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# Comparative Study of Phubbing between two Latin Public Universities

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#### Abstract

The objective of this study was to know the levels of phubbing in higher education students, from two countries of the American continent, to know if they are similar and if there is a correlation with some demographic and school variables, to determine some areas of opportunity that allow them to be minimized. A quantitative approach was used, using a measurement instrument developed by Cao, Jiang and Liu (2018). The sample was made up of 107 students from each participating university. Thus, it was possible to know that more than 40% of the participating university students, from both countries, agreed that they use the cell phone in class to attend to personal matters without the consent of the teacher, in addition to finding a strong association between the dimensions of the phubbing with age, gender, and academic status. It can be concluded that phubbing presents similarities between Mexican and Colombian students, since the percentages of cell phone misuse, especially in class and without the consent of the teacher, evidencing an upward trend in the short term if they are not established emergent care strategies. Likewise, it was possible to identify associations between the dimensions of phubbing with some personal and school characteristics of the respondents, which opens the door for future research.

**Keywords:** Phubbing, college students, cell phone use, academic status, Latino public universities.

### Introduction

The mobile phone is driving one of the most important technological revolutions in human history, as there are more mobile phones in use today than people, but measuring the number alone trivializes the importance of the mobile phone to those who rely on it. in it. Surveys have shown that people would rather eat less than give up their mobile phones. People who forget their phone at home will come back to retrieve it, but choose to go on without their wallet.

The Supreme Court of the United States has ruled that a mobile phone is an integral part of a person, an extension of their personality (Harris & Cooper, 2019). There has been considerable euphoria around smartphones and their ability to make mobile Internet access a reality for previously disconnected communities, offering them exciting possibilities in terms of communication, education, health, and consumer services (Lim & Loh, 2020).

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In the educational sector, cell phones are an open door for students to have free and instant access to universal knowledge, which is why in Mexico most of the students, especially in the university environment, make use of a smart cell phone as part of their learning tool, which allows them to access all kinds of content, socialize, and stay informed in a practical and easy way (Sánchez & Calderón, 2021).

In Colombia it is known that the social phenomenon of phubbing has also increased due to the growing demand and supply of mobile technology, which has caused a new way of relating, especially among university students (Medina, 2016). Despite the multiple benefits that cell phones can offer, there are negative aspects associated with the health and well-being of people, especially in young people, since it generates addiction to the Internet and problems derived from mobile communication by reducing friction. (Chotpitayasunondh & Douglas, 2016).

Likewise, it is common for parents or those responsible for the education of young people to exercise minimal supervision over the content and use that they give to smartphones, especially in school environments, which can also generate serious problems in their professional education, and pose risks to physical and mental health (Chávez-Arcega, 2015; Peralta, 2018; Villani et al., 2018).

Finally, with the present study we intend to know the levels of phubbing in higher education students in two countries of the American continent, to know if they are similar and to analyze the possible correlation with some demographic and school variables.

## Theoretical Reference

For several decades now, the human being has faced several industrial revolutions whose technology has been changing at an accelerated pace, bringing with it positive and negative consequences. One of the aspects that have greatly influenced society is the way we communicate, since today we have digital platforms and sophisticated equipment that require extraordinary skills to be able to use these new scenarios.

Over time, young people become more dependent on electronic devices, especially smartphones, generating barriers to direct social interaction with people and taking refuge through a screen, which generates anxiety problems as time goes by dependency, addiction and in the educational field, stressful situations that generate conflicts in the teaching-learning process (Simanowski, 2018; Guzmán-Brand & Gelvez-García, 2022).

Young university students, by being aware of their cell phones at all times, mainly from social networks, its impact begins to affect their personal and offline lives. This is evident, above all, in his academic performance; because many students put aside their jobs to stay on their social networks (Haji, 2020).

Smartphones play an important role in our lives thanks to the opportunities they offer in terms of access, interaction and communication. However, in addition to these positive aspects, smartphones have become objects of dependency due to games, social networks and Internet access and are beginning to impair the quality of face-to-face communications between different individuals. (Erzen, Odaci & Yeniçeri, 2021).

## The Phubbing

Phubbing is a term used to despise or slight one person to another by displaying behavior that involves ignoring someone by paying attention to the cell phone and avoiding direct

interaction. This concept is also associated with the act of looking at the mobile phone instead of having verbal and visual contact with another person (Murray, 2018; T'ng, Ho, & Low, 2018).

Phubbing can be described as a person looking at their mobile phone during a conversation with other people, handling the mobile phone, and escaping from interpersonal communication (Karadağ et al, 2015). Also like snubbing someone in the middle of a face-to-face conversation by using smartphones instead of paying attention (Sun & Samp, 2022).

Phubbing is made up of various aspects or elements, since smartphones contain various applications such as: telephone lines, Internet browsing, emails, messaging platforms, electronic games, access to web pages from different social, economic, political and cultural sectors., as well as a wide range of communication and recreation (Hernández, Duana & Hernández, 2020).

Mobile phones are a double-edged sword, as on one hand, users enjoy the benefits it brings and on the other, it also causes some social communication and physical health problems. The phenomenon of phubbing is especially an epidemic among college students (Cao, Jiang & Liu, 2018).

The risks that they can represent for our societies today due to the excessive use of these technologies are: diseases such as obesity caused by spending many hours sitting in front of the computer or playing video games, or psychological damage such as nomophobia, which is the fear of leaving home without the mobile phone or phubbing, which is the behavior of individuals to ignore people by answering phone calls on the mobile phone or answering messages on networks (Téllez, 2017).

Although universities in many parts of the world base their education on the use of technological communication resources, even more so with the recent covid-19 pandemic where online classes had to be implemented, this does not imply that university students can transform an important tool didactic support in a distracting device, which can affect their academic performance (Capilla & Cubo, 2017).

The evolution of technology in the field of education has been very important in the use of tools for the development and use of teaching materials, the knowledge that is taught in classrooms with the support of specialized software and hardware offer better learning alternatives for the students.

It is common for mobile phones to be used by students to consult some specific material, solve an exam or access educational platforms, although they also often become distracting. Sometimes teachers have to deal with their students in class, since it is common for them to get distracted by sending personal text messages, playing games or simply accessing their emails to attend to some personal situation, which is known as phubbing and negatively influences the learning environment (Thseen, 2020).

### **Studies Carried**

Currently, only a few studies on phubbing have been carried out at the national level, others at an international level (Davey, Davey, Raghav, Singh, Singh, Blachnio & Przepiórkaa, 2018; Güliz & Koç, 2015; Hernández, 2020; Rafael & Ramírez, 2016; Ruiz-Palmero, Sánchez-Rodríguez & Trujillo-Torres, 2016; Rodríguez & Clariana, 2017).

Studies reflect an increase in the use and abuse of cell phones, mainly in populations of young university students, which has had an effect on their academic performance and social life (partner, family, friends).

There is still a gap in the literature, since the reasons why a young student commits acts of phubbing are not the same as those of an adult, even the environment or sector also influences. That is why what is intended with the study is to begin to identify some motivators or reasons why university students commit phubbing in class and their relationship with some demographic and school variables.

Mexico presents educational problems similar to Latin American countries, as is the case of Colombia, for which the opportunity and interest was obtained to carry out the study in two public universities where students take common degrees and thus better understand these phenomena.

Colombia is a Latin American country with educational characteristics similar to Mexico, as well as very similar problems. Phubbing has been studied in both countries, but in an isolated way, that is, no comparative studies have been carried out, so it is important to be able to contribute to this research.

This study presents the main findings of an analysis on phubbing among undergraduate students from two public universities, one from Mexico and the other from Colombia, as well as some descriptive data on the level at which they are found and whether there is a correlation with some demographic variables. and schoolchildren.

## **Hypothesis**

**H<sub>1</sub>:** The phubbing level of students from public universities in Mexico and Colombia is very similar and its value is above 40%.

**H<sub>2</sub>:** Phubbing has a significant relationship with some demographic variables in university students from Mexico and Colombia.

Finally, the answer to each hypothesis is made through descriptive calculations through measures of central tendency and analysis of correlations between the phubbing model and the demographic and school variables.

#### Method

The main objective of the research is to know the levels of phubbing in students of the higher level, from two countries of the American continent, to know if they are similar and if there is a correlation with some demographic variables, to determine some areas of opportunity that allow them to be minimized.

The research design, according to Hernández, Fernández & Baptista (2010), has a quantitative approach, since a problem is posed and numerical data of the objects or phenomena are used and analyzed through statistical processes. The scope is descriptive-correlational because it seeks to specify properties, characteristics and important features of any phenomenon that is analyzed, in addition to the trends of a group or population, as well as to find if there is an association between variables. It is observational, since there was no interference from the researchers, that is, they were limited to observing the phenomenon as it appears in its nature.

It is transversal because the object of study is evaluated at a single moment and determined time

The population that was defined as the object of study was made up of 150 students only from the first three semesters, since it is where there is the highest rate of failure and learning problems, which are currently enrolled in the Bachelor of Business Administration, from from which a sample of 107 cases was obtained, using a formula for finite populations [1] proposed by Castañeda, De la Torre, Morán & Lara (2002) based on the establishment of criteria such as: a confidence level of 95 %, maximum variability and a permissible error of 5%. As described in Equation 1:

$$n = \frac{z^2 pqN}{Ne^2 + z^2 pq} \qquad n = \frac{(1.96)^2(.5)(.5)(150)}{(150)(.05)^2 + (1.96)^2(.5)(.5)}$$
[1]

The measurement instrument to measure phubbing was applied between September and November 2022, and a translation of the one developed by Cao, Jiang & Liu in 2018 was used, which consists of 14 questions, some of them measured on a Likert scale. of five options that go from a lot to nothing and others with pre-established answers. The demographic and school variables included in the applied questionnaire were: age, gender, socioeconomic level, semester, academic status (regular/irregular) and shift,

The measurement instrument was applied independently and separately in two public universities in Mexico and Colombia, which for reasons of confidentiality were not authorized to disclose their names. Based on the facilities received by the directors of educational institutions, a probabilistic sampling without replacement was taken as a criterion (Hernández, Fernández & Baptista, 2010).

The pilot test was carried out considering 10% of the population, which allowed refining the questionnaire and verifying its internal consistency, which was measured through Cronbach's Alpha coefficient, the average of which was obtained between the two countries that participated in the test. study was greater than 0.800, which is considered statistically acceptable, as indicated by Hernández, Fernández & Baptista (2010). The validity of the instruments was supported by their application in research carried out with populations similar to the one used for the present study.

## **Results Analysis**

The results of the research are presented in two moments, first the phubbing levels are obtained to know the similarity that exists between the two countries, then it is analyzed if there is a significant correlation with some demographic and school variables of the students in the two universities. public.

Regarding phubbing, Table 1 shows the level of influence that cell phones have on the lives of students and the situation in which they use it the most. Perhaps no one could believe nowadays that our life depends a lot on mobile phones. At least that is how more than 80% of the students from both countries who participated in the study perceive it, that is, almost 190 of the 214 respondents.

Table 1, referring to the first dimension of the phubbing model, alludes to the greatest situations in which university students are prone to use phones. In the case of Mexico and Colombia, the highest percentage appears in the time they use to study or work, with 25.2%

(27 cases) and 28.0% (30 cases), respectively. Additionally, for Mexican students, 23.4% (25 cases). In third place, the boys require the Smartphone as a transit guide, presenting 11.2% (12 cases) and 18.7% (20 cases) in the aforementioned order. The results directly and strongly support the idea that with the development of technology, the influence of phones is gradually prominent.

Additionally, some more details that point to the great influence of mobile phones. Mexico and Colombia agree that more than 47% and 60% (51 and 65 cases) of students spend 3 to 5 hours on their mobile phones a day. According to the survey, almost 30% (32 cases) of Mexican students use it from 5 to 8 hours and only 14% (15 cases) more than 8 hours, while Colombian students only 18.7% (20 cases). and 9.3% (10 cases), in the same items mentioned above. All this means that the Smartphone covers approximately one third of a student's daily time, from when they wake up to when they go to sleep. Mexican and Colombian students agree in almost 80% (85 cases) that they always carry their phones with them even if they only leave for a moment (30 minutes).

Table 1 Phubbing in Students (Dimension One).

Traits	<b>Mexico</b> 88.0%		Colombia 84.0%	
Influence of cell phones				
In which situation do you use your cell phone the	%	#	%	#
most?				
Study or work	25.2	27	28.0	30
transit guide	11.2	12	18.7	20
In the food	23.4	25	13.1	14
before and after sleep	18.7	20	23.4	25
All previous	21.5	23	16.8	18
Daily cell phone use	%	#	%	#
less than 1 hour	2.8	3	1.9	2
More than 1 and up to 3 hours	5.6	6	9.3	10
More than 3 and up to 5 hours	47.7	51	60.7	65
More than 5 and up to 8 hours	29.9	32	18.7	20
more than 8 hours	14.0	15	9.3	10

Note: Own Elaboration Based on the Results of the Investigation.

Table 2 shows that more than 70% (75 cases) comment that a day without a cell phone will make them feel uncomfortable to varying degrees. The fact that more than 13% (14 cases) would be willing to return home for their device if they forget to take it stands out. Students' dependence on the Smartphone is evident and also illustrates the great influence it exerts on them.

The research shows that 41.1% (44 cases) of Mexican university students use cell phones to communicate through short messages, while 51.4% (55 cases) of Colombians surveyed prefer social networks. In this area, it is striking that less than 15% in both countries chose face-to-face communication, which shows that the irruption of Smartphone technology has weakened the use of traditional communication channels.

Finally, in relation to the purpose of having a cell phone, the majority (more than 50%) agreed on the options of social networks, calls and messages. These answers can have a very important connection in the levels of phubbing that often occur in any educational setting, since, as can be seen, the academic question is in the background.

Table 2 Phubbing in Students (Dimension Two).

Traits	Mexico		Colombia	
Need to carry the cell phone everywhere	78.0%		82.0%	
How is your day if you forget your cell phone?	%	#	%	#
Equal	11.2	12	7.5	8
A bit difficult	48.6	52	23.4	25
Difficult	23.4	25	54.2	58
I return home for him	16.8	18	13.1	14
Don't know	0.0	0	1.9	2
Preferred communication	%	#	0/0	#
Social networks	35.5	38	51.4	55
Short messages	41.1	44	29.9	32
Mail	7.5	8	9.3	10
Face to face	14.0	15	9.3	10
Other	1.9	2	0.0	0
Purpose of the cell	%	#	%	#
Find information to study	18.7	20	28.0	30
Videos – music	16.8	18	11.2	12
Social networks	33.6	36	37.4	40
Search for new information	11.2	12	9.3	10
Calls and Messages	19.6	21	14.0	15

Note: Own Elaboration Based on the Results of the Investigation.

In Table 3, 50% (53 cases) of university students in Mexico and 65% (70 cases) in Colombia are unaware of the term ningufoneo or phubbing, since they are not technically familiar with the term. Perhaps of the action of its meaning if they are aware of it, since perhaps on some occasion they have been called to their attention in class, in the library or in an assembly hall of their educational institution.

It is also observed in the first instance that more than 80% (89 cases) of Mexican students perceive phubbing with a futuristic tendency to become more popular among people, despite the fact that they are not technically familiar with the word, but with its meaning definition, while Colombian students more than 50% (57 cases) also conceive it that way.

On the other hand, we can verify that this phenomenon draws attention due to the high percentage, that is, that important strategies must be taken to combat phubbing, since the results show that almost 50% (average) of Mexican and Colombian university students They acknowledge using the cell phone in class with a certain level of frequency, without the permission of the teacher.

**Table 3** Phubbing in Students (Dimension Three).

Traits	Mexico		Colombia	
Knowledge of phubbing	50.0%		65%	
phubbing trend	%	#	%	#
more and more popular	83.2	89	53.3	57
Keep current state	10.3	11	37.4	40
less and less popular	4.7	5	9.3	10
Disappear	0.0	0	0.0	0
I have no idea	1.9	2	0.0	0

Note: Own Elaboration Based on the Results of the Investigation.

Table 4 shows that 35.5% (38 cases) of Mexican university students and 25.2% (27 cases) of Colombians agree that a time limit should be established for the use of mobile phones in the classroom., as well as a significant fraction of the students surveyed state that it is important to keep the cell phone parked and deactivate notifications when entering the classroom. These opinions are promising, as students in both countries show a positive attitude towards combating phubbing.

**Table 4** Phubbing in Students (Dimension Five).

Traits	Mexico		Colombia	
Cell phone use in class	44.0%		52.0%	
Attitude towards phubbing	%	#	%	#
mobile parking	19.6	21	35.5	38
Disable notifications	23.4	25	15.9	17
mobile time limit	35.5	38	25.2	27
schedule fixing	14.0	15	15.9	17
none	07.5	8	7.5	8

Note: Own Elaboration Based on the Results of the Investigation.

In general, the results reflect that there is an average level of phubbing of 44% in Mexican students, while for Colombian students it is 52%. In addition to this, there is a great dependence on the cell phone in different activities associated with communication, where the averages are above 50% in both countries.

## **Correlational Analysis**

Questions associated with the demographic and school environment were used in the questionnaire, so only those that had a positive correlation with some dimension of phubbing are shown.

Table 5 shows the correlation between the phubbing model with some demographic and school variables, finding that in the dimension Need to carry the cell phone everywhere there is a significant correlation with respect to the gender variable. Also in the Knowledge dimension of phubbing there is a significant correlation with respect to age. Finally, in the cell phone use in class dimension of the phubbing model, there is a significant correlation with respect to academic status.

**Table 5** Pearson's Bivariate Correlation Between the Phubbing Model and Some Demographic and School Variables (Mexico).

Phubbing dimensions	Demogra	Demographic/school variables			
	Age	Gender	Academic status		
Influence of cell phones	-0.149*	0.100	0.174**		
Need to carry the cell phone everywhere	-0.202**	-0.027	-0.091		
Knowledge of phubbing	-0.033*	0.128*	0.128*		
Cell phone use in class	-0.040	0.068	-0.028*		

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

Note: Own Elaboration Based on the Results of the Investigation.

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

## **Hypothesis Testing**

**H<sub>1</sub>:** The phubbing level of students from public universities in Mexico and Colombia is very similar and its value is above 40%.

The results shown allow us to understand that the hypothesis (H1) is partially fulfilled, that is, that the level of phubbing in Mexican and Colombian students exceeds 40% and is similar.

**H<sub>2</sub>:** Phubbing has a significant relationship with some demographic and school variables in university students from Mexico and Colombia.

Based on the results obtained, both for Mexican and Colombian students, the research hypothesis is accepted, since there is a significant correlation between the dimensions of the phubbing model with some demographic and school variables, such as: age, gender and academic status.

## Discussion

The main objective of the research was to know the levels of phibbing in higher education students, from two countries of the American continent, to know if they are similar and if there is a correlation between both constructs, to determine some areas of opportunity that allow them to be minimized.

The enormous popularity that the use of cell phones has gained in recent years and the powerful functions that they offer every day make students think that they have a great influence on their lives (Ruiz-Palmero, Sánchez-Rodríguez & Trujillo Torres, 2016), being a similar phenomenon in countries like Mexico and Colombia, which belong to the same American continent.

In averages close to 50%, university students from both countries acknowledge doing phub in class to send text messages mainly, which invites reflection on the matter to implement strategies by teachers, students and authorities, since the The phenomenon of phubbing is increasing more and more in the different academic campuses, as shown by some research carried out in various universities (Güliz & Koç, 2015; Capilla & Cubo, 2017; Cao, Jiang & Liu, 2018; Hernández, Duana & Hernandez, 2020).

The addiction to the use of cell phones is reflected in the study carried out by Mexican and Colombian students, since around 80% of the cases analyzed agreed that they consider it necessary to take the cell phone wherever they go (even if there are 30 minutes). In findings from related studies, it has been determined that said behavior could be associated with different cultural and demographic factors of the participants, that is, family dependency, installation of recreational software and various habits (Norouzi et al., 2016).

The great dependence on the mobile device can have significant consequences on social health, relationships and self-sufficiency and a significant impact for phubbers when they are in states of depression and anxiety (Davey et al., 2018).

It is important to understand that phubbing affects the school performance of students, showing positive correlations between some of the dimensions of the model with some demographic and school variables such as age, gender, and academic status.

Regarding age, it is presumed that it is when phubbing is most promoted, since customs have been accumulating since the secondary level, for which reason studies should be carried out in populations of students of the upper secondary level in order to be able to attack the phenomenon from the change to adolescence (Guzmán-Brand & Gálvez-García, 2022).

In relation to gender, there is a strong relationship between phubbing and although some studies report that there are higher levels in men than in women, perhaps because they have a greater affinity for playing games on their smartphones, these differences should be investigated in greater depth (Villafuerte & Vera, 2019).

Phubbing is related to academic status and the misuse of smartphones can have a negative influence on students, especially those who are irregular, that is, they have been taking subjects from other semesters because they failed them. Recent studies have shown that the irresponsible use of cell phones in class is reflected in their learning and therefore can affect expected academic performance.

This means that the population under study shows recurring behaviors associated with the improper use of cell phones. Although in some cases the levels are low, there is evidence that the trend goes from an average to high level, which may represent that there are cases of addiction and homophobia to smartphones and of course chronic behaviors associated with their age, gender and status. academic, which should be studied in greater depth.

Finally, having the opportunity to carry out the same study on populations of public universities at the higher level in two countries with important cultural similarities, due to being located on the same American continent, was very interesting, since it opens the opportunity to continue with research. similar ones that require new perspectives, knowledge construction and debates, which allow the exchange of strategies and practices to try to reduce phubbing, not only in the classroom, but also in the social environments where students interact, thus gradually changing the habit of using smartphones in class improperly.

#### **Conclusions**

Phubbing presents similarities between Mexican and Colombian students, since the percentages of cell phone misuse, especially in class and without the consent of the teacher, evidencing an upward trend in the short term if emerging attention strategies are not established.

With the great popularity that cell phones have today and their powerful applications and access to social networks, the students surveyed think that they exert a great influence on their daily activities of their lives, since this is demonstrated by 88% of them. Mexican students and 84% Colombians.

Most Colombian Mexican students have heard of the concept of phubbing and believe that this phenomenon will become more and more popular. According to the survey, more than 60% of college students said they mainly use phones to find information for study, watch videos, listen to music and access social media, which is probably one of the reasons for its popularity.

It was observed that less than 20% of the students surveyed, from both countries, prefer face-to-face communication, so we believe that this phenomenon of phubbing must be urgently addressed by implementing some positive actions for its control, since in the future it can influence the development and development as professionals within the business field.

Finally, there is a significant relationship between the dimensions of phubbing and some personal and school variables, which makes it possible to establish dimensions based on age,

gender and school status, making it important for future studies to begin looking for traits that could better explain this phenomenon, as well as direct actions and specific ways to alleviate it in Latino students.

## Suggestions

There may be many effective strategies to combat phubbing, so some of them that could be applied to a certain extent in the Higher Education Institutions under study are presented below.

- 1. Support university students to cultivate the good habit of cell phone use, not prohibit it, but try to sensitize them so that they can take them out in appropriate places and in cases where teachers want them to connect to consult some important information on class.
- 2. Generate a code of ethics or decalogue on the use of smartphones in different areas and academic spaces, with the participation of students, teachers and authorities.
- 3. Train and/or inform about the risks that people can develop due to the excessive use of electronic devices, such as: addiction, homophobia, isolation, introversion to speak in public, among others.
- 4. Encourage sports and recreational activities in the open air, as well as the culture of reading so that students leave their cell phones for certain periods of time.

It is important in future research on phubbing to continue studying how to reduce the effects it has by establishing preventive and intervention strategies that do not prohibit the use of cell phones and mobile devices in the classroom, but rather avoid their use. abuse and, above all, control the amount of time they are used and strengthen the self-control capacity of young people so that they use these electronic devices in a controlled manner. Phubbing is a topic that needs to be further studied due to its dynamic structure, the causes of the concept, its effects on social interaction, determinants, psychological background and its effects on the relationship (İlic & Tanyeri, 2021).

#### References

- Capilla, E. & Cubo, S. (2017). Phubbing. Conectados a la red y desconectados de la realidad. Un análisis en relación al bienestar psicológico. Revista de Medios y Educación, 1(50), 173-185.https://dx.doi.org/10.12795/pixelbit.2017.i50.12
- Cao, S., Jiang, Y. & Liu, Y. (2018). Analysis of Phubbing Phenomenon among College Students and Its Recommendations. *Journal of Arts & Humanities*, 7(12), 27-32. http://dx.doi.org/10.18533/journal.v7i12.1524
- Castañeda, J., De la Torre, M., Morán, J. & Lara, L. (2002). Metodología de la Investigación. McGraw Hill.
- Chávez-Arcega, M. A. (2015). Cómo enseñar a las nuevas generaciones digitales. Revista Electrónica de Investigación Educativa, 17(2), 1-3. http://redie.uabc.mx/vol17no2/contenido-canor.html
- Chotpitayasunondh, V. y Douglas, K. M. (2016). How "phubbing" becomes the norm: The antecedents and consequences of snubbing via Smartphone. *Journal Computers in Human Behavior* 1(63), 19-24. https://doi.org/10.1016/j.chb.2016.05.010
- Davey, S., Davey, A., Raghav, S., Singh, J., Singh, N., Blachnio, A. & Przepiórkaa, A. (2018). Predictors and consequences of "Phubbing" among adolescents and youth in India: An impact evaluation study. *Journal of Family & Community Medicine*, 25(1), 36-42.https://doi.org/10.4103/jfcm.JFCM\_71\_17

- Erzen, E., Odaci, H., & Yeniçeri, İ. (2021). Phubbing: which personality traits are prone to phubbing?. Social Science Computer Review, 39(1), 56-69. https://doi.org/10.1177/0894439319847415
- Güliz, N & Koç, T. (2015). Time for Digital Detox: Misuse Of Mobile Technology And Phubbing. *Procedia Social and Behavioral Sciences*, 1(195), 1022-1031. <a href="http://dx.doi.org/10.1016/J.SBSPRO.2015.06.491">http://dx.doi.org/10.1016/J.SBSPRO.2015.06.491</a>
- Guzmán-Brand, V. & Gelvez-García, L. (2022). Phubbing en los adolescentes un comportamiento que afecta la interacción social. Una revisión sistemática. Revista Estudios Psicológicos, 2(4), 7-19. <a href="https://doi.org/10.35622/j.rep.2022.04.001">https://doi.org/10.35622/j.rep.2022.04.001</a>
- Haji, S.A. (2020). La procrastinación consecuencia del uso excesivo de las redes sociales en jóvenes universitarios de 18 a 22 años (Tesis de maestría) Universidad San Ignacio Loyola, Lima, Perú.
- Harris, A. y Cooper, M. (2019). Mobile phones: Impacts, challenges, and predictions. *Human Behaviorand Emerging Technologies*, 1, 15-17. <a href="https://doi.org/10.1002/hbe2.112">https://doi.org/10.1002/hbe2.112</a>
- Hernández, M. (2020, 23 de abril). Procrastinar y Phubbing... cuídate de ellos para rendir y no morir en el intento. UNIACC. <a href="https://blog.uniacc.cl/proclastinar-y-phubbing">https://blog.uniacc.cl/proclastinar-y-phubbing</a>
- Hernández, T. J., Duana, D. & Hernández, J. F. (2020). The Phubbing. The interference in communication within the classroom. *Journal of Administrative Science*, 2(3), 12-17. https://repository.uaeh.edu.mx/revistas/index.php/jas/issue/archive
- Hernández, R., Fernández, C. & Baptista, M. (2010). Metodología de la Investigación. McGraw Hill.
- Ilic, U & Tanyeri, T. (2021). Is phubbing a matter for educators: A case for pre-service and inservice teachers. Malaysian Online Journal of Educational Technology, 9(1), 70-79. http://dx.doi.org/10.17220/mojet.2021.9.1.246
- Karadağ, E., Tosuntaş, Ş. B., Erzen, E., Duru, P., Bostan, N., Şahin, B. M. & Babadağ, B. (2015). Determinants of phubbing, which is the sum of many virtual addictions: A structural equation model. *Journal of behavioral addictions*, 4(2), 60-74. http://dx.doi.org/10.1556/2006.4.2015.005
- Lim, S. & Loh, M. (2020). Young people, smartphones, invisible illiteracies: Closing the potentiality-actuality chasm in mobile media. Disponible en: <a href="https://www.researchgate.net/publication/337618224">https://www.researchgate.net/publication/337618224</a> Young People Smartphones and Invisible Illiteracies
- Medina, J. (2016). El fenómeno social phubbbing y las relaciones interpersonales en jóvenes universitarios de la Facultad de Comunicación Social de la jornada nocturna (Tesis de maestría) Corporación Universitaria Minuto de Dios, Bogotá, Colombia.
- Murray, A. (2018, 8 de octubre). *Phubbing is the new workplace trend that is ruining communication*. JOBBIO.https://blog.jobbio.com/2018/10/08/phubbing-new-trend-ruining-workplace-communication/
- Norouzi, N., Mirhadian, L., EmamiSigaroudi, A., Kazemnezhad, E., Hasandoost, F. & Rafiei, H. (2016). Internet and Mobile Phone Addiction among High School Students: A Cross Sectional Study from Iran. *Journal of Nursing and Health Science*, 5(3), 31-34. http://dx.doi.org/10.9790/1959-0503053134
- Peralta E. (2018). Adolescencia Normal: desarrollo psicosocial. En Barrera F. (Ed.), Guías de práctica clínica en pediatría. (8a ed.). Hospital Clínico San Borja Arriarán. Santiago de Chile <a href="http://www.codajic.org/sites/www.codajic.org/files/publication.pdf">http://www.codajic.org/sites/www.codajic.org/sites/www.codajic.org/files/publication.pdf</a>
- Rafael, A & Ramírez, A. (2016). Procrastinación y rendimiento académico en los alumnos de la Escuela Profesional de Psicología de la Universidad Peruana Unión Filial Tarapoto [tesis de licenciatura, Universidad Peruana Unión] Repositorio Institucional. https://repositorio.upeu.edu.pe/handle/UPEU/511

- Rodríguez, A. & Clariana, M. (2017). Procrastinación en Estudiantes Universitarios: su Relación con la Edad y el Curso Académico. *Revista Colombiana de Psicología*, 26(1), 45-60. http://dx.doi.org/10.15446/rcp.v26n1.53572
- Ruiz-Palmero, J., Sánchez-Rodríguez, J. & Trujillo-Torres, J. M. (2016). Utilización de Internet y dependencia a teléfonos móviles en adolescentes. Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud, 14(2), 1357-1369. http://www.scielo.org.co/pdf/rlcs/v14n2/v14n2a33.pdf
- Sánchez, P. & Calderón, G.Y. (2021). Diferencias en el uso del dispositivo móvil entre estudiantes de secundaria y universidad en México. Revista Iberoamericana para la Investigación y el Desarrollo Educativo, 12(22), 1-16. https://doi.org/10.23913/ride.v11i22.932
- Simanowski, R. (2018). Sociedad de Facebook. Perdernos En Compartir Nosotros Mismos. Editorial Editores de Columbia University.
- Sun, J., & Samp, J. A. (2022). 'Phubbing is happening to you': examining predictors and effects of phubbing behaviour in friendships. Behaviour & Information Technology, 41(12), 2691-2704. https://doi.org/10.1080/0144929X.2021.1943711
- Téllez, E. (2017). Families and Technologies. What about the Phubbing in Mexico? *Horyzonty Wychowania*, 16(37), 59-69. http://doi.org/10.17399/HW.2017.163704
- Thseen, N. (2020). Impact of classroom Phubbing of teachers who face Phubbing during lectures. *Psychology Research on Education and Social Science*, 1(1), 41-47. <a href="https://www.researchgate.net/publication/341767068">https://www.researchgate.net/publication/341767068</a> Impact of classroom phubbing on teachers who face phubbing during lectures
- T'ng, S.T., Ho, K.H., & Low, S.K. (2018). Are you phubbing me? The Determinants of Phubbing Behavior and Assessment of Measurement Invariance across Sex Differences. *International and Multidisciplinary Journal of Social Sciences*, 7(2), 159-190. <a href="http://doi.org/10.17583/rimcis.2018.3318">http://doi.org/10.17583/rimcis.2018.3318</a>
- Villafuerte, C. & Vera, M. (2019). Phubbing y género en un sector académico en Quito: Uso, abuso e interferencia de la tecnología. Convergencia, 26(79), 1405-1435. https://doi.org/10.29101/crcs.v0i79.9156
- Villani, D., Morganti, L., Carissoli, C., Gatti, E., Bonanomi, A., Cacciamani, S., Confalonieri, E. & Riva, G. (2018). Students' acceptance of tablet PCs in Italian high schools: Profiles and differences. *British Journal of Educational Technology*, 49(3), 533-544. <a href="https://doi.org/10.1111/bjet.12591">https://doi.org/10.1111/bjet.12591</a>