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## Emotional intelligence and peer cybervictimisation in adolescents: Gender as moderator

### Inteligencia emocional y cibervictimización en adolescentes: El género como moderador

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### Abstract

Elucidating personal factors that may protect against the adverse psychological outcomes of cyberbullying victimisation might help guide more effective screening and school intervention. No studies have yet examined the role of emotional intelligence (EI) and gender in adolescent victims of cyberbullying and how these dimensions might interact in explaining cybervictimisation experiences. The main aim of this study was to examine the relationship between EI and cybervictimisation, and the interactive link involving EI skills and gender as predictors of cyberbullying victimisation in a sample of 1,645 Spanish adolescents (50.6% female), aged between 12 and 18 years. Regarding the prevalence of cybervictimisation, our results indicated that over 83.95% of the sample were considered non-cyber victims, while 16.05% experienced occasional or severe cyber victimisation. Additionally, findings indicated that deficits in EI and its dimensions were positively associated with cyber victimisation in both genders, but were stronger in females. Besides, a significant emotion regulation x gender association was found in explaining cyber victimisation experiences. While no interaction was found for males, for females the deficits of emotion regulation were significantly associated with greater victimisation. Our findings provide empirical support for theoretical work connecting EI skills, gender and cyber victimisation, suggesting emotion regulation skills might be considered as valuable resources, as well as the inclusion in new gender-tailored cyberation victimisation prevention programmes.



## Resumen

Dilucidar los factores personales que protegen contra las consecuencias psicológicas de la cibervictimización podría ayudar a una detección e intervención escolar más eficaz. Ningún estudio ha examinado el papel de la inteligencia emocional (IE) y el género en adolescentes víctimas de ciberacoso y cómo estas dimensiones interactúan para explicar la cibervictimización. El objetivo de este estudio fue examinar la relación entre IE y cibervictimización, y el papel moderador de las habilidades de IE y el género como predictores de la cibervictimización en una muestra de 1.645 adolescentes españoles (50,6% mujeres) de edades entre 12 y 18 años. Con respecto a la prevalencia, nuestros resultados indicaron que el 83,95% de la muestra no eran cibervíctimas mientras un 16,05% eran cibervíctimas ocasionales o severas. Los resultados mostraron que los déficits en IE y sus dimensiones se asociaron positivamente con la cibervictimización en ambos géneros, pero más en mujeres. Además, se encontró una interacción significativa entre regulación emocional y género explicando las experiencias de cibervictimización. Aunque no hubo interacción para los hombres, para las mujeres el déficit en regulación emocional se asoció significativamente a mayor cibervictimización. Nuestros hallazgos proporcionan apoyo empírico para el corpus teórico que conecta las habilidades de IE, el género y la cibervictimización, sugiriendo que la regulación emocional puede ser considerada un recurso valioso, así como de inclusión en futuros programas de prevención de cibervictimización ajustados por géneros.

## Keywords / Palabras clave

Emotional intelligence, cyberbullying, victimisation, adolescents, emotional regulation, gender, cybervictimization and socio-emocional abilities.

Inteligencia emocional, ciberacoso, victimización, adolescentes, regulación emocional, género, cibervictimización y habilidades socio-emocionales.

## 1. Introduction

School bullying is recognised as a serious psychosocial problem commonly seen during adolescence in school settings worldwide (Book, Volk, & Hosker, 2012; Casas, Del Rey, & Ortega-Ruiz, 2013). Resulting from the growing use of new technologies and social media, cyberbullying has emerged as a new kind of abuse in cyberspace, which is related to school bullying (Kowalski, Giumetti, Schroeder, & Lattanner, 2014). Cyberbullying, also known as digital bullying, is defined as repeated aggressive and hostile messages sent through the use of electronic media against a victim who cannot easily defend him- or herself (Hinduja & Patchin, 2009). According to a recent meta-analysis, prevalence rates of cyberbullying and victimisation vary depending on the definitions of the phenomenon. In general, most of the studies that have addressed cyberbullying show prevalence rates of between 10 and 40% of adolescents involved, finding incidences of 15% for adolescent cybervictimisation (Zych, Ortega-Ruiz, & Del Rey, 2015). In contrast to traditional bullying, the use of electronic devices provides new challenges for intervention due to unique features such as anonymity, rapid social dissemination and increased access to the victims (Alvarez-Garcia, Nuñez, Dobarro, & Rodriguez, 2015; Tokunaga, 2010). Thus, cyberbullying experiences are consistently associated with a wide range of negative outcomes. For instance, youths who encounter cyberbullying report significantly higher levels of psychosomatic problems than non-involved youths (Beckman, Hagquist, & Hellström, 2012), higher levels of depressive symptoms (Nixon, 2014), greater levels of anxiety symptoms (Sontag, Clemans, Graber, & Lyndon, 2011), lower self-esteem (O'Brien & Moules, 2013) and even higher rates of suicide ideation and attempts (Gini & Espelage, 2014). Furthermore, being the victim of cyberbullying negatively affects the victims' emotional and social adjustment (Elipe, Mora-Merchan, Ortega-Ruiz, & Casas, 2015). In particular, cybervictimisation has been linked with negative feelings such as anger, upset, sadness, helplessness, fear, shame, guilt or loneliness (Elipe & al., 2015; Ortega & al., 2012).

When peer victimisation is not handled appropriately, it can have a huge influence on the development of internal and external problems that lead to reduced levels of well-being (Zych & al., 2015). However, all cyber victims do not develop the same negative outcomes or to the same grade



of intensity (Dredge, Gleeson, & Garcia, 2014; Elipe & al., 2015). Certain risk and protective factors are considered contributors to important aspects of cognitive and emotional adjustment (Gini, Pozzoli, & Hymel, 2014; Kowalski & al., 2014). Research suggests that certain cognitive and socio-emotional variables might determine the impact of cybervictimisation on mental health such as social abilities, empathy or personality traits, among others (Perren & al., 2012; Tfofi, Farrington, & Lösel, 2014). Over the last two decades, one variable that has shown growing evidence regarding its potential role as a buffer against negative effects of cyberbullying is emotional intelligence (EI) (Baroncelli & Ciucci, 2014; Elipe & al., 2015; Extremera, Quintana-Orts, Mérida-López, & Rey, 2018). EI literature has shown that how people process the emotionally relevant information during stressful events is relevant for healthy functioning and positive relationships (Rey & Extremera, 2014). From an ability model, EI is conceptualised as a group of abilities to perceive emotions, to access emotions, to enhance thoughts, to understand emotions and emotional knowledge, and to regulate emotions to promote emotional and intellectual growth (Mayer & Salovey, 1997). Several studies have revealed that adolescents with EI are able to use and regulate their emotions and others' negative emotions for improving happiness and psychological well-being, and preventing psychological maladjustment (Fernandez-Berrocal & Extremera, 2016; Hill, Heffernan, & Allemand, 2015; Tucker, Bitman, Wade, & Cornish, 2015). Previous research, in both traditional bullying and cyber victimisation, has pointed out that students with higher levels of EI are less peer victimised and even experience more positive social behaviors (Elipe & al. 2015; Garaigordobil & Oñederra, 2010; Lomas, Stough, Hansen, & Downey, 2012). Recently, Elipe and al. (2015) found that high levels of emotional clarity but low levels of emotional repair in cyber victims contribute to manifestations of negative emotional impact, while high levels of attention together with high repair ability tend to reduce anger and depression among undergraduate students. These results suggest the crucial role of the EI variable in cyberbullying, specifically in the emotion regulation dimension.

Gender differences are key variables related to cyberbullying and EI, which have demonstrated a relevant impact on health outcomes and social adaptation. Despite the mixed nature of the results of studies on the prevalence of cyber victimisation (Del Rey, Elipe, & Ortega-Ruiz, 2012), most have found that females are more victimised than males (Kowalski & al., 2014; Li, 2006; Palermi, Servidio, Bartolo, & Costabile, 2017). Besides, focusing on emotions, cyber victims have a higher ability to attend emotions and a lower ability to understand and regulate emotions (Elipe & al., 2015; Ortega & al., 2012). However, few studies have paid attention to examining the gender differences in EI skills in the context of cyberbullying in a Spanish high school sample. The aim of this study is to make progress in this direction, specifically, by examining the interplay between EI and cybervictimisation experiences and the potential role of gender in moderating this relationship in a large sample of Spanish adolescents.

Taking into account the above considerations, the objective of this study was threefold: on the one hand, to analyse the role of EI related to the gender differences of the victims of cyberbullying among Spanish adolescents. Thus, we examine the predictive validity of EI dimensions in relation to cyber victimisation. Finally, we sought to examine whether there was a significant interactive model involving EI and gender as concurrent predictors of cybervictimisation beyond what is accounted for by direct effects of socio-demographic variables and EI. Consistent with the literature, we hypothesise differences between males and females and we expected to find evidence for an EI x gender interaction for explaining cyber victimisation.

## 2. Material and methods

### 2.1. Participants

The sample comprises a total of 1 645 adolescents (50.6% female), aged between 12 and 18 years ( $M=14.08$ ;  $SD=1.53$ ) from six public schools in Málaga province (Spain). The sample of schools was selected according to their availability for participating in the study, and there was a similar percentage of adolescents from the different educational centers. Regarding the level taught, 29.1%



attended classes of the first course of compulsory secondary education; 27.7% attended second course; 21.8% third course and 12.6% the final course of compulsory secondary education. The remainder of the sample attended classes at A level (8.8%).

## 2.2. Measures

**Cybervictimisation.** Cybervictimisation was measured with the cybervictimisation dimension of the European Cyberbullying Intervention Project Questionnaire (ECIPQ) (Brighi, Guarini, Melotti, Galli, & Genta, 2012; Del Rey & al., 2015). It consists of 11 Likert type items (i.e., Someone posted embarrassing videos or pictures of me online) with five response options for frequency of behaviors towards them during the last two months, (from 0=None to 4=More than once a week). This subscale shows good psychometric properties (Casas & al., 2013; Ortega-Ruiz, Del Rey, & Casas, 2012). In the present sample, the Cronbach's Alpha was adequate ( $\alpha = 0.86$ ). Following the criteria used by Elipe, De-la-Oliva and Del Rey (2017), we considered 'non-cyber victims' as those adolescents who marked option 'none' or the 'once or twice' option in all items; 'occasional cyber victims' as those students who indicated that at least one of the behaviours had happened to them with a frequency of 'once or twice a month'; and 'severe cyber victims' as those who indicated that at least one of the behaviours had happened 'about once a week' or more.

**Emotional intelligence.** EI was evaluated using the 'Wong and Law Emotional Intelligence Scale' (WLEIS) (Law, Wong, & Song, 2004), a questionnaire composed of four dimensions: self-emotion appraisal (SEA), other-emotion appraisal (OEA), use of emotion (UOE) and regulation of emotion (ROE). The scale comprises a total of 16 Likert type items with seven options ranging from 1 (totally disagree) to 7 (totally agree). This scale has shown satisfactory reliability in Spanish samples (Rey, Extremera, & Pena, 2016). In this study, Cronbach's Alpha was 0.88 for the overall scale, 0.75 for SEA, 0.72 for OEA, 0.77 for UOE and 0.80 for ROE.

## 2.3. Procedure

This study was part of a larger project that examined the relationship between strengths and health correlates of adolescents. Prior to data collection, head teachers and principals of the different schools selected randomly received an explanation about the research and a request for their collaboration accompanied by consent letters. The study respected the ethical values required in research with human beings having been approved by the Ethics Committee of the University of Málaga, Spain (62-2016-H). The questionnaires were completed by adolescents during the second trimester of the 2016/2017 academic year during a tutorial lesson. A teacher from the school with a research assistant was presented in class to assist with any questions. The adolescents were also informed of the study's objectives and its voluntary and confidential nature. They had one hour to answer all questionnaires.

## 3. Results

### 3.1. Descriptive analyses

Descriptive statistics (Table 1) and prevalence analyses were conducted to examine all variables included in the study and the percentage of cybervictimisation presented in our sample. Regarding the prevalence of cybervictimisation, 16.05% of participants reported that at least one of the behaviors in the survey had happened to them 'once or twice a month' or 'once or twice a week or more frequently' (7.78% occasional and 8.27% severe, respectively).

As it can be seen in Figure 1, the most frequently experienced types of cybervictimisation were 'insults about me said to others via the Internet or SMS messages' (10.21%), followed by 'direct personal insults via email or SMS messages' (6.99%). On the contrary, only 1.64% said that 'somebody had created a fake account to pretend to steal their identity.' Finally, in the cases of



'receiving threats through texts or online messages,' this happened about once a week or more frequently (2.13%).

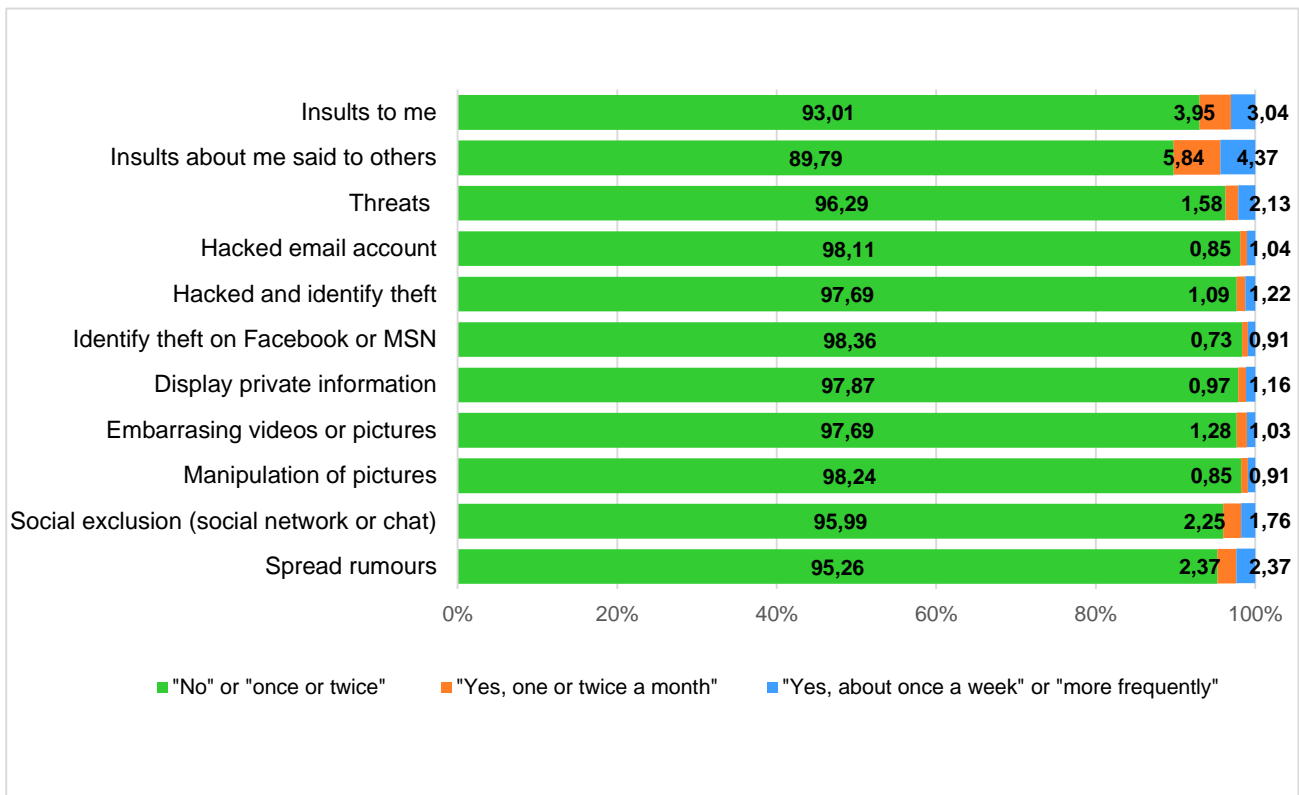


Figure 1. Percentage of students who reported having experienced the different types of cybervictimisation.

### 3.2. Gender differences in relation to EI and cybervictimisation

One-way analysis of variance (ANOVA) was conducted to examine gender differences. We followed Cohen's convention (1988) to estimate the effect size of differences by gender. The results are shown in Table 1. We found that males scored higher in self-emotion appraisal, use of emotion, regulation of emotion and total EI, whereas females reported higher scores in other-emotion appraisal and cybervictimisation.

Pearson correlations were conducted to examine the associations between EI dimensions and cybervictimisation separately for females and males. As seen in Table 2, self-emotion appraisal was negatively related to cybervictimisation for both females and males. More interestingly, the use of emotion and regulation of emotion were negatively related to cybervictimisation only for females. According to Cohen's convention (1988), the effect sizes of the correlations were small.

Table 1. Descriptive analyses and differences between females and males in study variables (\*\* $p < .01$ ; \*\*\* $p < .001$ )

	Total (N= 1645)		Female (N=832)		Male (N=813)		F	d
	M	DT	M	DT	M	DT		
EI	4.83	0.98	4.73	1.00	4.93	0.95	18.06***	-0.21
SEA	5.04	1.22	4.84	1.28	5.25	1.13	49.25***	-0.34
OEA	5.13	1.11	5.29	1.09	4.96	1.11	37.43***	0.30
UOE	4.78	1.32	4.69	1.35	4.86	1.29	7.14**	-0.13
ROE	4.36	1.41	4.09	1.42	4.65	1.34	67.39***	-0.41
Cyber victimisation	0.20	0.38	0.23	0.40	0.17	0.35	7.52**	0.16



Note: EI=Emotional Intelligence, SEA=Self-emotion appraisal; OEA=Other-emotion appraisal; UOE=Use of emotion; ROE= Regulation of emotion.

**Table 2. Intercorrelations separately by gender (\*\*p<.01)**

	1	2	3	4	5
1. SEA	-	0.39**	0.56**	0.61**	-0.15**
2. OEA	0.51**	-	0.38**	0.28**	0.02
3. UOE	0.50**	0.41**	-	0.58**	-0.16**
4. ROE	0.60**	0.32**	0.50**	-	-0.21**
5. Cybervictimisation	-0.12**	-0.02	-0.04	-0.05	-

Note: Correlations above the diagonal are for females (N= 832), those below the diagonal are for males (N= 813). SEA=Self-emotion appraisal; OEA=Other-emotion appraisal; UOE=Use of emotion; ROE=Regulation of emotion.

### 3.3. Predictive value of EI dimensions in cyber victimisation

We tested the predictive validity of EI dimensions in predicting cyber victimisation scores along with the potential moderating role of gender in these relationships. We conducted hierarchical regression analyses in which we took cyber victimisation as the dependent variable. In the first step, age, gender, and grade were entered as covariates. EI dimension scores were entered in the second step. The EI dimensions x gender interactions were included in the third step. All continuous predictors were centered in order to reduce potential problems of multicollinearity (Aiken & West, 1991). The main results of these analyses are displayed in Table 3.

For predicting cyber victimisation, a total of 5% of the variance was explained by the final model. First, we found that age was positively related to cyber victimisation scores and significantly contributed to the prediction of this variable. Second, we found that self-emotion appraisal was the only dimension that accounted for a significant amount of the variance in cyber victimisation, even after controlling the variance attributable to our covariates. Finally, we found that the regulation of the emotion x gender interaction was significant in the prediction of cyber victimisation scores beyond the main effects of the covariates and EI dimensions.

As a final point, we used Process to graphically represent the moderating effects. Following standard procedures, we used a bootstrapping procedure based on 5,000 bootstrapped resamples and a 95% confidence interval. Figure 2 shows the relationship between regulation of emotion and cyber victimisation scores by gender. We found a negative association between regulation of emotion and cyber victimisation for females ( $b=-0.06$ ,  $t(832)=-6.11$ ,  $p<0.001$ ). In particular, it was at the low emotion regulation level where female adolescents showed higher cyber victimisation. On the contrary, we did not find interaction effects between regulation of emotion and cyber victimisation in males ( $b=-0.012$ ,  $t(813)=-1.27$ ).

**Table 3. Results for the hierarchical regression analyses using cyber victimisation as the criterion variable (\*p<.05; \*\*p<.01; \*\*\*p<.001)**

Cyber victimisation	$R^2$	$F$	Unstandardised coefficients		Standardised coefficients	95% Confidence interval		$\Delta R^2$
			B	Standard error	$\beta$	Lower limit	Upper limit	
<b>Step 1</b>	0.01	7.52						0.01***
Age			0.03	0.01	0.13**	0.01	0.05	
Gender			0.02	0.02	0.02	-0.02	0.06	
Grade			-0.02	0.01	-0.08	-0.05	0.00	
<b>Step 2</b>	0.04	9.67						0.03***
SEA			-0.08	0.04	-0.26*	-0.15	-0.01	
OEA			-0.01	0.03	-0.02	-0.07	0.05	
UOE			0.03	0.03	0.11	-0.02	0.09	



ROE			0.05	0.03	0.20	-0.01	0.11	
<b>Step 3</b>	0.05	7.58						0.01**
SEA x Gender			0.04	0.03	0.17	-0.01	0.09	
OEA x Gender			0.03	0.02	0.11	-0.02	0.07	
UOE x Gender			-0.04	0.02	-0.15	-0.08	0.01	
ROE x Gender			-0.07	0.03	-0.29**	-0.12	-0.02	

Note: SEA=Self-emotion appraisal; OEA=Other-emotion appraisal; UOE=Use of emotion; ROE=Regulation of emotion. The beta reported are standardised coefficients for the final equation (step 3).

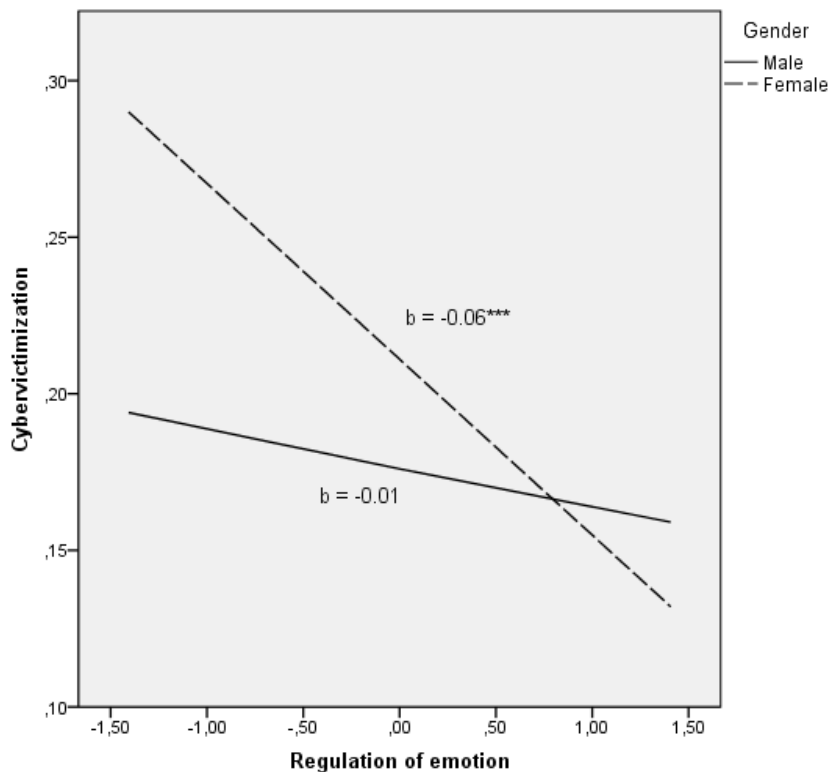


Figure 2. The relationship between regulation of emotion and cybervictimisation scores separately by gender.  
 Note: \*\*\* $p < .001$ .

## 4. Discussion and conclusion

The current study was designed to examine how EI dimensions and cyber victimisation are related in high school students and to analyse the moderating role of gender in this association. Our study replicated previous EI findings (Elipe & al., 2015), confirming the positive role of these emotional skills on the levels of cyber victimisation in a large sample of Spanish adolescents. Besides, our findings extend those of earlier studies by finding evidence that gender might be an underlying mechanism that could moderate the relationship between certain EI dimensions and cyber victimisation experiences.

Regarding the prevalence of cyber victimisation, our results show similar percentages to those reported by a recent systematic review (Zych & al., 2015). Following the criteria used by Elipe and al. (2017), over 83.95% of the sample was considered as non-cyber victims. Inversely, 16.05% were considered occasional or severe cyber victims. The most frequent forms of cyberbullying in this study were 'insults about me said to others via the Internet or SMS messages,' similar to results of previous studies carried out with adolescents (Katzner, Fetchenhauer, & Belschack, 2009).



Consistent with previous research regarding both traditional victimisation and cyber victimisation (Elife & al., 2015; Lomas & al., 2012), our study found that higher levels of total EI were significantly and negatively associated with lower scores in cyber victimisation both in males and females. Our findings are in line with the approach suggesting that the propensity of being cyber victimised by peers is, to some extent, related to the victim's emotional abilities. Interestingly, compared to male victims, the relationship between total and specific emotional abilities and cyber victimisation experiences of female victims was stronger. In short, all subscales except one (interpersonal perception) showed small but still negative and significant associations with cyber victimisation for females. On the contrary, only global EI and intrapersonal perception showed a significant and negative association with cyber victimisation for males.

With respect to examining the gender differences in EI skills and cyber victimisation experiences, gender analyses showed that males reported higher self-reported global EI along with higher intrapersonal perception, assimilation and emotional regulation than females. Some authors have found that males tend to report higher ability to regulate own emotions compared with female adolescents (Extremera, Duran, & Rey, 2007). Since the male gender role is to be more agentic and active, it is possible that male adolescents might use more frequent problem-solving strategies and positive reappraisal in attempts to change the negative daily experiences that they believe are driving their mood states (Tamres, Janicki, & Helgeson, 2002). These are in line with literature findings that male adolescents typically reported less psychological symptoms than female ones (Nolen-Hoeksema & Hilt, 2009). On the other hand, another potential reason is that male adolescents typically tend to overestimate their emotional skills compared to females when using self-report measures (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006), therefore, depending on the EI measures used, gender difference results might be different. Further research should examine this issue carefully, using EI ability measures to generalise our findings. Regarding female adolescents, some researchers have shown that women typically report a greater tendency to be attentive to moods and regulate emotions compared with men, both in adult and adolescent populations (Fernandez-Berrocal & Extremera, 2008; Salguero, Fernandez-Berrocal, Balluerka, & Aritzeta, 2010; Thayer, Rossy, Ruiz-Padial, & Johnsen, 2003). Furthermore, women tend to be more vulnerable to the impact of stressful life events (Kessler & McLeod, 1984). It may be that differences in the emotional regulation process between men and women might form the basis of the higher prevalence rate in women of emotional maladjustment and the use of maladaptive coping strategies (Nolen-Hoeksema, 2003; Thayer et al., 2003). Finally, the analysis indicated that, compared to male adolescents, female students were more likely to be victims of cyberbullying (Kowalski & al., 2014). While this gender difference in cyber victimisation demands further research, one plausible explanation is that female adolescents tend to be more likely to experience indirect forms of bullying than their male counterparts, and the negative impact of these experiences is stronger in females (Carbone-Lopez, Esbensen, & Brick, 2010).

Moreover, we found that emotion regulation interacted differently as a function of gender, extending previous literature regarding gender differences on the influence of EI in other areas of psychology such as interpersonal relationships (Brackett & al., 2006) or psychological adjustment (Merida-Lopez, Extremera, & Rey, 2017). Expanding on previous research, our study revealed an interesting finding substantiating evidence for the moderating effect of gender with deficits in emotion regulation as a risk factor for cyber victimisation experiences. In this research, mood regulation was the only EI ability which interacted significantly with gender in predicting cyber victimisation experiences in line with similar studies (Lomas & al., 2012; Schokman & al., 2014). In short, we found significant differences in the associations between emotion regulation and cyber victimisation for females, but not for males. While no interaction effect was found for males between mood regulation and cyber victimisation, in female adolescents the relationship with cyber victimisation was more negative at higher levels of emotion regulation. In line with our correlational findings, it is tentative to assume that emotion regulation skills may be more associated with cyber victimisation for female adolescents. By contrast, it might be that, for males, these regulation abilities may not be so important or may imply different socio-educational or psychological factors associated with men





other than emotion regulation to explain cyber victimisation. Further research should examine this issue.

Therefore, the future implementation of anti-bullying programmes aimed at reducing cyber victimisation might take into account these gender differences in mood regulation to develop more effective training by specifically focusing on the emotional deficits/strengths characteristically present in females and males. Several authors have underlined that specific prevention and intervention strategies need to be developed tailored to the special needs of each gender (Kowalski & al., 2014). In addition, our findings raise questions about the role of gender in strategies used in cyber victimisation experiences and asks for further exploration to examine the specific mechanisms that link differences in EI and cyber victimisation between males and females.

Even though the present study makes a novel contribution to the existing literature, there are several limitations that should be addressed by further research. First, although our data provide preliminary evidence for a moderating role of gender in predicting cyber victimisation experiences, the cross-sectional nature of our design makes it impossible to determine the directionality of any causal relationships. Further prospective follow-up studies or a longitudinal design would help to untangle the causal direction. In addition, it is important to underline that the adolescent sample is based on a convenience sample, so the results of this study cannot be generalised. Future work should apply a random design or use adolescent samples with clinically diagnosed psychiatric problems associated with cyber victimisation experiences, which would increase the degree of generalisation of the findings. Another potential limitation was the use of self-report measures which might be subject to social desirability. Future studies should replicate our findings using a wider array of assessment approaches with multiple sources (i.e., parents, school practitioners, peers), as well as other measures of cyber victimisation (e.g., the Cyber victimization questionnaire (CBV) by Alvarez, Dobarro, & Nuñez, 2015). Besides, we used an EI self-report measure. Although tools of this type are widely used in the scientific literature, their combined use with newer ability-based measures based on performance criteria would increase our knowledge beyond what the WLEIS data allows, not only about the independent and interactive effect of perceived and actual EI but also about insights into the design of professionally guided interventions focusing on emotional knowledge, emotional self-efficacy, and EI abilities aimed at reducing the negative consequences of cyber victimisation. Finally, the inclusion of measures of personality (i.e., big five) and social abilities would provide a comprehensive perspective and would generate some new insights into the interactive role that EI, personality traits, and social skills play in reducing the negative symptoms associated to cyber victimisation.

Despite these limitations, our study has provided some empirical evidence that EI is associated with cyber victimisation experiences in life. As practical implications, given that extensive evidence has shown that the emotional skills grouped into the EI construct can be learned and are susceptible to being developed through school programmes in children and adolescents (Ruiz-Aranda, & al., 2013), the present findings might serve as a good starting point for inclusion of training in EI skills as an additional intervention strategy to complement current anti-bullying approaches to reduce cyber victimisation experiences in adolescents at risk. If these findings can be replicated, psychological service providers should include EI abilities while working with adolescent females to prevent cyberbullying since our findings suggest that a deficiency in mood regulation in female adolescents has a combined effect in increasing cyber victimisation experiences. Additionally, other implications for school officials and counselors are that evaluating the interactive association between EI and gender in explaining cyber victimisation might be fundamental as these variables may potentially be used as a screening assessment to identify potential high school students who might be at risk of cyber victimisation after experiencing cyberbullying behaviors. Also, as Lomas and al. (2012) have argued, detection and identification of risk factors related to victims of cyberbullying would help to change the role of school practitioners, moving from a 'policing' role to inhibit disruptive behaviours and securely engage cyber behaviours of bullies, to a more active role in developing emotional skills and mood regulation strategies of cyberbullies and their victims. Nevertheless, since prevention and intervention programmes aimed at increasing EI skills have only been implemented in a normal



sample of high school students, further research should specifically examine the efficacy of these EI prevention programmes for adolescents at risk of peer cyber victimisation. Some preliminary work has shown the effectiveness of EI interventions in Spanish high school settings to reduce physical/verbal aggression and hostility and increase empathy and mental health (Castillo, Salguero, Fernandez-Berrocal, & Balluerka, 2013). It is tentative to assume that similar intervention programmes might be used to reduce psychological distress and negative symptoms in those adolescents who are at a greater risk of being subjected to peer cyber victimisation.

In conclusion, our findings shed some light on the importance of considering EI skills for the preventative design of anti-bullying programmes and provide preliminary evidence for using a gender-tailored cyber victimisation approach as a potentially efficient way of coping with the associated distress caused by cyberbullying experiences.

## References

- Aiken, L.S., & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Alvarez-Garcia, D., Nuñez, J.C., Dobarro, A., & Rodriguez, C. (2015). Risk factors associated with cybervictimization in adolescence. *International Journal of Clinical and Health Psychology*, 15(3), 226-235. <https://doi.org/10.1016/j.ijchp.2015.03.002>
- Alvarez-Garcia, D., Dobarro, A., & Nuñez, J.C. (2015). Validez y fiabilidad del cuestionario de cibervictimización en estudiantes de Secundaria. *Aula Abierta*, 43(1), 32-38. <https://doi.org/10.1016/j.aula.2014.11.001>
- Baroncelli, A., & Ciucci, E. (2014). Unique effects of different components of trait emotional intelligence in traditional bullying and cyberbullying. *Journal of Adolescence*, 37(6), 807- 815. doi: 10.1016/j.adolescence.2014.05.009
- Beckman, L., Hagquist, C., & Hellström, L. (2012). Does the association with psychosomatic health problems differ between cyberbullying and traditional bullying? *Emotional and Behavioural Difficulties*, 17, 421-434. <https://doi.org/10.1080/13632752.2012.704228>
- Book, A.S., Volk, A.A., & Hosker, A. (2012). Adolescent bullying and personality: An adaptive approach. *Personality and Individual Differences*, 52(2), 218-223. doi: 10.1016/j.paid.2011.10.028
- Brackett, M.A., Rivers, S.E., Shiffman, S., Lerner, N., & Salovey, P. (2006). Relating emotional abilities to social functioning: A comparison of self-report and performance measures of Emotional Intelligence. *Journal of Personality and Social Psychology*, 91(4), 780-795. <https://doi.org/10.1037/0022-3514.91.4.780>
- Brighi, A., Guarini, A., Melotti, G., Galli, S., & Genta, M.L. (2012). Predictors of victimisation across direct bullying, indirect bullying and cyberbullying. *Emotional and Behavioural Difficulties*, 17(3-4), 375-388.
- Carbone-Lopez, K., Esbensen, F., & Brick, B.T. (2010). Correlates and consequences of peer victimization: Gender differences in direct and indirect forms of bullying. *Youth Violence and Juvenile Justice*, 8, 332-350. <https://doi.org/10.1177/1541204010362954>
- Casas, J.A., Del Rey, R., & Ortega-Ruiz, R. (2013). Bullying and cyberbullying: Convergent and divergent predictor variables. *Computers in Human Behavior*, 29(3), 580-587. <https://doi.org/10.1016/j.chb.2012.11.015>
- Castillo, R., Salguero, J.M., Fernandez-Berrocal, P., & Balluerka, N. (2013). Effects of an emotional intelligence intervention on aggression and empathy among adolescents. *Journal of Adolescence*, 36, 883-892. <https://doi.org/10.1016/j.adolescence.2013.07.001>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Del Rey, R., Casas, J.A., Ortega-Ruiz, R., Schultze-Krumbholz, A., Scheithauer, H., Smith, P., ... Plichta, P. (2015). Structural validation and cross-cultural robustness of the European Cyberbullying Intervention Project Questionnaire. *Computers in Human Behavior*, 50, 141-147. <https://doi.org/10.1016/j.chb.2015.03.065>
- Del Rey, R., Elipe, P., & Ortega-Ruiz, R. (2012). Bullying and cyberbullying: Overlapping and predictive value of the co-occurrence. *Psicothema*, 24, 608-613.
- Dredge, R., Gleeson, J., & Garcia, X.P. (2014). Cyberbullying in social networking sites: an adolescent victim's perspective. *Computer and Human Behaviour*, 36, 13-20. doi: 10.1016/j.chb.2014.03.026
- Elipe, P., De-la-Oliva, M., & Del Rey, R. (2017). Homophobicbullying and cyberbullying: Study of a silenced problem. *Journal of Homosexuality*, 65(5), 672-686. <https://doi.org/10.1080/00918369.2017.1333809>



- Elipe, P., Mora-Merchan, J.A., Ortega-Ruiz, R., & Casas, J.A. (2015). Perceived emotional intelligence as a moderator variable between cybervictimization and its emotional impact. *Frontiers in Psychology*, 6, 486. <https://doi.org/10.3389/fpsyg.2015.00486>
- Extremera, N., Duran, A., & Rey, L. (2007). Perceived emotional intelligence and dispositional optimism-pessimism: Analyzing their role in predicting psychological adjustment among adolescents. *Personality and Individual Differences*, 42, 1069-1079. <https://doi.org/10.1016/j.paid.2006.09.014>
- Extremera, N., Quintana-Orts, C., Mérida-López, S., & Rey, L. (2018). Cyberbullying victimization, self-esteem and suicidal ideation in adolescence: Does emotional intelligence play a buffering role? *Frontiers in Psychology*, 9, 367. <https://doi.org/10.3389/fpsyg.2018.00367>
- Fernandez-Berrocal, P., & Extremera, N. (2008). A review of trait meta-mood research. In M.A. Columbus (Ed.), *Advances in Psychology Research* (pp.17-45). San Francisco: Nova Science.
- Fernandez-Berrocal, P., & Extremera, N. (2016). Ability Emotional Intelligence, Depression, and Well-Being. *Emotion Review*, 8(4), 311-315. <https://doi.org/10.1177/1754073916650494>
- Garaibordobil, M., & Oñederra, J.A. (2010). Inteligencia emocional en las víctimas de acoso escolar y en los agresores [Emotional intelligence in victims of school bullying and in aggressors]. *European Journal of Education and Psychology*, 3(2), 243-256.
- Gini, G., & Espelage, D.L. (2014). Peer victimization, cyberbullying, and suicide risk in children and adolescents. *The Journal of the American Medical Association*, 312, 545-546. [doi:10.1001/jama.2014.3212](https://doi.org/10.1001/jama.2014.3212)
- Gini, G., Pozzoli, T., & Hymel, S. (2014). Moral disengagement among children and youth: A meta-analytic review of links to aggressive behavior. *Aggressive Behavior*, 40, 56-68. <https://doi.org/10.1002/ab.21502>
- Hill, P.L., Heffernan, M.E., & Allemand, M. (2015). Forgiveness and Subjective Well-Being: Discussing Mechanisms, Contexts, and Rationales. In L.L. Toussaint (Ed.), *Forgiveness and Health* (pp. 155-169). Dordrecht: Springer. [https://doi.org/10.1007/978-94-017-9993-5\\_11](https://doi.org/10.1007/978-94-017-9993-5_11)
- Hinduja, S., & Patchin, J.W. (2009). *Bullying beyond the schoolyard: Preventing and responding to cyberbullying*. Thousand Oaks, CA: Sage Publications.
- Katzer, C., Fetchenhauer, D., & Belschack, F. (2009). Cyberbullying: who are the victims? A comparison of victimization in Internet chatrooms and victimization in school. *Journal of Media Psychology*, 21(1), 25-36. <https://doi.org/10.1027/1864-1105.21.1.25>
- Kessler R.C., & McLeod J.D. (1984). Sex differences in vulnerability to undesirable life events. *American Sociological Review*, 49, 620-631. <https://doi.org/10.2307/2095420>
- Kowalski, R.M., Giumetti, G.W., Schroeder, A.N., & Lattanner, M.R. (2014). Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. *Psychological Bulletin*, 140(4), 1073-1137. <https://doi.org/10.1037/a0035618>
- Law, K.S., Wong, C.S., & Song, L.J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology*, 89, 483-496. <https://doi.org/10.1037/0021-9010.89.3.483>
- Li, Q. (2006). Cyberbullying in schools: A research on gender differences. *School Psychology International*, 27, 157-170. <https://doi.org/10.1177/0143034306064547>
- Lomas, J., Stough, C., Hansen, K., & Downey, L.A. (2012). Brief report: Emotional intelligence, victimization and bullying in adolescents. *Journal of Adolescence*, 35, 207-211. <https://doi.org/10.1016/j.adolescence.2011.03.002>
- Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey, & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implication* (pp. 3-31). New York: Basic Books.
- Merida-Lopez, S., Extremera, N., & Rey, L. (2017). En busca del ajuste psicológico a través de la inteligencia emocional ¿es relevante el género de los docentes? *Behavioral Psychology/Psicología Conductual*, 25, 581-597.
- Nixon, C.L. (2014). Current perspectives: The impact of cyberbullying on adolescent health. *Adolescent Health, Medicine and Therapeutics*, 5, 143-158. <https://doi.org/10.2147/AHMT.S36456>
- Nolen-Hoeksema, S. (2003). The response styles theory. In C. Papageorgiou & A. Wells (Eds.), *Depressive rumination: Nature, theory and treatment of negative thinking in depression* (pp. 107- 123). New York: Wiley.
- Nolen-Hoeksema, S., & Hilt, L.M. (2009). Gender differences in depression. In I.H. Gotlib & C.L. Hammen (Eds.), *Handbook of Depression* (pp. 386-404). New York: Guilford.
- O'Brien, N., & Moules, T. (2013). Not sticks and stones but tweets and texts: Findings from a national cyberbullying project. *Pastoral Care in Education: International Journal of Psychology in Education*, 31, 53-65. <https://doi.org/10.1080/02643944.2012.747553>



- Ortega, R., Elipe, P., Mora-Merchan, J.A., Genta, M.L., Brighi, A., Guarini, A., ... Tippett, N. (2012). The emotional impact of bullying and cyberbullying on victims: a European cross-national study. *Aggressive Behavior*, 38, 342-356. <https://doi.org/10.1002/ab.21440>
- Ortega-Ruiz, R., Del Rey, R., & Casas, J.A. (2012). Knowing, building and living together on internet and social networks: The ConRed cyberbullying prevention program. *International Journal of Conflict and Violence*, 6(2), 302-312. <https://doi.org/10.4119/UNIBI/ijcv.250>
- Palermi, A.L., Servidio, R., Bartolo, M.G., & Costabile, A. (2017). Cyberbullying and self-esteem: An Italian study. *Computers in Human Behavior*, 69, 136-141. <https://doi.org/10.1016/j.chb.2016.12.026>
- Perren, S., Corcoran, L., Cowie, H., Dehue, F., Garcia, D.J., McGuckin, C., ... Völlink, T. (2012). Tackling cyberbullying: Review of empirical evidence regarding successful responses by students, parents, and schools. *International Journal of Conflict and Violence*, 6, 283-292.
- Rey, L., & Extremera, N. (2014). Positive psychological characteristics and interpersonal forgiveness: Identifying the unique contribution of emotional intelligence abilities, Big Five traits, gratitude and optimism. *Personality and Individual Differences*, 68, 199-204. <https://doi.org/10.1016/j.paid.2014.04.030>
- Rey, L., Extremera, N., & Pena, M. (2016). Emotional competence relating to perceived stress and burnout in Spanish teachers: a mediator model. *PeerJ*, 4:e2087. <https://doi.org/10.7717/peerj.2087>
- Ruiz-Aranda, D., Cabello, R., Salguero, J.M., Palomera, R., Extremera, N., & Fernandez-Berrocal, P. (2013). Guía para mejorar la inteligencia emocional de los adolescentes. Programa INTEMO. Madrid: Piramide.
- Salguero, J.M., Fernandez-Berrocal, P., Balluerka, N., & Aritzeta, A. (2010). Measuring perceived emotional intelligence in the adolescent population: psychometric properties of the Trait Meta-Mood scale. *Social Behavior and Personality*, 38 (9), 1197-1210. <https://doi.org/10.2224/sbp.2010.38.9.1197>
- Schokman, C., Downey, L.A., Lomas, J., Wellham, D., Wheaton, A., Simmons, N., & Stough, C. (2014). Emotional intelligence, victimisation, bullying behaviours and attitudes. *Learning and Individual Differences*, 36, 194-200. doi: 10.1016/j.lindif.2014.10.013
- Sontag, L.M., Clemans, K.H., Graber, J.A., & Lyndon, S.T. (2011). Traditional and cyber aggressors and victims: a comparison of psychosocial characteristics. *Journal of Youth and Adolescence*, 40, 392-404. <https://doi.org/10.1007/s10964-010-9575-9>
- Tamres, L.K., Janicki, D., & Helgeson, V.S. (2002). Sex differences in coping behavior: a meta-analytic review and an examination of relative coping. *Personality and Social Psychology Review*, 6, 2-30. [https://doi.org/10.1207/S15327957PSPR0601\\_1](https://doi.org/10.1207/S15327957PSPR0601_1)
- Tokunaga, R.S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, 26, 277-287. <https://doi.org/10.1016/j.chb.2009.11.014>
- Thayer, J.F., Rossy, L. A., Ruiz-Padial, E., & Johnsen, B.H. (2003). Gender differences in the relationship between emotional regulation and depressive symptoms. *Cognitive Therapy and Research*, 27, 349-364. <https://doi.org/10.1023/A:1023922618287>
- Ttofi, M.M., Farrington, D.P., & Lösel, F. (2014). Interrupting the continuity from school bullying to later internalizing and externalizing problems: findings from cross-national comparative studies. *Journal of School Violence*, 13, 1-4. <https://doi.org/10.1080/15388220.2013.857346>
- Tucker, J.R., Bitman, R.L., Wade, N.G., & Cornish, M.A. (2015). Defining forgiveness: Historical roots, contemporary research, and key considerations for health outcomes. In L. Toussaint, E. Worthington, & D. Williams (Eds.). *Forgiveness and Health: Scientific Evidence and Theories Relating Forgiveness to Better Health* (pp. 13-28). Dordrecht: Springer. [https://doi.org/10.1007/978-94-017-9993-5\\_2](https://doi.org/10.1007/978-94-017-9993-5_2)
- Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015). Systematic review of theoretical studies on bullying and cyberbullying: Facts, knowledge, prevention, and intervention. *Aggression and Violent Behavior*, 23, 121. <https://doi.org/10.1016/j.avb.2015.10.001>