

RELATIONSHIP BETWEEN TRAIT MINDFULNESS AND THE ROLES OF CYBERBULLYING BYSTANDERS AMONG ADOLESCENTS

Ángel Prieto-Fidalgo¹, Izaskun Orue¹, Joaquín Manuel González-Cabrera², Juan Manuel Machimbarrena³ and Esther Calvete¹

¹*University of Deusto*; ²*International University of La Rioja*;

³*University of the Basque Country (Spain)*

Abstract

The widespread use of the Internet among adolescents has led to cyberbullying. Bystanders play a vital role in sustaining and strengthening bullying. As trait mindfulness has been associated with prosocial behaviors, there is good reason to believe that there is a relationship between the mindfulness trait and the role adopted by cyberbullying bystanders. A cross-sectional study was employed with a sample of 2015 students aged 11-19 years. The participants completed the measures for cyberbullying, trait mindfulness, and their role as bystanders. The results revealed that 74.3% and 7.8% of them were identified as provictim and pro-perpetrator, respectively. MANCOVA was employed to analyze the differences in the characteristics of trait mindfulness according to the role of bystander with corrected age, and its use was significant for the following factors: Observing, describing, acting with awareness, and nonjudging. No significant differences were observed in the nonreactivity factor. Provictims and pro-perpetrators scored higher on observing than those who supported neither the victim nor the perpetrator. Implications and limitations are discussed.

KEY WORDS: *cyberbullying bystanders, cyberbullying, trait mindfulness, provictim, pro-perpetrator.*

Resumen

El uso generalizado de Internet entre los adolescentes ha propiciado el ciberacoso. Los testigos desempeñan un papel fundamental en el mantenimiento y el fortalecimiento del acoso. El rasgo de atención plena (AP) se ha asociado con comportamientos prosociales, así cabe pensar que existe relación entre este rasgo y el papel adoptado por los testigos de ciberacoso. 2015 estudiantes de 11-19 años completaron medidas de ciberacoso, rasgo de AP y papel de espectador. Ante una situación de acoso *online*, el 74,3% se declaró a favor de la víctima y el 7,8% a favor del perpetrador. Para analizar las diferencias en el rasgo AP según el papel del espectador, se realizó un MANCOVA que resultó ser significativa para las siguientes facetas de atención plena: observar, describir, actuar con conciencia y no juzgar. El análisis no resultó significativo para la faceta de no reactividad. Las víctimas y los agresores obtuvieron puntuaciones más altas en la observación que

aquellos que no apoyaron ni a la víctima ni al agresor. Se discuten las implicaciones y limitaciones.

PALABRAS CLAVE: *testigo de ciberacoso, ciberacoso, rasgo de atención plena, provictima, properpetrator.*

Introduction

The widespread usage of new technologies has enabled the extension of traditional bullying to bullying in the digital environment, thereby promoting cyberbullying in recent decade (Garaigordobil, 2015). Cyberbullying has been defined as “an aggressive, intentional act performed by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself.” (Smith et al., 2008, p. 376).

Several studies have confirmed the negative outcomes of cyberbullying on victims, including high levels of depression (Calvete et al., 2016), social anxiety (Navarro et al., 2012), suicidal ideation (Iranzo et al., 2019), and alcohol abuse (Alonso and Romero, 2020; Gámez-Guadix et al., 2013). In addition, the consequences of cyberbullying could be even more harmful than those of face-to-face bullying (Garaigordobil, 2011; Smith et al., 2006) because the material used in the aggressions may remain over time on Internet. Moreover, cyberbullying can occur at any time, not only in certain situations (i.e., at school break). The consequences extend beyond the victims to the perpetrators and bystanders and are related to the loss of quality of life (González-Cabrera et al., 2019; Machimbarrena et al., 2018).

Several studies on bullying and cyberbullying have focused on the roles of perpetrators and/or victims while neglecting the role of bystanders. However, researchers have provided sufficient evidence to support the importance of the role of bystanders because visibility, power, and high status act as stimuli for the perpetrators to commit bullying (Salmivalli, 2010; Sijtsema et al., 2009), which mainly occurs in situations where others are present (Atlas & Pepler, 1998; Lynn Hawkins, et al., 2001). Research reveals that bystanders reinforce the perpetrators in at least two ways: by approving aggressive behavior and by acknowledging the perpetrator (Salmivalli, 2014). Therefore, in recent years, the role of bystanders has gained importance in assessing bullying (González-Cabrera et al., 2019) and cyberbullying (González-Cabrera, et al., 2019).

Furthermore, several different bystander roles have been identified. Initially, Salmivalli and colleagues (1996) proposed four roles: a) those who, while not initiating aggressive behavior, assist or collaborate with the perpetrator; b) those who reinforce the behavior of the perpetrator; c) those who remain neutral and support neither the victim nor the perpetrator; and d) those who defend the victim or display that they are on her/his side. Having bystanders who defend the victims is a protective factor because even when receiving the same level of aggression, these victims are found to be less depressed and anxious (Sainio et al., 2011). In addition, an observational study revealed that the reactions of bystanders in favor of the victim also had a containment effect on the bullying episode (Lynn Hawkins et al., 2001).

However, several studies have demonstrated the passivity of the majority of cyberbystanders to intervene in acts of cyberbullying (Dillon & Bushman, 2015; Shultz et al., 2014).

Studies have also examined individual differences among bystanders who act in defense of the victim and those who do not; the former tend to be empathetic (Caravita et al., 2009) and have more defense-related self-efficacy and less moral disengagement. Self-efficacy seems to be a vital feature that differentiates bystanders who support the victim from those who remain neutral because the latter tend to perceive it less valid to defend victims of bullying (Thornberg & Jungert, 2013) or cyberbullying (DeSmet et al., 2016). In addition, several studies have supported the idea that those bystanders who defend the victim tend to have a higher social status (Cillessen & Mayeux, 2004; Thornberg & Jungert, 2013).

Another trait that could be associated with the attitudes of bystanders is mindfulness, which is described as the behavioral tendency to be aware (Baer et al., 2006). Mindfulness involves directing the attention to something in particular (e.g., breath or body sensations deliberately) focusing in the present moment, without judging (Kabat-Zinn, 2003). Thus, trait mindfulness represents the tendency of an individual to direct attention—or awareness—to feelings, thoughts, or sensations. Recent research shows that mindfulness interventions may increase prosocial behaviors (Cheang et al., 2019; Hafenbrack et al., 2019). The effect of mindfulness in prosocial behaviors seems to be mediated by the increase in related skills, such as empathy and perspective taking (Hafenbrack et al., 2019).

On the basis of recent literature, trait mindfulness appears to be beneficial in the context of cyberbullying. Royuela-Colomer and colleagues (2018) found that trait mindfulness predicted lower levels of victimization and perpetration in cyberbullying. Similarly, another study exhibited that empathy mediated between mindfulness and cyberbullying perpetration, and that these variables were associated with lower perpetration (Yuan et al., 2019). Another study examined the mediating role of mindfulness between emotional abuse during childhood and perpetrating cyberbullying and found that high levels of abuse in childhood were associated with lower levels of mindfulness, and high levels of this variable were associated with lower levels of cyberbullying perpetration (Emirtekin et al., 2019). Mindfulness is related to better social relationships (Greco et al., 2011) and prosocial behavior (Donald et al., 2018), best moral and ethical intentions, and fewer offenses (Ruedy & Schweitzer, 2010). Therefore, we expected that trait mindfulness would relate differently to the different roles of cyberbullying bystanders.

One of the most used models in research on trait mindfulness was proposed by Baer et al. (2006), who created the Five Facets Mindfulness Questionnaire (FFMQ) by reviewing various questionnaires designed to assess mindfulness. In this model, trait mindfulness is not considered a unitary construct but a construct with multiple components, including five facets or dimensions. The first facet, observing, relates to paying attention to the external or internal experiences. The second facet, describing, is understood as the ability to put into words experiences and inner feelings. The third facet is acting with awareness wherein individuals shift their attention to the actions being undertaken at the given time by avoiding automatic behavior. The fourth facet, nonjudging, is the tendency of not evaluating thoughts

and feelings. The fifth facet, nonreactivity, refers to not being carried away by thoughts and feelings, alongside possessing a permissive attitude for such thoughts and feelings to come and go. A number of studies have examined the associations between cyberbullying and the acting with awareness facet (Emirtekin et al., 2019; Royuela-Colomer et al., 2018; Yuan et al., 2019). However, the study of the associations between other facets and cyberbullying is scarce. In a recent study, nonjudging, describing, and acting with awareness were negatively associated with cyberbullying victimization and perpetration, and observing was positively associated with victimization, although effect sizes were small (Calvete et al., 2020).

The primary objective of this study was to examine the relationship between trait mindfulness facets and roles of cyber-bystanders. We hypothesized that bystanders who defend victims have a higher level of some mindfulness facets than the bystanders who help the perpetrators. Namely, we expected that some of the facets of mindfulness could be more relevant than others in relationship with the roles of cyberbullying bystanders. For example, the trait of acting with awareness could imply more attention and awareness about the occurrence of an abusive behavior. In addition, acting with awareness has been associated with effortful control (Cortázar et al., 2019), which involves a lower likelihood of reacting impulsively without anticipating the consequences. Observing and nonjudging are also positively associated with helping behaviors (Cameron & Fredrickson, 2015); thus, these facets could be related to the role of helping the victim. A longitudinal study found that observing moderated by stress and nonjudging moderated by acting with awareness predicted lower levels of aggressive and rule-breaking behaviors (Cortazar & Calvete, 2019).

Finally, a secondary objective of the study was to explore the distribution of classic victim-perpetrator roles (victim, perpetrator, victim-perpetrator, and not involved; similar to Chan & Wong, 2020) with respect to the bystanders' roles. We expected that, among the perpetrators, there would be a smaller proportion of bystanders who support the victim, whereas among the pure victims, there would be a smaller proportion of bystanders who support the perpetrator.

Method

Participants

In all, 14 high schools from several communities in Spain participated. The study sample included 2015 high school students aged 11-19 years ($M= 14.20$, $SD= 1.47$), of which 53.6% (1094) and 46.4% (948) of the participants were girls and boys, respectively.

Instruments

- a) *Cyberbullying Questionnaire* (CBQ; Calvete et al., 2010; Estévez et al., 2010), revised version (Calvete et al., 2020). The CBQ was used to assess cyberbullying perpetration and victimization. The questionnaire comprised nine statements that reflected the more common behaviors in cyberbullying, such as

sending threatening messages or humiliating images. In this study, we modified the response format, comprising a Likert 5-point scale ranging from 0 (*never*) to 4 (*almost every week*). Higher scores on this scale imply greater victimization or perpetration of cyberbullying. The alpha coefficients were .88 and .90 for victimization and perpetration, respectively.

- b) *Question for cyberbullying bystanders*. We evaluated the roles of cyberbullying bystanders by asking a question with five responses. The participants were particularly asked how they would define themselves when they see or know that someone whom they know is being bullied in relation to the behaviors described in the previous scales. The response options were: a) "I never start the aggression; but, sometimes, I participate in support of the aggressor"; b) "I sympathize with the aggressor, but I never participate directly with him or her"; c) "I remain neutral when there is an aggression. I do not support anyone—neither the bully nor the one who defends the victim"; d) "Although I support the victim, I do nothing to avoid aggression"; and e) "I usually defend the victim actively and help her/him in everything I can."
- c) *Five Facets of Mindfulness Questionnaire* (FFMQ, Baer et al., 2006), Spanish short version (FFMQ-SF) by Cortázar et al. (2019). The original FFMQ has 39 items, while the short version used in this study has 25 items. The questionnaire collects the five dimensions of the aforementioned trait: describing, observing, acting with awareness, nonjudging, and nonreactivity. Items are scored on a Likert 5-point scale ranging from 1 (*never or rarely*) to 5 (*very often or almost always true*). The mean of the items has been used. Higher scores mean a higher trait for this variable. Cronbach's alpha coefficients for the abovementioned facets were as follows: observing, .72; describing, .65; acting with awareness, .75; nonjudging, .82; and nonreactivity, .65.

Procedure

A cross-sectional study was conducted between January and April 2018, with nonprobabilistic incidental sampling. The battery of questionnaires was applied in an online format through the Qualtrics platform. Participants answered the questionnaires in the computer rooms of their high schools. The duration to complete the questionnaires was 10-15 minutes, depending on the participants' age and reading comprehension. The collaboration was voluntary and anonymous. In addition, informed consent was required from the participants' legal guardians. The ethical procedure was approved by the Research Ethics Committee of Universidad Internacional de la Rioja (Ref. 231/17) and Research Ethics Committee of University of Deusto (Ref. ETK-12/17-18).

The question on the roles of bystanders was used to classify the participants on the basis of the roles they play as cyber-bystanders. On the basis of the selected response option, the bystanders' roles were categorized into three groups, namely, pro-perpetrator (Responses A and B), neutral (Response C), and provictim (Responses D and E).

Second, participants were classified by considering the classic victim-perpetrator roles in cyberbullying. For this, on the basis of the information on the

CQ scale, all participants who performed at least one abusive behavior in the past six months were classified as cyber perpetrators and all those who reported being abused at least once in the past six months were classified as victims. In addition, the participants who were perpetrators as well as victims were grouped in the victim-perpetrator group. Finally, the participants who did not report being victims or perpetrators composed the neutral group. We chose this broad criterion, also used in previous studies (e.g., Royuela-Colomer et al., 2018), taking into account the pernicious nature of cyberbullying due to the reproducibility over the time of the consequences of this type of bullying acts.

Analysis of data

The data is available in OSF repository (<https://osf.io/7s2gv/>). IBM SPSS Statistic 25 was employed for data analysis. To test the main hypothesis, a MANCOVA was conducted that evaluated the differences in the dimensions of mindfulness on the basis of the roles of cyberbullying bystanders, with age as a covariate. Pillai's trace was used as a statistic, considering that increasing values are synonym to high difference size.

The scales were calculated using the means of the items. The effect size of the univariate components was measured with η^2 , which was calculated by the sum of the squares of the effect divided by the sum of the squares of the error. The contrast between groups was conducted through the Bonferroni method, and the effect size of these comparisons was calculated through Cohen's *d*.

Results

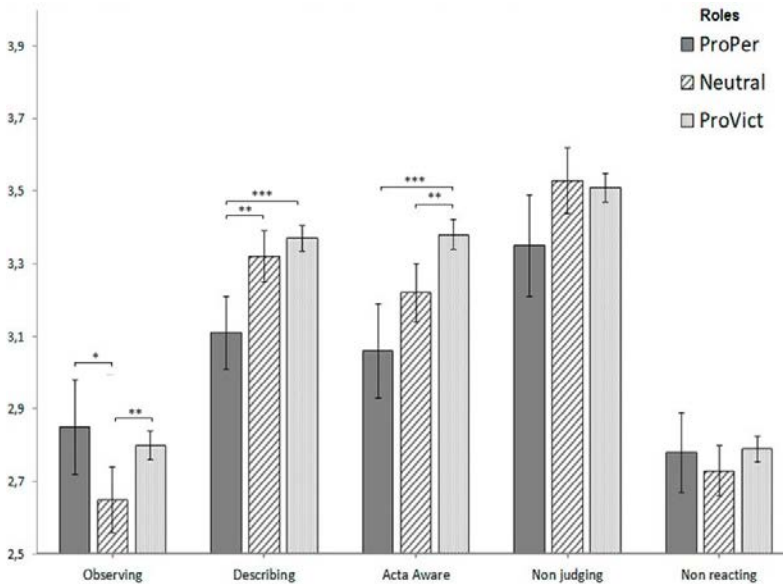
The means and standard deviations by roles of cyberbullying bystanders are presented in Table 1. A MANCOVA was performed to analyze the traits of mindfulness according to roles of cyberbullying bystanders (provictim, perpetrator, or neutral). The overall effect of the roles of cyberbullying bystanders was statistically significant, Pillai's Trace= 0.18, $F(10, 4014)= 5.39$, $p < .001$, $\eta^2= 0.013$. Figure 1 displays the marginal means of this analysis with corrected age. The model was significant for observing, $F(3, 2011)= 3.58$, $p= .01$, $\eta^2= 0.004$; describing, $F(3, 2011)= 8.47$, $p < .001$, $\eta^2= 0.011$; acting with awareness, $F(3, 2011)= 16.66$, $p < .001$, $\eta^2= 0.023$; and nonjudging, $F(3, 2011)= 8.89$, $p < .001$, $\eta^2= 0.012$; however, the mean differences were not significant for nonreactivity, $F(3, 2011)= 1.11$, $p= .34$. Group comparisons were performed by the Bonferroni method, which revealed several significant differences. Among these differences, individuals on the side of the victim had higher scores than those who supported the perpetrator for describing, $\Delta M= 0.26$, $SD= 0.06$, 95% CI [0.40, 0.12], $p < .001$, $d= 0.39$, and acting with awareness, $\Delta M= 0.33$, $SD= 0.07$, 95% CI [0.49, 0.16], $p= .048$, $d= 0.36$.

Table 1
Means and standard deviations by role of cyberbullying bystanders and classic roles of cyberbullying

Role	Pro-perpetrator			Neutral			Pro-victim			All		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Observing	157	2.85	0.99	360	2.65	0.83	1498	2.8	0.87	2015	2.78	0.87
Describing	157	3.11	0.61	360	3.32	0.66	1498	3.37	0.71	2015	3.34	0.70
Act. Aware.	157	3.06	0.97	360	3.22	0.8	1498	3.38	0.8	2015	3.33	0.82
Nonjudging	157	3.35	0.99	360	3.53	0.89	1498	3.51	0.9	2015	3.50	0.91
Nonreacting	157	2.78	0.88	360	2.73	0.7	1498	2.79	0.7	2015	2.78	0.72
CB Victim.	154	1.76	0.84	349	1.49	0.59	1457	1.51	0.61	2004	1.25	0.49
CB Perp.	145	1.76	1.00	337	1.41	0.62	1407	1.27	0.42	1987	1.16	0.42

Note: Act. Aware= Acting with awareness; CB Victim.= Cyberbullying victimization; CB Perp.= Cyberbullying perpetration

Figure 1
Marginal means of dimensions of the ffmq mancova according to cyberbullying bystanders' roles in participants with no active role



Notes: Model with corrected age. Bonferroni correction was employed for comparisons between groups. Error bar show 95% CI. ProPerp= pro-perpetrator; ProVict= provictim. **p*< .05; ***p*< .01; ****p*< .001.

Additionally, participants who remained neutral, compared with those who remained on the side of the perpetrator, scored higher for describing, $\Delta M = 0.21$, $SD = 0.07$, 95% CI [0.05, 0.37], $p = .005$, $d = 0.32$, and had lower scores than the provictim participants for acting with awareness, $\Delta M = -0.15$, $SD = 0.05$, 95% CI [-0.26, -0.04], $p = .005$, $d = 0.17$. This tendency was contrary for observing in the case wherein individuals who remained neutral obtained a lower score than the pro-

perpetrators, $\Delta M = -0.20$, $SD = 0.08$, 95% CI [-0.40, -0.01], $p = .04$, $d = 0.22$, and provictims ($\Delta M = -0.16$, $SD = 0.05$, 95% CI [-0.28, -0.04], $p = .006$, $d = 0.19$).

Table 2 represents the distribution of the roles of cyberbullying bystanders on the basis of the victim-perpetrator type. Irrespective of the role of the victim-perpetrator, a larger proportion of the sample declared that they were on the side of the victim (74.3%), and 7.8% supported the perpetrator of cyberbullying. However, this percentage increased to 13.2% and 11.3% among perpetrators and victim-perpetrator, respectively. The percentage of participants in favor of the perpetrator decreased among those with no associated role (5.9%) and pure victims (5.3%).

Table 2

Distribution of bystanders' roles through types of involvement in cyberbullying

Cyberbullying roles	Pro-perpetrator	Neutral	Provictim	$\chi^2(p)$
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	
Not involved (<i>n</i> = 917)	54 (5.9)	160 (17.4)	703 (76.7)	37.8 (.001)
Pure perpetrator (<i>n</i> = 129)	17 (13.2)	35 (27.1)	77 (59.7)	
Pure victim (<i>n</i> = 393)	21 (5.3)	57 (14.5)	315 (80.2)	
Perpetrator and victim (<i>n</i> = 576)	65 (11.3)	108 (18.8)	403 (70)	
Total (<i>n</i> = 2015)	157 (7.8)	360 (17.9)	1498 (74.3)	

Discussion

The role of bystanders in peer bullying plays a critical role in sustaining bullying and has a significant impact on the victim (Yudes-Gómez et al., 2018; Salmivalli, 2010, 2014). Therefore, identifying the traits associated with the roles of bystanders in cyberbullying could reveal insights that would provide a framework to propose more effective interventions that could benefit the victims. In this study, we examined whether trait mindfulness, which has been found to be associated with prosocial and less aggressive behavior (e.g., Cortázar & Calvete, 2019; Donald et al., 2018) was related to these roles.

In line with the proposed hypothesis, we found that those adolescents who were on the side of the perpetrator had a lower score than those who supported neither the victim nor the perpetrator for describing and acting with awareness facets. These data partially agree with those obtained by Cameron and Fredrickson (2015), who found that individuals who had higher levels of acting with awareness and observing tended to demonstrate more helpful behaviors. These data are also in line with the notion that mindfulness is related to engaging in prosocial behavior (Donald et al., 2018). In relation to the observing facet, data from this study are also consistent with those of Cameron and Fredrickson (2015), who found that individuals who helped the victims had a higher level for the observing facet than the neutral group; however, in this study this trend has also been observed in individuals who supported the perpetrator. Despite the significant mean differences in some of the facets of mindfulness according to the role of cyber-bystander, the

factor that explained the most variance was below 3%. Thus, we should conclude that the relationship between mindfulness and the roles for cyber-bystanders is relatively low.

This study provides information about which bystander roles are more frequent. Approximately 75% of the adolescents classified themselves as pro-victim, and less than 8% classified themselves as those who helped the perpetrators. These data are consistent with other studies that have found that most participants were in favor of the victim (Yudes-Gómez et al., 2018). However, we consider that the number of adolescents who help the perpetrators might be underestimated because of social desirability; therefore, these results should be interpreted with caution.

We also examined the distribution of the roles of cyberbullying bystanders on the basis of the classic victim and perpetrator roles. As expected, the participants who demonstrated support for the aggressors were mainly perpetrators. By contrast, the victims mainly supported other victims, along with those not involved and the victim-perpetrators. Interestingly, almost 60% of the perpetrators responded that they were in favor of the victim; this data is initially counterintuitive and might be because all the participants who performed at least one perpetration behavior in the past six months were classified as perpetrators. In addition, social desirability could have influenced this result.

There are limitations in this study that should be considered in future research. First, the participants assessed the role they played as bystanders based on a single question; hence, in this case, the number of pro-victims could be overestimated because of social desirability bias. Second, the classification criteria that we employed could have overestimated the number of bullying perpetrators and victims as it consisted of reporting at least one cyberbullying act in the last months. Third, although the sample was large, it was a non-random sample and included a greater proportion of private schools. Finally, because of the cross-sectional nature of the study, the results prevent concluding predictive relationships. Therefore, further longitudinal research is required.

This study is a first approximation to examine the relationship between facets of mindfulness and bystanders' roles in cyberbullying. The results indicate that the role of mindfulness facets is associated with an attitude of cyber-bystanders in favor of protecting the victims of cyberbullying to a greater extent. Several programs have been proven effective in reducing cyberbullying, including bystanders' interventions; for example, KiVa (Williford et al., 2013), Cyberprogram 2.0 (Garaigordobil & Martinez-Valderrey, 2015), and Incremental Theory of Personality interventions (Calvete et al., 2019). Data from this study, together with the central role of bystanders in sustaining and strengthening the behavior of perpetrators (Salmivalli, 2014), suggest that bystanders should be considered in interventions associated with cyberbullying situations to extend support to victims and avoid reinforcing perpetration conduct. Moreover, incorporating mindfulness techniques in interventions could improve bystanders' attitudes. Mindfulness interventions have also been proven effective for promoting other aspects in the prevention and reduction of cyberbullying, such as empathy and prosocial behavior (Cheang et al., 2019; Hafenbrack et al., 2019). However, additional studies that prove the direct effect of mindfulness on bystanders' attitudes are essential. In summary, this study

contributes the first approach toward the study of the roles of bystanders in cyberbullying and facets of mindfulness.

References

- Alonso, C., & Romero E. (2020). Estudio longitudinal de predictores y consecuencias del ciberacoso en adolescentes españoles [Longitudinal study of predictors and consequences of cyberbullying in Spanish adolescents]. *Behavioral Psychology/Psicología Conductual*, 28(1), 73-93.
- Atlas, R. S., & Pepler, D. J. (1998). Observations of bullying in the classroom. *Journal of Educational Research*, 92(2), 86-99. doi: 10.1080/00220679809597580
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13(1), 27-45. doi: 10.1177/1073191105283504
- Calvete, E., Fernández-González, L., González-Cabrera, J., Machimbarrena, J. M., & Orue, I. (2020). Internet-Risk classes of adolescents, dispositional mindfulness and health-related quality of life: A mediational model. *Cyberpsychology, Behavior, and Social Networking* 23(8), 533-540. doi: 10.1089/cyber.2019.0705
- Calvete, E., Orue, I., Estévez, A., Villardón, L., & Padilla, P. (2010). Cyberbullying in adolescents: Modalities and aggressors' profile. *Computers in Human Behavior*, 26(5), 1128-1135. doi: 10.1016/j.chb.2010.03.017
- Calvete, E., Orue, I., Fernández-González, L., & Prieto-Fidalgo, A. (2019). Effects of an incremental theory of personality intervention on the reciprocity between bullying and cyberbullying victimization and perpetration in adolescents. *PloS One*, 14(11), e0224755. doi: 10.1371/journal.pone.0224755
- Calvete, E., Orue, I., & Gámez-Guadix, M. (2016). Cyberbullying victimization and depression in adolescents: The mediating role of body image and cognitive schemas in a one-year prospective study. *European Journal on Criminal Policy and Research*, 22(2), 271-284. doi: 10.1007/s10610-015-9292-8
- Cameron, C. D., & Fredrickson, B. L. (2015). Mindfulness facets predict helping behavior and distinct helping-related emotions. *Mindfulness*, 6(5), 1211-1218. doi: 10.1007/s12671-014-0383-2
- Caravita, S. C. S., Di Blasio, P., & Salmivalli, C. (2009). Unique and interactive effects of empathy and social status on involvement in bullying. *Social Development*, 18(1), 140-163. doi: 10.1111/j.1467-9507.2008.00465.x
- Chan, H. C., & Wong, D. S. (2020). The overlap between cyberbullying perpetration and victimisation: Exploring the psychosocial characteristics of Hong Kong adolescents. *Asia Pacific Journal of Social Work and Development*, 1-17. doi: 10.1080/02185385.2020.1761436
- Cheang, R., Gillions, A., & Sparkes, E. (2019). Do mindfulness-based interventions increase empathy and compassion in children and adolescents: A systematic review. *Journal of Child and Family Studies*, 28(7), 1765-1779. doi: 10.1007/s10826-019-01413-9
- Cillessen, A. H., & Mayeux, L. (2004). From censure to reinforcement: Developmental changes in the association between aggression and social status. *Child development*, 75(1), 147-163. <https://doi.org/10.1111/j.1467-8624.2004.00660.x>
- Cortazar, N., & Calvete, E. (2019). Dispositional mindfulness and its moderating role in the predictive association between stressors and psychological symptoms in adolescents. *Mindfulness*, 10(10), 2046-2059. doi: 10.1007/s12671-019-01175-x
- DeSmet, A., Bastiaensens, S., Van Cleemput, K., Poels, K., Vandebosch, H., Cardon, G., & De Bourdeaudhuij, I. (2016). Deciding whether to look after them, to like it, or leave it: A multidimensional analysis of predictors of positive and negative bystander behavior in

- cyberbullying among adolescents. *Computers in Human Behavior*, 57, 398-415. doi: 10.1016/j.chb.2015.12.051
- Dillon, K. P., & Bushman, B. J. (2015). Unresponsive or un-noticed?: Cyberbystander intervention in an experimental cyberbullying context. *Computers in Human Behavior*, 45, 144-150. doi: 10.1016/j.chb.2014.12.009
- Donald, J. N., Sahdra, B. K., Van Zanden, B., Duineveld, J. J., Atkins, P. W. B., Marshall, S. L., & Ciarrochi, J. (2018). Does your mindfulness benefit others? A systematic review and meta-analysis of the link between mindfulness and prosocial behaviour. *British Journal of Psychology*, 110(1), 101-125. doi: 10.1111/bjop.12338
- Emirtekin, E., Balta, S., Kircaburun, K., & Griffiths, M. D. (2019). Childhood emotional abuse and cyberbullying perpetration among adolescents: The mediating role of trait mindfulness. *International Journal of Mental Health and Addiction*. doi: 10.1007/s11469-019-0055-5
- Estévez, A., Villardón, L., Calvete, E., Padilla, P., & Orue, I. (2010). Adolescentes víctimas de cyberbullying: Prevalencia y características [Adolescent victims of cyberbullying: Prevalence and characteristics]. *Behavioral Psychology/Psicología conductual*, 18(1), 73-89.
- Gámez-Guadix, M., Orue, I., Smith, P. K., & Calvete, E. (2013). Longitudinal and reciprocal relations of cyberbullying with depression, substance use, and problematic internet use among adolescents. *Journal of Adolescence Health*, 53, 446-452. <http://dx.doi.org/10.1016/j.jadohealth.2013.03.030>.
- Garaigordobil, M. (2011). Prevalencia y consecuencias del cyberbullying: Una revisión. International [Prevalence and consequences of cyberbullying: A review. International]. *International Journal of Psychology and Psychological Therapy*, 11(2), 233-254.
- Garaigordobil, M. (2015). Cyberbullying in adolescents and youth in the Basque Country: Changes with age. *Anales de Psicología*, 31(3), 1069-1076. doi: 10.6018/analesps.31.3.179151
- Garaigordobil, M., & Martínez-Valderrey, V. (2015). Effects of Cyberprogram 2.0 on "face-to-face" bullying, cyberbullying, and empathy. *Psicothema*, 27(1), 45-51. doi: 10.7334/psicothema2014.78
- González-Cabrera, J., Machimbarrena, J. M., Fernández-González, L., Prieto-Fidalgo, Á., Vergara-Moragues, E., & Calvete, E. (2019). Health-related quality of life and cumulative psychosocial risks in adolescents. *Youth and Society* 53(4), 636-653. doi: 10.1177/0044118X19879461
- González-Cabrera, J. M., León-Mejía, A., Machimbarrena, J. M., Balea, A., & Calvete, E. (2019). Psychometric properties of the Cyberbullying Triangulation Questionnaire: A prevalence analysis through seven roles. *Scandinavian Journal of Psychology*, 60(2), 160-168. doi: 10.1111/sjop.12518
- Greco, L. A., Baer, R. A., & Smith, G. T. (2011). Assessing mindfulness in children and adolescents: Development and validation of the Child and Adolescent Mindfulness Measure (CAMM). *Psychological Assessment*, 23(3), 606-614. doi: 10.1037/a0022819
- Hafenbrack, A. C., Cameron, L. D., Spreitzer, G. M., Zhang, C., Noval, L. J., & Shaffakat, S. (2019). Helping people by being in the present: Mindfulness increases prosocial behavior. *Organizational Behavior and Human Decision Processes*, 1-18. doi: 10.1016/j.obhdp.2019.08.005
- Iranzo, B., Buelga, S., Cava, M.-J., & Ortega-Barón, J. (2019). Cyberbullying, psychosocial adjustment, and suicidal ideation in adolescence. *Psychosocial Intervention*, 28(2), 75-81. doi: 10.5093/pi2019a5
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144-156. doi: 10.1093/clipsy/bpg016

- Lynn Hawkins, D., Pepler, D. J., & Craig, W. M. (2001). Naturalistic observations of peer interventions in bullying. *Social Development, 10*(4), 512-527. doi: 10.1111/1467-9507.00178
- Machimbarrena, J. M., Calvete, E., Fernández-González, L., Álvarez-Bardón, A., Álvarez-Fernández, L., & González-Cabrera, J. (2018). Internet risks: An overview of victimization in cyberbullying, cyber dating abuse, sexting, online grooming and problematic Internet use. *International Journal of Environmental Research and Public Health, 15*(11), 2471. doi: 10.3390/ijerph15112471
- Navarro, R., Yubero, S., Larrañaga, E., & Martínez, V. (2012). Children's cyberbullying victimization: Associations with social anxiety and social competence in a Spanish sample. *Child Indicators Research, 5*(2), 281-295. doi: 10.1007/s12187-011-9132-4
- Royuela-Colomer, E., Calvete, E., Gámez-Guadix, M., & Orue, I. (2018). The protective role of dispositional mindfulness against the perpetuation of cyberbullying victimization and perpetration among adolescents. *Cyberpsychology, Behavior, and Social Networking, 21*(11), 703-710. doi: 10.1089/cyber.2017.0685
- Ruedy, N., & Schweitzer, M. (2010). In the moment: The effect of mindfulness on ethical decision making. *Journal of Business Ethics* (Vol. 95). Retrieved from <http://ideas.repec.org/a/kap/jbuset/v95y2010i1p73-87.html>
- Sainio, M., Veenstra, R., Huitsing, G., & Salmivalli, C. (2011). Victims and their defenders: A dyadic approach. *International Journal of Behavioral Development, 35*(2), 144-151. doi: 10.1177/0165025410378068
- Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior, 15*(2), 112-120. doi: 10.1016/j.avb.2009.08.007
- Salmivalli, C. (2014). Participant roles in bullying: How can peer bystanders be utilized in interventions? *Theory into Practice, 53*(4), 286-292. doi: 10.1080/00405841.2014.947222
- Salmivalli, C., Lagerspetz, K., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior, 22*(1), 1-15. doi: 10.1002/(SICI)1098-2337(1996)22:1<1::AID-AB1>3.0.CO;2-T
- Shultz, E., Heilman, R., & Hart, K. J. (2014). Cyber-bullying: An exploration of bystander behavior and motivation. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 8*(4). doi: 10.5817/CP2014-4-3
- Sijtsema, J. J., Veenstra, R., Lindenberg, S., & Salmivalli, C. (2009). Empirical test of bullies' status goals: Assessing direct goals, aggression, and prestige. *Aggressive Behavior, 35*(1), 57-67. doi: 10.1002/ab.20282
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 49*(4), 376-385. doi: 10.1111/j.1469-7610.2007.01846.x
- Thornberg, R., & Jungert, T. (2013). Bystander behavior in bullying situations: Basic moral sensitivity, moral disengagement and defender self-efficacy. *Journal of Adolescence, 36*(3), 475-483. doi: 10.1016/j.adolescence.2013.02.003
- Williford, A., Elledge, L. C., Boulton, A. J., DePaolis, K. J., Little, T. D., & Salmivalli, C. (2013). Effects of the KiVa Antibullying Program on cyberbullying and cybervictimization frequency among Finnish youth. *Journal of Clinical Child and Adolescent Psychology, 42*(6), 820-833. doi: 10.1080/15374416.2013.787623
- Yuan, G., Liu, Z., & An, Y. (2020). Machiavellianism, mindfulness and cyberbullying among Chinese junior high school students: The mediating role of empathy. *Journal of Aggression, Maltreatment and Trauma, 29*(9), 1047-1058. doi: 10.1080/10926771.2019.1667467

Yudes-Gómez, C., Baridon-Chauvie, D., & González-Cabrera, J. M. (2018). Cyberbullying and problematic Internet use in Colombia, Uruguay and Spain: Cross-cultural study. *Comunicar*, 26(56), 49-58. doi: 10.3916/C56-2018-05

RECEIVED: July 21, 2021

ACCEPTED: April 4, 2022