



maria.nivelac@ug.edu.cu,
luis.santillanlo@ug.edu.cu

Received: December 9, 2023

Accepted: December 19, 2023

Original article

Social-emotional approaches to reduce cyberbullying in upper secondary education students

Enfoques socioemocionales para reducir el ciberacoso en estudiantes de educación secundaria superior

Abordagens socioemocionais para reduzir o cyberbullying em estudantes do ensino secundário

Johanna Viviana Mora Torres¹



<https://orcid.org/0009-0008-7266-9498>

Omar Gabriel Mejía Flores²



<https://orcid.org/0000-0001-5129-8933>

María Alejandrina Nivelá Cornejo³



<https://orcid.org/0000-0002-0356-7243>

Luis Gerardo Santillán López³



<https://orcid.org/0000-0002-7696-8400>

¹César Vallejo University, Piura campus, Peru.



jmorato85@ucvvirtual.edu.pe

²E-Idea Omwin S.A., Guayaquil Ecuador.



omar.meji@estudioidea.org

³University of Ecuador. Ecuador

ABSTRACT

Information and Communications Technologies (ICT), as a basic support for educational activities, have influenced the relationships between students, teachers, and the family itself, due to the ease of access to new knowledge, as well as the spread of alterations. psychological conditions that can trigger anxiety, irritation and stress behaviors. Cyberbullying or cyberharassment is an educational and social problem that negatively influences its victims. The objective was to analyze the effect of a program of socio-emotional strategies to reduce cyberbullying, in upper basic level students of an educational institution in Ecuador, during 2023. A mixed methodology with a quasi-experimental approach was used. The sample was intentional, made up of 69 8th year high school students between 10 and 12 years old. A control group and an experimental group to which a socio-emotional strategies program was applied were compared. The variables analyzed were: level of cyberbullying (electronic insults, impersonation and exclusion) and Socio-emotional strategies program. The pre-test and post-test analyze were contrasted with the non-parametric Mann Whitney U Test, after descriptive analysis. Statistically significant differences were found between the averages of the experimental group compared to the control group, with lower values in the levels of cyberbullying in the post-test in the three dimensions. The results obtained constitute a practical proposal with significant impact to reduce cyberbullying in high school students of a public institution in Ecuador.

Keywords: Program; socio-emotional strategies; *cyberbullying*.

RESUMEN

Las Tecnologías de la Información y las Comunicaciones (TIC), como soporte básico para las actividades educativas, han influenciado en las relaciones entre alumnos, docentes, y la propia familia, por las facilidades de acceso a nuevos conocimientos, además por la propagación de alteraciones psicológicas que pueden desencadenar comportamientos de ansiedad, irritación y estrés. El ciberbullying o ciberacoso, es un problema educacional y social, que influye negativamente en sus víctimas. El objetivo fue analizar el efecto de un programa de estrategias socioemocionales para disminuir el ciberbullying, en los estudiantes de nivel básico superior de una institución educativa en Ecuador, durante 2023. Se utilizó una metodología mixta con enfoque cuasi experimental. La muestra fue intencional, compuesta por 69 estudiantes de 8vo año de básica superior con edades entre 10 y 12 años. Fue comparado un grupo de control y otro experimental al que se le aplicó un Programa de estrategias socioemocionales. Las variables analizadas fueron: nivel de ciberbullying (insultos electrónicos, suplantación y exclusión) y Programa de estrategias socioemocionales. Los análisis pre test y pos test, fueron contrastados con la Prueba no paramétrica U de Mann Whitney, previo análisis descriptivo. Se constataron diferencias estadísticamente significativas entre promedios del grupo experimental con respecto al de control, con valores más bajos en los niveles de ciberbullying en el pos test en las tres dimensiones. Los resultados obtenidos constituyen una propuesta práctica de impacto significativo para la disminución del ciberbullying en estudiantes de básica superior de una institución pública en Ecuador.

Palabras clave: Programa; estrategias socioemocionales; *cyberbullying*.

RESUMO

As Tecnologias de Informação e Comunicação (TIC), como suporte básico das atividades educativas, têm influenciado as relações entre alunos, professores e a própria família, pela facilidade de acesso a novos conhecimentos, bem como pela propagação de alterações psicológicas. que podem desencadear comportamentos de ansiedade, irritação e estresse. O cyberbullying ou assédio cibernético é um problema educacional e social que influencia negativamente as suas vítimas. O objetivo foi analisar o efeito de um programa de estratégias socioemocionais para reduzir o cyberbullying, em estudantes de nível básico superior de uma instituição de ensino no Equador, durante 2023. Foi utilizada uma metodologia mista com uma abordagem quase experimental. A amostra foi intencional, composta por 69 alunos do 8º ano do ensino médio entre 10 e 12 anos. Foram comparados um grupo controle e um grupo experimental ao qual foi aplicado um programa de estratégias socioemocionais. As variáveis analisadas foram: nível de cyberbullying (insultos eletrônicos, falsificação de identidade e exclusão) e programa de estratégias socioemocionais. As análises pré-teste e pós-teste foram contrastadas com o Teste não paramétrico Mann Whitney U, após análise descritiva. Foram encontradas diferenças estatisticamente significativas entre as médias do grupo experimental em comparação ao grupo controle, com valores mais baixos nos níveis de cyberbullying no pós-teste nas três dimensões. Os resultados obtidos constituem uma proposta prática com impacto significativo para reduzir o cyberbullying em estudantes do ensino médio de uma instituição pública no Equador.

Palavras-chave: Programa; estratégias socioemocionais; *cyberbullying*.

INTRODUCTION

The COVID-19 pandemic has generated significant changes and the need to adapt to them, altering life realities at a personal, family, organizational and social level. In the field of Education, during the health emergency, Information and Communications Technologies (ICT) have increased their presence as a basic support to continue educational activities, through teaching-learning processes and actions based on technologies. virtual (Valencia, 2021); alternative that has influenced the relationships between students, teachers, social groups and the family itself, not only due to the ease of access to new knowledge and skills, but also due to the spread of psychological alterations that can trigger anxiety, irritation and stress behaviors.

To the aforementioned psychological alterations González, *et al.*, (2022); add *cyberbullying*, an anglicism that in Spanish can be interpreted as: cyberbullying or cyberbullying, treated interchangeably in this study, as a phenomenon that relates to the inappropriate use of ICT, where a person (*bullie*, harasser) acts as the aggressor to through messages and other actions intended to annoy, intimidate, extort, hurt and/or ridicule another person (victim), whom they consider weak and try to cause as much damage as possible, transforming them into a focus of ridicule and marking a power difference between harasser and victim, fostered by the anonymous nature of the virtual ecosystem, where the victim confronts the harasser and at the same time is exposed to collective scrutiny.

Gulliana (2023) seems to agree with the previous definition; from which it is inferred that cyberbullying is a phenomenon that, in addition to being a psychological inconvenience, is an educational and social problem, due to its ability to influence the personal, family and social level of those involved; transformed the power relations in the educational fabric, in which the harasser tries to control, manage and harm

the identity of the victim, through technological means.

Both González, *et al.*, (2022) and Gulliana (2023); They agree that cyberbullying influences the emotional state of students who are victims of attacks that manifest themselves in the form of messages, images, videos or comments, among which the following prevail:

Electronic insults: sending denigrating or offensive messages, considered the most frequent action by an aggressor, refers to offensive or insulting messages in the digital ecosystem (defined as the set of technological means, tools, networks and other communication channels). virtual communication), the disclosure of content or information of general or specific interest that the harasser sends to the victim, verbal attacks, insults and/or provocations that the harasser sends with the intention of causing harm to another person and breaking their emotional balance (generate anxiety, destroy self-esteem, affect dignity or public image, etc.)

Victim identity theft: it is especially common among adolescents; it occurs when one pretends to be another person to send messages, use passwords or confidential information as an authentication method to access a certain resource.

The exclusion of groups or groups of people: in this case, it refers to separating someone, configured as the denial or significant restriction of access to opportunities for personal development, social interaction and/or participation in established groups. It can manifest itself in the expulsion of chat, emails

In González, *et al.*, (2022); Almost 40 investigations carried out by education, psychology and mental health professionals are systematized between 2011 and 2021; theoretical concepts that support cyberbullying, its causes, the role of those involved and the psychological

influence of this phenomenon on adolescents. In this regard, they report that recent studies show that approximately 33% of students worldwide have suffered some form of cyberbullying; This figure coincides with the students who have been affected by this phenomenon in Europe, while in North America, the figures range between 14% and 27%.

The same authors reveal that in the Latin American and Caribbean region, approximately 33% of students have experienced the negative experience of being the target of cyberbullying in virtual ecosystems. An issue that apparently increases in Ecuador, where according to a study by Moya and Moreta (2022), almost 57% of students said they were victims of cyberbullying actions and verified the existence of aggressive manifestations in virtual ecosystems for student use; among them, group exclusion, denigrating or offensive messages and alteration of identification.

The aforementioned studies accuse the generalization of cyberbullying, as a phenomenon that promotes relationships of aggression/victimization among students González, *et al.*, (2022); Moya and Moreta (2022); which can be aggravated given the increasing migration from face-to-face models towards non-face-to-face models based on the use of ICT (Valencia, 2021); trends that make cyberbullying a highly worrying social issue.

Authors such as González, *et al.*, (2022); They report the profusion of studies related to psychosocial risks and prevention in relation to gender violence, domestic violence, early pregnancy, alcohol, tobacco and drug consumption among adolescents; However, they regret that there is not enough research on cyberbullying "a

situation that manifests itself silently among adolescents, since when it develops in the digital world (social networks) it can be easy to overlook" (González, *et al.*, 2022, p.6).

In summary, the current problem at both a national and international level raises the need to investigate how cyberbullying influences its manifestations: electronic insults, identity theft of the victim and the exclusion of groups or groups of people in students of higher basic education. of a state institution in Ecuador with the objective of *analyzing the effect of a program of socio-emotional strategies to reduce cyberbullying, on upper basic level students of an educational institution in Ecuador, during 2023.*

MATERIAL AND METHODS

A mixed methodology with a quasi-experimental approach was used to compare an experimental group to which a Socio-Emotional Strategies Program was applied, validated by experts, and another control group that did not receive said program. A pre-test was administered to both groups before applying the Socio-Emotional Strategies Program to the experimental group, followed by a post-test to determine if there was any influence on said variable. In this context the following variables were considered:

Dependent variable: Level of *cyberbullying*

Independent variable: The socio-emotional strategies program.

The operationalization of the study variables is presented in Table 1.

Table 1- Basic variables that make up the study.

Variables	Classification	Conceptual definition	Operational definition	Indicators/ scale
Cyberbullying level	Ordinal qualitative	Cyberbullying arises from a power relationship in the school context, with the purpose of controlling, manipulating and damaging the identity of the victim through the use of technological devices, mainly through psychological and verbal violence, with repercussions in the school environment. family and social (Redondo, 2023).	It was measured according to dimensions such as: Electronic insults, impersonation and exclusion, which were taken into account in the application of the instrument, which were valued according to the application of the questionnaire.	Disclosures, verbal attacks, insults, provocations, use of passwords, publications, chat expulsion, email expulsion. Scale according to the level in the different dimensions: 1= Low 2= Medium 3= High
Socio-emotional strategies program.	Ordinal qualitative	It is a set of educational practices focused on promoting the socio-emotional strategies of high school students, with the aim of reducing cyberbullying in a formative, preventive and regulatory manner. (Estévez et al. 2019).	The socio-emotional strategies program is made up of 3 dimensions: Foundation, implementation and evaluation. (Nguyen and Guerra, 2021).	17 statements structured in 3 dimensions: 1= Never 2= Almost never 3= Sometimes 4= Almost always 5= Always

Population and sample

The population, defined as the set of individuals who share similar characteristics, was made up of 258 students in the 8th year of higher basic education, from a public educational institution in Ecuador during 2023. Students who are in the 8th year were considered as inclusion criteria. of higher basic education, aged between 10 and 12 years and having accepted and approved the informed consent, with prior authorization from the director of the

institution. Those who did not meet the inclusion requirements or had been in the educational institution for a short time were also excluded.


An intentional non-probabilistic sampling was carried out, considering the heterogeneity in terms of gender, where from the total of three sections of the 8th year, sections "A" and "B" were selected, assuming the risk of possible bias. In this sense, the bias caused by non-randomness is assumed, since the participants are selected according to the criteria

established by the author of the study. Thus, the sample size was 69 students in the 8th year of high school, which are in turn the units of analysis of the research.

A pre-test and post-test were carried out on both the control group (8-A) and the experimental group (8-B), with the corresponding comparisons.

In the present study, the survey was used as a technique for collecting information, which made it possible to quickly obtain opinions or perceptions related to a specific problem identified in a study universe. The questionnaire to measure *cyberbullying* was administered individually. It contains 17 items, of which the first 9 measure the dimension, *electronic insults*, the next 4 measure the *impersonation* dimension, while the last 4 evaluate the *exclusion dimension*. (Table 2).

Table 2- Cyberbullying questionnaire in high school students

 UNIVERSIDAD CÉSAR VALLEJO						
GRADUATE SCHOOL Program of socio-emotional strategies to reduce cyberbullying in high school students of a public institution, Ecuador 2023						
Dear participants , I am a postgraduate student at the Cesar Vallejo University and I am conducting research that aims to determine the influence of socio-emotional strategies to reduce cyberbullying in high school students of a public institution, Ecuador 2023; which is why I ask for your help in filling out this questionnaire. Likewise, there are no "right" or "wrong" answers, nor "good" or "bad" answers. We only request honesty and sincerity according to your perception. Subsequently, the answer you provide is totally reserved and confidentiality will be kept and check all the items. Likewise, the data collected will be used for academic purposes. Thanking you in advance for your kind support. Instructions: Read each statement carefully and mark with a cross (X) the alternative that you consider appropriate. Where: 1: NEVER, 2: ALMOST NEVER, 3: SOMETIMES 4: ALMOST ALWAYS, 5: ALWAYS.						
Informed						consent:
Do you want to participate and give your consent to use the data in the research? Please mark your answer with an (X) : YES () NO ()						
General						data:
Sex: Male () Female (). Age: 11 to 14 () 15 or more () Level of education: primary () secondary (). Course/parallel that belongs: 8th A () 8th. B () Considered a student with SEN: Yes () No () Lives with: Only dad () Only mother () Some other family member () Dad and mother ()						
CYBERBULLYING						
Electronic insults dimension						
ITEM	Divulagation	Never 1	Hardly ever 2	Sometimes 3	Almost always 4	Always 5
01	Insults and false rumors have been published about me on some social networks.					
02	They have hit me and insulted me, they have					

	recorded it and then broadcast it.					
Verbal attacks		Never	Hardly ever	Sometimes	Almost always	Always
		1	2	3	4	5
03	I have received calls to insult me or make fun of me.					
04	I have received anonymous calls, to threaten or frighten me					
Abuse		Never	Hardly ever	Sometimes	Almost always	Always
		1	2	3	4	5
05	I have been made fun of with offensive or insulting comments on social media					
06	They have posed as me on Tuenti, Twitter.... creating a false user profile (photos, personal data) with which they have insulted or ridiculed me.					
07	They have threatened and insulted me publicly, through social networks (Tuenti, Twitter, Facebook...)					
08	I have received insults through short text messages (SMS) or instant messaging programs (Whatsapp)					
Provocations		Never	Hardly ever	Sometimes	Almost always	Always
		1	2	3	4	5
09	They have sent me strong photos or videos, unpleasant for me.					
Impersonation dimension						
Password usage		Never	Hardly ever	Sometimes	Almost always	Always
		1	2	3	4	5
10	I have been blocked from accessing email, a social network (Tuenti) or an instant messaging program (Messenger, WhatsApp), changing my password					
Publications		Never	Hardly ever	Sometimes	Almost always	Always
		1	2	3	4	5
eleven	They have impersonated me on the Internet by posting comments in my name, as if it were me					
12	Someone has pretended to be someone else, to laugh at me over the Internet or mobile phone.					

13	They have posed as me on Twitter, Tuenti..., creating a false user profile (photo, personal data) with which they have insulted or ridiculed me					
Exclusion dimension						
Chat ban		Never	Hardly ever	Sometimes	Almost always	Always
		1	2	3	4	5
14	Some person has not admitted me or expelled me from their team in online games, without having done anything wrong to justify it.					
fifteen	I have been kicked out or not accepted in the contact list of a chat, social network (e.g., Tuenti) or instant messaging program (e.g., Messenger, WhatsApp), without having done anything, just for being me					
16	They agree to ignore me (ignore me) on social networks.					
Mail Expulsion		Never	Hardly ever	Sometimes	Almost always	Always
		1	2	3	4	5
17	Someone has sent annoying messages to someone they know, using my email, as if it were me, to get me into trouble so they ignore me.					

The determination of the levels of *cyberbullying* was carried out according to the score obtained, as shown in table 3.

Table 3- Scores for classification by levels.

Qualitative scale	Quantitative scale	
	Cyberbullying	
	Minimum Score	Top Score
Levels		
Low (1)	17	39
Half	40	62
High (3)	63	85

The results of the evaluations were compared with each other, taking into account the two sections. Statistical processing was carried out using descriptive summary statistics to contrast the results obtained and establish comparisons. In order to statistically certify the possible differences that were observed on average in both pre-test and post-test sections, the alternative non-parametric Mann Whitney U test was applied, considering independence between both groups, as well as non-normality in the distributions. of the essential variables of the study, verified through the Kolmogorov-Smirnov Test, with the Lilliefors significance correction, for a 5% statistical significance in both tests.

The information was processed with the SPSS V.23 program package.

RESULTS

Of the total number of respondents, 41% were female, while the remaining 59 were male.

From the analysis by dimensions in the *control group*, it was obtained in the *electronic insults dimension* that the medium and high levels of perception were 13.89% different in the pre-test with respect to the post-test. In the *impersonation dimension*, the difference

obtained was 8.34% and in the *exclusion dimension*, the percentage difference obtained in the medium and high levels of cyberbullying was 22.17% in the pre-test compared to the post-test.

The behavior by dimensions in the *experimental group* showed percentage differences observed in the descriptive analysis in the order of 57.58% for the *electronic insults dimension*, 63.64% in *impersonation* and 51.52% in the *exclusion dimension*.

Frequency behavior is distinguished at the high level. The students in the experimental group, to whom the Program with socio-emotional strategies was subsequently applied, showed lower percentages in the grades of medium and low levels of *cyberbullying*. (Table 4).

Table 4- Comparison of the *cyberbullying variable* (Pretest)

Levels	Experimental		Control	
	frequency	%	frequency	%
Low	1	3.03	2	5.56
Half	eleven	33.33	fifteen	41.67
High	twenty-one	63.64	19	52.78
Total	33	100	36	100

Source: SPSS outputs.

In the absolute and relative post-test comparisons, the low level is distinguished with the highest percentage, unlike the control group with an average level that

exceeds 50% and equal percentages for both the high and low levels (table 5).

Table 5- Comparison of the cyberbullying variable (Posttest).

Levels	Experimental		Control	
	frequency	%	frequency	%
Low	twenty	60.61	8	22.22
Half	10	30.30	twenty	55.56
High	3	9.09	8	22.22
Total	33	100	36	100

Source: SPSS outputs

In order to know if the differences are significant, the results of the Mann Whitney U Test showed that the differences between the levels of *cyberbullying* in the pre-test analysis were not significant (Sig. > 0.05), however, in the observations post test the differences are statistically significant (Sig. < 0.05). See Table 6.

Table 6- Test statistics of the variable (experimental and control).

Cyberbullying variable	Pretest	Post test
Mann-Whitney U	527,500	263,000
asymptotic sig. (bilateral)	.424	,000

Source: SPSS outputs

The previous analysis results in the acceptance of the alternative hypothesis for the post-test contrast, so it is ensured for a 5% significance that the median scores between the three levels are statistically different, which means that the Program of socio-emotional strategies positively influences the behavior of *cyberbullying levels* in high school students of the public institution under study.

Additionally, the analysis by dimensions shown in Table 7 corroborates, according to the statistical significances of the dimensions in the post-test, that the calculated differences are significant.

Table 7- Test statistics of the dimensions (experimental and control).

Mann-Whitney U test	DIMENSIONS					
	PRE-TEST			POS TEST		
	Electronic insults	Impersonation	Exclusion	Electronic insults	Impersonation	Exclusion
Statistician U	584.5	476.5	459.5	248.5	245.0	358.0
Sig. Asymptotic (bilateral)	.90	,15	.10	,000	,000	.004

Source: SPSS outputs

It is confirmed that before applying the Program, the control group does not differ from the experimental group, since all their significance levels exceed the preset 0.05. Quite the opposite happened after applying the strategies. It could be observed that, with the application of the Socio-emotional Strategies Program, there are differences in each of the dimensions, which significantly influences the improvement of the scores of the dimensions: Electronic insults, impersonation, exclusion in the experimental group.

DISCUSSION

In the absolute and relative comparisons of the pre-test, differences were observed in both groups (experimental and control), however, it is possible to notice the same behavior in terms of frequencies, where the highest percentages were seen at the high level. The students in the experimental group, to whom the Program with socio-emotional strategies was subsequently applied, showed lower percentages in the grades of medium and low levels of *cyberbullying*.

In the post-test, it is evident that the experimental group has better indicators, where the low level contains the highest percentage, unlike the control group with an average level that exceeds 50% and equal percentages for both the high and low levels. which may be considered unsuitable.

In the analyzes by dimensions, carried out to determine the possible influence of the socio-emotional strategies program to reduce *cyberbullying* in high school students of the public institution studied, it was confirmed in the pre-test of the control group that the students registered high and medium levels of *cyberbullying*, without any program being applied to them that would allow them to effectively counter *electronic insults, impersonation and exclusion*. The highest percentages

obtained in the pre-test, in relation to the post-test at these levels, were located in the *exclusion dimension*, followed by *electronic insults* and, in a lower percentage, *impersonation*.

Same behavior between levels (high and medium), indicates Pinedo (2020), referring to the THnEmE emotional intelligence test developed by Merchán (2017). The results obtained revealed that 31% of the children and adolescents were at the high level, 64% at the medium level and 5% at the low level in terms of emotional intelligence. These results demonstrate the existence of significant difficulties since the majority of students are located at the high and medium levels.

However, these results do not ensure that students manage strategies that allow them to act appropriately when they are affected. The experience of *cyberbullying* differs from one child to another and varies in each situation. In general, the psychological consequences are usually serious, damaging the self-esteem of minors and their ability to relate to their peers, and in extreme cases, leading to episodes of depression. The emotional impact caused by these actions on the victims is of great magnitude.

The emotional suffering experienced can be even greater compared to other forms of harassment. The effects of online insults have a negative impact on students' academic performance. However, this problem improved significantly thanks to the students' participation in conflict resolution workshops, where they learned to develop a positive attitude, which is essential to foster resilience.

Such effects can be considerably improved by implementing a program of social-emotional strategies focused on effective communication. Through this program, affectionate communication was encouraged that promotes interaction in society, the development of feelings and emotions, the resolution of conflicts and the promotion of healthy relationships. The

results obtained in the three study dimensions observed in the experimental group demonstrate this for the educational institution in the case study.

The behavior by dimensions in the experimental group showed lower values in the levels of *cyberbullying* in the post test in relation to the pretest in the three dimensions after the application of the Program, so the percentage differences observed in the descriptive analysis were satisfactory. better, firstly, in the *impersonation dimension*, then in the *electronic insults dimension* and finally in the *exclusion dimension*.

Additionally, in the analysis by dimensions it was found that before applying the program, the control group does not differ in terms of its average scores from the experimental group, since all its significance levels exceeded 5%. Quite the opposite happens after applying the strategies, in which there are differences in each of the dimensions with zero or almost zero asymptotic significance in the three dimensions. In this way, the hypothesis proposed was accepted: "The application of the socio-emotional strategies program significantly improves the dimensions: Electronic insults, impersonation, exclusion in the experimental group."

In general, the averages displayed before applying the program do not differ in the control and experimental groups, as corroborated by the hypothesis test carried out. On the other hand, in the post-test a significant difference is observed in terms of the averages, less in the experimental group than in the control group. Allowing the general hypothesis to be accepted: "There is a significant influence of the socio-emotional strategies program to reduce *cyberbullying* in high school students of a public institution, Ecuador 2023."

In this regard, Fonseca (2019) demonstrated that the application of a socio-emotional skills program in the prevention of aggression among eighth

grade students in a public school in Chiclayo, caused a decrease of 59.3% in physical attacks and 37 % in psychological attacks. These findings support the claim that the implementation of the program had significant effects in reducing aggression among students.

Additionally, in Rodríguez, *et al.*, (2018), it was shown that the application of the SEA program, of socio-emotional skills in basic students, focused on the adaptation and regulation of emotions, denoted a notable advance in the development of the socio-emotional skills of students, with an asymptotic significance close to 0 (0.01). A fundamental growth was evident in the students' capacity for empathy, assertiveness and emotional control.

On the other hand, in Chuquiray (2022), it was also demonstrated that the application of the "Strong Families" intervention program in the development of socio-emotional skills in secondary education students had a significant effect on the development of these skills in the students. which agrees with the results obtained in the present study.

Furthermore, regarding digital literacy in the prevention of cyberbullying in students of an Educational Institution in Phara, Rodríguez (2021), demonstrated that the application of the program through a pre-experimental design and convenience sampling, composed of 15 students, has a positive effect on the prevention of cyberbullying in said educational institution.

These findings support the claim that the implementation of the program had significant effects in reducing aggression among students.

These reflections appear as background and validation of the present research and corroborate the results obtained where changes can be expected in the lifestyles and environments in which students at this basic level operate.

Guevara, *et al.*, (2020) highlight the importance of incorporating socio-emotional strategies in educational institutions to prevent problematic behaviors and promote an environment of respect and tolerance. These strategies focus on promoting emotional control, both in students and teachers, and promoting healthy internal coexistence.

Rodríguez, *et al.*, (2020), conducted research with the purpose of collecting information about the frequency of cyberbullying and the role that social skills, empathy, and self-esteem play in predicting cybervictimization and cyberaggression in two countries: Spain and Ecuador. The sample included a large number of elementary school adolescents (Spain = 14,206 and Ecuador = 10,737). The results revealed that in Spain 8.8% of adolescents were cybervictims, 3.1% were cyberaggressors and 4.9% were cybervictims-cyberaggressors. In Ecuador, 8.7% were cybervictims, 5.1% were cyberaggressors and 14.3% were cybervictims-cyberaggressors. Concluding that cyberaggression could be predicted in both countries through empathy, assertiveness and conflict resolution skills.

In summary, after a reflective and critical evaluation of the results derived from the implementation of the Socio-emotional Strategies Program, the impact of said program on reducing the levels of *cyberbullying* at the upper basic level of the educational institution under study is evident. For subsequent studies that follow up on the topic for the sake of its relevance and greater validity, it would be advisable to extend the study to a probabilistic sample representative of the population under study.

By way of conclusion, it can be said that the results obtained constitute a practical proposal with significant impact for the reduction of *cyberbullying* in high school students of a public institution in Ecuador.

The statistical methods used allowed us to detect significant differences before and

after the intervention; however, extending the study to a representative probabilistic sample of the population could be useful in the subsequent validation of the results.

The methodology used allowed us to analyze the effect of the intervention, through a program of socio-emotional strategies in upper basic level students, highlighting the impact on the three study dimensions observed in the experimental group with respect to the control group.

REFERENCES

- Chuquiray, M.E. (2022). Programa familias fuertes para desarrollar habilidades socioemocionales en estudiantes de secundaria de una institución educativa pública de Lima, 2022. Repositorio Institucional: Perú. https://repositorio.ucv.edu.pe/bitstream/handle/20.500.12692/108032/Chuquiray_DPME-SD.pdf?sequence=1&isAllowed=y
- Estévez, E., Flores, E., Estévez, J., y Huescar, E. (2019). Programas de intervención en acoso escolar y ciberacoso en educación secundaria con eficacia evaluada: una revisión sistemática. *Rev. Latinoam. Psicol.*, 51(3), 210-225. <https://doi.org/10.14349/rlp.2019.v51.n3.8>
- Fonseca, O. (2019). Programa de habilidades sociales para prevenir la violencia escolar en los estudiantes de segundo grado de educación en la Institución Educativa N 1649 "Eloy Soberon Flores" San Igancio. Repositorio Institucional Universidad César Vallejo: Perú
- Gulliana, L.P. (2023). Acoso escolar cibernético en el contexto de la pandemia por COVID-19. *Revista*

- Cubana de Medicina, 59(4), 1362.
<http://revmedicina.sld.cu.med.artic le.view>
- González, K.J., Fernández, E.R., Vera, V.G., Otiniano, M.Y., y Calvanapon, F.A. (2022). Cyberbullying un enemigo invisible en adolescentes: una Revisión Sistemática. (Ponencia). 2nd. LACCEI International Multi-conference for Engineering, Education and Technology. Virtual Edition. <https://laccei.org/LEIRD2022-VirtualEdition/full-papers/FP176.pdf>
- Guevara, C., Rugerio, J., Hermosillo, Á., y Corona, L. (2020). Aprendizaje socioemocional en preescolar: fundamentos, revisión de investigaciones y propuestas. *Revista electrónica de investigación educativa*, 22. http://www.scielo.org.mx/scielo.php?pid=S1607-40412020000100126&script=sci_arttext
- Moya, A. y Moreta, R. (2022). Víctimas de cyberbullying y su influencia en las dificultades de regulación emocional en adolescentes del Ecuador. *Psychology, Society & Education*, 14(1), 6775. <https://doi.org/10.21071/psye.v14i1.14066>
- Nguyen Thao, N. y Guerra Rubio, L. M. (2021). El Cyberbullying como reto para la Educomunicación. *Alcance*, 10(26), 173197. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2411-99702021000200173
- Pinedo, G., (2020). Actividades socioemocionales para mejorar el aprendizaje de niños y adolescentes de la institución educativa18037. Repositorio Institucional Universidad César Vallejo: Perú
- Redondo, J. (2023). Variables asociadas al fenómeno del cyberbullying en adolescentes colombianos. *Revista de Psicología (PUCP)*, 41(1), 219-239. http://www.scielo.org.pe/scielo.php?pid=S0254-92472023000100219&script=sci_arttext
- Rodríguez, L., Orejudo, S., Celma, L., y Cardoso, M. (2018). Mejora de las competencias socioemocionales en el aula, con jóvenes de Educación, mediante el programa SEA. *Electronic Journal of Research in Educational Psychology*, 16(3), 681-701. <https://doi.org/10.25115/ejrep.v16i46.2241> , <https://zaguan.unizar.es/record/76905>
- Rodríguez, A.J., Mero, O., Solera E., Herrera, M., & Calmaestra, J. (2020). Prevalence and psychosocial predictors of cyberaggression and cybervictimization in adolescents: A Spain-Ecuador transcultural study on cyberbullying. *PLoS ONE* 15(11): e0241288. <https://doi.org/10.1371/journal.pone.0241288>
- Rodríguez, W. (2021). Influencia del programa de alfabetización digital sobre la prevención del ciberacoso en estudiantes de una institución educativa de Phara, 2021. Repositorio Institucional Universidad César Vallejo: Perú https://repositorio.ucv.edu.pe/bitstream/handle/20.500.12692/70202/Rodriguez_%c3%91W-SD.pdf?sequence=1&isAllowed

Valencia, J.C. (2021). Educación + TIC:
¿Un cambio de época? Cienfuegos:
Editorial Universo Sur.

Conflict of interests:

The authors declare not to have any interest conflicts.

Authors' contribution:

The authors participated in the design and writing of the article, in the search and analysis of the information contained in the consulted bibliography.

Cite as

Mora Torres, JV., Mejía Flores, OG., Nivela Cornejo, MA., Santillán López, LG. (2024). Social-emotional approaches to reduce cyberbullying in upper secondary education students. *Mendive. Journal of Education*, 22(1), e3700.
<https://mendive.upr.edu.cu/index.php/MendiveUPR/article/view/3700>



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).