

Adaptive and maladaptive strategies used by  
adolescents victims of bullying or cyberbullying:  
A Systematic Review

University of Lleida

Faculty of Education, Psychology and Social Work

DEGREE IN PSYCHOLOGY

Grosu Grosu, Daniela

Tutor: Sotillo Sáez, Esther

- Friday the 05th of July, 2021 -

# Adaptive and maladaptive strategies used by adolescents victims of bullying or cyberbullying: A Systematic Review

Grosu, Daniela & Sotillo, Esther

---

**Abstract:** Being a bullying (SB) or cyberbullying (CB) victim has a significant impact on one's development. It is a risk factor, specially in children and adolescents (WHO, 2021). It is essential to know how are their reactions to this adverse event and detect them. After systematic researchers in Web of Science, Scopus, and Psycodoc and the application of inclusion and exclusion criteria, 13 articles that report adaptive and maladaptive strategies used by adolescents were included in this systematic review. The results show that maladaptive strategies are more investigated than adaptive strategies and have the worst impact on reaching suicidal thoughts. As for the differences found between SB and CB, in CB, people who suffer from it use more adaptive strategies, and it is easier to put an end to the harassment (Giménez-Gualdo et al., 2018).

**Keywords:** bullying; cyberbullying; victim; adaptive strategies; maladaptive strategies; adolescent

---

## Introduction

Many children and adolescents worldwide suffer from some violence (Sastre, 2016). Within the extensive spectrum of violence, bullying or school harassment is one of the most prevalent forms and has a higher impact on childhood and adolescence. (Garaigordobil & Oñederra, 2010). This social phenomenon received its name and began to be studied in the 1970s by Dan Olweus (1977). Based on what he observed from his first investigations, he defined this event: intentional actions to inflicting harm and discomfort on those who received these actions in the school context, usually done by peers. Moreover, there has been an evolution to new forms of School

Bullying (from now on: SB). Cyberbullying (from now on: CB) arose through new technologies in a new form of harassment, especially with the Internet and mobile phones. (Garaigordobil, 2011; Mitchell & Jones, 2015; Waasdorp & Bradshaw 2015).

This new kind of bullying has become critical at an early age (Fernández-Montalvo et al., 2015). Nowadays, children and adolescents victims of CB frequently are bullied at school (Twyman et al., 2010) because it is notorious that students involved in CB know each other from this environment (Hinduja & Patchin, 2008).

This social interaction has become a significant public health problem (Srabstein & Leventhal, 2010; UNESCO, 2019). The fact that the stages of adolescence (from 10 to 19 years) and childhood involve a vast development in the person also implies that this process involves risks (WHO, 2021). The World Health Organisation (2021) exposes that the social context can have a decisive influence on it. Thus, the interactions and experiences they go through in these stages can strongly determine their adult life (Srabstein & Leventhal, 2010).

The World Health Organisation shows how the incidence of SB or CB decreases with age and states that the proportion of harassed adolescents is 10% (Inchley et al., 2020). In Spain, the Health Behavior in School-Aged Children (HBSC-2018) says that there is 14,8% of preadolescents and adolescents victims of SB or CB. Whereas, as a perpetrator, there is a 9,7% participation in SB and a 2,3% participation in CB (Ministerio de Sanidad, 2020a). Specifically, Catalonia has the same average as Spain, 14,8%. However, it has a slight increase in the number of perpetrators with a 10,2% for SC and a 2,6% for CB (Ministerio de Sanidad, 2020b).

The educational context is part of the daily lives of young people, which is why it has a considerable impact on their lives and,

therefore, on their psychosocial development (Currie et al., 2005). This is due to the amount of time adolescents spend in this environment where a complex social interaction network is created (Currie et al., 2005). Within these social interactions that may emerge, SB is one of them.

Olweus (2011) defines the phenomenon of SB as intentional negative behaviour, which seeks to cause harm to people or groups of people who have difficulty defending themselves. Continuously doing these interactions causes the victims negative effects such as low self-esteem, anxiety, and even depressive symptoms, making it challenging to integrate into the school environment and acquire learnings (Graham & Juvonen, 2001; Kochenderfer-Ladd & Wardrop, 2001). Furthermore, development of loneliness, social dissatisfaction, negative school attitudes, and school absenteeism is also found (Graham & Juvonen, 2001; Kochenderfer-Ladd & Wardrop, 2001)

This act can manifest itself not only as an asymmetric imbalance of power in relationships between bullies and victims (Colell & Escudé i Miquel, 2006; Olweus, 1993) but also as the creation of a dominance-submission scheme that remains stable over time. It is continuous to be an act of conscious

and deliberate abuse (Smith & Brian, 2000) that can manifest itself verbally, physically, psychologically, relationally, material, sexual, and currently also through CB.

Once SB is defined, CB shares some characteristics as the intention to harm someone, but it also has its own. The characteristics distinguished in CB from SB are no physical contact, anonymity, and information can be presented in a very public way making the audience unlimited, as well as countless times that can be reposted the message, video, or photo. This host of new characteristics presented by CB means that the victim cannot physically escape or confront the harasser, thus causing a perception of little or no control over the situation (García, 2013; Machmutow et al., 2012; Ortega-Ruiz et al., 2016; Perren et al., 2010; Ševčíková et al., 2012; Šléglová & Černá, 2011).

Although SB and CB have a substantial impact on the development of young people, it is known that not everyone reacts in the same way to these adverse events (Kochenderfer-Ladd & Ladd, 2001). We can see how Mora-Merchán (2006) finds valued adaptive and maladaptive strategies to face this situation. Adaptive strategies include dealing with the problem (talking to the bully, seeking help from peers, family members, or teachers). In

the group of maladaptive strategies, we can find fights with the aggressor because this could lead to more problems.

Likewise, several studies (Carver et al., 1989; Roth & Cohen, 1986) indicate that there are more positive outcomes with strategies that directly address the source of the stressor (attempting to alter the situation or seeking additional information) than avoiding the stressor (ignoring it or not thinking about it).

Nock (2010) introduces another type of maladaptive strategy to deal with SB or CB, which is the non-suicidal self-injury (NSSI) that is usually used to relieve stress or tension to escape from painful and stressful experiences.

According to Schoeman et al. (2009), in an adolescent sample who have gone through a traumatic situation, cognitive deficits related to attention, visual memory, and nonverbal concept formation were found. Moreover, impaired visual, verbal, spatial, and/or working memorial were also affected (Park et al., 2014). Moreover, IQ scores were lower in a sample of young people who had witnessed or experienced violence and/or who had been maltreated (De Bellis et al., 2013; Bucker et al., 2012). Not only youth who have been trauma exposed had lower verbal skills

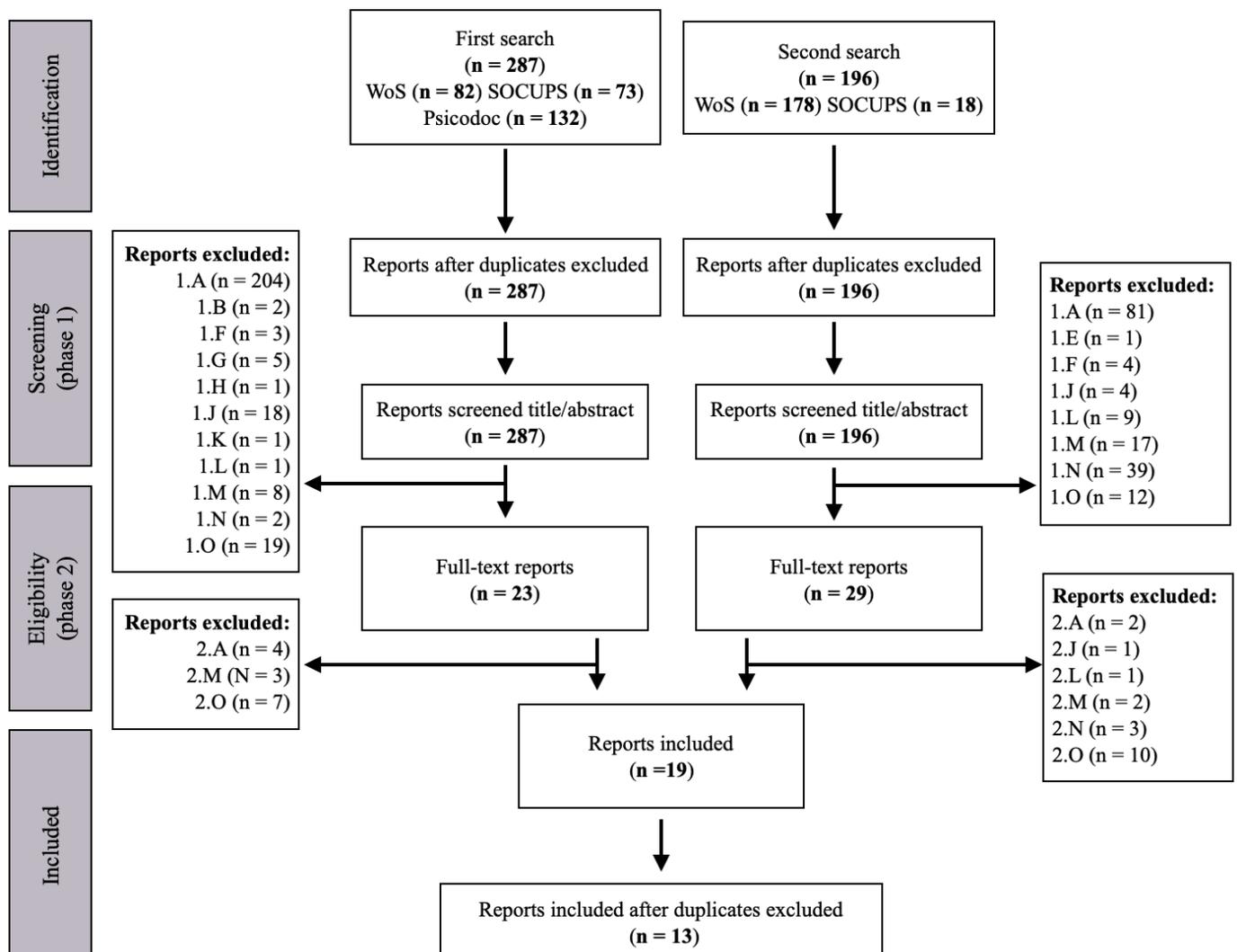
(Graham-Bermann et al., 2010), but higher rates of grade retention and absences were also found, and special educations services were needed (Mathews et al., 2009; Shonk & Cicchetti, 2001).

The current study aims to observe the reactions made by adolescents victims of SB or CB that develop adaptive or maladaptive strategies for themselves.

- Hypothesis 1: adolescents that use adaptive strategies also use coping skills to overcome the situation.
- Hypothesis 2: adolescents that use maladaptive strategies can get to the point of developing suicidal ideation or non-suicidal self-injury.

**Figure 1**

*The different phases of a systematic review following the PRISMA model (Urrútia & Bonfill, 2010)*



**Table 1***Key words from phase 1*

Victims of bullying (AND)		Adolescent (AND)		Coping	
OR	victims of cyberbullying cyber-bullying victims victims of cyber-bullying victims of school bullying bullying victims school bullying victims	OR	adolescents adolescence young teen teens teenager teenagers teenage	OR	resilient resilience coping style coping styles coping strategy coping strategies personal skills mechanism of resilience mechanisms of resilience

**Table 2***Key words from phase 2*

Exposure (AND)		Adolescent (AND)		Cyberbullying (AND)		Strategies (AND)		Involvement	
OR	victim victims victimise victimised victimisation	OR	adolescents adolescence young teen teens teenager teenagers teenage	OR	cyber- bullying school bullying bullying	OR	adaptive maladaptive coping adjustment maladjustment		

## Method

### Search Strategy

The first step of the systematic revision starts with the PICOS system, which helps with the search strategy. Due to this system, the main question of the study is divided into parts: Participants, Intervention, Comparisons, Results, and Study Design (Urrútia & Bonfill, 2010). This subdivision helps to create an adequate and accurate combination of terms for the search in the databases (Table 1 and 2).

The second step is shown in Figure 1, where can be seen the step-by-step process of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Urrútia & Bonfill, 2010) guidelines to arrive at the 13 articles that make up this systematic review. This sample of articles is from Web of Science, SCOPUS, and Psycodoc databases from the last five years, 2017-2021. In particular, this systematic review required two searches, the first was done in October 2020, and the second was done in March 2021. In this particular case, this systematic review

required a second search in the databases to complete the first one.

The third step was carried out with the Rayyan tool, an instrument used among other issues to

### Table 3

#### *Exclusion criteria from phase 1 and phase 2*

LETTER	EXCLUSION CRITERIA
A	Topics not concerned to the main question
B	Other languages than catalan, spanish or english
C	Dissertations
D	Book chapters
E	Conference abstracts
F	Review article
G	Case study
H	Field experiment
I	Commentary or opinion
J	Checking reliability of self-report or questionnaire
K	Meta-analysis
L	Not being an empiric article
M	It's not sample age (10-19 years old)
N	Articles with people that had not been bullied at school or ciberbullied.
O	Articles that are not checking adaptive or maladaptive strategies.

facilitate the Screening process. (Ouzzani et al., 2016). All the searches were translated to Rayyan, and to begin with the Screening, exclusion criteria were established (Table 3). Phase 1 involved replacing duplicates; in this case, there were none, and according to the title and summary, include or exclude the articles. In Phase 2, the articles were included or excluded by reading the complete text, 23 and 29 articles, respectively. And after the inclusion of the 19 articles, it was necessary to do another exclusion for duplicates due to the two searches, and 13 were left.

Finally, the last step was to make a table with all the 13 reports with the Excel program. This table facilitated the extraction of the information and the analysis.

### Participants

After the PICOS system was done with the help of the Rayyan tool, 13 reports make up this systematic review. The participants of the study in the articles are adolescents between 10 and 19 years old that had been victims of SB or CB.

### Results

As for SB and CB, Table 4 exposes the sample of the articles. Figure 2 exposes the strategies from the 13 articles and if they belong to SB or CB.

**Adaptive strategies**

Starting with CB, as for the first hypothesis: adolescents that use adaptive strategies also use coping skills to overcome the situation. A wide variety of significant differences from pre- to post- program assessment are found on a pilot study of an online psychoeducational program on CB. Chillemi et al. (2020) found significant differences about use the coping skills of self-comparison and challenging unhelpful thinking in the event of CB, report confidence in the ability to cope with and/or help a friend cope with an experience of CB, help-seek behaviour intentions, as well as, seek professional psychological help.

It was also found significant that CB victims used self-control and social support strategies more than those who did not participate (Mallmann et al., 2018). In addition, SB

victims were found to score higher on cognitive empathy and individual values than those who harassed or were observers of the situation (Lázaro-Visa et al., 2019).

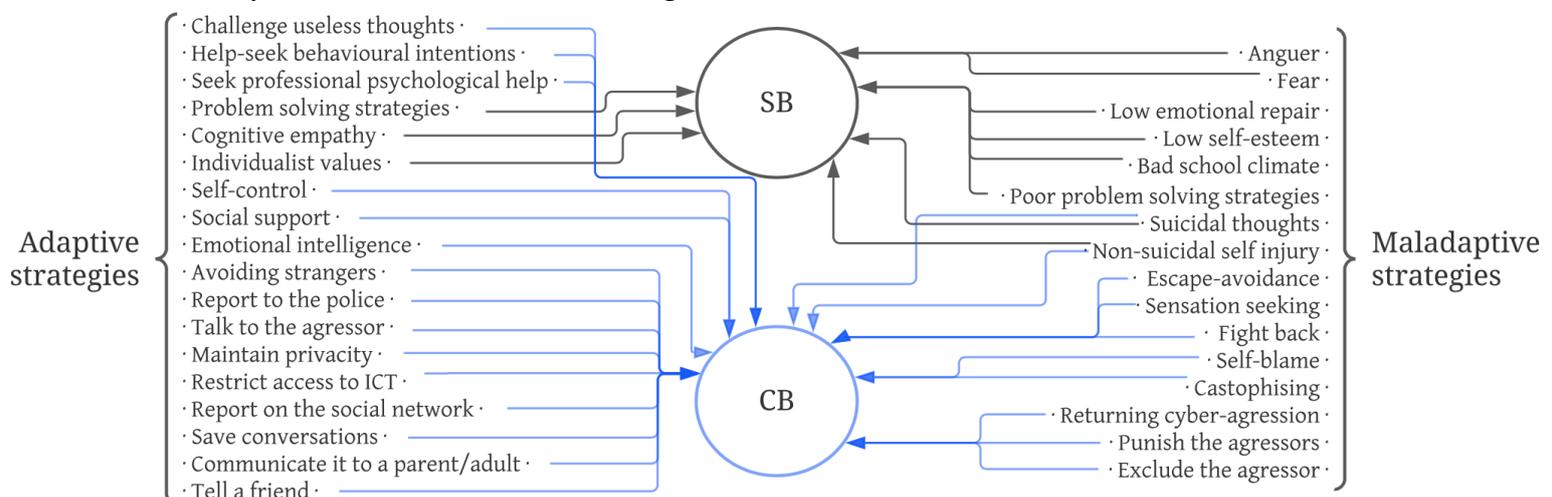
**Maladaptive strategies**

Regarding the second hypothesis, SB or CB victims who used maladaptive strategies could get to the point of developing suicidal ideation (Ceballos-Ospino et al., 2019; Iranzo et al., 2019; Lu et al., 2020; Rey et al., 2019), non-suicidal self-injury (NSSI) (Li et al., 2020; Rey et al., 2019; Yu et al., 2020) and sensation seeking (Yu et al., 2020).

Moreover, not only were suicidal ideation and NSSI found, but also being a victim would be significantly associated with depressive symptoms (Ceballos-Ospino et al. 2019; Rey et al., 2019) and psychological distress (Iranzo et

**Figure 2**

*Results of the 13 articles and their strategies*



Note: SB: School Bullying; CB: Cyberbullying

al., 2019). Furthermore, adolescents with low emotional intelligence would have a higher CB victimisation and a higher risk of suicide than their high emotional intelligence peers (Extremera et al., 2018).

Novin et al. (2019) discovered that boys with autism would get a higher score on emotions through guilt and shame than boys without autism. Thus, boys with autism would follow a pattern of behavior that would encourage victimization in SB because of these emotions. Also found that victimisation decreases with age.

Regarding SB, Lázaro-Visa et al. (2019) found that adolescent victims of SB had a significant negative correlation in problem-solving, emotional reparation, self-esteem, personal values and school environment. In Yu et al. (2020), NSSI was negatively predicted by school engagement.

In addition, the avoidance-escape strategy was found to be used by CB victims rather than by observers. This was significantly associated with CB victimization (Mallmann et al., 2018).

Rey et al. (2020) identified that the effect of being a victim of CB is significantly related to somatic complaints. Also, this is mediated by self-blame and catastrophising. In Li et al.

(2020), NSSI in SB was positively correlated with anxiety, poor emotional tendency, poor physical symptoms, physical bullying, verbal bullying, and relationship bullying.

Finally, a CB study divides victims' reactions into assertive and non-assertive strategies (Giménez-Gualdo et al., 2018). The assertive strategies included reporting to the police; help/defend the victim; talk to the abuser; preserve my privacy; not fighting; restrict access to ICT (Information and Communication Technologies); make good use of ICT; report on the social network, and save conversations. The non-assertive strategies are: returning the cyber-aggression, punishing the aggressors, hitting the aggressor, or excluding him. Passive strategies highlight the responses: avoiding strangers, ignoring the aggressor, restricting the use of ICT, promoting an anti-bullying law, watch mobile phones and computers, or do nothing.

## Discussion

With the information found for the construction of the theoretical framework and the results of the 13 articles, on the one hand, it can be concluded that adolescents that use adaptive strategies also use coping skills to overcome the situation (Chillemi et al., 2020; Lázaro-Visa et al., 2019; Mallmann et al., 2018). On

# Adaptive and maladaptive strategies used by adolescents victims of bullying or cyberbullying: A Systematic Review

Grosu, D. & Sotillo, E.

**Table 4**  
Classification of the articles per aim of the study, follow-up, participants and their age, SB or CB, coping strategies, hypothesis, statistics and results

Authors and year of publication	Title	Aim	Follow-up	Participants and their age	SB / CB	Coping strategies	Hypothesis	Statistics	Results
Kerry Chillemi, Jo-Anne M. Abbott, David W. Austin and Ann Knowles (2020)	<b>A Pilot Study of an Online Psychoeducational Program on Cyberbullying That Aims to Increase Confidence and Help-Seeking Behaviors Among Adolescents</b>	The goal of the "increasing resilience to cyberbullying" (IRCB) program was to increase the likelihood of adolescents using coping skills that may be helpful to victims of cyberbullying and increase confidence in their ability to cope and / or help a friend cope with a cyberbullying experience.	Longitudinal	54 Australian 9th or 10th grade high school students (48 men and 6 women), aged between 14 and 16 years (M = 14.70 years, DE = 0.57).	CB	Adaptive	H1: There would be an increase from pre- to post-program in adolescents' likelihood of using the coping skills of self-compassion, challenging unhelpful thinking, and seeking support in the event of cyberbullying H2: There would be an increase from pre- to post-program in adolescents' confidence in their ability to cope and/or help a friend cope with an experience of cyberbullying.	Fisher's exact test - Percentage calculation of associations between factors (Binomial test; Pearson's Chi square)	There was a significant increase from pre- to post-program assessment in adolescents' reported likelihood of using the coping skill of self-compassion in the event of cyberbullying ( $X^2 = (1) 4.70, p < 0.001$ ). In addition, there was a significant increase from pre- to post-program assessment in adolescents' reported likelihood of using the coping skill of challenging unhelpful thinking in the event of cyberbullying ( $X^2 = (1) 2.58, p = 0.01$ ). Data comparing participants' ratings from pre- to post-program assessment regarding reported confidence in the ability to cope with and/or help a friend cope with an experience of cyberbullying at pre- and post-program. There was a significant increase in adolescents' general help-seeking behavioural intentions at pre- to post-program assessment ( $t(53) = 2.64, p = 0.01$ ). The eta-squared statistic (0.12) indicated a small effect size. There was also a significant increase in adolescents' attitudes toward seeking professional psychological help at pre- to post-program assessment ( $t(53) = 2.73, p = 0.01$ ). The eta statistic (0.12) also indicated a small effect size. The majority (87%) of participants (n=34) described the IRCB program as helping them. The majority (82%) of participants (n = 32) reported that they would likely to recommend the IRCB program to a friend.
Guillermo Ceballos-Ospino, Yuly Paola Suárez-Colorado, Adalberto Campo-Arias (2018)	<b>Association between school bullying, depressive symptoms and suicidal ideation</b>	The aim of the present research was to estimate the relationship between school bullying (ME), depressive symptoms of clinical importance (SDIC) and high level of suicidal ideation (ANIS) in adolescent students in the city of Santa Marta, Colombia	Transversal	350 students between the ages of 10 and 17, with no exclusion criteria.	SB	Maladaptive	H1: The relationship between ME and ANIS may be mediated by concurrence of SDIC H2: It is possible that the experience of ME generates so much emotional suffering that SDICs are added to the IS, considered a symptom of alarm and greater severity.	Descriptive analyses were performed with estimation of frequencies, percentages, means, and standard deviation, depending on the nature of the variables.	In relation to the variables, 16.6% of the students answered affirmatively to more than one item of the CIE-A-5, i.e. ME indicator; SDICs occurred in 16.9% of participants and 9.4% presented ANIS (OR = 3.1; 95% CI 1.3–7.9). From bivariate regression analysis, victimisation by ME was significantly associated with ANIS. The association remained in the statistically significant range after being monitored by SDIC and sex (OR = 4.6, 95% CI 2.1–98).
Lourdes Rey, Cirenía Quintana-Orts, Sergio Mérida-López and Natalio Extremera (2019)	<b>Being bullied at school: Gratitude as potential protective factor for suicide risk in adolescents</b>	This study aimed to examine the relationship between victimisation and suicide risk in adolescents 12 to 17 years of age and to delve into the role that gratitude plays in the relationship of victimisation and suicide risk of bullying, and the gender-based differences.	Transversal	1,617 adolescents (50.5% women). The mean age was 14.02 years (SD = 1.46; range 12-17).	SB	Maladaptive	H1: It is expected bullying victimization to be positively related to suicide risk, whereas we predicted gratitude would be negatively related to suicide risk	Descriptive analyses were used to describe the demographic information of the sample. Pearson's correlation analyses was used to examine the associations among research variables in the total sample. Participants' gender differences in the research variables were examined by using Student's t-test. to analyze the potential buffering effects of gratitude in both boys and girls, separate moderation analyses were conducted for each group using the process macro (Model 1) developed by Hayes	Pearson's bivariate correlations for the studied variables showed that victimization was positively correlated with depressive symptoms (0.38***) and suicidal thoughts and behaviors (0.41***), and negatively correlated with gratitude (-0.26***). Gratitude was negatively correlated with depressive symptoms (-0.49***) and suicidal ideation and behaviors.
Sheida Novin, Evelien Broekhof and Carolien Rieffe (2019)	<b>Bidirectional relationships between bullying, victimization and emotion experience in boys with and without autism</b>	This study examines the longitudinal associations of anger, fear, guilt and shame with being victimized and bullying others in adolescent boys with and without autism.	Longitudinal	The autistic sample included boys diagnosed with autism, with an IQ score above 80 and without additional diagnoses. The group without autism included 96 typically developing (TD) boys, also with an IQ score above 80, and with no diagnosed developmental disorders.	SB	Maladaptive	H1: Regarding victimization, it is expected anger, fear and shame to be the strongest predictors given that youngsters with higher emotional reactivity are more vulnerable to victimization. H2: It is expected that especially fear would evoke victimization in boys without autism. In turn, we expected victimization to contribute to increased anger, fear and shame with anger being a more dominant reaction in adolescents with than without autism. H3: It is expected that more anger and less guilt would contribute to more bullying behaviour over time in boys with and without autism. H4: Bullying others may increase anger due to the activation of bully-related thoughts, emotions and responses and decrease guilt due to the discomfort of feeling remorse after bullying.	Generalized linear model (GLM) analyses with clustered bootstrapping were performed	Victimization decreased with Age (OR = -0.004, 95% CI -0.006, -0.002) Mean Bullying (OR = 0.220, 95% CI 0.087, 0.347) and Change Bullying (OR = 0.116, 95% CI 0.004, 0.217), Anger (OR = 0.190, 95% CI 0.090, 0.291) and Fear (OR = 0.356, 95% CI 0.182, 0.501) contributed to increased Victimization. A Group × Mean Fear interaction indicated a stronger relation for Fear × Victimization in boys without autism For Anger, Mean and Change Victimization and Bullying Others contributed to increased Anger For Guilt and Shame (), a main Group effect indicated that moral emotions were lower in boys with than without autism Mean (OR = 0.331, 95% CI 0.063, 0.586) and Change Victimization (OR = 0.301, 95% CI 0.056, 0.530) contributed to increased Shame
Susana Lázaro-Visa, Raquel Palomera, Elena Briones, Andrés A. Fernández-Fuertes and Noelia Fernández-Rouco (2019)	<b>Bullied adolescent's life satisfaction: Personal competencies and school climate as protective factors</b>	Analyze the influence that bullying has on one's life satisfaction, while taking into account participants' socio-demographic characteristics (i.e., gender and developmental stage), their core personal competencies (i.e., problem solving strategies, empathy, emotional repair, self-esteem, and values), and the school climate.	Transversal	693 students (mean age: 12.98, SD: 1.78) from the last cycle of primary education (10–13 years; 60.3% preadolescents) and secondary education (14–18 years; 39.7% adolescents), balanced by gender (women: 53.3%; men: 43.8%).	SB	Both	H1: Is life satisfaction a key component of subjective well-being in adolescent bullying? H2: Will there be basic personal skills that will be predictors of life satisfaction? H3: Will the school climate be a predictor of life satisfaction?	Hierarchical regression	As for being a victim of bullying, the significant and negative correlation with problem solving strategies (-.17***), emotional repair (-0.07*), self-esteem (-0.27***), personal values (-0.09*) and school climate (-0.23***) can be seen, with those who have suffered bullying being the ones who score the lowest among these variables. In addition, being a victim of bullying correlates significantly and positively with cognitive empathy (0.08*) and with individualistic values (0.09*).

# Adaptive and maladaptive strategies used by adolescents victims of bullying or cyberbullying: A Systematic Review

Grosu, D. & Sotillo, E.

**Table 4**  
Classification of the articles per aim of the study, follow-up, participants and their age, SB or CB, coping strategies, hypothesis, statistics and results

Authors and year of publication	Title	Aim	Follow-up	Participants and their age	SB / CB	Coping strategies	Hypothesis	Statistics	Results
Li Lu, ShengYan Jian, Min Dong, Jie Gao, TianTian Zhang, XueQin Chen, YuFang Zhang, HongYi Shen, HongRu Chen, XiangYun Gai and Shou Liu (2020)	<b>Childhood trauma and suicidal ideation among Chinese university students: the mediating effect of Internet addiction and school bullying victimisation</b>	This study examined the direct effect of childhood trauma on suicidal ideation on the one hand and whether school bullying victimisation and Internet addiction mediate the association between childhood trauma and suicidal ideation on the other hand.	Transversal	5864 university students with an average age of 19.9 years (S.D. = 1.52).	SB	Maladaptive	Is there a direct relationship between childhood trauma and the idea of suicide? Do the victimization of school bullying and Internet addiction serve as a mediator of the association between childhood trauma and suicidal ideation?	Hierarchical multiple logistic regression	11.4% (662/5832; 95% CI 10.5–12.2%) of university students reported experiences of school bullying. School bullying victimisation, tested in step 3, captured an additional 0.8% of variance in suicidal ideation beyond the effects of basic sociodemographic and clinical factors and the experiences of childhood trauma (adjusted $R^2 = 0.209$ , $\Delta R^2 = 0.008$ ).  School bullying victimisation (OR=1.58, 95% CI 1.29–1.92) were positively associated with suicidal ideation. School bullying victimisation predicted suicide ideation over and above Internet addiction in the fourth step ( $\Delta R^2 = 0.005$ , $p < 0.001$ ).
Caroline Louise Mallmann, Carolina Saraiva de Macedo Lisboa, Tiago Zanatta Calza (2018)	<b>Cyberbullying and coping strategies in adolescents from Southern Brazil</b>	The objective of this research is to identify associations among aggression, victimization, aggression-victimization and non-involvement in cyberbullying with the use of different coping strategies in Brazilian adolescents.	Transversal	273 students participated in this study (M = 14.91 years old, SD = 1.45). 48.7% of the sample were girls (N = 133) and 51.3% were boys (N = 140).	CB	Both	There will be a different relationship between the type of participation in cyberbullying and the coping strategies used, in victims, victims-aggressors and non-victims.	Descriptive analyses were carried out (aiming at investigating the frequencies throughout the different groups above described), chi-squared (to evaluate the prevalence of cyberbullying in any gender), variance analysis (to compare coping means among different groups) and logistic regression (to investigate the chance of an individual belonging to one group or another considering the coping strategies used).	ANOVAs indicated significant differences for confrontation strategies, self-control, social support and escape-avoidance. Victims reported they used self-control, social support and escape-avoidance strategies more than no participants, and these differences were significant. In this analysis we only used coping strategies which presented, from ANOVAs, significant differences ( $p < .05$ ) among the groups. A significant association between victimization and the escape-avoidance strategy was found (.16**).
Chengfu Yu, Qi Xie1, Shanyan Lin, Yue Liang, Guodong Wang, Yangang Nie, Jianping Wang and Claudio Longobardi (2020)	<b>Cyberbullying Victimization and Non-suicidal Self-Injurious Behavior Among Chinese Adolescents: School Engagement as a Mediator and Sensation Seeking as a Moderator</b>	In the current study, we aimed to bring together the social control theory (Hirschi, 1969) and the organism-environment interaction model (Cummings et al., 2002) to explain why cyberbullying victimization is associated with adolescent NSSI	Transversal	A total of 1,006 adolescents (51.78% females, n = 521) ranging in age from 12 to 15 (Mage = 13.16, SD = 0.67)	CB	Maladaptive	H1: school engagement will mediate the relationship between cyberbullying victimization and adolescents' NSSI. H2: sensation seeking will moderate the positive indirect link between cyberbullying victimization and adolescent NSSI. Specifically, this indirect link will be significant among adolescents with high sensation seeking but less significant among adolescents with low sensation seeking.	This study used the SPSS 25.0 software for reliability analysis and descriptive statistical analysis. Moreover, we conducted structural equation modeling using maximum likelihood estimation and bootstrapping with 1,000 replicates to test the mediation and moderation effects in Mplus 7.1 (Muthén and Muthén, 1998–2019). According to statisticians' suggestion (Hoyle, 2012), we used three indices (including $\chi^2/df$ , CFI, and RMSEA) to evaluate the goodness of fit of a model. The model fit is considered acceptable when $\chi^2/df < 5$ , CFI $> 0.90$ , RMSEA $< 0.08$ , and SRMR $< 0.08$ (Hoyle, 2012).	The results indicate that cyberbullying victimization and sensation seeking were both negatively correlated with school engagement and positively correlated with NSSI. Moreover, school engagement scores were negatively correlated with NSSI. School engagement negatively predicted NSSI ( $b = -0.07$ , $SE = 0.02$ , $\beta = -0.12$ , $t = -3.59$ , $p < 0.01$ , 95%CI [-0.11, -0.03]). Moreover, the residual effect of cyberbullying victimization on NSSI was significant ( $b = 0.30$ , $SE = 0.04$ , $\beta = 0.21$ , $t = 6.86$ , $p < 0.01$ , 95%CI [0.22, 0.39]). The indirect link between cyberbullying victimization and NSSI via school engagement was significant for the adolescents with higher sensation seeking (indirect effect = 0.025, $SE = 0.015$ , 95% CI [0.001, 0.062]). However, this indirect link was non-significant for those with lower sensation seeking (indirect effect = 0.005, $SE = 0.006$ , 95% CI [-0.002, 0.029]). Therefore, the mediating effect of school engagement between cyberbullying victimization and adolescent NSSI was moderated by sensation seeking.
Lourdes Rey, Felix Neto, Natalio Extremera (2020)	<b>Cyberbullying victimization and somatic complaints: A prospective examination of cognitive emotion regulation strategies as mediators</b>	The main purpose of this study was to examine the relationships among cybervictimization, maladaptive cognitive emotion regulation strategies and somatic complaints in a 4-month follow-up study.	Longitudinal	A total of 1,024 high school students (456 male and 568 female, M (SD) = 13.69 years (1.3 years), range 12-18 years	CB	Maladaptive	Cybervictimization would be significantly and negatively correlated with somatic complaints 4 months later. Furthermore, we expected that maladaptive cognitive emotion regulation strategies might be mediators in the relation between cybervictimization and somatic complaints.	Correlation	Bootstrap estimation showed that the total effect of victimization on somatic complaints was significant ( $c = .03$ , $p < .01$ ), and the effect was still significant when variance associated with the hypothesised mediators was controlled ( $c' = .02$ , $p < .01$ ). The effect of cybervictimisation on somatic complaints was mediated by self-blame (indirect effect = .001; 95% CI = .000-.002) and catastrophising (indirect effect=.002; 95% CI=.000-.003). All together, the multiple mediator model was significant, accounting for 20% of the variance in somatic complaints( $R^2_{adj}=.20;F(7,992)=35.39;p<.01$ )(indirect total effect = .003 CI = .001-.005).
Natalio Extremera, Cirenía Quintana-Orts, Sergio Mérida-López and Lourdes Rey (2018)	<b>Cyberbullying victimization, self-esteem and suicidal ideation in adolescence: Does emotional intelligence play a buffering role?</b>	The aim of this study was to provide further evidence on the potential moderation of the relationship between cyberbullying victimization and psychological adjustment by EI in adolescence.	Longitudinal	1,660 adolescents (50.4% female). The mean age was 14.10 years (SD = 1.54; range 12–18).	CB	Maladaptive	Emotional Intelligence (EI) might serve as a buffer between cyberbullying victimization and psychological maladjustment in adolescents. More specifically, we hypothesise that those adolescents with higher levels of EI would report lower levels of suicide risk and greater self-esteem	Correlation	Adolescents with low EI reported lower self-esteem [ $t(500) = -18.40$ , $p < 0.001$ ; $d = -1.63$ ], higher cybervictimization [ $t(350) = 4.52$ , $p < 0.001$ ; $d = 0.40$ ] and higher suicide risk [ $t(500) = 11.61$ , $p < 0.001$ ; $d = 1.01$ ] in comparison to their high EI counterparts.

# Adaptive and maladaptive strategies used by adolescents victims of bullying or cyberbullying: A Systematic Review

Grosu, D. & Sotillo, E.

**Table 4**  
Classification of the articles per aim of the study, follow-up, participants and their age, SB or CB, coping strategies, hypothesis, statistics and results

Authors and year of publication	Title	Aim	Follow-up	Participants and their age	SB / CB	Coping strategies	Hypothesis	Statistics	Results
Begoña Iranzo, Sofía Buelga, María-Jesús Cava, and Jessica Ortega-Barón (2019)	<b>Cyberbullying, psychosocial adjustment, and suicidal ideation in adolescence</b>	The main objective of this study was to analyze the relationships between cybervictimization and suicide ideation in adolescent victims of cyberbullying through the psychosocial maladjustment variables of loneliness, depressive symptomatology, perceived stress, and psychological distress.	Transversal	Participants in this study were 1,062 adolescents (547 boys, 515 girls), ranging in age from 12 to 18 years old (M = 14.51, SD = 1.62).	CB	Maladaptive	The initial hypotheses of this study were: a) cyberbullying victimization and school bullying victimization are directly related to each other; b) cyberbullying victimization and school bullying victimization have a direct effect on suicide ideation; and c) cybervictimization has an indirect effect on suicide ideation through the variables of perceived stress, loneliness, psychological distress, and depressive symptomatology.	The research design is non-experimental, correlational, and cross-sectional.	Cyberbullying victimization was found to correlate higher with relational bullying victimization ( $r = .65$ , $p < .01$ ), verbal bullying victimization ( $r = .57$ , $p < .01$ ), and physical bullying victimization ( $r = .45$ , $p < .01$ ). There are also significant correlations between cyberbullying victimization and all the psychological maladjustment indicators. The highest correlations are observed with psychological distress ( $r = .42$ , $p < .01$ ), depressive symptomatology ( $r = .36$ , $p < .01$ ), and suicide ideation ( $r = .34$ , $p < .01$ ). Results confirm that school bullying victimization and cyberbullying victimization correlate positively with each other ( $r = .53$ , $p < .001$ ), and also that there are direct effects of school bullying victimization ( $\beta = .04$ , $p < .05$ ) and cyberbullying victimization ( $\beta = -.09$ , $p < .05$ ) on suicide ideation.
Xuyang Li, Feiyu Chen, Yixiang Lin, Zhihui Jia, Winter Tucker, Jianguan He, Lanyue Cui and Zhaokang Yuan (2020)	<b>Research on the Relationships between Psychological Problems and School Bullying and Non-Suicidal Self-Injury among Rural Primary and Middle School Students in Developing Areas of China</b>	Purpose: To analyze the role of psychological problems in connection with school bullying and non-suicidal self-injury (NSSI) among rural primary and middle school students in developing areas of China.	Transversal	2284 participants: 1208 boys (52.89%), 1076 girls (47.11%); 1348 primary school students (59.02%); 936 middle school students (40.98%).	SB	Maladaptive	School bullying in primary and middle school students has a direct effect on psychological problems and NSSI; psychological problems have a direct effect on NSSI; suffering from school bullying has an indirect effect on NSSI through psychological problems.	Pearson correlation, logistic regression, and bootstrap tests	After controlling for covariates, students who had suffered school bullying (AOR = 2.10; 95% CI = (1.65, 2.69)) had a higher tendency to NSSI than students who had not suffered ( $p < 0.001$ ). Correlation analysis found that whether NSSI occurred in primary and middle school students was positively correlated with anxiety, bad emotional tendency, bad physical symptoms, physical bullying, verbal bullying, and relationship bullying. The more likely each factor is to occur, the more likely these students are to have NSSI.
Ana-M. Giménez-Gualdo, Pilar Arnaiz-Sánchez, Fuensanta Cerezo-Ramírez y Elaine Prodócimo (2018)	<b>Teachers' and students' perception about cyberbullying. Intervention strategies in Primary and Secondary education</b>	This study analyses the perception of teachers and students and the strategies that both groups use to deal with it.	Transversal	1,704, being 6th grade in primary education (29.3%) and compulsory secondary education (61.1%). Likewise, 238 teachers participated (59.7% women) aged between 26 and 61 years (M = 43.58, SD = 9.12), 35.7% of whom were teachers in primary education and the 64.3% to secondary education.	CB	General	Knowing the coping strategies of students in the face of cyberbullying.	Descriptive statistics (percentages, Mean, Standard Deviation) and inferential (parametric and non-parametric).	The most notable coping strategies was avoiding strangers (13.48%), followed by reporting to the police (10.56%).  As assertive strategies, the students indicated: reporting to the police (19.8%), helping / defending the victim (18.7%), talking to the aggressor (16.3%), preserving my privacy (15.7%), do not fight back (10.90%), restrict access to ICT (10.1%), make good use of ICT (4.5%), report on the social network (3.0%) and save conversations (0.9%).  Among the help-seeking strategies, the majority of students say they communicate it to parents (41.4%), to other trusted adults (36.1%), to teachers (11.5%), to friends (2.3%) and the counselor of the center (0.2%).  As non-assertive strategies: confrontational strategies, the students mentioned: returning the cyber-aggression (69%), punishing the aggressors (33.8%), hitting the aggressor (30.4%) or excluding him (0.6%). Passive strategies highlight the responses: avoiding strangers (46.4%), ignoring the aggressor (23.5%), restricting the use of ICT (28.8%), promoting an anti-bullying law (13.5%), watch mobile phones and computers (10.3%) or do nothing (11.4%).

the other hand, victims of SB or CB who would employ maladaptive strategies could get to the point of developing suicidal ideation or NSSI (Ceballos-Ospino et al., 2019; Iranzo et al., 2019; Li et al., 2020; Lu et al., 2020; Rey et al., 2019; Yu et al., 2020).

Therefore, SB and CB would significantly impact adolescents aged 10–19 years as a traumatic experience (Lu et al., 2020; Schoeman et al., 2009). The notorious consequences of SB or CB would be absenteeism, impairment of learning due to cognitive deficits (Schoeman et al., 2009), NSSI (Li et al., 2020; Rey et al., 2019) is also associated with depressive symptoms (Ceballos-Ospino et al., 2019; Rey et al., 2019). From what we can see, there are two significant issues with the visual consequences of SB and CB. First, people would ignore detail, underestimating people's feelings. Second, it would be possible for teachers not to have adequate training for harassment situations (Serrano & Pérez, 2015).

Although some authors expose the differences between SB and CB, justifying that CB has its characteristics like the need for a technological tool (Garaigordobil, 2011; Mitchell & Jones, 2015; Waasdorp & Bradshaw 2015) and the anonymity of the perpetrator (Ortega-Ruiz et al., 2016). In my firm opinion, CB would be a

type of SB, as pointed out by authors such as Hemphill et al. (2012), who would indicate that being a victim of SB is a risk factor for being the target of bullying in another context, in this case, the virtual environment. It would become necessary to keep in mind that one person would not harass another without knowing the person. CB would arise from a known environment, such as school (Hinduja & Patchin, 2008; Twyman et al., 2010). According to the statistics performed, the study by Iranzo et al. (2019) state that CB and SB would correlate directly with each other, so it could be stated that they are closely related.

In this situation, the school environment and engagement are essential for adolescents, as they can help integrate the person and lead with SB/CB (Lázaro-Visa et al., 2019; Olweus, 2011; Yu et al., 2020).

Regarding the study by Novin et al. (2019), it is found that the adolescent's reaction is critical between the emotions they experience and the victimization of SB. Therefore, we can see the need to have a good emotional education, not only to avoid harassment or cyberbully but also to know how to react to it. Because, as it can be seen in the article, the more guilty they feel, the more it favors victimization. Moreover, as well as in Inchley et al. (2020), there is less incidence of harassment as age increases.

For a victim of CB would be easier to “escape” from this situation (Giménez-Gualdo et al., 2018). Many people who use social media would not use their real/full name. This would suggest that it would be possible to create a completely new identity, as well as stop the harassment by simply blocking the harasser and putting the profile in private. In a physical environment, such as school, SB would be much more complex because there would be a high probability of interacting directly or indirectly with the bully(s). Also, the harassment would not be recorded as it would be with CB.

Both in the evidence presented and in the studies included in the review, it could be observed that in the latest research presented in this paper, the same line of research would be maintained, and similar results would be reached. Today, technological tools help to find evidence in the hypothesis in a completely different way (e.g., computer programs, online activities, roleplays). Replication from a study is suitable for validating the results, but verifying it with different methodologies is also essential to see if it adapts to this new modern world.

### **Further Investigations**

Working with psychoeducational programs in adolescence has been shown to be effective in

improving the situations of victims and their peers in coping with bullying (Chillemi et al., 2020). Chillemi et al. (2020) conducted a self-directed online classroom program for teens that aimed to employ coping skills that could be helpful to a CB victim and increase confidence in their ability to cope and/or help a classmate cope with a CB experience. These tools can be helpful for teenagers because they have already suffered from the SB or CB situation.

Novin et al. (2019) pointed out that boys' emotions with autism would lead to reactive behavior to deal with bullying situations. Subsequently, Rey et al. (2020) found that adolescents with low emotional intelligence would use more maladaptive strategies. Therefore, it could be considered that including emotional intelligence in Early Childhood Education plans would be an excellent protective factor to deal with this situation. Emotional intelligence could be worked on by talking about it (knowing what it is), playing some emotional intelligence games (practicing it), and playing role-playing games (consolidating knowledge).

Given the research of Inchley et al. (2020) and Novin et al. (2019) regarding the decrease in the incidence of harassment as age increases, longitudinal studies could be conducted to

detect the learning of adolescents when facing SB or CB and would help them with more adaptive strategies. In addition, it would be seen whether only the strategies affect the outcome of being a victim or, in addition, there is some change in the aggressor (s) or the spectator (s) over time.

Finally, as a future professional in psychology, I would start working on emotional intelligence at an early age. Suicide harassment and awareness activities would also become key. One aspect that I consider essential would be to teach and practice coping strategies to deal with stressful situations, not only for cases of harassment but also for exam weeks. Alternatively, deal with annoying situations in which someone's teammate does not do his part of the job.

### **Limitations**

The specificity of the study topic led to little information and a prolonged search that required two searches in the database. Initially, the study was intended to focus exclusively on adaptive strategies. However, because little information was found and most of the research found included both positive and negative responses to harassment or cyberbullying, we choose to also consider maladaptive strategies in this work. When it comes to talking about a person's development,

the adverse topic is necessary because this experience leaves a mark on the young people that will accompany them throughout their lives.

This systematic review did not consider whether gender differences could lead to different ways of dealing with stressful CB or SB situations. Differences that might be interesting to highlight among other issues due to the influence of cultural diversity on gender roles.

Another issue to note would be that this study looked at a sample of a wide range of ages. There would be many differences between the ages of 10 and 19, making age groups give specificity to the results. The proposal is endorsed by Inchley et al. (2020) and Novin et al. (2019) on the fact that harassment decreased with age.

Also, highlight the lack of involvement of parents or adults involved in the lives of adolescents, to know their point of view and compare it with the adolescent.

Finally, the fact that the articles that passed the inclusion and exclusion criteria and would make up the study documents had not used the same statistical techniques to process the data would not have allowed us to make a Meta-

analysis. The impediment of not being able to make a Meta-analysis has meant not being able to combine the weighted results of individual studies to assess the consistency of the results, which would have affected the validity of the study as the statistical value resulting from the study would be insufficient.

### **Acknowledgments**

This systematic review would not be possible without the knowledge that the University of Lleida has given me throughout these four years of the degree.

Also, the support and wisdom of the tutor, Esther Sotillo, was crucial. The organization, motivation, awareness, and judgment are the main things that I can highlight from being her scholar. Another essential thing to take into account is the care and importance that she taught I had to give to every single step. Last but not least, I need to thank her for the dedication of her time, the flexibility that she had when I needed and her accompaniment through the process from a vain idea to a hole paper.

In the last place, I need to thank my roommates and my friends for the support over this extensive investigation.

## References

- Bücker, J., Kapczynski, F., Post, R., Ceresér, K. M., Szobot, C., Yatham, L. N., et al. (2012). Cognitive impairment in school-aged children with early trauma. *Comprehensive Psychiatry*, 53, 758–764. doi: 10.1016/j.comppsy.2011.12.006
- Carver, C. S., Scheier, M. F. & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267–283.
- Ceballos-Ospino, G., Suárez-Colorado, Y., & Campo-Arias, A. (2019). Asociación entre matoneo escolar, síntomas depresivos e ideación suicida. *Rev. CES Psico*, 12(3), 91-104.
- Chillemi, K., Abbott, J.-A. M., Austin, D. W., & Knowles, A. (2020). A Pilot Study of an Online Psychoeducational Program on Cyberbullying That Aims to Increase Confidence and Help-Seeking Behaviors Among Adolescents. *Cyberpsychology, Behavior, and Social Networking*, 23(4), 253-256. doi: 10.1089/cyber.2019.0081
- Colell Caralt, J., & Escudé i Miquel, C. (2006). El acoso escolar: un enfoque psicopatológico. *El Acoso Escolar: Un Enfoque Psicopatológico*, 2, 9–14.
- Currie, C., Roberts, C., Morgan, A., Smith, R., Settertobulte, W., & Samdal, O. (2005). Young people's health in context. *Rivista Italiana Di Medicina Dell'Adolescenza*, 3(1), 50–52.
- De Bellis, M. D., Woolley, D. P., & Hooper, S. R. (2013). Neuropsychological findings in pediatric maltreatment: Relationship of PTSD, dissociative symptoms, and abuse/neglect indices to neurocognitive outcomes. *Child Maltreatment*, 18, 171–183. doi: 10.1177/1077559513497420
- Extremera, N., Quintana-Orts, C., Mérida-López, S. and Rey, L. (2018) Cyberbullying Victimization, Self-Esteem and Suicidal Ideation in Adolescence: Does Emotional Intelligence Play a Buffering Role? *Front. Psychology*, 9:367. doi: 10.3389/fpsyg.2018.00367
- Fernández-Montalvo, J. Peñalva, A., y Irazabal, I. (2015). Hábitos de uso y conductas de riesgo en Internet en la preadolescencia. *Comunicar*, 44, 113-120. doi: 10.3916/C44-2015-12
- Garaigordobil, M., & Oñederra, J. A. (2010). La violencia entre iguales: revisión teórica y estrategias de intervención [The Violence between peer: Theoretical revision and intervention strategies]. Madrid: Pirámide.
- Garaigordobil, M. (2011). Bullying y Cyberbullying: Conceptualización, Prevalencia y Evaluación. *Focad*, 12, 2–22.
- García, M. (2013). Acoso y ciberacoso en escolares de primaria: factores de personalidad y de contexto entre iguales. Tesis doctoral, Universidad de Córdoba, Córdoba, España.
- Giménez-Gualdo, A.-M., Arnaiz-Sánchez, P., Cerezo-Ramírez, F. and Prodócimo, E. (2018). Teachers' and students' perception about cyberbullying. Intervention strategies in Primary and Secondary education. *Revista Científica de Educomunicación*, 56 (26), 29-38. doi: 10.3916/C56-2018-03
- Graham, S. & Juvonen, J. (2001). An attributional approach to peer victimization. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 332–351). New York: The Guilford Press.
- Graham-Bermann, S. A., Howell, K. H., Miller, L. E., Kwek, J., & Lilly, M. M. (2010). Traumatic events and maternal education as predictors of verbal ability for preschool children exposed to intimate partner violence (IPV). *Journal of Family Violence*, 25, 383–392. doi: 10.1007/s10896-009-9299-3
- Hemphill, S. A., Kotevski, A., Tollit, M., Smith, R., Herrenkohl, T. I., Toumbourou, J. W., & Catalano, R. F. (2011). Longitudinal predictors of cyber and traditional bullying perpetration in Australian secondary school students. *Journal of Adolescent Health*, 51, 59-65. doi: 10.1016/j.jadohealth.2011.11.019
- Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior*, 29(2), 129–156. doi: 10.1080/01639620701457816
- Inchley, J., Currie, D., Budisavljevic, S., Torsheim, T., Jåstad, A., Cosma, A., et al., editors (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 1. Key findings. Copenhagen: WHO Regional Office for Europe; 2020. Licence: CC BY-NC-SA 3.0 IGO.
- Iranzo, B., Buelga, S., Cava, M. J., & Ortega-Barón, J. (2019). Cyberbullying, psychosocial adjustment, and suicidal ideation in adolescence. *Social Intervention*, 28, 75-81. doi: 10.5093/pi2019a5
- Kochenderfer-Ladd, B. & Ladd, G. W. (2001). Variations in peer victimization: Relations to children's maladjustment. In J. Juvonen and S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 25–48). New York: Guilford Press.
- Kochenderfer-Ladd, B. & Wardrop, J. L. (2001). Chronicity and instability of children's peer victimization experiences as predictors of loneliness and social satisfaction trajectories. *Child Development*, 72, 134–151.
- Lázaro-Visa, S., Palomera, R., Briones, E., Fernández-Fuertes, A. A., & Fernández-Rouco, N. (2019). Bullied Adolescent's Life Satisfaction: Personal Competencies and School Climate as Protective Factors. *Frontiers in Psychology*, 10:1691. doi:10.3389/fpsyg.2019.01691
- Li, X., Chen, F., Lin, Y., Jia, Z., Tucker, W., He, J., Lanyue, C. and Yuan, Z. (2020). Research on the Relationships between Psychological Problems and School Bullying and Non-Suicidal Self-Injury among Rural Primary and Middle School Students in Developing Areas of China. *International Journal of Environmental Research and*

- Public Health, 17(10):3371. doi:10.3390/ijerph17103371
- Research perspectives and applications, 85– 128. State University of New York Press.
- Lu, L., Jian, S., Dong, M., Gao, J., Zhang, T., Chen, X., Zhang, Y., Shen, H., Chen, H., Gai, X., and Liu S. (2020). Childhood trauma and suicidal ideation among Chinese university students: the mediating effect of Internet addiction and school bullying victimisation. *Epidemiology and Psychiatric Sciences* 29, E152. doi: 10.1017/S2045796020000682
- Machmutow, K., Perren, S., Sticca, F., & Alsaker, D. (2012). Peer victimisation and depressive symptoms : can specific coping strategies buffer the negative impact of cybervictimisation? *17*, 3–4.
- Mallmann, C. L., De Macedo Lisboa, C. S. and Zanatta Calza, T. (2018). Cyberbullying y estrategias de afrontamiento en adolescentes del sur de Brasil. *Act.Colom.Psicol.* 21 (1), 13-43. doi: 10.14718/acp.2018.21.1.2
- Mathews, T., Dempsey, M., & Overstreet, S. (2009). Effects of exposure to community violence on school functioning: The mediating role of posttraumatic stress symptoms. *Behaviour Research and Therapy*, 47, 586–591. doi:10.1016/j.brat.2009.04.001
- Mitchell, K. J., & Jones, L. M. (2015). Cyberbullying and bullying must be studied within a broader peer victimization framework. *The Journal of Adolescent Health*, 56(5), 473–474. doi:10.1016/j.jadohealth.2015.02.005
- Ministerio de Sanidad (2020a). *Informe técnico de los resultados obtenidos por el Estudio Health Behaviour in School-aged Children (HBSC) 2018 en España*. Recovered from: [https://www.msbs.gob.es/profesionales/saludPublica/prevPromocion/promocion/saludJovenes/estudioHBSC/docs/HBSC2018/HBSC2018\\_InformeTecnico.pdf](https://www.msbs.gob.es/profesionales/saludPublica/prevPromocion/promocion/saludJovenes/estudioHBSC/docs/HBSC2018/HBSC2018_InformeTecnico.pdf)
- Ministerio de Sanidad (2020b). *Informe técnico de los resultados obtenidos por el Estudio Health Behaviour in School-aged Children (HBSC) 2018 en Cataluña*. Recovered from: [https://www.msbs.gob.es/profesionales/saludPublica/prevPromocion/promocion/saludJovenes/estudioHBSC/docs/HBSC2018/CCAA/HBSC2018\\_Cataluna.pdf](https://www.msbs.gob.es/profesionales/saludPublica/prevPromocion/promocion/saludJovenes/estudioHBSC/docs/HBSC2018/CCAA/HBSC2018_Cataluna.pdf)
- Mora-Merchán, J. (2006). Las estrategias de afrontamiento, ¿mediadoras de los efectos a largo plazo de las víctimas del bullying? *Anuario de Psicología Clínica y de La Salud = Annuary of Clinical and Health Psychology*, 2(2), 15–26.
- Nock, M. K. (2010). Self-injury. *Ann. Rev. Clin. Psychol.* 6, 339–363.
- Novin, S., Broekhof, E., & Rieffe, C. (2019). Bidirectional relationships between bullying, victimization and emotion experience in boys with and without autism. *Autism*, 23(3), 796-800. doi: 10.1177/1362361318787446
- Olweus, D. (1977). Aggression and peer acceptance in adolescent boys: Two short-term longitudinal studies of ratings. *Child Development*, 48(4), 1301–1313.
- Olweus, D. (1993). Bullies on the playground: The role of victimization. In C. H. Hart (Ed.), *SUNY series, children's play in society*. Children on playgrounds: Research perspectives and applications, 85– 128. State University of New York Press.
- Olweus, D. (2011). Acoso escolar, “bullying”, en las escuelas: hechos e intervenciones. Bergen, Noruega: Centro de Investigación para la promoción de la salud de la Universidad de Bergen.
- Ortega-Ruiz, R., Del Rey, R., & Casas, J. (2016). Evaluar el bullying y el cyberbullying validación española del EBIP-Q y del ECIP-Q. *Psicología Educativa*, 22(1), 71-79. doi: 10.1016/j.pse.2016.01.004
- Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan-a web and mobileapp for systematic reviews. *Systematic Reviews*, 5(1), 1–10. doi:10.1186/s13643-016-0384-4
- Park, S., Kim, B.-N., Choi, N.-H., Ryu, J., McDermott, B., Cobham, V., et al. (2014). The effect of persistent posttraumatic stress disorder symptoms on executive functions in preadolescent children witnessing a single incident of death. *Anxiety, Stress & Coping: An International Journal*, 27, 241–252. doi: 10.1080/10615806.2013.853049
- Perren, S., Dooley, J., Shaw, T., & Cross, D. (2010). Bullying in school and cyberspace: Associations with depressive symptoms in Swiss and Australian adolescents. *Child and Adolescent Psychiatry and Mental Health*, 4, 1–10. doi: 10.1186/1753-2000-4-28
- Rey, L., Neto, F., & Extremera, N. (2020). Cyberbullying victimization and somatic complaints: A prospective examination of cognitive emotion regulation strategies as mediators. *International Journal of Clinical and Health Psychology*, 20(2), 135-139. doi:10.1016/j.ijchp.2020.03.003
- Rey, L., Quintana-Orts, C., Mérida-López, S. & Extremera, N. (2019) Being Bullied at School: Gratitude as Potential Protective Factor for Suicide Risk in Adolescents. *Front. Psychol.* 10:662. doi: 10.3389/fpsyg.2019.00662
- Roth, S. & Cohen, L. J. (1986). Approach, avoidance, and coping with stress. *American Psychologist*, 41, 813–819.
- Sastre, A. (2016). Yo a eso no juego: Bullying y cyberbullying en la infancia [I don't play to this game: Bulling and cyberbullying in childhood]. Madrid: Save The Children.
- Schoeman, R., Carey, P. & Seedat, S. (2009). Trauma and Posttraumatic Stress Disorder in South African Adolescents A Case-Control Study of Cognitive Deficits. *Journal of nervous and mental disease*, 197(4), 244-250.
- Serrano, M. & Pérez, M. (2011). Formación del profesorado de educación secundaria obligatoria sobre el bullying. *Revista Española de Orientación y Psicopedagogía*, 22(1), 58-68.
- Ševčíková, A., Šmahel, D., & Otavová, M. (2012). The perception of cyberbullying in adolescent victims. *Emotional and Behavioural Difficulties*, 17(3–4), 319–328. doi: 10.1080/13632752.2012.704309
- Shonk, S. M., & Cicchetti, D. (2001). Maltreatment, competency deficits, and risk for academic and behavioral

Adaptive and maladaptive strategies used by adolescents victims of bullying or cyberbullying: A Systematic Review  
Grosu, D. & Sotillo, E.

- maladjustment. *Developmental Psychology*, 37, 3–17. doi:10.1037/0012-1649.37.1.3
- Šléglová, V., & Cerna, A. (2011). Cyberbullying in Adolescent Victims: Perception and Coping. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 5(2), 1–33.
- Smith, P. K., & Brain, P. (2000). Bullying in schools: Lessons from two decades of research. *Aggressive Behavior*, 26(1), 1–9.
- Srabstein, J. & Leventhal, B. (2010). Prevention of bullying-related morbidity and mortality: a call for public health policies. *Bulletin of the World Health Organization*, 88 (6), 403. doi: 10.2471/BLT.10.077123
- Twyman, K., Saylor, C., Taylor, L. A., & Comeaux, C. (2010). Comparing children and adolescents engaged in cyberbullying to matched peers. *Cyberpsychology, Behavior, and Social Networking*, 13(2), 195–199. doi: 10.1089/cyber.2009.0137
- UNESCO (2019). *La violencia y el acoso escolares son un problema mundial, según un nuevo informe de la UNESCO*. Recovered from: <https://es.unesco.org/news/violencia-y-acoso-escolares-son-problema-mundial-segun-nuevo-informe-unesco>
- Urrútia, G., & Bonfill, X. (2010). PRISMA declaration: A proposal to improve the publication of systematic reviews and meta-analyses. *Medicina Clinica*, 135(11), 507–511. doi:10.1016/j.medcli.2010.01.015
- Waasdorp, T. E., & Bradshaw, C. P. (2015). The co-occurrence between cyberbullying and traditional bullying. *Journal of Adolescent Health*, 56(5), 483–488. doi: 10.1016/j.jadohealth.2014.12.002
- WHO (2021). *Desarrollo de la adolescencia*. Recovered 12 December 2020 from: [https://www.who.int/maternal\\_child\\_adolescent/topics/adolescence/dev/es/](https://www.who.int/maternal_child_adolescent/topics/adolescence/dev/es/)
- Yu, C., Xie, Q., Lin, S., Liang, Y., Wang, G., Nie, Y., Wang, J., and Longobardi, C. (2020) Cyberbullying Victimization and Non-suicidal Self-Injurious Behavior Among Chinese Adolescents: School Engagement as a Mediator and Sensation Seeking as a Moderator. *Front. Psychol.* 11:572521. doi: 10.3389/fpsyg.2020.572521