

Cyberbullying according to sociodemographic and academic characteristics among university students

Ciberacoso según características sociodemográficas y académicas en estudiantes universitarios

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Abstract:

There is evidence of the existence of both bullying and cyberbullying in the university environment. The aim of this study is to analyse the differences between cyberbullying roles (target, perpetrator, and bystander) according to sociodemographic and academic variables (sex, age, origin, level of studies, and faculty). The participants were 765 young students (72.9% women) from a university of the southeast of Spain (83.7% undergraduate degree, 15.2% Master's degree, and 1.1% other studies) from different faculties. The Questionnaire on Harassment among University Students tool was used. The results of the study determined that women, people aged under 20, undergraduate degree students, and Humanities, Social Sciences, and Health Sciences stu-

dents obtained higher values in the sub-scales evaluated. Among the roles of those involved, bystanders stood out, followed by perpetrators and victims. Regression analysis showed a relationship between being the target, perpetrator, and/or bystander of cyberbullying. The study will make it possible to focus on those sociodemographic variables that turned out to be significant as well as the relationship between the cyberbullying roles in the face of prevention and intervention programs for each of the roles. The university context must assume the importance of promoting coexistence and university welfare. The involvement of the entire educational community is also relevant.

Keywords: cybernetics, universities, university faculty, education, cyberbullying.

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Resumen:

Existe evidencia de la aparición del acoso escolar en el ámbito universitario tanto de manera presencial como a través de medios tecnológicos. El objetivo del estudio fue analizar las diferencias entre los roles del ciberacoso (objeto, agente y observador) en función de variables sociodemográficas y académicas (sexo, edad, procedencia, nivel de estudios y Facultad). Los participantes del estudio fueron 765 jóvenes estudiantes (72.9% mujeres) de una universidad del sureste español (83.7% estudios de Grado, el 15.2% de Máster y el 1.1% otros estudios) pertenecientes a diferentes Facultades (Humanidades, Ciencias Sociales y de la Educación, Ciencias de la Salud y Ciencias). El instrumento utilizado fue el Cuestionario sobre Acoso entre Estudiantes Universitarios. Los resultados del estudio determinaron que las mujeres, los menores de 20 años, los estudiantes de Grado, los estu-

diantes de Humanidades, Ciencias Sociales y Ciencias de la Salud obtuvieron valores más altos en las subescalas evaluadas. Entre los roles de los implicados destacaban los observadores seguido de agresores y de víctimas. El análisis de regresión determinó la relación entre el hecho de haber sido objeto de ciberacoso, agente de ciberacoso y observador de ciberacoso. El estudio permitirá centrarse en aquellas variables sociodemográficas que resultaron ser significativas, así como la relación entre los roles del ciberacoso de cara a programas de prevención e intervención en cada uno de sus roles. El contexto universitario debe asumir la importancia de promover la convivencia y el bienestar universitario. Asimismo, es relevante la implicación de toda la comunidad educativa.

Descriptor: cibernética, universidad, facultad universitaria, educación, ciberacoso.

1. Introduction

Problems of intimidation or harassment among peers can appear throughout the educational period (Ortega-Ruiz, 2015), mainly in cultural/ethnic, sexual minorities and minorities of other types (Llorent, Ortega-Ruiz, & Zych, 2016; Walker, 2015). Such situations are categorised by being intentional in nature and by being situations repeated over time carried out by an individual or a group against victims unable to defend themselves, with a resulting imbalance of power (Olweus, 2013).

Cyberbullying involves using ICT —Information and Communication Technologies— to harass other peers, mainly by using the Internet and mobile phones. The methods generally used are text messages, phone calls, recording and publication of attacks and humiliations, social networks, and so on (Garaigordobil, 2015), repeated over time, intentionally and with an imbalance of power (Zych, Ortega-Ruiz, & Marín-López, 2016). In general, there are three groups of roles directly involved in this issue: victim or target, perpetrator, and bystander, either directly or through cyberbullying.

Cyberbullying is often covered up (Hernández & Solano, 2007), and the concealment of the aggressor's identity facilitates impunity and increases the victim's defencelessness. Electronic attacks are spread rapidly to a great number of people who can share them in turn (Buelga, Cava, & Musitu, 2010).

The virtual world offers possibilities as well as risks, such as, for instance, Internet addiction or cyberbullying (Arnaiz, Cerezo, Giménez, & Maquilón, 2016; Del Rey, Casas, & Ortega-Ruiz, 2012; Myers & Cowie, 2017). Del Rey et al. (2012) state that overuse of new technologies is a risk that may affect students' quality of life since it generates a situation of dependence. Several studies have demonstrated that cyberbullying may have legal and highly negative psychological consequences for the students involved (Álvarez-García, Barreiro-Collazo, Núñez, & Dobarro, 2016). Ortega-Barón, Buelga, Cava, and Torralba (2017) showed that students who had been cyberbullies, either continuously or occasionally, had previously broken the rules, that is to say, they had been involved in other prescribed behaviour.

Among protective factors, it is important to highlight self-esteem as protection against occasional cyber-victimisation arising from owning a mobile phone, playing online games, and frequency of Internet use on week days. Cyber-victimisation, either continuous or occasional, is mainly found among girls and with an average age of 14 (Álvarez-García, Núñez, Dobarro, & Rodríguez, 2016). Similarly, Arnaiz et al.

(2016) affirm that family supervision is a protective factor.

The coexistence of traditional bullying and cyberbullying suggests that involvement in cyberbullying may be predicted by involvement in traditional bullying (cyber-victimisation and cyber-aggression) (Del Rey, Elípe, & Ortega-Ruiz, 2012; Yubero, Navarro, Elche, Larrañaga, & Ovejero, 2017). Save the Children's report (Sastre, 2016) on bullying and cyberbullying showed that 9.3% of students in Spain had been victims of school bullying and 6.9% victims of cyberbullying. Among the ways it manifests itself, insults were the most common form (six out of ten students had used insults and more than two out of ten had been insulted frequently), followed by other forms such as rumours, theft, threats, physical mistreatment, or exclusion. Moreover, 5.4% had suffered cyber-bullying and 3.3% had committed cyberbullying. This shows that the prevalence of cyberbullying is increasing (Álvarez-García et al., 2016; Garaigordobil, 2011, 2015).

Therefore, cyberbullying is a social problem which goes beyond the borders of the educational contexts of primary and secondary education, affecting other types of population, such as university circles, with the same devastating effects (Crosslin & Golman, 2014; García-Peña, Moncada, & Quintero, 2013; Torres-Mora, 2010; Walker, 2015).

Until recently, the risk in the university population had not been considered, as university students were ascribed a cer-

tain psychosocial maturity which would minimise relationship problems among them. It must be noted that intimidation among young university students is not only a social issue but also a problem of public health.

It follows from the above that bullying is not exclusively a phenomenon of the of the primary and secondary education context since it presents itself as a relationship problem among peers which can arise in other academic locations such as universities, and such abuse of power even appears through new technologies (cyberbullying). It is a serious problem which has negative consequences for the development of university students (Cassidy, Faucher, & Jackson, 2017; Crosslin & Golman, 2014; García-Peña et al., 2013; Walker, 2015).

In the university context, there is a series of factors that cause stress, anxiety, depressive symptoms, and other problems. One of these factors is intimidation or harassment among students (García-Peña et al., 2013). The factors which contribute to the appearance of intimidation in the university context include different academic abilities, peer-groups, and students with special needs (McDougal, 1999).

The existence of lower levels of physical aggression among university students in comparison to other educational levels has been shown, while rates of other types of hostility such as verbal abuse (taunts, insults, etc.), social exclusion through alienation, denigration, abuse in group work, categorization by physical features

and economic status, among others, are greater (Hoyos, Romero, Valega, & Molin-ares, 2009; López, 2017; Paredes, Sanabria-Ferrand, González-Quevedo, & Moreno Rehalpe, 2010; Torres-Mora, 2010; Trujillo & Romero-Acosta, 2016). Among the roles of those involved, bystanders are most apparent, followed by bullies and victims (Hoyos et al., 2009; Paredes et al., 2010; Trujillo et al., 2016). Both men and women are actors in the different types of abuse (Anguiano-Carrasco & Vigil-Collet, 2011; Faucher, Jackson, & Cassidy, 2014; Hoyos et al., 2009; Kokkinos, Antoniadou, & Markos, 2014). Specifically, men are usually more involved as victim than women, although not in all of its manifestations, while women appear as bystanders. In relation to bullies, women appeared as bullies in different ways (ignoring, disparaging, etc.) than men (name-calling, insulting, etc.) (Hoyos et al., 2009; Hoyos et al., 2012). With reference to the courses, Molero, Gázquez, Pérez-Fuentes and Soler (2014) did not find differences between the types of degrees analysed (Primary Education, Early Childhood Education, and Psychology), nor did Paredes et al. (2010) who analysed situations of bullying in faculties of medicine in Colombia. In relation to age, there is a greater presence of abuse in more forms between 17 and 20 (Hoyos et al., 2009; Hoyos et al., 2012) which seems to derive from the difficulty of establishing group dynamics and each student's participation in them.

For this reason, the aim of this study is to analyse differences because of socio-demographic and academic variables (sex,

age, origin, level of studies and faculty) among cyberbullying roles (victim of cyberbullying, perpetrator of cyberbullying, and bystander of the cyberaggression).

2. Method

2.1. Participants

The participants in the study were 765 young university students in southern Spain with ages ranging from under 20 to over 30, 72.9% of whom were women (see Table 1), 93.5% of students were of Spanish origin. In relation to the

type of studies, 83.7% were studying for an undergraduate degree, 15.2% for a Master's, and the others, other studies. The distribution by faculty was: 14% Humanities (Fine Art, Geography, History, Languages, Classical Philology, and others), 45.6% Social Sciences and Education (Law, Economics, Social Work, Education, and others), 30.2% Health Sciences (Medicine, Nursing, Psychology, Optometry, Physiotherapy, and others), and 10.2% Science (Physics, Chemistry, Biology, Computing, Engineering, and others).

TABLE 1. Distribution of participants.

Age	Men	Women
Under 20	41 (19.8%)	182 (32.8%)
20-24	125 (60.4%)	276 (49.7%)
25-29	28 (13.5%)	58 (10.5%)
30 or more	13 (6.3%)	39 (7%)

Source: Own elaboration.

2.2. Instruments

The instrument used was the Questionnaire on Harassment among University Students by Cerezo, Martín, Martínez, Méndez, and Ruiz (2016) validated by Martínez, Méndez, Ruiz and Cerezo (not published).

The instrument consists of 135 items. The first part measures socio-demographic and academic variables such as: age (under 20, between 20-24, between 25-29, 30 or more), gender (male/female), faculty

where studies were pursued (Humanities, Social Sciences and Education, Health Sciences, and Sciences), type of studies (undergraduate degree, Master's, or others), year (1st, 2nd, 3rd, or 4th) and country of origin (Spain or other). The instrument then uses three scales:

- a) As target of aggression.
- b) As perpetrator of aggression.
- c) As bystander of aggression.

Each of these measures direct aggression (bullying) as well as cyber aggression (cyberbullying):

Scale a) *As target of aggression*: consists of 49 items distributed between bullying (type, who, place, time, reason) and cyberbullying (type, way or means, moment, reason, informer and support), it is made up of the sub-scales direct aggression (DA) (e.g., “I have suffered physical aggression”) and target of cyberbullying (TCB) (e.g., “on occasion I have received cyberbullying through social networks”).

Scale b) *As perpetrator of aggression*: has 35 items distributed between direct aggression or harassment (type, object or direction, moment, and cause) and cyberbullying (act, path, object, and motives), and it comprises the sub-scales perpetrator of direct aggressions (PDA) (e.g., “on occasion I have verbally harassed a partner with insults, threat, etc.”) and perpetrator of cyberbullying (PCB) (e.g., “on occasion I have done cyberbullying through offensive calls”).

Scale c) *As bystander of the aggression*: consists of 45 items distributed between observation of direct aggression or harassment (type, object, moment and motives) and cyberbullying (type, route, excluded, causes, informed and help) made up of the sub-scales of bystander

of direct aggressions (BDA) (e.g., “on occasion, I have seen another student assaulted, the aggressions were physical”) and bystander of cyberbullying (BCB) (e.g., “on occasion, I have observed cyberbullying —aggression to others through mobile phones or the Internet— through calls”). These sub-scales have appropriate Cronbach’s Alpha values: as target of aggression .95; as perpetrators of aggression .94 and as bystander of the aggression .96. In this study, the sub-scales relating to cyberbullying (TCB, PCB and BCB) were selected.

2.3. Process

Participants were selected taking into account the faculty in which they were enrolled in the 2015-2016 academic year in such a way that the representativeness of each group of the 20 faculties at the University in southern Spain was guaranteed (Humanities, Social Sciences and Education, Health Sciences, and Sciences) with a confidence level of 95%. It was necessary to ask for permission and collaboration of the teachers in charge of the undergraduate degrees, Master’s, or other studies selected so the questionnaires could be administered in person or online through the course’s virtual classroom (28.48%). Administering the questionnaire took between 15 and 20 minutes. Data confidentiality and anonymity were guaranteed during the completion of the instrument. The protocol was approved by the Ethics Committee for Clinical Research of the Universidad de Murcia. The

study was performed in accordance with the approved guidelines and the Declaration of Helsinki.

2.4. Data Analysis

To analyse cyberbullying roles according to socio-demographic characteristics, a mean difference was calculated (Student's *t*) for our independent samples to determine if there were differences relating to gender and origin for each of the sub-scales and Cohen's *d* (1988) was calculated for the effect size. To analyse the mean differences by level of studies, the faculty in which they were enrolled, and age (in ranges), an analysis of variance (ANOVA) was used for each of the sub-scales. Comparisons with the Bonferroni Post-Hoc Test were used. In addition, the Brown-Forsythe test was used when Levene's test could not assess the equality of variances. Hierarchical regression analyses were used to contrast the predictive power of the groups of independent variables (socio-demographic variables such as age, gender, faculty, level of studies, origin) in relation to the dependent variable under study (TCB, PCB, BCB) as well as the relations between them and the "enter" method. Analyses were carried out using the SPSS v.21 program.

2.5. Results

14.4% of the students had suffered cyberbullying, 7.3% had committed cyberbullying, and 17.4% had witnessed cyberbullying.

Table 2 shows the differences by gender in the QAEU sub-scales. Student's *t*-test showed significant mean differences

in the TCB, PCB, and BCB sub-scales with higher values in women and a low effect size ($d = -.20$).

Secondly, Table 3 shows the differences by age range in the QAEU sub-scales in the one-way ANOVA test. The post hoc tests revealed that there were mean differences between students younger than 20 and students aged between 20 and 24 in the three sub-scales. In the PCB sub-scale, there were mean differences between students aged between 20 and 24 and students aged 30 or more, being higher in the latter.

Table 4 shows the differences by place of origin in the QAEU sub-scales. Student's *t*-test did not show significant mean differences in the TCB, PCB, and BCB sub-scales.

Table 5 shows the study results by level of studies. The post hoc tests showed that there were significant differences between undergraduate degree and Master's students in the three sub-scales (TCB, PCB, and BCB), the figures being lower for the latter. Likewise, in the TCB sub-scale, there were mean differences between Master's students and those enrolled in other types of training, the figures being higher for the latter.

Table 6 shows the results relating to the faculty of the course on which the students were enrolled. The post hoc tests showed that there were significant mean differences with Science students (who had lower values) and students from Humanities, Social Sciences, and Health Sciences in the

TCB, PCB, and BCB sub-scales. Moreover, in the OBC sub-scale, there were mean differences between Social Sciences and Health Sciences students, with the former being higher.

Finally, the regression analysis, using TCB as criterion and as predictor variables those relating to the sociodemographic and academic variables (age, gender, faculty, level of studies, and origin) as well as PCB and BCB explained 65.8% of the variance. The standardised Beta regression coefficient showed that, among all the predictor variables, level of studies ($Beta = -.062$; $t = -2.606$; $p = .009$), PCB ($Beta = .474$; $t = 14.458$; $p = .000$), and BCB were significant. Similarly, the regression analysis which used PCB as its criterion and as predictor variables those relating to sociode-

mographic and academic variables (age, gender, faculty, level of studies and origin) as well as TCB and BCB, explained 66.6% of the variance. The standardised Beta regression coefficient showed that, among all the predictor variables, faculty ($Beta = -.048$; $t = -2.163$; $p = .031$), TCB ($Beta = .459$; $t = 14.458$; $p = .000$), and BCB ($Beta = .409$; $t = 12.974$; $p = .000$) were significant. Also, the regression analysis with BCB as criterion and as predictor variables those relating to sociodemographic and academic variables (age, gender, faculty, level of studies, and origin) as well as TCB and PCB explained 63.6% of the variance. The standardised Beta regression coefficient showed that, among all the predictor variables, TCB ($Beta = .401$; $t = 11.615$; $p = .000$) and PCB ($Beta = .447$; $t = 12.974$; $p = .000$) were significant.

TABLE 2. Differences by gender in the QAEU sub-scales.

QAEU SUB-SCALES	GENDER		<i>t</i>	<i>p</i>
	MEN	WOMEN		
	<i>M(SD)</i>	<i>M(SD)</i>		
TCB	12.24 (14.81)	15.28 (15.62)	-2.243	.016*
PCB	5.9 (8.22)	7.6 (9.2)	-2.349	.019*
BCB	11.91 (16.08)	15.26 (17.43)	-2.501	.013*

Note: TCB = target of cyberbullying, PCB = perpetrator of cyberbullying, BCB = bystander of cyberbullying.

Source: Own elaboration.

TABLE 3. Differences by age range in the QAEU sub-scales.

QAEU SUB-SCALES	AGE		<i>p</i>
	<i>F</i>	Mean differences	
TCB	Brown-Forsythe $F(3;30.423) = 3.633$, $p = .013$	Under 20-20-24 years = 3.60 Under 20-25-29 years = 3.40 Under 20-30 or more = -1.35 20-24 years-25-29 years = -.20 20-24 years-30 or more = -4.95 25-29 years-30 or more = -4.75	.031* n.s. n.s. n.s. n.s. n.s.
PCB	Brown-Forsythe $F(3;280.899) = 6.856$, $p = .000$	Under 20-20-24 years = 3.06 Under 20-25-29 years = 2.12 Under 20-30 or more = -.77 20-24 years-25-29 years = -.94 20-24 years-30 or more = -3.83 25-29 years-30 or more = -2.89	.000 n.s. n.s. n.s. .019* n.s.
BCB	Brown-Forsythe $F(3;322.231) = 5.148$, $p = .002$	Under 20 years-20-24 years = 5.52 Under 20 years-25-29 years = 3.44 Under 20 years-30 or more = 1.49 20-24 years-25-29 years = -2.08 20-24 years-30 or more = -4.04 25-29 years-30 or more = -1.95	.001* n.s. n.s. n.s. n.s. n.s.

Note: TCB = target of cyberbullying, PCB = perpetrator of cyberbullying, BCB = bystander of cyberbullying.
Source: Own elaboration.

TABLE 4. Differences by place of origin in the QAEU sub-scales.

QAEU SUB-SCALES	ORIGIN		<i>t</i>	<i>p</i>
	SPANISH	OTHERS		
	<i>M(SD)</i>	<i>M(SD)</i>		
TCB	14.46 (15.42)	14.56 (16.35)	-.045	n.s.
PCB	7.17(8.92)	7.14 (9.37)	-.020	n.s.
BCB	14.20 (17)	16.84 (18.98)	-1.052	n.s.

Note: TCB = target of cyberbullying, PCB = perpetrator of cyberbullying, BCB = bystander of cyberbullying.
Source: Own elaboration.

TABLE 5. Differences by level of studies in the QAEU sub-scales.

QAEU SUB-SCALES	LEVEL OF STUDIES		
	<i>F</i>	<i>Mean differences</i>	<i>p</i>
TCB	Brown-Forsythe $F(2;24.544) = 21.645$, $p = .000$	Undergraduate-Master's = 8.37 Undergraduate-Other = -8.67 Master's-Other = -17.04	.000* n.s. .07*
PCB	Brown-Forsythe $F(2;22.451) = 9.085$, $p = .001$	Grado- Máster = 3.45 Undergraduate-Other = -2.30 Master's-Other = 5.76	.000* n.s. .07*
BCB	Brown-Forsythe $F(2;17.985) = 9.764$, $p = .001$	Master's-Other = 5.76 Undergraduate-Master's = 7.14 Undergraduate-Other = -5.80 Master's-Other = -12.93	n.s. .000* n.s. n.s.

Note: TCB = target of cyberbullying, PCB = perpetrator of cyberbullying, BCB = bystander of cyberbullying.

Source: Own elaboration.

TABLE 6. Differences by faculty in the QAEU sub-scales.

QAEU SUB-SCALES	FACULTY		
	<i>F</i>	<i>Mean differences</i>	<i>p</i>
TCB	Brown-Forsythe $F(3;508.722) = 8.240$, $p = .000$	Humn. - Soc. Sci. = 1.81 Humn. - Health Sci. = -.424 Humn. - Sci. = 8.85 Soc. Sci. - Health Sci. = -2.23 Soc. Sci. - Sci. = 7.04 Health Sci. - Sci. = 9.27	n.s. n.s. .001* n.s. .002* .000*
PCB	Brown-Forsythe $F(3;523.363) = 12.136$, $p = .000$	Humn. - Soc. Sci. = 2.1 Humn. - Health Sci. = .56 Humn. - Sci. = 6.5 Soc. Sci. - Health Sci. = -1.54 Soc. Sci. - Sci. = 4.41 Health Sci. - Sci. = 5.95	. n.s. n.s. .000* n.s. .000* .000*
BCB	Brown-Forsythe $F(3;507.807) = 10.126$, $p = .000$	Humn. - Soc. Sci. = 2.89 Humn. - Health Sci. = -1.13 Humn. - Sci. = 10.05 Soc. Sci. - Health Sci. = -4.02 Soc. Sci. - Sci. = 7.17 Health Sci. - Sci. = 11.19	n.s. n.s. .000* .031* .004* .000*

Note: TCB = target of cyberbullying, PCB = perpetrator of cyberbullying, BCB = bystander of cyberbullying.

Source: Own elaboration.

3. Discussion

University students, like people at other educational levels, are vulnerable to bullying by peers (Crosslin et al., 2014; García-Peña et al., 2013). Bystander stood out among the roles involved, followed by aggressors and victims (Hoyos et al., 2009; Paredes et al., 2010; Trujillo et al., 2016). This suggests that situations of aggression are hidden by university students and, therefore, are difficult to detect. Since students from undergraduate degrees, Master's and other courses do not usually interact with all the other students in the university environment and peer relationships are usually reduced to a peer group, situations of aggression can be identified by the closest students (Hoyos et al., 2009). The perception that intimidation is something legitimized within students' social groups means it is viewed positively (Paredes et al., 2010). Therefore, cyberbullying tends to be hidden (Hernández et al., 2007) since the passivity of the victim and bystanders entails subjection to a power that restrains the right to freedom (Torres-Mora, 2010). Cyberbullying may result in negative legal and psychological consequences for the students involved (Álvarez-García, Barreiro-Collazo, et al., 2016; Cassidy et al., 2017, Crosslin et al., 2014; Walker, 2015; Yubero et al., 2017).

In this study, men and women were actors in the different forms of abuse (Anguiano-Carrasco et al., 2011; Faucher et al., 2014; Hoyos et al., 2009; Kokkinos et al., 2014). Women obtained higher values in all of the sub-scales (as perpetrator, target, and bystander), a result that agrees with previous studies (Hoyos

et al., 2009; Hoyos et al., 2012). With reference to age, it is important to highlight that the results showed that participants aged under 20 obtained higher values in all the different sub-scales than those in the 20-24 age range. It is noteworthy that in the PCB sub-scale (perpetrator), students aged 30 or more obtained higher values than those in the 20-24 age range, something that does not happen in other age ranges. These data partially coincide with previous studies since a greater presence of intimidation surfaces at the start of studies; this appears to be due to the difficulty of group dynamics and students' participation in them (Hoyos et al., 2009; Hoyos et al., 2012). There were no mean differences in any of the sub-scales relating to the students' origins.

In relation to the level of studies in which the students were enrolled, it should be noted that undergraduate degree students obtained higher values than Master's students in the three sub-scales. On the other hand, in the TCB sub-scale (target), students enrolled in other types of education obtained higher values than Master's students. As with age, the level of studies may be connected to the fact students are starting undergraduate degree studies or different types of education, owing to the difficulty of forming group dynamics (Hoyos et al., 2009; Hoyos et al., 2012).

With regards to the faculty the studies belonged to, the results showed that students in Humanities, Social Sciences, and Health Sciences obtained higher values when compared to students in Scienc-

es in all the sub-scales. Likewise, Health Sciences students obtained higher values than Social Sciences students in the BCB sub-scale. Previous studies did not give clear proof of the existence of differences relating to faculty, which may be because they only included one or two types of faculty (Molero et al., 2014; Paredes et al., 2010; Yubero et al., 2017).

A relationship between having been the target, perpetrator, and bystander of cyberbullying was demonstrated in predicting TCB, PCB and BCB. The importance of belonging to a particular faculty must be taken into account for PCB and TCB in relation to the level of studies. Our study has allowed a wider vision of intimidation in the university context since it focused on analysing the type of faculty (Humanities, Social Sciences and Education, Health Sciences, and Sciences) as well as the level of studies (undergraduate degree, Master's, or others).

4. Conclusion

In conclusion, knowing the origin of school bullying, it is possible to contextualise it in the university community and then promote prevention and intervention programmes. It should be highlighted that these are not alarming situations, but they are worrying because of the incidents found (Hoyos et al., 2009) and the emotional impact (Walker, 2015). Preventive and intervention measures, which allow an analysis of how the issue affects the academic process and interpersonal relationships in the different educational fields, must be implemented (García-Peña et al., 2013; My-

ers & Cowie, 2017). With this objective in mind, it is necessary to promote awareness campaigns and reinforce emotional education as well as the acquisition of social skills (Sastre, 2016) and the values of coexistence (Del Rey et al., 2012), minimise tolerance towards different forms of aggression, diffusion of responsibility and so on (Hoyos et al., 2012), generate strategies to avoid aggression, and promote prosocial behaviour, empathy, and emotional control (Garaigordobil, 2015; Gómez-Ortiz, Romera-Félix, & Ortega-Ruiz, 2017; Trujillo et al., 2016). It is also necessary to educate students at all educational levels about the safe use of ICT, emphasising the moral and ethical principles against violence (Ortega-Ruiz & Zych, 2016). Del Rey, Casas, et al. (2012) highlight the important role of the educational institution in relation to technological competence, which means that this competence should be articulated alongside personal autonomy and learning to learn. Therefore, it is essential to encourage cybersocialisation with programmes such as Red (Del Rey, Casas, et al., 2012) or Ciberprogram 2.0 (Garaigordobil & Martínez-Valderrey, 2014). It is also necessary to promote students' inclusion, coexistence, and cybercoexistence (Garaigordobil, 2015; Llorent et al., 2016), even through (Álvarez-Bermejo, Belmonte-Ureña, Martos-Martínez, Barragán-Martín, & Simón-Márquez, 2016). What is more, parental supervision of Internet access is also needed as this encourages safe emotional bonds (Bernal, & Angulo, 2013; Garaigordobil, 2015). Therefore, the university community must assume the importance of promoting coexistence and well-being at university

(Cassidy et al., 2017) as well as providing legal information for the victims (Myers & Cowie, 2017). Moreover, the involvement of the whole educational community is essential.

Thinking ahead, it would be relevant to carry out longitudinal studies and include other meaningful variables such as: university students' performance and their involvement in aggressive behaviour (Mole-ro et al., 2014); analysis of whether there is bullying of teaching staff including the school and family climate (López, 2017) or by teachers on students; investigation of harassment within couple relationships (Duran & Martínez-Pecino, 2015) and in the LGBT community (Walker, 2015); analysis of its appearance along with other associated forms of violent behaviour (Ortega-Barón et al., 2017); investigation of the role of victims of bullying as it has been shown that they also exist in university contexts (Trujillo et al., 2016); investigation of teaching staff's point of view (Cassidy et al., 2017); and investigation of the role of teaching practices in preventing violence between peers (Valdés-Cuervo, Martínez-Ferrer, & Carlos-Martínez, 2018).

Among the constraints of this study, its transversal character should be noted. Moreover, we should also note the use of self-reporting methods, which may be influenced by social desirability. Finally, since the explained variance percentage is not particularly high, it would be desirable to use other assessment instruments at the same time which would allow identification of other influential variables.

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