Revista Iberoamericana para la Investigación y el Desarrollo Educativo
ISSN 2007 - 7467

https://doi.org/10.23913/ride.v10i19.607

Artículos Científicos

Variables individuales y escolares en estudiantes universitarios víctimas de ciberacoso

Individual and School Variables in University Students Victims of Cyberbullying

Variáveis individuais e escolares em estudantes universitários vítimas de cyberbullying

Esperanza Vargas Jiménez
Universidad de Guadalajara, México
esperanzavgas@hotmail.com
https://orcid.org/0000-0002-6943-2878

Remberto Castro Castañeda
Universidad de Guadalajara, México
reembert@hotmail.com
https://orcid.org/0000-0002-5916-7839

Claudia Gregoria Huerta Zúñiga
Universidad de Guadalajara, México
claughz_@hotmail.com
https://orcid.org/0000-0002-5735-8068

Raquel Domínguez Mora
Universidad de Guadalajara, México
raqueldmz@gmail.com
https://orcid.org/0000-0002-9382-3174

Raúl Medina Centeno
Universidad de Guadalajara, México
topraul2002@yahoo.co.uk
https://orcid.org/0000-0002-9277-5561

Revista Iberoamericana para la Investigación y el Desarrollo Educativo
ISSN 2007 - 7467

Resumen

El uso de las tecnologías de la información y de la comunicación conlleva beneficios y perjuicios. Actualmente uno de los riesgos que generan mayor preocupación es el fenómeno del acoso en las redes sociales. A nivel universitario existen pocos estudios que expliquen el impacto individual y escolar del acoso por Internet en las víctimas. Considerando estos antecedentes, el objetivo principal de este estudio fue examinar la cibervictimización y su relación con variables individuales (aceptación percibida y depresión) y escolares (implicación, afiliación y ayuda del profesor), analizando las diferencias en función del sexo, examinando las divergencias entre los grupos que documentaron cibervictimización severa, ocasional y nula, y evidenciando el valor predictivo de las variables individuales y escolares de este fenómeno. Esta investigación fue de tipo explicativa y se utilizó un diseño transversal. La muestra fue representativa, conformada por 662 jóvenes universitarios, 282 hombres (42.5 %) y 380 mujeres (57.5 %), con un rango de edad entre los 18 y 25 años y una media de 19.41 años (DT = 2.43). Se realizó un análisis de correlaciones de Pearson, y se obtuvieron correlaciones significativas entre todas las variables. La prueba *t* de Student reveló diferencias estadísticamente significativas entre los sexos: los chicos obtuvieron medias más altas en aceptación percibida de la familia, la madre y el padre, así como puntuaciones elevadas en implicación escolar y ayuda del profesor; en cambio, las chicas sobresalen en sintomatología depresiva. En el análisis de varianza se establecieron tres grupos de contraste: cibervíctimas severas, cibervíctimas ocasionales y no cibervíctimas, comparando las variables individuales y escolares; las no cibervíctimas obtuvieron las puntuaciones más elevadas, en comparación con los jóvenes con moderada y severa cibervictimización, en afiliación escolar y aceptación percibida de los amigos, la familia, la madre y el padre. En la variable implicación escolar y ayuda del profesor no hay diferencias en las medias de los grupos de no cibervíctimas y ocasionales cibervíctimas, pero sí de ambos grupos con respecto a las víctimas severas. Además, los adolescentes con severa cibervictimización mostraron una mayor sintomatología depresiva que los jóvenes con moderada y no cibervictimización. Los análisis de regresión confirmaron el valor predictivo de las variables individuales (11.4 %) y escolares (7.0 %) en la cibervictimización. Se confirmó el impacto negativo de las agresiones a través de las redes sociales en la salud mental y en la identidad de las víctimas sin distinción de edad o grado académico. Aunado a ello, se corrobora que el ciberacoso es un fenómeno que debe abordarse sistémicamente, involucrando

aspectos individuales, escolares, familiares y sociales, haciendo énfasis en la importancia de la colaboración entre la familia, las autoridades escolares y profesorado.

Palabras clave: aceptación percibida, afiliación, ayuda del profesor**,** cibervictimización, depresión, implicación.

Abstract

The use of information and communication technologies entails benefits and damages. Currently one of the risks that generate most concern is the phenomenon of bullying through social media. At the college level there are few studies that explain the individual and school impact bullying through Internet on victims. Considering this background, the main objective of this study was to examine cybervictimization and its relationship with individual (perceived acceptance and depression) and school variables (involvement, affiliation and teacher aid), analyzing the differences according to sex, examining the differences between the groups that reported severe, occasional and zero cybervictimization, and evidencing the predictive value of the individual and school variables of this phenomenon. This research was explanatory and a cross-sectional design was used. The sample was representative, consisting of 662 young university students, 282 men (42.5%) and 380 women (57.5%), with an age range between 18 and 25 years and an average of 19.41 years (SD = 2.43). An analysis of Pearson's correlations was performed, obtaining significant correlations between all the variables. The Student's *t* test revealed statistically significant differences between the sexes: the boys obtained higher means in perceived acceptance of the family, the mother and the father, as well as high scores in school involvement and teacher support; however, the girls stand out in symptomatology depressive. In the analysis of variance three contrast groups were established: severe cyber victims, occasional cyber victims and non-cyber victims comparing the individual and school variables; non-cyber victims obtained the highest scores, compared to young people with moderate and severe cybervictimization, in school affiliation and perceived acceptance of friends, family, mother and father. In school involvement and teacher support variables there are no differences in the means of the non-cyber-victim and occasional cyber-victim groups, but there's difference of both groups with respect to the severe victims. In addition, adolescents with severe cybervictimization have a higher depressive symptomatology than young people with moderate and do not have cybervictimization. Regression analyzes confirmed the predictive value of individual (11.4%) and school (7.0%) variables in

cybervictimization. The negative impact of the aggressions through social networks on mental health and on the identity of the victims was confirmed regardless of age or academic degree. In addition to this, it is corroborated that cyberbullying is a phenomenon that must be addressed systemically, involving individual, school, family and social aspects, and emphasizing the importance of collaboration between the family, school authorities and teachers.

Keywords: perceived acceptance, affiliation, teacher aid**,** cybervictimization, depression, involvement.

Resumo

O uso de tecnologias da informação e comunicação acarreta benefícios e danos. Atualmente, um dos riscos que mais preocupa é o fenômeno do assédio nas redes sociais. No nível universitário, existem poucos estudos que explicam o impacto individual e escolar do assédio na Internet nas vítimas. Considerando esse cenário, o principal objetivo deste estudo foi examinar a cibervictimização e sua relação com variáveis individuais (percepção de aceitação e depressão) e escolares (envolvimento, afiliação e apoio ao professor), analisando diferenças com base no sexo, examinando diferenças entre os grupos que documentaram cibervitimização grave, ocasional e nula e evidenciaram o valor preditivo das variáveis individuais e escolares desse fenômeno. Esta pesquisa foi explicativa e foi utilizado um desenho transversal. A amostra foi representativa, composta por 662 jovens universitários, 282 homens (42,5%) e 380 mulheres (57,5%), com faixa etária entre 18 e 25 anos e média de 19,41 anos (DP = 2,43). Foi realizada uma análise de correlação de Pearson, e correlações significativas foram obtidas entre todas as variáveis. O teste t de Student revelou diferenças estatisticamente significantes entre os sexos: os meninos obtiveram médias mais altas na aceitação percebida da família, mãe e pai, além de altas pontuações no envolvimento escolar e no apoio ao professor; em vez disso, as meninas se destacam na sintomatologia depressiva. Na análise de variância, três grupos de contraste foram estabelecidos: vítimas cibernéticas graves, vítimas ocasionais e não cibernéticas, comparando variáveis individuais e escolares; As vítimas não cibernéticas obtiveram as pontuações mais altas, comparadas aos jovens com cibervictimização moderada e grave, na afiliação à escola e na aceitação percebida de amigos, familiares, mãe e pai. Na variável envolvimento escolar e apoio ao professor, não há diferenças nos meios dos grupos de não-vítimas cibernéticas e ocasionais, mas de ambos os grupos em relação às vítimas graves. Além disso, os adolescentes com

cibervictimização grave apresentaram sintomas depressivos maiores do que aqueles com moderação e não cibervictimização. As análises de regressão confirmaram o valor preditivo das variáveis individuais (11,4%) e escolares (7,0%) na cibervictimização. O impacto negativo das agressões pelas redes sociais na saúde mental e na identidade das vítimas foi confirmado sem distinção de idade ou grau acadêmico. Além disso, corrobora-se que o cyberbullying é um fenômeno que deve ser abordado sistemicamente, envolvendo aspectos individuais, escolares, familiares e sociais, enfatizando a importância da colaboração entre família, autoridades escolares e professores.

Palavras-chave: aceitação percebida, afiliação, ajuda do professor, ciber-vitimização, depressão, envolvimento.

Fecha Recepción: Septiembre 2019 **Fecha Aceptación:** Diciembre 2019

Introduction

The use of information and communication technologies (ICT) has revolutionized the forms of coexistence, socialization, communication and social inclusion (Buelga and Chóliz, 2013). For digital natives, screens are part of their daily lives, which encourages the acquisition of technological skills; Cyberspace is a virtual reality created by computers, servers and digital networks that is contiguous to the real world. In their university education, young people use ICT because they cover educational, research and social needs. However, the advantages of technological empowerment also integrate risks and damages caused by inappropriate use, which generates levels of toxicity in communicative interaction, little empathic capacity with others (Udris, 2014) and the adaptation of different identities in each situation online (Arab and Díaz, 2015). In the virtual world, phenomena such as cyberbullying arise, where young people assault classmates without considering the negative consequences of this phenomenon on the personality of the cyber victim: their self-perception, their mood and the consequences in support networks.

Cyberbullying is understood as the phenomenon where contemporaries are intimidated and mistreated through the Internet, computer, cell phone, online videogames and ICT (Buelga, Cava and Musitu, 2012; Kowalski, Morgan and Limber, 2012; Patchin and Hinduja, 2015), with the intention of annoying or harming the victim through the repetition of aggressive behaviors and the permanence of content on social networks (Gálvez, Vera, Cerda and Díaz, 2016; Garaigordobil and Martínez, 2016). It is punctuated in behaviors such as insults, denigration, harassment,

impersonation, exclusion, violation of privacy and persecution, either directly or indirectly (Kowalski, Giumetti, Schroeder and Lattanner, 2014; Kowalski, Limber and Agatston, 2010), which generates an imbalance of power between cyberbullying and cyber-victim (Monelos, Mendiri and García-Fuentes, 2015) and creates a feeling of vulnerability and helplessness due to the anonymity of the aggressor (Lucas, Pérez and Giménez, 2016). To this is added the wide audience of social networks: the aggressions impact on the private and public dimensions due to the large number of spectators, which leads to a devastating effect on the victim due to the lack of control of the situation (Ortega, Buelga y Cava, 2016), the rapid dissemination of information to a multitude of people through the open channel of the virtual world (Stewart, Drescher, Maack, Ebesutani and Young, 2014) and the feeling of not being able to escape the situation from the cyber victim (Durán y Martínez, 2015).

For the understanding of peer violence through the use of technologies, we must start from a complex and interconnected phenomenon between personal resources, family factors, the school climate of the university and social factors (Cross et al., 2015) , so the present study took up the ecological approach and focused on the individual and school factors of university students.

Regarding individual factors, depressive symptomatology is articulated to cybervictimization, in the sense of the vulnerability perceived by peer groups towards the victim (Cappadocia, Craig and Pepler, 2013); In turn, exposure to violence and abuse leads to low self-esteem and greater depressive symptomatology (Gualdo, Hunter, Durkin, Arnaiz and Maquilón, 2015; Ortega, Torralba and Buelga, 2017; Resett and Putallaz, 2018). Depressive symptomatology is characterized by a negative self-perception, without enjoying life, with a sadness rooted in being, with concentration and sleep problems. This negative self-reference of cyber-victim trials maintains and exaggerates depressive symptomatology (Lozano et al., 2016).

Another individual factor studied is the perceived acceptance of sources of social support. The young university student in his network perceives approval, recognition, emotional warmth, security, understanding and care from the mother, father, family in general and friends. The family and the network of friends are immediate supports for young people. Both promote a warm climate, fluid communication and recognition, elements that are directly related to the involvement of cyberbullying (Tanrikulu and Campbell, 2015). The negative perception of sources of support in the family is characterized by low communication and conflicts with the parents (Buelga, Martínez and Musitu, 2016; Larrañaga, Yubero, Ovejero and Navarro, 2016; Romero et al., 2019), and

positions to young people in a state of vulnerability and lack of protective psychological resources (Solecki, McLaughlin and Goldschmidt, 2014). Thus, an authoritarian parental style based on rigid rules that do not change or become more flexible in late adolescence builds insecure, vulnerable young people and candidates to become victims (Makri y Karagianni, 2014; Martínez, Murgui, García y García, 2019).

In the university, students and professors add a set of subjective perceptions of the social interactions and of the school context that integrate the school climate (Trickett, Leone, Fink and Braaten, 1993). The warm school climate characterized by a healthy coexistence, cooperation and empathy represents a protective factor of cyberbullying: in the classroom young people show interest, attention and participate in classes, positive emotional bonds are built, where students know each other, form networks of friendships, which facilitates the cooperative work in the projects, together with the interest of the teachers, as well as their concern and confidence in the students, and a greater attention time. When the school climate is negative, young people carry out bullying behaviors, which are transferred to the virtual world through the use of new technologies (Kowalski et al., 2014); Cyber victims decrease their academic performance (Giménez, Maquilón and Sánchez, 2014), a phenomenon accompanied by a lack of concentration, absenteeism (Gualdo et al., 2015; Ortega et al., 2016), deterioration of self-esteem and self-confidence, at that you add relational difficulties with your peers (Navarro, Ruiz, Larrañaga and Yubero, 2015; Ortega et al., 2016). In addition, the cyber victim distrusts the professors and the institutional authority (Buelga, Cava and Torralba, 2014), and therefore does not ask for help in dealing with the situation. And to the above, one more thing should be added: the demand to become a self-sufficient “adult” at the university level, which aggravates his isolation and vulnerability.

Based on the previous ideas and based on the fact that the phenomenon of cyberbullying has been less studied in samples of university students (Resett and Putallaz, 2018), this research work set out the following objectives: 1) examine to what extent it relates cybervictimization with the individual (perceived acceptance and depression) and school variables (teacher involvement, affiliation and help), and in turn, describe the differences of the variables according to sex; 2) analyze the possible differences between the groups (occasional, severe and without cybervictimization) and the individual and school variables, and 3) point out the predictive value of the individual and school variables in cybervictimization.

Method

Participants

This study was explanatory and a cross-sectional design was used. The sample consisted of 662 young people from the second semester of the different careers of the University Center of the Coast of the University of Guadalajara, located in Puerto Vallarta, Jalisco, Mexico; It was also representative of the three divisions: Biological and Health Sciences, Social and Economic Studies and Engineering. In this study, 282 men (42.5%) and 380 women (57.5%) participated, the age range was between 18 and 25 years, with a total average of 19.41 years (SD = 2.43).

Process

Authorization was requested from the corresponding authorities; Career coordinators were informed about the objectives of the study. Regarding ethical values in research with human beings, the study respected the fundamental principles included in the Helsinki Declaration, in its updates and in the current regulations, such as informed consent and the right to information, protection of personal data and guarantees of confidentiality, non-discrimination, gratuity and possibility of leaving the study in any of its phases. Atypical cases were treated with the detection or presence of univariate and multivariant atypical cases. The former were detected by scanning standardized scores. Following the criteria indicated by Hair, Anderson, Tathan and Black (2008), those whose standardized scores presented an absolute value greater than four were considered outliers. Seconds were detected by computing the distance of Mahalanobis (Tabachnick y Fidell, 2006).

Evaluation instruments

The scales used in this study are described in the following paragraphs.

Regarding the Victimization Scale through the Mobile and Internet Telephone [CYBVIC] (Buelga et al., 2012), of the two dimensions only cybervictimization was used on the Internet: the subscale is composed of 10 items (for example: “ They have told lies or false rumors about me ”). The response ranges of the scale are one to four (never, sometimes, quite a few times, and many times). In the study, the reliability coefficient (Cronbach's alpha) was 0.85.

The Perceived Acceptance Scale [PAS] (Brock, Sarason, Sanghvi and Gurung, 1998), adapted to Spanish by Rodríguez, Martínez, Tinajero, Guisande and Páramo (2012), was used to

measure the level of the different sources of social support . It is made up of 44 items grouped into four dimensions: 1) PAS-Friends, consisting of 12 items (for example: "I am important to my friends"); 2) PAS-Family, consisting of 12 items (eg, “My parents are opposed to some things I do”); 3) PAS-Mother, consisting of 10 items (eg, “My mother is always available when I need her”), and 4) PAS-Father, consisting of 10 items (eg, “My father never gives me has understood ”). The response ranges are from one to five (totally disagree, disagree, neither agree nor disagree, agree, totally agree). The reliability coefficient α obtained for this study was 0.84, 0.89, 0.85 and 0.86, respectively. On the global scale an alpha of 0.93 was reported.

The School Climate Scale [CES] (Moos, Moos and Trickett, 1984) was used to measure the social climate and interpersonal relationships existing in the classroom, adapted to Spanish by Fernández and Sierra (1989). The scale is composed of 30 items grouped into three dimensions: 1) involvement, consisting of 10 items (eg, “Students put a lot of interest in what they do in class”); 2) affiliation, consisting of 10 items (eg: “In classes, students get to know each other well”), and 3) teacher help, also consisting of 10 items (eg: “Teachers show personal interest in students”). The response ranges are two (false and true). In this investigation, the reliability coefficients (Cronbach's alpha) were 0.68 for involvement, 0.67 for affiliation and 0.61 for teacher support, and the overall scale coefficient was 0.81.

The Depression Scale [CESD] (Radloff, 1977) was used to measure the symptoms associated with depression or depressive mood. It is made up of seven items grouped into one dimension (eg, "I felt depressed"). The response ranges are from one to four (never, rarely, many times and always). In this investigation, the reliability coefficient (Cronbach's alpha) was 0.77.

Results

The coding and analysis of the data was performed in the statistical package SPSS version 22. First, Pearson's correlations were analyzed to determine the relationship between cybervictimization with all the variables studied, as well as the application of the t-test to verify

differences by sex. . Subsequently, to classify young people, the cybervictimization scale scores were used through the Internet, forming three groups: non-cyber victim, occasional cyber victim and severe cyber victim. Following Marini, Dane, Bosacki and Ylc-Cura (2006), young people who score a standard deviation above average are placed in the severe cyber victim group; those who score one (never) are placed in the non-cyber victim group and those who get the remaining scores are assigned to the occasional cyber victim group. Establishing the contrast groups, the multivariate analysis of the variance (Manova) and that of the variance (Anova) were calculated to analyze the individual variables and the school variables. Finally, the linear regression analysis was performed to examine the predictive value of the variables referred to with cybervictimization. The following paragraphs detail the data collected according to the statistical procedures performed.

Pearson correlations

Table 1 shows the correlations between the study variables, the means, the standard deviations and the corresponding t-test. Significant correlations were obtained between all the variables. Cybervictimization correlates significantly and negatively with perceived acceptance of friends ($r = -0.257$, $p < 0.01$), perceived family acceptance ($r = -0.278$, $p < 0.01$), school involvement ($r = -0.215$, $p < 0.01$), school affiliation ($r = -0.243$, $p < 0.01$) and teacher support ($r = -0.167$, $p < 0.01$); in turn, positively correlates with depression ($r = 0.259$, $p < 0.01$).

Tabla 1. Correlaciones Pearson, medias, desviaciones típicas y pruebas t entre las variables consideradas

	1	2	3	4	5	6	7	8	9
1. Victimización Internet	1								
2. Sintomatología depresiva	.259**	1							
3. PAS Amigos	-.257**	-.399**	1						
4. PAS Familia	-.278**	-.479**	.470**	1					
5. PAS Madre	-.255**	-.340**	.315**	.764**	1				
6. PAS Padre	-.230**	-.338**	.309**	.634**	.510**	1			
7. Implicación	-.215**	-.296**	.261**	.262**	.221**	.261**	1		
8. Afiliación	-.243**	-.233**	.287**	.258**	.222**	.256**	.486**	1	
9. Ayuda del profesor	-.167**	-.177**	.220**	.207**	.222**	.139**	.440**	.369**	1
M Hombre	1.44	1.96	3.60	4.04	4.17	3.86	1.58	1.69	1.64
DT Hombres	.54	.50	.63	.65	.61	.77	.23	.21	.21
M Mujer	1.38	2.15	3.61	3.83	4.00	3.63	1.54	1.68	1.59
DT Mujeres	.48	.50	.65	.77	.76	.87	.23	.23	.22
T	1.35	-4.79***	-.20	3.73***	3.4**	3.58***	2.70**	.54	3.25**

Nota: *M* = Medias H/M; *DE* = Desviación estándar; *T* = Prueba *t* de Student.

* p < 0,05; ** p < 0,01; *** p < 0,001.

Fuente: Elaboración propia

Statistically significant differences were also found between the sexes in the variables of depressive symptomatology (t = -4.79, p <0.001), perceived acceptance of the family (t = 3.73, p <0.001), perceived acceptance of the mother (t = 3.14 , p <0.01), perceived acceptance of the parent (t = 3.58, p <0.001), school involvement (t = 2.70, p <0.01) and teacher support (t = 3.25,

p <0.01). The boys score higher means in perceived acceptance of the family, perceived acceptance of the mother, perceived acceptance of the father, school involvement and teacher support; instead, girls excel in depressive symptomatology.

Manova and Anova of cyber-victim groups and individual and school variables

Subsequently, the Anova was carried out, which revealed statistically significant differences between the cyber-victim groups with the individual and school variables ($\wedge$ = 0.992, F (16,1306) = 5.48, $p < 0.001$, $n^2 = 0.063$).

The Anova showed significant differences in depressive symptomatology (F, (2.659) = 21.69, $P < 0.001$, $n^2 = 0.072$), perceived acceptance of friends (F, (2.659) = 15.86, $P < .001$, n^2=.046), perceived family acceptance (F, (2.659) = 25.48, $P < 0.001$, $n^2 = 0.072$), perceived acceptance of the mother (F, (2.659) = 17.07, $P < 0.001$, $n^2 = 0.049$), perceived acceptance of the father (F, (2.659) = 16.34, $P < 0.001$, $n^2 = 0.047$), implication (F, (2.659) = 10.47, $P < 0.001$, $n^2 = 0.032$), membership (F, (2.659) = 15.34, $P < 0.001$, $n^2 = 0.044$) and teacher help (F, (2.659) = 7.65, $P < 0.001$, $n^2 = 0.017$).

Thus, as shown in Table 2, the Bonferroni tests indicated that the non-cyber-victim youth obtained the statistically higher scores in perceived acceptance of friends, perceived acceptance of the family, perceived acceptance of the mother, perceived acceptance of the father and affiliation school, differing from young people with moderate and severe cybervictimization. In the variable of school involvement and teacher support there are no differences in the means of the non-cyber-victim and occasional cyber-victim groups, but there are discrepancies between the two groups with respect to the severe victims. In addition, young people with severe cybervictimization showed a greater depressive symptomatology with respect to the groups of moderate and non-cybervictimization.

Tabla 2. Diferencias entre los grupos (no cibervíctimas, cibervíctimas ocasionales y cibervíctimas severas) en las variables individuales y escolares

	No cibervíctimas		Cibervíctimas ocasionales		Severa cibervictimización		*F*
	M	**(DT)**	**M**	**(DT)**	**M**	**(DT)**	
Variables individuales							
Sintomatología Depresiva	1.88^{c}	.47	2.09^{b}	.48	2.35^{a}	.54	25.69^{***}
PAS Amigos	3.82^{a}	.63	3.59^{b}	.61	3.34^{c}	.72	15.86^{***}
PAS Familia	4.22^{a}	.62	3.88^{b}	.71	3.57^{c}	.80	25.48^{***}
PAS Madre	4.32^{a}	.59	4.04^{b}	.70	3.73^{c}	.75	17.07^{***}
PAS Padre	4.01^{a}	.80	3.69^{b}	.83	3.40^{c}	.79	16.34^{***}
Variables escolares							
Implicación	1.60^{a}	.23	1.56^{a}	.22	1.46^{b}	.24	10.47^{***}
Afiliación	1.74^{a}	.21	1.69^{a}	.21	1.57^{b}	.22	15.34^{***}
Ayuda del profesor	1.63^{a}	.21	1.61^{a}	.21	1.54^{b}	.22	5.65^{***}

Nota: *M* = Media; *DT* = Desviación típica; *F* = F de Fisher-Snedecor; [F] Prueba de Bonferroni. *A* > *b* > *c*

* $p < 0,05$; ** $p < 0,01$; *** $p < 0,001$.

Fuente: Elaboración propia

Predictive value of individual and school variables in cybervictimization

Finally, the results of the regression analysis confirmed the predictive value of individual and school variables in cybervictimization. As verified in Table 3, on the one hand, the individual variables explain 11.4% and, on the other, the 7.0% school variables of cybervictimization. It should be stressed that individual variables have a higher predictive value than school variables.

It is found that the perceived acceptance of friends (ß = -0.139; p = <0.001), depressive symptomatology (ß = 0.135; p = <0.002) and the perceived acceptance of the mother (ß = 0.119; p = <0.038) are statistically significant explanatory variables; In turn, the factors of perceived acceptance of the family and perceived acceptance of the father are not significant in the predictive dimension of cybervictimization.

Regarding school variables, it is found that school involvement (ß = -0.108; p = <0.017) and affiliation (ß = 0.169; p = <0.001) are statistically significant variables in the explanation of cybervictimization; On the other hand, the teacher's help variable is not significant.

Tabla 3. Variables predictoras de cibervictimización

Variables predictoras	R^2 **corregida**	***F***	***β***	***P***
Variables individuales	.114	17.95		
Sintomatología Depresiva			-.135	.002*
PAS Amigos			-.139	.001*
PAS Familia			-.015	.831
PAS Madre			-.119	.038*
PAS Padre			-.066	.165
Variables escolares	.070	17.61		
Implicación			-.108	.017*
Afiliación			-.169	.000*
Ayuda del profesor			-.057	.181

Nota: R^2 = Correlación múltiple cuadrada; F = F de Fisher-Snedecor; β = Beta; $p = \alpha = 0.05$.

Fuente: Elaboración propia

Discussion

In the present investigation, the objective of analyzing the relationships between individual and school variables and their relationship with cybervictimization was raised.

Prior to the purpose of the study, the descriptive results revealed that 23.41% (n = 155) of young people have never been victimized online, 63.74% (n = 422) has been occasional and 12.83% severely (n = 85). This last data coincides with the studies of Garaigordobil (2015), who reports a figure of 15.8% of severe cyber victims. At the same time, the results confirm that there are significant differences in terms of gender in the variables of perceived acceptance of the family, perceived acceptance of the mother, perceived acceptance of the father, school involvement and teacher support; men stand out in their stockings over women. In men, unlike women, more psychological resources of their family and their social network are accentuated, when they feel

accepted and recognized in their relational links, which moves into the university when they get involved with their partners and when they ask for help of the teachers. On the other hand, women excel in the mean of depressive symptomatology, a situation that places them in a psychological vulnerability that could facilitate the situation of being involved in the phenomenon of cyber bullying, in the role of cyber-victim. This result is consistent with other studies by pointing out that women tend to be more cybervictimized than men. (Ortega *et al.*, 2017; Resett y Putallaz, 2018).

The findings confirm that cybervictimization is significantly related to the individual and school variables studied. The data indicate that non-cybervictimized young people, in comparison with occasional and severe ones, have better adjustment in individual and school variables. Thus, non-cybervictimized youth have a better perceived acceptance of friends, perceived acceptance of the family, perceived acceptance of the mother and perceived acceptance of the father. In the sense that the network of peers, family, mother and father, accept it, emotionally welcome it, respect it in their decisions, are sensitive to their needs, count on them to tell secrets, in short, a collective fabric of characters that generates a positive climate and another resource to reaffirm their social identity, their life project, the feelings of being loved, recognized and loved. In this acceptance process, an open communication is implicitly articulated in which the values of respect, acceptance, positive feelings with emotional warmth are transmitted. These results are coincident with other studies, since they indicate that there is a relationship between open family communication and cyberbullying (Law, Shapka and Olson, 2010), since a sensitive, warm and affectionate parenthood uses open communication between the members of the family and establishes values of respect among young people, and therefore, takes them away from aggressions in the virtual world (Yubero, Larrañaga and Navarro, 2014). It is important to note that the perceived acceptance starts from experiencing an affectionate parentality and a parenting style with norms, integrating the protective elements in the family that reduce the possibility of incurring maladaptive phenomena such as cyberbullying (Hinduja and Patchin, 2013; Ortega et al., 2016; Sasson and Mesch, 2014).

Another variable in which the group of non-cybervictimized stands out in comparison to the occasional and severe ones is school affiliation. The young person who does not experience Internet aggression interacts in a positive school climate characterized by good relationships in the group, a mutual knowledge of classmates, a feeling of solidarity, collective work and friendship

in the university environment; elements that foster positive feedback on their identity in their psychological well-being and converge with the perception of acceptance by parents, family and friends. The data obtained are coincident with other investigations by pointing out that non-cybervictimized young people have high academic and family self-esteem (Tokunaga, 2010), as well as identification with their peers (Buelga and Pons, 2012; Tokunaga, 2010) and positive relationships with his classmates (Odaci y Kalhan, 2010).

Another particular fact of the investigation is that the group of casual and non-cybervictimized stood out in their means in school involvement and teacher support in contrast to the group of severe cybervictimization. This result can be understood in the context that young people are of legal age and are socially required responsible autonomy, which is implied in class activities, paying attention, actively participating, doing work, with a teaching authority figure not as powerful as in previous educational levels, accompanied by a requirement and responsibility as an emerging adult. As Ortega and Torralba (2017) states, it is important that students show respect towards authority figures and formal institutions; accompanied by trust with teachers and a positive appreciation of the school as protective elements in a school climate that mitigates the problems of cybervictimization and cyberbullying (Buelga et al., 2014).

Severe cyber-victims show worse adjustment in individual and school variables than occasional and non-cyber-victim groups. Thus, at the individual level, the results indicate that cybervictimized youths have severe depressive symptoms, with sleep problems, lack of effort and difficulty concentrating, a situation that leads to a subjective malaise that maintains a negative perception of friends, family, specifically of mother and father. The results are consistent with other research that suggests that severe cyberbullying victims have depression (Ortega et al., 2017; Resett and Putallaz, 2018; Roberts, Axas, Nesdole and Repetti, 2016), a high psychological malaise, suicidal ideation (Aviles, 2013), low self-esteem (Ortega et al., 2016; Tokunaga, 2010), all of which affects your mental health and reduces personal and social resources (Makri y Karagianni, 2014; Ortega *et al.*, 2016).

Severe cyber victims are those that have the worst perceived acceptance of the network of friends, family, mother and father, as well as a negative school climate in the areas of involvement, affiliation and help of the teacher, which in short promotes a systemic constellation of vulnerability lacking individual and school resources. The results show similarities with other studies whose findings confirm that cyberbullying victims maintain poor family communication (Larrañaga et

al., 2016) or experience an offensive and avoidant communication (Yubero et al., 2014) that disqualifies their identity, which It makes them enter into a circularity of family conflicts (Ortega et al., 2016). The subjective vulnerability of the cyber victim leads to distrust of teachers, which prevents requesting help to stop the situation of abuse (Ortega, Buelga, Cava and Torralba, 2017) and especially because of the idea that he is an adult and has to defend himself at the university level, coupled with a perception of less help and friendship with classmates (Ortega et al., 2016). They also suffer from a feeling of low peer affiliation, which affects their participation in homework and negatively impacts school performance (Buelga et al., 2014).

Finally, this work provides suggestive and relevant observations on certain psychosocial variables that intervene in the phenomenon of cyberbullying in young university students; It contains the strengths of being correlational and explanatory, with a representative sample in a poorly studied population such as young university students; Likewise, standardized scales were used in Mexico, which allowed an analysis of multivariate and regression data. However, it is important to review the limitations of the study. The exposed results should be interpreted with caution due to the cross-sectional and correlational nature of the data, which, as is well known, does not allow for causal relationships between the variables. A longitudinal study with measurements at different times would help clarify the relationships observed here. Another caveat is that the use of scales in the self-report modality can generate biases and social desirability when answered by the youth, so it is recommended in other studies to include the perception of classmates and teachers. A further limitation for the generalization of results at the university level is that this research conformed its universe only with second semester students; A stratified sample with all semesters of the races accompanied by the increase in size would help to redeem the above. Despite these limitations, this work can effectively guide those who design prevention and intervention programs in the field of cyberbullying in university students, integrating the family and the school in their attention and explanation.

The results indicated guide the permanence of mentoring programs at the university level, and reveal that, despite being in the “emerging adulthood” stage, young people are involved in situations of harassment on the Internet and the most vulnerable are the victims. The phenomenon must be systematically addressed, addressing issues in comprehensive training that foster an individuation with protective resources in the areas of mental health, expanding social ties with friends, parents, classmates and teachers, which feed back the perception of their personality and

its relational significance in school and social life. An axis of the program's operability would be to sensitize young people about peaceful, empathic coexistence, as well as to activate fellow mediators in conflict resolution (Buelga et al., 2014; Ortega et al., 2017). Another axis would be psychoeducational intervention to reduce the collisions of those involved and therapeutic support for victims and aggressors (Garaigordobil, 2015).

Conclusions

Cyberbullying is a phenomenon that occurs in the university environment, where it is mistreated and insulted using the Internet with the intention of repeating aggressive behaviors to harm or annoy the victim. Cybervictimization is significantly related to individual and school variables. The worst psychological adjustment was experienced by the severe cyber victim, to perceive the bad acceptance of the mother, father, family and friends. In turn, they stand out with a greater depressive symptomatology, which is articulated with a negative school climate characterized by low group cohesion and teacher support, a situation that places them in a constellation of psychological vulnerability in their being, in social and school networks of coexistence. On the other hand, those not involved in cybervictimization present a better psychological adjustment in the individual and school variables; The perceived acceptance of friends, family and parents is positive and they have less depressive symptoms. All of them are individual elements that positively nurture your identity, your skills and resources to live with your classmates, getting involved in a positive school climate. Finally, in the explanation of cybervictimization, individual variables stand out over school variables.

References

Arab, L. E. y Díaz, G. A. (2015). Impacto de las redes sociales e internet en la adolescencia: aspectos positivos y negativos. *Revista Médica Clínica Las Condes, 26*(1), 7-13.

Avilés, J. M. (2013). Análisis psicosocial del ciberbullying: claves para una educación moral. *Papeles del Psicólogo, 34*(1), 65-73. Recuperado de http://www.papelesdelpsicologo.es/pdf/2172.pdf.

Brock, D. M., Sarason, I. G., Sanghvi, H. and Gurung, R. A. R. (1998). The Perceived Acceptance Scale: Development and validation. *Journal of Social and Personal Relationships, 15*(1), 5-21. Retrieved from https://doi.org/10.1177/0265407598151001.

Buelga, S. y Chóliz, M. (2013). El adolescente frente a las nuevas tecnologías de la información y la comunicación. En Musitu, G. (ed.), *Adolescencia y familia: Nuevos retos en el siglo XXI* (pp. 209-228). Ciudad de México, México: Editorial Trillas.

Buelga, S. y Pons, J. (2012). Agresiones entre adolescentes a través del teléfono móvil y de internet. *Psychosocial Intervention, 21*(1), 91-101.

Buelga, S., Cava, M. J. y Musitu, G. (2012). Validación de la Escala de Victimización entre Adolescentes a través del Teléfono Móvil y de Internet. *Pan American Journal of Public Health, 32*(1), 36-42. Recuperado de https://doi.org/10.1590/S1020-49892012000700006.

Buelga, S., Cava, M. J. y Torralba, E. (2014). Influence of family environment in victims of cyberbullying. Paper presented at the XII National Congress of Social Psychology. Sevilla, November 2014.

Buelga, S., Martínez, B. y Musitu, G. (2016). Family relationships and cyberbullying. In Navarro, R., Yubero, S. and Larrañaga (eds.), *Cyberbullying Across the Globe* (pp. 99-114). New York, United States: Springer International Publishing.

Cappadocia, M. C., Craig, W. M. and Pepler, D. (2013). Cyberbullying: prevalence, stability, and risk factors during adolescence. *Canadian Journal of School Psychology, 28*(2), 171-192.

Cross, D., Barnes, A., Papageorgiou, A., Hadwen, K., Hearn, L. and Lester, L. (2015). A social–ecological framework for understanding and reducing cyberbullying behaviours. *Aggression and Violent Behavior, 23*, 109-117.

Durán, M. y Martínez, R. (2015). Ciberacoso mediante teléfono móvil e Internet en las relaciones de noviazgo entre jóvenes. *Comunicar, 22*(44). Recuperado de http://dx.doi.org/10.3916/C44-2015-17.

Fernández, R. y Sierra, B. (1989). *Escalas de clima social: FES, WES, CIES y CES*. Madrid, España: TEA.

Gálvez, J. L., Vera, D., Cerda, C. y Díaz, R. (2016). Escala de Victimización entre Adolescentes a través del Teléfono Móvil y de Internet: Estudio de validación de una versión abreviada en estudiantes chilenos. *Revista Iberoamericana de Diagnóstico e Avaliação Psicológica, 41*(1), 16-27.

Garaigordobil, M. and Martínez, V. (2016). Impact of Cyberprogram 2.0 on different types of school violence and aggressiveness. *Frontiers in Psychology, 7*, 428.

Giménez, A. M., Maquilón, J. J. y Sánchez, P. A. (2014). Acceso a las tecnologías, rendimiento académico y cyberbullying en escolares de secundaria. *Revista Iberoamericana de Psicología y Salud, 5*(2), 119-133.

Gualdo, A. M., Hunter, S. C., Durkin, K., Arnaiz, P. and Maquilón, J. J. (2015). The emotional impact of cyberbullying: Differences in perceptions and experiences as a function of role. *Computers & Education, 82*, 228-235.

Hair, J., Anderson, R., Tatham, R. and Black, W. (2008). *Multivariate Data Analysis*. Boston, United States: McGraw-Hill.

Hinduja, S. and Patchin, J. W. (2013). Social influences on cyberbullying behaviors among middle and high school students. *Journal of Youth and Adolescence, 42*(5), 711-722.

Kowalski, R. and Limber, S. (2007). Electronic bullying among middle school students. *Journal of Adolescent Health, 41*(6), S22-S30. Retrieved from http://dx.doi.org/10.1016/j.jadohealth.2007.08.017.

Kowalski, R., Giumetti, G., Schroeder, A. and Lattanner, M. (2014). Bullying in the Digital Age: A Critical Review and Meta-analysis of Cyberbullying Research among Youth. *Psychological Bulletin, 140*(4), 1073-1137. Retrieved from http://dx.doi.org/10.1037/a-0035618.

Kowalski, R., Limber, S. y Agatston, P. (2010). *Cyberbullying: El acoso escolar en la era digital*. Bilbao,España: Desclée de Brouwer.

Kowalski, R., Morgan, C. A. and Limber, S. P. (2012). Traditional bullying as a potential warning sign of cyberbullying. *School Psychology International, 33*(5), 505-519. Retrieved from https://doi.org/10.1177/0143034312445244.

Larrañaga, E., Yubero, S., Ovejero, A. and Navarro, R. (2016). Loneliness, parent-child communication and cyberbullying victimization among Spanish youths. *Computers in Human Behavior, 65*, 1-8.

Law, D. M., Shapka, J. D. and Olson, B. F. (2010). To control or not to control? Parenting behaviours and adolescent online aggression. *Computers in Human Behavior*, *26*(6), 1651-1656.

Lozano, L. M., Valor, I., Pedrosa, I., Suárez, J., García, E. y Lozano L. (2016). Adaptación del Inventario de la Triada Cognitiva Infantil en población española. *Anales de Psicología, 32*(1), 158-166.

Lucas, B., Pérez, A. y Giménez, M. (2016). La evaluación del cyberbullying: situación actual y retos futuros. *Papeles del Psicólogo, 37*(1), 27-35

Makri, E. and Karagianni, G. (2014). Cyberbullying in Greek adolescents: The role of parents. *Procedia-Social and Behavioral Sciences*, *116*, 3241-3253.

Marini, Z. A., Dane, A. V., Bosacki, S. L. and Ylc-Cura. (2006). Direct and Indirect Bully-Victims: Differential Psychosocial Risk Factors Associated With Adolescents Involved in Bullying and Victimization. *Aggressive Behavior*, *32*(6), 551-569. Retrieved from https://doi.org/10.1002/ab.20155.

Martínez, I., Murgui, S., García, O. F. and García F. (2019). Parenting in the digital era: Protective and risk parenting styles for traditional bullying and cyberbullying victimization. *Computers in Human Behavior, 90*, 84-92. Retrieved from https://doi.org/10.1016/j.chb.2018.08.036.

Monelos, M. E., Mendiri, P. y García, C. D. (2015). El bullying revisión teórica, instrumentos y programas de intervención. *Revista de Estudios e Investigación en Psicología y Educación*, (2), 74-78. Recuperado de https://doi.org/10.17979/reipe.2015.0.02.1299.

Moos, R., Moos, B. y Trickett, E. (1984). *FES, WES y CES: Escalas de clima social*. Madrid España: TEA Ediciones.

Navarro, R., Ruiz, R., Larrañaga, E. and Yubero, S. (2015). The impact of cyberbullying and social bullying on optimism, global and school-related happiness and life satisfaction among 10-12-year-old schoolchildren. *Applied Research in Quality of Life*, *10*(1), 15-36.

Odaci, H., & Kalkan, M. (2010). Problematic Internet Use, Loneliness and Dating Anxiety among Young Adult University Students. Computers & Education, 55(3), 1091-1097. Retrieved from https://doi.org/10.1016/j.compedu.2010.05.006.

Ortega, J., Buelga, S. y Cava, M. J. (2016). Influencia del clima escolar y familiar en adolescentes víctimas de ciberacoso. *Comunicar*, *24*(46), 57-65. Recuperado de http://dx.doi.org/10.3916/C46-2016-06.

Ortega, J., Buelga, S., Cava, M. J. y Torralba, E. (2017). Violencia escolar y actitud hacia la autoridad de estudiantes agresores de cyberbullying. *Revista de Psicodidáctica*, *22*(1), 23-28.

Ortega, J., Torralba, E. y Buelga, S. (2017). Distrés psicológico en adolescentes víctimas de cyberbullying. *Revista de Estudios e Investigación en Psicología y Educación*, *4*(1), 10-17. Recuperado de https://doi.org/10.17979/reipe.2016.4.1.1767.

Patchin, J. W. and Hinduja, S. (2015). Measuring cyberbullying: Implications for research. *Aggression and Violent Behaviour, 23*, 69-74. Retrieved from https://doi.org/10.1016/j.avb.2015.05.013.

Radloff, L. S. (1977). The CES-D Scale: A Self-Report Depression Scale for Research in the General Population. *Applied Psychological Measurement*, *1*(3), 385-401. Retrieved from https://doi.org/10.1177/014662167700100306.

Resett, S. y Putallaz, P. R. (2018). Cybervictimización y cyberagresión en estudiantes universitarios: problemas emocionales y uso problemático de nuevas tecnologías. *Psicodebate*, *18*(2), 38-50. Recuperado de https://doi.org/10.18682/pd.v18i2.811.

Roberts, N., Axas, N., Nesdole, R. and Repetti, L. (2016). Pediatric emergency department visits for mental health crisis: Prevalence of cyber-bullying in suicidal youth. *Child and Adolescent Social Work Journal*, *33*(5), 469-472. Retrieved from https://doi.org/10.1007/s10560-016-0442-8.

Rodríguez, M. S., Martínez, Z., Tinajero, C., Guisande, M. A. y Páramo, M.F. (2012). Adaptación española de la Escala de Aceptación Percibida (PAS) en estudiantes universitarios. *Psicothema*, *24*, 483-488.

Romero, A., Martínez, B., Musitu, G., León, C., Villarreal, M. E. and Callejas, J. E. (2019). Family communication problems, psychosocial adjustment and cyberbullying. *International*

Journal of Environmental Research and Public Health, 16(13), 2417. Retrieved from https://doi.org/10.3390/ijerph16132417.

Sasson, H. and Mesch, G. (2014). Parental mediation, peer norms and risky online behavior among adolescents. *Computers in Human Behavior*, *33*, 32-38.

Solecki, S., McLaughlin, K. and Goldschmidt, K. (2014). Promoting positive offline relationships to reduce negative online experiences. *Journal of Pediatric Nursing, 29*(5), 482-484.

Stewart, R. W., Drescher, C. F., Maack, D. J., Ebesutani, C. and Young, J. (2014). The development and psychometric investigation of the Cyberbullying Scale. *Journal of Interpersonal Violence, 29*(12), 2218-2238.

Tabachnick, B. and Fidell, L. (2006). *Using Multivariate Statistics* (5th ed.). United States: Allyn & Bacon/Pearson Education.

Tanrikulu, I. and Campbell, M. (2015). Correlates of traditional bullying and cyberbullying perpetration among Australian students. *Children and Youth Services Review, 55*, 138-146.

Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in human behavior, 26*(3), 277-287.

Trickett, E. J., Leone, P. E., Fink, C. M. and Braaten, S. L. (1993). The perceived environment of special education classrooms for adolescents: A revision of the Classroom Environment Scale. *Exceptional Children, 59*, 411-420.

Udris, R. (2014). Cyberbullying among high school students in Japan: Development and validation of the Online Disinhibition Scale. *Computers in Human Behavior, 41*, 253-261.

Yubero, S., Larrañaga, E. y Navarro, R. (2014). La comunicación familiar en la victimización del bullying y el cyberbullying. *International Journal of Developmental and Educational Psychology, 5*(1), 343-350.

Rol de Contribución	Autor (es)
Conceptualización	Esperanza Vargas Jiménez
Metodología	Raúl Medina Centeno
Software	Claudia Gregoria Huerta Zúñiga
Validación	Remberto Castro Castañeda
Análisis Formal	Remberto Castro Castañeda
Investigación	Esperanza Vargas Jiménez
Recursos	Raquel Domínguez Mora
Curación de datos	Claudia Gregoria Huerta Zúñiga
Escritura - Preparación del borrador original	Remberto Castro Castañeda
Escritura - Revisión y edición	Raúl Medina Centeno
Visualización	Raquel Domínguez Mora
Supervisión	Esperanza Vargas Jiménez
Administración de Proyectos	Esperanza Vargas Jiménez
Adquisición de fondos	No aplica