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# **Cybervictimization and Student Engagement in High School Students** from Private Schools in Lima

Cibervictimización e involucramiento escolar en estudiantes de secundaria de colegios privados de Lima

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#### **Summary**

In this study, a non-experimental, cross-sectional design with a descriptive-correlational scope was used to examine the relationship between cyber victimization and school engagement. There were 391 students who participated, 51.7% male and 48.3% female, aged 13 to 18 years (M=15.3, SD=0.895), from third (24.5%), fourth (38.8%), and fifth (36.5%) grades of secondary school from three private schools in Lima. For data collection, the School Cybervictimization Scale (ECE) and the School Involvement Scale (EIE-A) were applied. Among the results, high levels of cyberbullying victimization were found in 16% and very high levels in 21.7% of students, as well as low levels of school engagement in 20.5% and very low levels in 19.4% of students. Likewise, a statistically significant and inverse relationship was found, with a small effect size, between the variables (p < .01,  $r_s = -.18$ ,  $r^2 = .03$ ). In addition, student engagement showed statistically significant and inverse correlations, with small effect sizes, regarding the dimensions of cyber victimization: harassment (p < .05,  $r_s = -.19$ ,  $r^2 = .036$ ), invasion of privacy (p < .05,  $r_s = -.15$ ,  $r^2 = .022$ ), and denigration (p < .05,  $r_s = -.12$ ,  $r^2 = .014$ ). Similarly, cybervictimization showed statistically significant and inverse correlations, with small effect sizes, regarding the dimensions of school involvement: behavioral (p < .05,  $r_s = -.15$ ,  $r^2 = .022$ ), emotional (p < .05,  $r_s = -.10$ ,  $r^2 = .010$ ), and cognitive (p < .05,  $r_s = -.15$ ,  $r^2 = .022$ ). In summary, cybervictimization is inversely related to student engagement.

**Keywords:** Cybervictimization; Student engagement; High school students.

#### Resumen

En este estudio de diseño no experimental-transversal y de alcance descriptivo-correlacional se examinó la relación entre cibervictimización e involucramiento escolar. Participaron 391 escolares, 51.7% hombres y 48.3% mujeres, de 13 a 18 años (M=15.3, DE=0.895), de tercero (24.5%), cuarto (38.8%, y quinto (36.5%) grado de secundaria de tres colegios privados de Lima. Para la recolección de datos se aplicaron la Escala de Cibervictimización Escolar (ECE) y la Escala de Involucramiento Escolar (EIE-A). Entre los resultados, se encontraron altos niveles de cibervictimización en 16% y muy altos en 21.7% de estudiantes, así como bajos niveles de involucramiento escolar en 20.5% y muy bajos en 19.4% de alumnos. Asimismo, se halló una relación estadísticamente significativa e inversa, con tamaño del efecto pequeño, entre las variables (p < .01,  $r_s = -.18$ ,  $r^2 = .03$ ). Además, el involucramiento escolar mostró correlaciones estadísticamente significativas e inversas, con tamaños del efecto pequeño, con respecto a las dimensiones de cibervictimización: acoso (p < .05,  $r_s = -.19$ ,  $r^2 = .036$ ), invasión a la privacidad (p < .05,  $r_s = -.15$ ,  $r^2 = .022$ ) y denigración (p < .05,  $r_s$ = -.12,  $r^2$  = .014). Igualmente, la cibervictimización mostró correlaciones estadísticamente significativas e inversas, con tamaños del efecto pequeño, con respecto a las dimensiones de involucramiento escolar: conductual (p < .05,  $r_s = -.15$ ,  $r^2 = .022$ ), emocional (p < .05,  $r_s = -.10$ ,  $r^2$ = .010) y cognitivo (p < .05,  $r_s = -.15$ ,  $r^2 = .022$ ). En síntesis, la cibervictimización se relaciona inversamente con el involucramiento escolar.

Palabras claves: Cibervictimización; Involucramiento escolar; Estudiantes de secundaria.

## INTRODUCTION

Diving into the complex phenomenon of school violence, one finds its roots in personal, social and cultural factors. This form of violence manifests itself in various expressions of physical and psychological aggression, aimed at harming or subjugating the victim (Ayala, 2015). From defensive aggression to cyberbullying, violence in schools takes multiple forms, each reflecting a different facet of this social problem (García & Ascensio, 2015; Herrera et al., 2019).

Cyberbullying, defined as technology-mediated bullying, has emerged as a significant concern in recent years (Belsey, 2004). This phenomenon has not only been studied in relation to school violence but has also been linked to cyberbullying and psychoactive substance use (Barragán et al., 2021; Carvalho et al., 2021; Nasaescu et al., 2020). As technology becomes more integrated into social life, cyberbullying presents itself as a pervasive challenge, with its unique characteristics, such as anonymity and wide audience, making it especially difficult to address (Wright et al., 2019).

In this regard, Bandura's (1986) social cognitive theory postulates that human learning is closely linked to the observation of models in social contexts, as well as to experiences and environmental factors (Penalva, 2018). In this regard, victims of cyberbullying may associate the behavior of virtual bullies with elements identified by routine activity theory (Morillo & Ríos, 2022). In addition, the harm caused by cyberbullying can manifest itself in a variety of areas, such as physical appearance, gender, race, ethnicity, sexual orientation, and personal beliefs (Malaki, 2020).

The problem of bullying and cyberbullying in Latin America is of concern, with alarming cases of cybervictimization, such as the spread of rumors and unpleasant messages (Herrera-López et al., 2018). From Chile to Peru, reports of cyberbullying have increased significantly in recent years, highlighting the urgent need to address this problem (El Peruano, 2021; Guevara et al., 2018; Ministry of Education [MINEDU], 2022). For example, Piñella (2022) found that, in a sample of 80 high school students in Lambayeque, the moderate level of cybervictimization was the most common level (48.8%), followed by high (26.3%) and low (25%).

In addition, school engagement emerges as a crucial factor in students' well-being and academic performance (Fredricks et al., 2016; Montenegro, 2017). This multidimensional construct encompasses behavioral, emotional and cognitive aspects, and is influenced by a variety of both internal and external factors (Hernández, 2015). Lack of engagement has been associated with disengagement and the risk of negative consequences, such as academic underachievement and dropping out of school (Appleton et al., 2008; Negrini, 2010).

The intersection between cybervictimization and school engagement is a rich and complex field of study. While cybervictimization can undermine student engagement and well-being, school engagement can act as a buffer against the negative effects of cyberbullying (Marciano et al., 2020; Varela et al., 2019). However, there are still few studies that address these variables as a whole.

In Mexico, Castro et al. (2019) studied the relationship between cybervictimization and school engagement in 1681 high school students in Puerto Vallarta, finding a negative correlation between cybervictimization and school engagement (rho = -.109, p <.01). Also, Vargas et al. (2019)

studied the relationship between cybervictimization and school engagement in 662 university students at the Universidad de Guadalajara, finding a negative correlation between them (r = -.215, p < .01). These data suggest that cyberbullying affects students' active participation in academic life.

In Peru, Mayta (2018) analyzed the relationship between bullying and school engagement in 174 sixth-grade students in Junín, finding that 21% had high level of engagement, 48% moderate level of engagement, and 21% low level of engagement. In addition, he found a significant correlation between bullying and school engagement (r = -.739, p < .05).

Understanding how these variables are related is crucial to address cyberbullying in the educational environment. Therefore, this study aims to examine the relationship between cybervictimization and school engagement in high school students in private schools in Lima. Specifically, we seek to know the levels of cybervictimization and school engagement, establish their association and examine the relationship between each dimension of cybervictimization and school engagement, as well as between the dimensions of school engagement and cybervictimization.

## **METHOD**

### Design

The study adopted a non-experimental cross-sectional design, with a descriptive-correlational scope. Data were collected at a specific time and place without manipulation of variables. The levels of cybervictimization and school engagement were measured separately, and their relationship was sought to be established (Hernández-Sampieri & Mendoza, 2018).

### **Participants**

A total of 391 students participated, 51.7% male and 48.3% female, aged 13 to 18 (M=15.3, SD=0.895), from third (24.5%), fourth (38.8%, and fifth (36.5%) years of high school from three private schools in Metropolitan Lima, and they were selected through non-probabilistic convenience sampling (Supo, 2014).

#### **Instruments**

#### School Cybervictimization Scale (ECE).

Developed by Valdés et al. (2014), it is composed of 9 items distributed in three factors: factor 1) harassment, items 1, 2, and 3, factor 2) invasion of privacy, items 4, 5 and 6, factor 3) denigration, items 7, 8 and 9. These items have a Likert-type response format with five anchors: 0 = Never(0 times), 1 = Almost never(1 to 2 times), 2 = Few times(3 to 5 times), 3 = Sometimes(6 to 10 times) and 4 = Many times (more than 10 times). Initially, Reyes et al. (2018) demonstrated the validity of the ECE through exploratory factor analysis: KMO = .80, Bartlett's Test of Sphericity (X2 = 522.4, p < .001), 57% of the total variance, and confirmatory factor analysis:  $\chi^2 = 33.43$ , p = .095,  $\chi^2/\text{gl} = 1.97$ , GFI = .92, CFI = .91, and RMSEA = .045. Likewise, its reliability is acceptable: ECE ( $\alpha = \frac{1}{2}$ )

.80), factor 1 ( $\alpha$  =.76), factor 2 ( $\alpha$  =.72), and factor 3 ( $\alpha$  =.71). Also, to ensure the validity and reliability of the test, a pilot study was conducted by giving the ECE scale to 154 students. A confirmatory factor analysis was performed with the free software RStudio version 4.3.0, testing a second-order hierarchical model with Schmid-Leiman transformations to justify the existence of a global score, finding adequate fit indices:  $\chi^2/gl = 1.346$ , CFI = .996, TLI = .994, RMSEA = .053, y SRMR = .050. Similarly, its reliability was verified: ECE ( $\omega$  = .96), factor 1 ( $\omega$  =.91), factor 2 ( $\omega$  =.90), and factor 3 ( $\omega$  =.90). Finally, ad hoc normative data were developed to measure levels of cybervictimization (See Appendices).

#### School Engagement Scale for Adolescents (EIE-A).

Developed by Sanchez and Andrade (2020), it consists of 10 items, distributed in three factors: factor 1) behavioral, items 1, 2, 3 and 4, factor 2) emotional, items 5, 6 and 7, and 3) cognitive factor, items 8, 9, and 10. These items have a Likert-type response format with seven anchors: 1 = never, 2 = almost never, 3 = seldom, 4 = neither many nor seldom, 5 = many times, 6 = almost always, 7 = always. Initially, these authors verified validity through confirmatory factor analysis, finding adequate fit indices:  $\chi^2/\text{gl} = 2.42$ , CFI = .98, TLI = .98, SRMR = .03 y RMSEA = .05. Likewise, its reliability was shown to be acceptable: EIE-A ( $\lambda 2 = .88$ ), factor 1 ( $\lambda 2 = .86$ ), factor 2 ( $\lambda 2 = .83$ ), and factor 3 ( $\lambda 2 = .74$ ). Similarly, a pilot study was conducted by giving the EIE-A scale to 154 students. A confirmatory factor analysis was executed, testing a second-order hierarchical model with Schmid-Leiman transformations to justify the existence of a global score, finding adequate fit indices:  $\chi^2/\text{gl} = 1.034$ , CFI = .997, TLI = .996, RMSEA=.016, and SRMR=.038. Also, its reliability was verified: EIE-A ( $\omega = .91$ ), factor 1 ( $\omega = .82$ ), factor 2 ( $\omega = .75$ ), and factor 3 ( $\omega = .88$ ). Finally, ad hoc normative data were developed to measure the levels of school engagement (see Appendices).

#### **Procedure**

The study was developed in the context of the Research Project Development (DPI) course, as part of the process to obtain the degree of Bachelor of Arts in Psychology. To guarantee the integrity of the work and respect intellectual property rights (Universidad César Vallejo [UCV], 2020), prior authorization was obtained from the authors of the measurement instruments. Likewise, access to the schools was arranged through letters addressed to the directors on behalf of the UCV. Once permission was obtained, data collection activities were coordinated. Informed consent was sought from the students' parents and the voluntary participation of the students (World Medical Association, 2013). For this purpose, Google Meet rooms were established, safeguarding the privacy and confidentiality of the data according to the guidelines of the Association of Psychologists of Peru (CPP, 2018). Participants received clear instructions and an estimated time of 10 minutes to complete two questionnaires. At the conclusion of the survey, thanks were expressed for their collaboration, and they were invited to leave the virtual meeting. This approach ensured an ethical and transparent data collection process.

#### **Data analysis**

Student responses were downloaded into a Microsoft Excel spreadsheet to create a database. This information was then exported to the SPSS 28 statistical package for processing. First, participants

were classified according to their levels in cybervictimization and school engagement in tables of frequencies and percentages (Cárdenas, 2018), using the percentiles obtained in the pilot study as a reference. Second, the Chi-square test of independence was used to establish the association between variables expressed in categories (Mendivelso & Rodriguez, 2018; Tinoco, 2008), quantifying the magnitude of this association with Cramer's V coefficient: .10 small, .30 medium, .50 large (Dominguez-Lara, 2018). Third, the distributional characteristics of the numerically expressed variables were examined with the Shapiro-Wilk (S-W) test, recommended for its statistical robustness, regardless of sample size (Ghasemi & Zahediasl, 2012). Fourth, the relationship between variables and their dimensions was analyzed with Spearman's rank coefficient (Martinez et al., 2009), considering a 95% confidence interval (Diaz et al., 2019), a significance level (p-value) < .05 (Diaz & Rios, 2018), and the magnitude of the  $r^2$  to quantify the effect size: .01 small, .10 medium, .25 large (Cohen, 1998).

## RESULTADOS

## **Descriptive analysis**

## Levels of cybervictimization and school engagement.

Table 1 describes the levels of both variables. Regarding cybervictimization, it is observed that 29.7% of the students have very low levels, 10% have low levels, 22% have moderate levels, 16.6% have high levels, and 21.7% have very high levels. Meanwhile, on school engagement, 19.4% have very low levels, 20.5% have low levels, 22.8% have moderate levels, 19.2% have high levels, and 18.2% have very high levels.

**Table 1.** Levels of cybervictimization and school engagement (n = 391)

	Cybervictimization	
Levels	Frequency (f)	Percentage (%)
Very low	116	29.7
Low	39	10
Moderate	86	22
High	65	16.6
Very high	85	21.7
Total	391	100
	School engagement	
Levels	Frequency (f)	Percentage (%)
Very low	76	19.4
Low	80	20.5
Moderate	89	22.8
High	75	19.2
Very high	71	18.2
Total	391	100

## Inferential analysis

#### Association between cybervictimization and school engagement.

Table 2 shows a statistically significant association (p = .004) between the study variables, with a small effect size: Cramer's V = .149.

**Table 2.** Association between cybervictimization and school engagement (n = 391)

Levels	School engagement					Total	
		Very low	Low	Moderate	High	Very high	='
Cybervictimization	Very low	14	14	35	25	28	116
	Low	2	11	11	6	9	39
	Moderate	19	19	19	16	13	86
	High	15	13	12	16	9	65
	Very high	26	23	12	12	12	85
Total		76	80	89	75	71	391
Statistics		Valor	•	gl		Sig.	
Pearson's Chi-square	Pearson's Chi-square		<u>)</u> *	16		.004	
Likelihood ratio		36.598 16			.002		
Linear by linear association	on	17.86	Ď	1		.000	
Cramer's V coefficient				.149			

Notes. \*0 boxes (0.0%) have expected a count of less than 5. The minimum expected count is 7.08.

#### Correlation between cybervictimization and school engagement.

Previously, the distributional characteristics of the study variables and their dimensions were examined with the S-W test. However, it was found that the data did not fit the normal distribution curve (p < .05). Therefore, it was decided to use Spearman's nonparametric rank-order correlation test.

Table 3 shows that the relationship between the variables is statistically significant, inverse and with a small effect size: p<.01,  $r_s=-.18$ ,  $r^2=.03$ .

**Table 3.** Relationship between cybervictimization and school engagement (n=391)

Variable	M	DE	Spearman
Cybervictimization	13.71	5.65	
School engagement	54.47	7.36	18**
			[27,08]

*Note.* M = mean, SD = standard deviation. Values in square brackets indicate the 95% confidence interval for each correlation. \* Indicates the significance level (p < .05). \*\* indicates the significance level (p < .01).

#### Correlations between school engagement and dimensions of cybervictimization.

Table 4 presents the correlations between the dimensions of cybervictimization and school engagement. They are statistically significant, inverse and with small effect sizes: bullying (p < .05,

rs = -.19,  $r^2$  =.036), invasion of privacy (p < .05,  $r_s$  = -.15,  $r^2$  = .022), and denigration (p < .05,  $r_s$  = -.12,  $r^2$  =.014).

**Table 4.** Relationships between school engagement and dimensions of cybervictimization (n=391)

Variable	M	DE		Spearman	
School engagement	54.47	7.36			
Bullying	4.58	2.19	19** [28,09]		
Invasion of privacy	4.23	1.93	[ · · · · · · · · · · · · · · · · · · ·	15** [25,05]	
Denigration	4.9	2.47		_ , _	12* [22,02]

*Note.* M = media, DE = standard deviation. Values in square brackets indicate the 95% confidence interval for each correlation. \*Indicates the significance level ( $p \times 0.01$ ).

#### Correlations between cybervictimization and dimensions of school engagement.

Table 5 presents the correlations between cybervictimization and the dimensions of school engagement. These are statistically significant, inverse, and with small effect sizes: behavioral (p < .05,  $r_s = -.15$ ,  $r^2 = .022$ ), emotional (p < .05,  $r_s = -.10$ ,  $r^2 = .010$  and cognitive (p < .05,  $r_s = -.15$ ,  $r^2 = .022$ ).

**Table 5.** Relationships between cybervictimization and dimensions of school engagement (n=391)

Variable	M	DE		Spearman	
Cybervictimization	13.71	5.65			
Behavioral	24.15	3.28	15** [25,05]		
Emotional	13.28	2.27	[ · · · · · · ]	10* [20,00]	
Cognitive	17.04	3.67		. , ,	15**
					[25,06]

*Note.* M = media, DE = standard deviation. Values in square brackets indicate the 95% confidence interval for each correlation. \* Indicates the significance level (p valor < .05). \*\* indicates the significance level (p < .01).

## **DISCUSSION**

The main purpose of this study was to analyze the relationship between cybervictimization and school engagement in high school students in Metropolitan Lima.

A significant correlation of an inverse nature was found between both factors, which indicates that as the cybervictimization level increases, the level of school engagement decreases. These findings are consistent with previous research by Castro et al. (2019) and Vargas et al. (2019), although they differ from Mayta (2018), whose study focused on elementary school students.

Cybervictimization, according to Bandura's (1986) social cognitive theory, can predispose to unbalanced behaviors and affect individual development (Morillo & Ríos, 2022).

Regarding the levels of cybervictimization, it was observed that approximately 16.6% and 21.7% of the participants presented high and very high levels, respectively. These results partially coincide with Piñella (2022), who found high levels of cybervictimization in high school students in Lambayeque, Peru.

The study also described the levels of school engagement in high school students. Similar to the categorization used for cybervictimization, five levels of school engagement were employed. The results indicated that about 19.4% of the participants demonstrated a low level and 20.5% showed a very low level of school engagement. These data agree with that reported by Mayta (2018), who found that 21% of 174 elementary school students in Junín, Peru, presented low levels of school engagement.

From a theoretical perspective, the model proposed by Skinner et al. (2009) postulates that the degree of engagement in school contexts is closely linked to individuals' expressions of both activity and environment. According to this theory, the lack of emotional connection with the school environment and a negative predisposition towards the learning process can have an adverse impact on the level of commitment to the educational institution.

In addition, the research sought to examine the association between each of the dimensions of cybervictimization and the level of school engagement. The results of the data revealed a small but statistically significant relationship between certain dimensions of cybervictimization and the level of school engagement. Specifically, the dimensions of bullying, invasion of privacy and denigration showed a negative correlation with the level of school engagement.

The association between cybervictimization and level of school engagement showed statistical significance with a Pearson's chi-square value of .004, indicating the existence of a connection between these two variables. These results are consistent with previous findings by Vargas et al. (2019), who focused on investigating cybervictimization and its relationship with individual and school environment factors, finding a significant and negative correlation with the school engagement dimension.

Although significant findings have been obtained, the study has important limitations. The non-probabilistic sampling used prevents generalization of the results. In addition, the sample is concentrated mainly on students from northern Lima, which limits the representativeness of the data. The lack of previous research on the relationship between the variables studied is also a limitation, hindering further analysis. These limitations highlight the need for future research to address these shortcomings and better understand the relationship between cybervictimization and level of school engagement.

Although a significant relationship was found between cybervictimization and the level of school engagement, it is important to note that this relationship was of small magnitude. This

suggests that while there is an association between the two variables, other factors may be more substantially influencing students' level of school engagement.

Ultimately, other researchers are encouraged to continue exploring these variables, which will generate new knowledge for future research. This may increase interest in the topic and facilitate the development of interventions that will benefit the socioeducational field. In addition, these studies are expected to promote peaceful coexistence among high school students in Metropolitan Lima, both inside and outside the classroom.

## **CONCLUSIONS**

The research highlights several important findings. An inverse relationship is evidenced between cybervictimization and the level of school engagement in high school students in Lima, which suggests that an increased in the level of cybervictimization is related to a decrease in the level of engagement, which may affect the psychoemotional and educational development of students. Levels of cybervictimization ranging from "very low" to "very high" were found, with "very low" being the most common, indicating limited exposure to online violence. The levels of school engagement are also distributed in different categories, with the moderate level predominating, which could indicate a relative decrease in academic interest. An inverse and significant correlation was identified between certain dimensions of cyberbullying and those of school engagement, suggesting that cyberbullying could contribute to student dropout. In addition, the emotional, behavioral, and cognitive dimensions of school engagement were also negatively related to cybervictimization, highlighting the importance of promoting adequate motivation in the school environment to counteract its negative effects. Ultimately, a significant association was found between cybervictimization and school engagement, emphasizing the interconnection between these aspects and the need to address them comprehensively in education.

**Author contributions:** KRFR: introduction, collection of bibliography, administration of instruments, data processing and analysis, interpretation of results, and discussion.

LOOU: research idea, methodological and statistical advice, proofreading, adaptation to journal format, and final reading of the manuscript.

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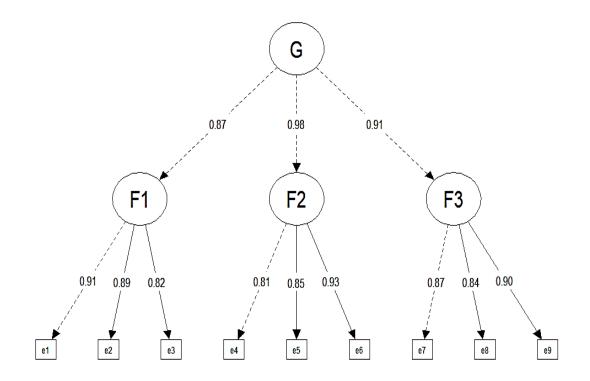
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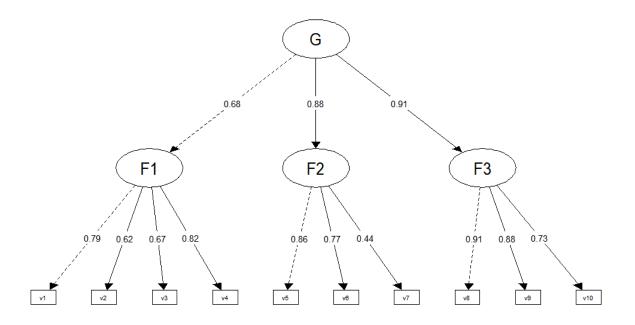
## **APPENDICES**

## $Evidencias\ de\ validez\ y\ confiabilidad\ de\ la\ Escala\ de\ Cibervictimizaci\'on\ Escolar\ (n=154)$



Ítems	λG	л́F1	λF2	λF3
1. Me envían mensajes desagradables.	.79	.46		
2. Me envían mensajes insultándome.	.77	.45		
3. Me envían fotos, imágenes y/o vídeos desagradables.	.71	.41		
4. Se han hecho pasar por mí con la intención de hacerme ver mal.	.79		.16	
5. Publican fotos o videos personales sin mi permiso.	.83		.17	
6. Manipulan fotos o videos míos sin mi permiso.	.91		.19	
7. Difunden mentiras y/o rumores sobre mí	.79			.35
8. Difunden situaciones vergonzosas mías	.77			.34
9. Publican cosas que me ridiculizan	.83			.37
Coeficiente omega (ω)	.96	.906	.897	.90
Coeficiente omega jerárquico (ω <sub>h</sub> )	.91	.227	.036	.15
Coeficiente de replicabilidad H	.95	.416	.085	.30
Varianza común explicada (ECV)	.85			
Porcentaje de correlaciones no contaminadas (PUC)	.75			

## Evidencias de validez y confiabilidad de la escala involucramiento escolar (n=154)



Ítems	λG	λ F1	λF2	λ F3
<ol> <li>Sigo indicaciones en clase.</li> </ol>	.54	.58		
2. Hago mis tareas.	.42	.45		
3. Pongo atención en las clases	.46	.50		
4. Obedezco las reglas en la escuela.	.55	.60		
5. Me gusta estar en la escuela.	.76		.41	
6. Me siento feliz en la escuela.	.68		.37	
7. Odio ir a la escuela.	.39		.21	
8. Ir a la escuela me ayuda a superarme.	.83			.37
9. Estudiar mejora mi forma de ser.	.81			.36
10. Con lo que aprendo en la escuela puedo ayudar a otros.	.67			.30
Coeficiente omega (ω)	.91	.82	.75	.88
Coeficiente omega jerárquico (ω <sub>h</sub> )	.78	.44	.17	.14
Coeficiente de replicabilidad H	.90	.63	.29	.29
Varianza común explicada (ECV)	.68			
Porcentaje de correlaciones no contaminadas (PUC)	.73			

## Percentiles de las variables cibervictimización e involucramiento escolar (n=154)

Variables	Cibervictimización	Involucramiento escolar
Media	13.03	57.37
Desviación estándar	5.75	8.80
Consistencia interna	.96	.91
Percentiles	Puntaje bruto	Puntaje bruto
5	9	40
10	9	45
15	9	49
20	9	52
25	9	53
30	9	54
35	9	55
40	9	57
45	9	58
50	10	60
55	11	61
60	12	61
65	13	62
70	14	62
75	15	63
80	17	64
85	19	66
90	22	67
95	26	69
100	32	70

## Datos normativos para cibervictimización e involucramiento escolar (n=154)

Nissalaa	D	Cibervictimización	Involucramiento escolar
Niveles	Percentiles –	Puntuacio	ones directas
Muy bajo	0 al 10	0 a 9	0 al 45
Bajo	11 al 25	10 al 12	46 al 53
Promedio	26 al 74	13 al 14	54 al 62
Alto	75 al 88	15 al 21	63 al 66
Muy alto	90 a más	22 a más	67 a más