Mental Health in Innovation: Mobile App and Bullying

Genesis Dayana Pinto Almeida[1]*, Grace Alexandra Guamán Cayachi[2], Tannia Judith Medina Martínez[3] and Flor Karina Freire Jumbo[4]

[1]High School "Nuevo Mundo", Ambato, Ecuador

[2]High School "Padre Renato Selva"

[3]High School "Nuevo Mundo", Ambato, Ecuador

[4]University Technical of Amato, Ecuador

*Corresponding Author: Genesis Dayana Pinto Almeida, High school "Nuevo Mundo", Ambato, Ecuador.

Abstract

The following research paper deals with the technology in mobile phones to identify school bullying in students who are constantly raped, which can be reflected verbally, psychologically, physically and virtually through social networks. The study focuses on verifying the use of technology in health and harassment in schools by identifying conflicts between teachers and students and between students, in order to create an application to generate empathy in the classroom. The type of methodology is experimental - exploratory analyzing causes and effects, while the quantitative approach that attempts to arrive at a deductive process predominates. With regard to the collection of information, the questionnaire is used as a tool and the survey as a technique for students in the ninth grade of basic general education, as is the T.A.M. method. (Technology acceptance model). Therefore, the "AfriEndly" application proved satisfactory with-in the research according to the T.A.M. method, which revealed that the technology is accepted within the study population.

Keywords: Application; Mobile health; Mental health; Bullying; Educational harassment; mobile applications; mobile health; self-esteem

Introduction

[1] In his research " Teachers' Training: From Pedagogical Tradition to Virtual Learning Environments," highlights the creation of virtual spaces according not only to the subject, but also to the current context, suitable scenarios for the student, teacher and the conformity of parents. ICTs not only contribute to an improvement towards education as the simple fact of imparting knowledge, but also to a refinement to access various intelligences such as emotional intelligence, which is deeply investigated in the teacher, because by being emotionally intelligent it favors the teacher's learning. the educational community, providing solutions focused on technology, from the current context of its environment leading to psychological and learning problems [6].

Thus, in the face of the health emergency due to COVID 19, it has caused chronic illnesses and even death, for which reason society has been forced to lead a life through virtuality, stressing the importance in educational, employment and even social continuity, from that time onwards. society has become a subject of transformation moving from paper to computer or cellular. Information and communication technologies (ICT) are therefore highlighted in education as a strategy for improving quality and adapting to the current environment, and this would require changes not only in methods, but also in instruments, i.e. in the use and benefit of education.

control and management of communication and information technology [1].

Additionally [2] some research has demonstrated the results of mobile well-being applications towards the subject, concluding that they often provide tolerance within distress, security within crisis, as well as future projection towards opportunities for improvement. emotionally and most importantly feel support in front of a mobile health app. For that reason, applications motivated to contribute to the well-being of mental health as well as physical, must consider factors that protect the subject, promoting personal worth, increasing self-esteem, as well as interpersonal relation-ships, in addition to recognizing his own achievements and recognition of the need for professional assistance, which leads to an openness to experience within one's own communication skills. Bullying School bullying has no gender, it can be male or female; nor time, as it was evident from the biblical case of Cain and Abel, in which there was physical violence by a sibling; nor age, since it can be present in children, young people and adults, and involves anyone person who mistreats physically, through beatings; verbally, using insults to intimidate cyber, with manipulation of social networks, as most abuses occur at an early age, usually against the weakest person, implying unequal violence for obvious differences [4].

Because of the presence of school bullying, according to [3], three criteria should be considered: the first is when a negative event against a child occurs repeatedly; the second, there must be instability in both the bullyer and the victim; and the third, consequently, a discrepancy develops between the two. This investigation, after collecting data, revealed cases where there is almost no intervention by teachers and parents, with consequences of suicides, including firearm revenge attacks, on the part of the harassed.

According to [3], if school bullying is to be combated, it is essential to point out the role that each teacher must play, as well as to consider that interrelationships are important so that those involved, such as the harassed, the victim or pedagogue, can develop, put forward projects and projects. have resources that contain the aim of participatory intervention by those involved, addressing cooperative changes in the environment and context in order to avoid school violence.

Self-esteem is associated with mental health, as it is the comfort it provides to a person's personality; however, without such health, the consequences become serious, such as drug addiction and abuse, as well as school failure, loneliness and other problems moreover, with the passing of time and without professional help, they worsen, resulting in a negative self-assessment, in which they may come to be considered insecure and incapable, provoking susceptibility to criticism and responding ineffectively to their surroundings. social is to be an important external factor, since one person's perception of the other is estimated and influences his well-being [5].

Methodology

The A.D.D. methodology was used for the development of the study. I.E: Analysis; Design; Development; Implementation; and Evaluation.
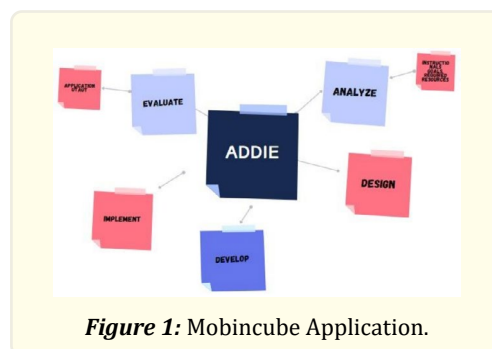

Figure 1: Mobincube Application.

Analysis: We analyzed as a pre-test the structured questionnaire addressed to students of ninth grade E.B.G. applied during hours of virtual classes. For this, the Mobincube tool was an important factor to consider within the study, since it helped develop an effective and feasible free app according to various users of YouTube platforms.
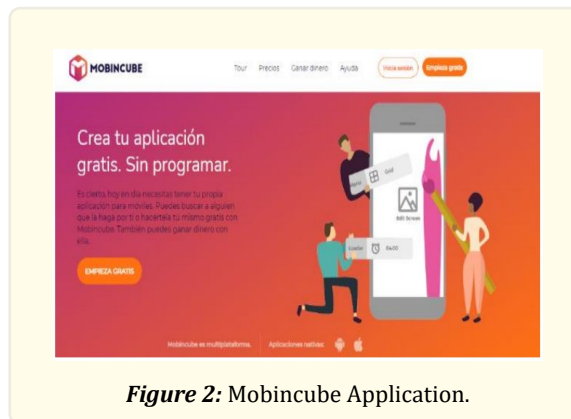
Figure 2: Mobincube Application.

Design: The purpose of the Mobincube interface is to interact the operation of other systems in an easy way according to their use and effective between subject-computer, which was conceived of relevance in generating an interface not only feasible to use, but also optimum to any individual of different age. For this purpose, in the development of the app a "Menu" was considered with 4 important buttons, such as the harassment detector, the attacker, the victim, the suggestions the app provides and the credits.

Development: Mobincube offered us a free and easy-to-use software, thanks to the fact that it is not mandatory to insert code and whose development was with block programming, accessing interfaces with interactive images, icons, text and tables.

Figure 3: Main menu-Harassment Detector Developed.

Harassment Detector: The main menu consists of a button called "Harassment Detector," which leads to a "Test" web page, which gets seven questions that the user can answer in order to get at the end of the survey a result, i.e. the page will help you to know if you suffer from bullying or not.

Figure 4: Suggestions Developed.

Suggestions: The option called "Recommendations" leads to a new screen showing us two images, the young people guides us to a screen of suggestions that students can make if they suffer from harassment, while the teacher's image sends us to a screen where he suggests their harassment inside the screen.
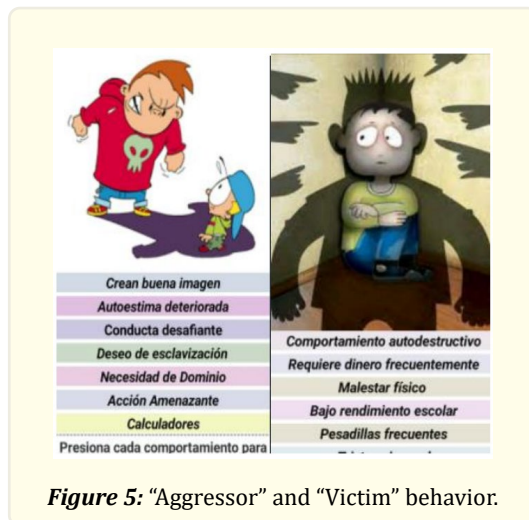

Figure 5: "Aggressor" and "Victim" behavior.

Aggressor: Consists of a representative image of the aggressor and below it is seven behavioral traits that the aggressor possesses, the instant that the text of each descriptor is crushed leads to a new page where it describes each of these characteristics. Victim: it consists of an image representative of the harassed person and beneath it is the behaviors that the victim usually has. Similarly, as soon as each textual feature is crushed, a new screen is opened specifying and detailing the attitude.

Seek help: Within this option is the emergency number known as 911, so that students can call when they feel intimidated.

Evaluation: The development of the T.A.M (Technology Acceptance Model) methodology was considered fundamental in order to determine whether the application was rejected or accepted within the study population, in order to investigate the impact of technology on society and how the population perceives such utility.
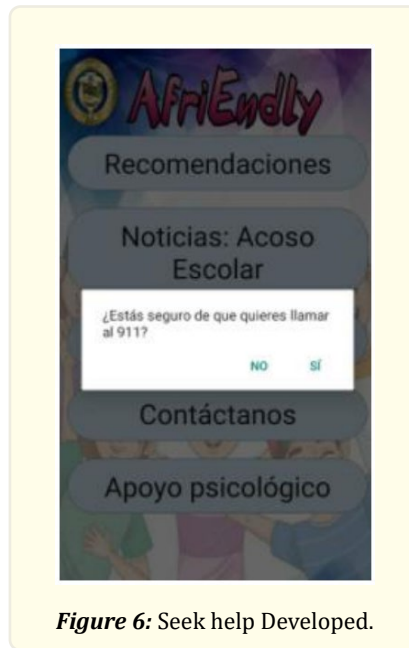
Figure 6: Seek help Developed.

Results

Learning to use gamification and technology tools easy for me?

Items	Frequency	Percentage
Totally Disagree	9	7,7
Disagreement	12	10,3
Undecided	19	16,2
Agree	39	33,3
Totally agree	38	32,5
Total	117	100,0

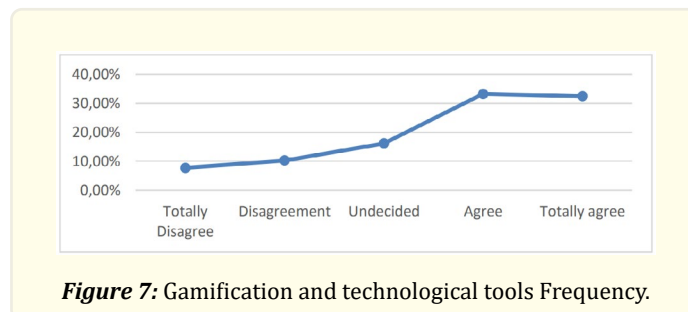**Table 1:** Gamification and technological tools Frequency Percentage.

Figure 7: Gamification and technological tools Frequency.

Analysis and Discussion

Out of a total of 117 students representing 100% of the sample, 33.3% equivalent to 39 students agree that the use of technological tools is easy to use, 32.5% totally agree, 16.2% undecided, 10.3% disagree total disagreement with the 7.7 per cent reported by nine pupils. This allows us to recognize within the research that the majority of E.G.B. ninth students agree that learning to use gamification and technology tools is easy.

How often have you been offended by comments made by your friends, either through social media or in person?

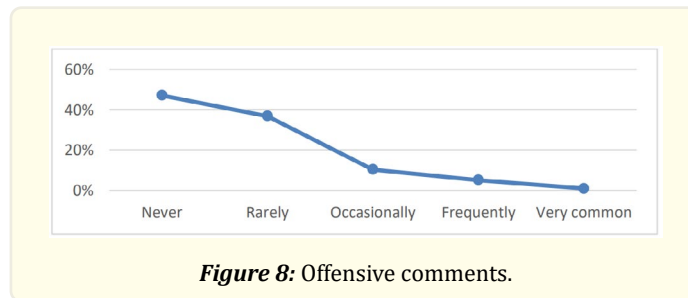| Items	Frequency	Percentage
Never	55	47,0
Rarely	43	36,8
Occasionally	12	10,3
Frequently	6	5,1
Very common	1	,9
Total	117	100,0

Table 2: Offensive comments.

Figure 8: Offensive comments.

Analysis and Discussion

Out of a total of 117 students corresponding to 100 per cent of the sample, 47.01 per cent equivalent to 55 pupils have never been offended by any comment, 36.75 per cent rarely, 10.26 per cent occasionally, 5.13 per cent frequently reported by 6 pupils and 0.85 per cent very often reported by 1 pupil. This allows us to recognize within the research that most of the ninth E.G.B. students have been offended by some comments made by their peers, either through social media or in person, yet 43 of them indicated that they have rarely been disgusted by any comments.

Are you aware of an app that detects bullying in schools or identifies bullying?

Items	Frequency	Percentage
Yes	8	6,8
No	109	93,2
Total	117	100,0

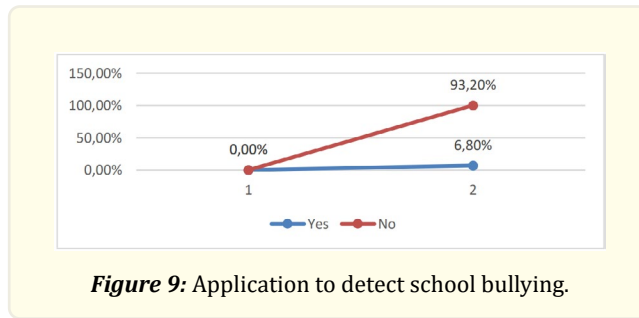*Table 3:* Application to detect school bullying.

Figure 9: Application to detect school bullying.

Analysis and Discussion

Out of a total of 117 students, representing 100 per cent of the sample, 93.16 per cent, representing 109 students, pointed out that they were not familiar with any application to detect harassment and 6.84 per cent indicated that they were aware of it. This allows us to recognize within the research that the majority of students in the ninth year of E.G.B. have no knowledge of any application that detects bullying in schools or identifies bullying.

Verification of hypotheses

For this research it was relevant to check through the Kolmogorov-Smirnov statistician or K-S, through the two questions representative of the study of the research; the questions are based on the object of study and the results manifested by the experiment. Question number 17 Have you heard the term Mobile Health? identified with the Mobile Health variable and question 5 How often have you been offended by a comment made by your colleagues, either through social networks or in person? represented by the Dependent Variable (School Harassment).

Have you heard the term Mobile Health?			***How often have you been offended by some comment made by your friends, either by Mo-bile social media or person***
N		117	117
Normal parameters[a,b]	Media	1,94	1,76
	Standard deviation	,238	
More extreme differences	Absolute	,539	,897
	Positive	,401	,272
	Negative	-,539	,272
Z de Kolmogorov-Smirnov		5,834	-,198
Sig. asintót. (bilateral)		,000	2,941
a. The contrast distribution is Normal.			
b. They have been calculated from data.			

Table 4: Kolmogorov-Smirnov test for a sample.

Conclusions

Bullying is a relevant factor to be observed in classrooms, since the consequences it causes on students such as physical, verbal, psychological and today cyber-assaults are serious, as they can cause physical discomfort, stress, stomach and even head-aches, constant nightmares, underperformance and exclusion in the classroom.

Usually, the victim who is subjected to various forms of violence by his or her aggressor suffers silently, as self-esteem and energy deteriorates with each aggression and humiliation. Students in the three ninth-grade parallels of General Basic Education do not suffer from harassment from teachers teaching classes during the aca-demic period, however, he was able to identify that occasionally the majority of students feel intimidated by their friends.

Technology nowadays is used not only for interaction, but also for recommendations of various topics that applications typically provide. Thus, the application developed was in order to create a guide to help the victim, recommending various ways of help such as telephone numbers, and was even a guide for teachers to know the different actions they can take to avoid harassment and foster empathy.

References

1. JJS Miranda, AG Polo and AM Rodríguez. "Teachers' Training: From Pedagogical Tradition to Virtual Learning Environments". RIDE. Iberoam. Investig. Desarro (2020).
2. AAJLCa. VB Mishra. "Health record management system-A Web -based Application". Journal of ISMAC 4 (2022): 301-313.
3. SaJSR Smys. "Future Challenges of the Internet of Things in the Health Care Domain-An Overview". Journal of Trends in Computer Science and Smart Technology 3.4 (2022): 274-286.
4. YC Diaz. "El Acoso Escolar: Bullying". Redalyc (2019): 13.
5. SP González. "Metaphors for teachers' roles in a bullying at school intervention". Psicoperspectivas 11 (2019).
6. NIGAL Fuentes. "Autoestima, Optimismo y Resiliencia en Niños en Situación de Pobreza". Revista Internacional psicológica (2019).

Volume 4 Issue 6 June 2023