Divecha, D., & Brackett, M. (2020). Rethinking school-based bullying prevention through the lens of social and emotional learning: A bioecological perspective. *International Journal of Bullying Prevention*, *2*(2), 93–113. https://doi.org/10.1007/s42380-019-00019-5

Erreygers, S., Vandebosch, H., Vranjes, I., Baillien, E., & De Witte, H. (2018). The interplay of negative experiences, emotions and affective styles in adolescents' cybervictimization: A moderated mediation analysis. *Computers in Human Behavior*, *81*, 223–234. https://doi.org/10.1016/j.chb.2017.12.027

Evangelio, C., Rodríguez-González, P., Fernández-Río, J., & Gonzalez-Villora, S. (2022). Cyberbullying in elementary and middle school students: A systematic review. *Computers & Education*, *176*, Article 104356. https://doi.org/10.1016/j.compedu.2021.104356

Falla, D., Ortega-Ruiz, R., Runions, K., & Romera, E. M. (2020). Why do victims become perpetrators of peer bullying? Moral disengagement in the cycle of violence. *Youth & Society, 54*(3), 397–418. https://doi.org/10.1177/0044118X20973702

Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, *50*(5), 992–1003. https://doi.org/10.1037/0022-3514.50.5.992

Fundación Mutua Madrileña, & Fundación ANAR. (2021). *La opinión de los estudiantes. III informe de prevención del acoso escolar en centros educativos en tiempos de pandemia 2020 y 2021. [The students' opinion. 3rd report on bullying prevention in educational centers in pandemic times 2020 and 2021]. https://www.observatoriodelainfancia.es/oia/esp/documentos_ficha.aspx?id=7603*

Gámez-Guadix, M., Gini, G., & Calvete, E. (2015). Stability of cyberbullying victimization among adolescents: Prevalence and association with bully–victim status and psychosocial adjustment. *Computers in Human Behavior*, *53*, 140–148. https://doi.org/10.1016/J.CHB.2015.07.007

Garnefski, N., & Kraaij, V. (2014). Bully victimization and emotional problems in adolescents: Moderation by specific cognitive coping strategies? *Journal of Adolescence*, *37*(7), 1153–1160. https://doi.org/10.1016/j.adolescence.2014.07.005

Garnefski, N., & Kraaij, V. (2018). Specificity of relations between adolescents' cognitive emotion regulation strategies and symptoms of depression and anxiety. *Cognition and Emotion*, *32*(7), 1401–1408. https://doi.org/10.1080/02699931.2016.1232698

Garnefski, N., Kraaij, V., & Spinhoven, P. (2001). Negative life events, cognitive emotion regulation and emotional problems. *Personality and Individual Differences*, *30*(8), 1311–1327. https://doi.org/10.1016/S0191-8869(00)00113-6

Garnefski, N., Kraaij, V., & Spinhoven, P. (2002). *Manual for the use of Cognitive Emotion Regulation Questionnaire*. DATEC, Leiderdorp.

Georgiou, S. N., Charalambous, K., & Stavrinides, P. (2021). The mediating effects of adolescents' internalizing and externalizing problems on the relationship between emotion regulation, mindfulness and bullying/victimization at school. *School Psychology International, 42*(6), 657–676. https://doi.org/10.1177/01430343211035420

Guo, S. (2016). A meta-analysis of the predictors of cyberbullying perpetration and victimization. *Psychology in the Schools*, *53*(4), 432–453. https://doi.org/10.1002/pits.21914

Guo, S., Liu, J., & Wang, J. (2021). Cyberbullying roles among adolescents: A social-ecological theory perspective. *Journal of School Violence*, *20*(2), 167–181. https://doi.org/10.1080/15388220.2020.1862674

Herd, T., & Kim-Spoon, J. (2021). A systematic review of associations between adverse peer experiences and emotion regulation in adolescence. *Clinical Child and Family Psychology Review*, *24*(1), 141–163. https://doi.org/10.1007/s10567-020-00337-x Holley, S. R., Ewing, S. T., Stiver, J. T., & Bloch, L. (2017). The relationship between emotion regulation, executive functioning, and aggressive behaviors. *Journal of Interpersonal Violence*, *32*(11), 1692–1707. https://doi.org/10.1177/0886260515592619

Huitsing, G., Veenstra, R., Sainio, M., & Salmivalli, C. (2012). "It must be me" or "It could be them?": The impact of the social network position of bullies and victims on victims' adjustment. *Social Networks*, *34*(4), 379–386. https://doi.org/10.1016/j.socnet.2010.07.002

Inchley, J., Currie, D., Budisavljevic, S., Torsheim, T., Jåstad, A., Cosma, A., Kelly, C., Arnarsson, A. M., & Samdal, O. (2020). *Spotlight on adolescent health and well-being. Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada. International report. Volume 2. Key data.* World Health Organization. https://apps.who.int/iris/handle/10665/332104

Kokkinos, C. M., & Voulgaridou, I. (2017). Relational and cyber aggression among adolescents: Personality and emotion regulation as moderators. *Computers in Human Behavior*, *68*, 528–537. https://doi.org/10.1016/j.chb.2016.11.046

Maier, S. F., & Seligman, M. E. P. (2016). Learned helplessness at fifty: Insights from neuroscience. *Psychological Review*, *123*(4), 349–367. https://doi.org/10.1037/REV0000033

Ortega-Ruiz, R., Del Rey, R., & Casas, J. A. (2016). Evaluar el bullying y el cyberbullying validación Española del EBIP-Q y del ECIP-Q [Assessing bullying and cyberbullying: Spanish validation of EBIPQ and ECIPQ]. *Psicología Educativa*, 22(1), 71–79. https://doi.org/10.1016/j.pse.2016.01.004

Peluchette, J. V., Karl, K., Wood, C., & Williams, J. (2015). Cyberbullying victimization: Do victims' personality and risky social network behaviors contribute to the problem? *Computers in Human Behavior*, *52*, 424–435. https://doi.org/10.1016/j.chb.2015.06.028

Potard, C., Kubiszewski, V., Combes, C., Henry, A., Pochon, R., & Roy, A. (2022). How adolescents cope with bullying at school: Exploring differences between pure victim and bully-victim roles. *International Journal of Bullying Prevention*, *4*(10), 144–159. https://doi.org/10.1007/s42380-021-00095-6

Quintana-Orts, C., Mérida-López, S., Rey, L., & Extremera, N. (2021). A closer look at the emotional intelligence construct: How do emotional intelligence facets relate to life satisfaction in students involved in bullying and cyberbullying? *European Journal of Investigation in Health, Psychology and Education*, *11*(3), 711–725. https://doi.org/10.3390/ejihpe11030051

Quintana-Orts, C., & Rey, L. (2018). Forgiveness and cyberbullying in adolescence: Does willingness to forgive help minimize the risk of becoming a cyberbully? *Computers in Human Behavior*, *81*, 209–214. https://doi.org/10.1016/j.chb.2017.12.021

Renati, R., Berrone, C., & Zanetti, M. A. (2012). Morally disengaged and unempathic: Do cyberbullies fit these definitions? An exploratory study. *Cyberpsychology, Behavior, and Social Networking*, *15*(8), 391–398. https://doi.org/10.1089/cyber.2012.0046

Roberton, T., Daffern, M., & Bucks, R. S. (2012). Emotion regulation and aggression. *Aggression and Violent Behavior*, 17(1), 72–82. https://doi.org/10.1016/j.avb.2011.09.006

Romera, E. M., Ortega-Ruiz, R., Runions, K., & Falla, D. (2021). Moral disengagement strategies in online and offline bullying. *Psychosocial Intervention*, *30*(2), 85–93. https://dx.doi.org/10.5093/pi2020a21

Roos, S., Salmivalli, C., & Hodges, E. V. E. (2015). Emotion regulation and negative emotionality moderate the effects of moral (dis)engagement on aggression. *Merrill-Palmer Quarterly*, *61*(1), 30–50. https://doi.org/10.13110/merrpalmquar1982.61.1.0030

Sadeh, N., & Bredemeier, K. (2021). Engaging in risky and impulsive behaviors to alleviate distress mediates associations between intolerance of uncertainty and externalizing psychopathology. *Journal of Personality Disorders*, *35*(3), 393–408. https://doi.org/10.1521/PEDI_2019_33_456

Schacter, H. L., White, S. J., Chang, V. Y., & Juvonen, J. (2015). "Why me?": Characterological self-blame and continued victimization in the first year of middle school. *Journal of Clinical Child & Adolescent Psychology, 44*(3), 446–455. https://doi.org/10.1080/15374416.2013.865194

Shamsipour, H., Bazani, M., Tashkeh, M., & Mohammadi, S. (2018). The role of negative affects and emotion dysregulation in aggression. *Practice in Clinical Psychology*, 6(4), 249–256. https://doi.org/10.32598/jpcp.6.4.249

Sorrentino, A., Baldry, A. C., Farrington, D. P., & Blaya, C. (2019). Epidemiology of cyberbullying across Europe: Differences between countries and genders. *Educational Sciences: Theory and Practice*, *19*(2), 74–91. https://doi.org/10.12738/estp.2019.2.005

Strohmeier, D., & Gradinger, P. (2022). Cyberbullying and cyber victimization as online risks for children and adolescents. *European Psychologist*, *27*(2), 141–150. https://doi.org/10.1027/1016-9040/a000479

Turliuc, M. N., Măirean, C., & Boca-Zamfir, M. (2020). The relation between cyberbullying and depressive symptoms in adolescence. The moderating role of emotion regulation strategies. *Computers in Human Behavior,* 109, Article 106341. https://doi.org/10.1016/j.chb.2020.106341

Wright, M. F., Yanagida, T., Macháčková, H., Dědková, L., Ševčíková, A., Aoyama, I., Bayraktar, F., Kamble, S. V., Li, Z., Soudi, S., Lei, L., & Shu, C. (2018). Face-to-face and cyber victimization among adolescents in six countries: The interaction between attributions and coping strategies. *Journal of Child & Adolescent Trauma, 11*(1), 99–112. https://doi.org/10.1007/s40653-018-0210-3

Zhu, C., Huang, S., Evans, R., & Zhang, W. (2021). Cyberbullying among adolescents and children: A comprehensive review of the global situation, risk factors, and preventive measures. *Frontiers in Public Health, 9*, Article 634909. https://doi.org/10.3389/fpubh.2021.634909

Zych, I., Farrington, D. P., & Ttofi, M. M. (2019). Protective factors against bullying and cyberbullying: A systematic review of meta-analyses. *Aggression and Violent Behavior*, *45*, 4–19. https://doi.org/10.1016/j.avb.2018.06.008

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