



ORIGINAL

Syndrome of cyber-phubbing "Its impact on interpersonal relationships and human health"

Síndrome del cyber-phubbing "Su impacto en las relaciones interpersonales y la salud humana"

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Abstract

Nowadays technology has acquired a significant role in our lives; social networking, internet, video games and mobile devices became the primary communication and interaction. Even though this phenomenon may represent a "double edged sword" providing us of positive but also negative results, the internet addiction problem that occurs when people develop a dependence on internet connectivity, might even



lead them to have symptoms of anxiety and violence reporting "abstinence periods" when they don't have access to a network source and generate similar brain alterations that alcohol and drugs does [Phubbing].

Aim. To describe the impact that reflects the technology as a risk factor on interpersonal relations in our environment, as well as locate the possible physiological consequences that these can cause.

Method. Sectional survey applied on two groups of 50 students, between 2014-2106.

Results. Results throw us that the impact of social media addiction, internet and cell phone's usefulness represents therefore a significant risk for their health, to hinder emotional relationships within their family and personal impact on cognitive and emotional health. The negative impact is personal and collective, emphasizing the cell phone use while driving a vehicle and its addiction (Phubbing) causes accidents and impacts on morbi-mortality.

Conclusions. Phubbing has led to a significant impact in our actual society, increases on morbi-mortality. This is not positive results.

Keywords

technology; video games; mobile devices; Internet addiction; symptoms of anxiety-violence; depression

Resumen

Hoy en día la tecnología ha adquirido un papel importante en nuestras vidas; Las redes sociales, Internet, los videojuegos y los dispositivos móviles se convirtieron en la principal comunicación e interacción. Aunque este fenómeno puede representar un "arma de doble filo" que nos proporciona resultados positivos pero también negativos, el problema de la adicción a Internet que ocurre cuando las personas desarrollan una dependencia de la conectividad a Internet, puede incluso llevarlos a tener síntomas de ansiedad y violencia que reportan "abstinencia". periodos" en los que no tienen acceso a una fuente de red y generan alteraciones cerebrales similares a las del alcohol y las drogas [Phubbing].

Objetivo. Describir el impacto que refleja la tecnología como factor de riesgo sobre las relaciones interpersonales en nuestro entorno, así como localizar las posibles consecuencias fisiológicas que estas pueden ocasionar.

Método. Encuesta seccional aplicada a dos grupos de 50 alumnos, entre 2014-2106.

Resultados. Los resultados nos arrojan que el impacto de la adicción a las redes sociales, internet y la utilidad del teléfono celular representa por tanto un riesgo significativo para su salud, al dificultar las relaciones emocionales dentro de su familia y el impacto personal en la salud cognitiva y emocional. El impacto negativo es personal y colectivo, enfatizando el uso del celular en la conducción de un vehículo y su adicción (Phubbing) provoca accidentes e impactos en la morbimortalidad.

Conclusiones. Phubbing ha tenido un impacto significativo en nuestra sociedad actual, incrementos en la morbimortalidad. Esto es resultados no positivos.



Palabras clave

tecnología; videojuegos; dispositivos móviles; adicción a Internet; síntomas de ansiedad-violencia; depresión

Introduction

Technology has achieved an important role in our daily lives, video games and mobile devices; in recent years it has caused several problems due to the use of computers, even though they have moved to a new dimension with the introduction of smartphones. Smartphones, which develop the properties of handheld computers acquired a significant impact in changing the way we relate and communicate to society, nevertheless have caused new problems in real life (phubbing). It is important to mention that the use of new technologies can influence the population either positively or negatively at any age.⁽¹⁾

The access to internet and video games since childhood has made new generations with increasingly better technology, they reach almost instinctively use and manage a broad technological knowledge at an early age. This phenomenon can reach both positive and negative impact. Positive in the sense that technology has become a contribution in education, and negative generated by the change in the way children and teenagers have built relationships with their peers, as well as high risks related to high information exposure on the network.⁽²⁾

In these last decades it has provoked a phenomenon called phubbing. Phubbing word aptly describes people who constantly look at his mobile phone during a conversation or in the meanwhile they perform an activity in which there is an interpersonal relationship. It shall be clarified that not only the phone use is considered phubbing but it gains this designation when it has become an addiction.⁽³⁾ The word "phubbing" is a merger of "phone to phone" and "snubbing" meaning, which both words together means ignoring someone with your phone. This word becomes more relevant when included in an Update famous Macquarie Dictionary. Phubbing is regarded as a disturbance at the intersection of many addictions such as mobile phone addiction, internet addiction, addiction to social media and gambling.⁽⁴⁾

Phubbing is an immediate consequence of the globalization in technology and post modernity, legitimizes and gives rule to act with lack of concern for other, even if strong ties



exist as of friendship, engagement, marriage or simply a work relationship; becoming into an addiction which turns out to be more frequent in young teenagers.⁽⁵⁾

It is necessary to point out that this phubbing phenomenon is appearing increasingly in young people of less age. It has increased its appearance, and its possible effects can be more devastating. An average of 36 phubbing cases are observed in a restaurant during lunch; 97% of the individuals perceives less flavors of its meals while phubbing; and 87% of teenagers prefers to communicate across messages rather than establish face to face communication. According to specialists, technology can provoke a negative impact in children and young people, causing isolation from real world, due to spend many hours surfing on the internet, chatting or playing video games, and lose significant portion of their time. In addition, it is considered risky the high level of young people network exposure. "In my practice I have had patients coming to consultation referring their parents concern of their poor ability to relate to other children and young people. These patients usually only have 'virtual friends', and may have more than 1,000 contacts on their Facebook profile, but did not meet any of them". For Rodriguez this problem provokes young people develop significant problems of social behavior that, in long term can generate several personal problems such as solitary confinement with the real world.⁽⁶⁾

"The addiction to new technologies is considered to be within the scope of the addictions and psychological disorders, as can occur with the shopping the sex or the games; it carries a strong psychological dependence, loss of control, interference in daily life and presence of the withdrawal syndrome"⁽⁷⁾

In the case of network addiction, the first proposals were instituted by Goldberg (1995), following the diagnostic criteria of the DSM IV⁽⁸⁾. Later Young (1998) introduced a new definition and a brief questionnaire to diagnose internet addiction also following DSM-IV criteria relating to pathological gambling. In 2013, version V of the DSM made changes in the nomenclature of addictions and made an inclusion called "Non-substance disorders" referring to the presence of behavioral addictions, within it is included as the only pathology approved for pathological gambling with the new nomenclature: "Gambling Disorder". In the Section III includes "Internet gaming disorder".⁽⁹⁾

What happens when it falls down in the network addiction?

A behavioral disorder, is the behavior due to realizing repeatedly what is pleasurable and generates a loss of control in the person, affecting one or several areas of his life, in a



social, family, school or work level. These behavioral, are initially determined by positive reinforcement that ends controlled by a negative reinforcement. In the specific case of cell phone use, people without an addiction can use it for utility or pleasure without having repercussions on their normal life, however, a person with cell addiction uses it to alleviate the effects of emotional discomfort caused by not using it as anxiety, boredom, anger, stress, sadness, etc.^(10,11,12)

Another subject, the "addiction to Internet" represents a problem which appears when a person becomes completely dependent on the connectivity to Internet and that even can lead them to having symptoms of anxiety, anxiety and violence if they have no access to the network, in addition to generating cerebral alterations similar to those generated by alcohol and drugs addiction.⁽¹³⁾ According to the specialists, this addiction can lead the persons to suffering depression, nervousness, irritability, panic and little interest to coexist with other persons. In Latin America this is yet a problem that causes alarm between the population, in countries as the United States, China and England concentrates a large number of cases of Internet addiction, what it has taken even to the opening of clinics specialized on the topic. The first case of internet addiction was released in 2008 in China, and then in the United States, where they opened the first clinic for this pathology in 2009. In China it is the treatment center of Beijing to deal with the large number of Chinese presenting this addiction. "It is estimated that about 2.5 million of their population are addicted to internet". (According to Dr. Tao ran, the founder of this medical center).The patients are young people between 18 and 36 years, who are admitted by their parents to cure this disorder. Until now this clinic counts with about 1,500 patients and reaches a 70% success rate in their treatments, which consist of days of physical training and sport, in addition to relaxation sessions that are coordinated by psychologists and psychiatrists.

The British are also dealing with the problem through the establishment of a clinic for children addicted to the Internet. This is a clinic opened in the private hospital Capio Spain Nightingale, located in the center of London. In this clinic patients from between 12 and 15 years are treated, taking therapies customized to each patient. In relation to the video games we find one of the new technologies that more social alarm has been created by its alleged negative effects on child and teenagers development, although, according to the empirical data available, "this is the technology that less time engaged young people, where the users themselves perceive less dependence and in which observed fewer symptoms of addiction"⁽¹⁴⁾

This does not mean that there exists a considerable volume of adolescents who make an excessive use of video games and that they show conducts that approach the objective



dependence criteria. But as said broke out (2009), "it appears that by now the true number of cases of gaming dependence is reduced and that, in the majority of them, the dysfunctional in the use of videogames is often symptomatic of other personal difficulties and social more clearly diagnosable. "

The main objective of this treatment is to increase teens self-confidence in the real encounters instead of a virtual environment. In addition, it helps young people to handle the energy and excitement caused by long hours playing on the PC and consoles.

If there is one thing to remember is that the technology used properly, can have too many utilities, both educational and communicative, and even allow us to establish closer relationships with our friends and/or family members who are in distant locations. However, "If technology is not well used, can cause isolation, lack of communication and other serious problems".⁽¹⁵⁾

Technology is the set of technical expertise, scientifically sorted, which enable us to design and create goods and services that facilitate the adaptation to an environment and to meet both the essential needs and the wishes of the humanity. It is a word of Greek origin, *τεχνολογία*, formed by *téchnē* (τέχνη, art, technical or trade, which can be translated as skill) and *logía* (λογία, the study of something). Although there are many technologies quite different, it is common to use the term in the singular to refer to one of them or to the set of all. When it is capitalized, technology can refer to both a discipline theoretical studying common knowledge about all technologies.

In this project we will approach about especially of a part of all this technology, the theme will focus on a technological device as is the cell phone; and a point which seems to be quite important for this technology is the influence within the society.

As time passes each time there is a greater technological progress and in the same way this medium continues to have more presence in the life of the people. It is therefore the time is devoted to this technology that may have significant consequences on the people that use it.

"From a development perspective positive, and in the case of people with good levels of personal adjustment, the new technologies provide an opportunity to expand knowledge, learning, enjoyment, for the promotion of creativity and development of interpersonal relationships".⁽¹⁶⁾

It is important to know a little of the history that includes this technological tool, that is why it is briefly presented some important points:



According to the opinion of the experts, "the pioneers in the field of mobile telephony for civilian use began to travel along its course of development in the distant decade of the 40, when in the United States is envisioned the great benefits that could come to report the use of this type of technology in the everyday life of citizens". (Young, 1998)

Like that was that in the west of the 40s analogical radio systems begun to be used, which were employed by means of the modulation at largeness, that is to say in frequencies AM, then waves FM began to use modulation in frequency, that is to say, achieving this way a major status of scope and precision of the service. In those first times, there were used the bands of HF and VHF, in order to offer to the population mobile mass communication media, which they could take with it on having gone out of its houses and offices, what was implying managing to maintain a constant communication.

Nevertheless, in that beginning of the mobile telephony, the answer of the consumers was not completely satisfactory. This principally owed to the exaggerated size and weight of the first teams of cellular telephony, and of course also to the high value that there were possessing the devices, which are beyond the economic possibilities of the North American average social class.

"Almost thirty years of constant evolution in the mobile personal communications have allowed to this device to turn into a fundamental part in the daily development of any activity that the individual tackles" (Young, 1998).

Surely along with Internet, cell phones have become one of the essential elements for the social life of any person, and that is precisely because these fabulous devices closer to the users a wide range of benefits, which are increasing day by day in the new models of terminals, which include additional features to offer the most complete service to the consumer.

With a mobile not only conducting a telephone communication, but that we can also take pictures, capturing video, surf the Internet, play games, listen to music and a multitude of tasks that today we can develop with the terminal.

Although the proper use of this technology is an essential tool with plenty of activities in a way or another were very difficult to perform some years back, do not forget also the negative effects that can cause and that the majority of the population does not take into account such as for example: the warming cellular in the area of the brain near the antenna of the mobile phone, chromosome breaks, strange peaks of neuronal activity in areas usually little active brain (revealed in encephalograms), changes in blood pressure of the brain while using the appliance, sleep disorders, headaches, and alterations coronary.



Aim

To describe the impact that reflects the technology as a risk factor in interpersonal relations in our environment, as well as locate the possible physiological consequences that these can cause.

Material and Methods

Sectional survey applied to two groups of 50 students, one in 2014 and other in 2016. The students were randomly selected when they agreed to participate, in order to compare both groups of different ICSa professional careers. Descriptive statistical analysis in SPSS-version 19.

Results

50 surveys were conducted to the students of different races that exist in the Institute of Health Sciences, obtaining the following results (Table 1)

Table 1. Frequency for gender in study and Bachelor's degree

Frequency of male	Frequency of female	Bachelor's degree
11	11	Medicine
8	8	Odontology
3	3	Nursing
3	3	Pharmacy
12	12	Psychology
13	13	Nutrition
Total: 50	50	

Direct, Survey applied to students in ICSa, 2014 and 2016

Why he feels or has the need to keep in touch with computer media? The 50 survey respondents use social networks like Facebook and Twitter. There is a coincidence in both genders stay in touch with family and friends (Table 2)



Table 2. Frequency and percentage for gender in Why he feels or has the need to keep in touch with computer media.

Frequency/percentage of male	Frequency/percentage of female	Answer
13 / [26%]	12 / [24%]	To be informed
19 / [38%]	20 / [40%]	Stay in touch with family and friends
13 / [26%]	12 / [24%]	As an auxiliary in jobs, tasks.
4 / [8 %]	5 / [10%]	It is necessary
1 / [2 %]	1 / [2%]	I don't feel the need to be connected

Direct, Survey applied to students in ICSa, 2014 and 2016

The Artifacts that have in house (Table 3), Connection to Internet (41) yes and 9 not of gender male and (46) of gender female (Table 4)

Table 3. Artifacts that have in house

Frequency/ of male	Frequency/ of female	Answer
25	25	Pc
45	46	Laptop
18	22	I Pad
10	10	I Pod
38	30	DVD player

Direct, Survey applied to students in ICSa, 2014 and 2016

Table 4. Connection to Internet

Frequency/percentage of male	Frequency/percentage of female	Answer
41 / [82%]	45 / [90%]	Yes
9 / [18%]	5 / [10%]	No

Direct, Survey applied to students in ICSa, 2014 and 2016

Use the Internet 100% in social network two genders, the gender female 100%, and male gender 37, homework the 50 Two genders (Table 5) the two genders uses of the PC at home for entertainment, work, communication in support in homework (Table 6)



Table 5. To use the Internet

Number of students male	Number of Students female	Answer
50	50	Homework
45	38	work
50	50	Social network
37	50	Entertainment
50	48	To research

Direct, Survey applied to students in ICSa, 2014 and 2016

Table 6. Uses of the PC at home

Frequency	Frequency	Answer
39	45	Entertainment
36	35	Work
38	40	Communication
48	38	Support in homework

Direct, Survey applied to students in ICSa, 2014 and 2016

Most students, men and women have more than a year with their computer. (Table 7)

Table 7. Time it takes with your PC or Notebook

Frequency	Frequency	Answer
1	1	Less than a month
0	0	One to three months
7	5	Three months or a year
42	44	More than a year

Direct, Survey applied to students in ICSa, 2014 and 2016

As soon as access to the internet at home, the (84% and 88%) every day 5 (10%) one or three times per week (Table 8), the vast majority are teenagers and young people 14 to 17 years and 18 -25 years (Table 9)



Table 8. Often access to the internet at home

Frequency/percentage of male	Frequency/percentage of female	Answer
42 / [84%]	44 / [88%]	Every day
5 / [10%]	5 / [10%]	One or three times per week
3 / [6%]	1 / [2%]	Once a week
0	0	More days/ does not have access at home

Direct, Survey applied to students in ICSa, 2014 and 2016

Table 9. Age of the inhabitants of the home

No. De personas	No. De personas	Age
3	2	5 to 10 years
3	3	11 to 15 years
15	18	14 to 17 years
39	38	18 to 25 years
8	8	Older than 25

Direct, Survey applied to students in ICSa, 2014 and 2016

Finally, regarding the usefulness given to the cellular phone, it emphasizes that women have had more accidents with respect to men, this implies that, using mobile phones while driving, Be on the point of having an accident and have been or have seen an accident for driving a car and using the cell phone, other accidents to use the cell phone [Tabla 10]

Table 10. Usefulness and risk behaviors for using a cell phone

Question	Yes, group 1	Not group 1	Yes, group 2	Not group 2
Using mobile phones while driving	8 / [16%]	42 / [84%]	11 / [22%]	39 / [78%]
Go in the street listening to music or talking on the phone	29 / [58%]	21 / [42%]	28 / [56%]	19 / [44%]
Be on the point of having an accident.	9 / [18%]	41 / [82%]	12 / [24%]	38 / [76%]
Have been or have seen an accident for driving a car and using the cell phone, other accidents to use the cell phone	10 / [20%]	40 / [90%]	12 / [42%]	38 / [76%]

Fuente; Direct, Survey applied to students in ICSa, 2014 and 2016



Discussion

Media multitasking, or the concurrent consumption of multiple media forms, is increasingly prevalent in today's society and has been associated with negative psychosocial and cognitive impacts, that brain structure can be altered upon prolonged exposure to novel environments and experience.

The Research realized for Loh and Kanai, 2014 has demonstrated that brain structure can be altered upon prolonged exposure to novel environments and experience. Individuals with higher Media Multitasking Index scores had smaller gray matter density in the anterior cingulate cortex. These suggest a possible structural correlate for the observed decreased cognitive control performance and socio-emotional regulation in heavy media-multitaskers. While the cross-sectional nature of our study does not allow us to specify the direction of causality, our results brought to light novel associations between individual media multitasking behaviors and ACC structure differences.⁽¹⁷⁾

The increase in the use of cell phone is due to a series of features that makes it attractive, since satisfies some interpersonal needs of the person, Such as creating links, maintaining them or other relationships, as it facilitates socialization processes, reinforcing the positive self-concept of the same person. However, the constant use of the cell phone has caused that society in general, to be completely oblivious to what is developed around it, completely alienated with the cell phone, unable to have face-to-face communication and interaction with people around you, these which causes greater risk in presenting psychological disorders such as depression, anxiety, insomnia, addictions both behavioral and substance, and it is more frequent to observe that young people lack social skills, school failure, social isolation.^(18,19)

It is essential to point out that the experience to level intrafamily denotes that have been lost moments of coexistence among the members and this leads them to propose a title or conceptual construction that perhaps for some people is not correct, but derived from the utility that gives the cell phone or even the computer have had an impact on interpersonal relationships and even in the generation of accidents, this concept generated from the impact of these media we call it "Syndrome the obstruction of cyberspace" or otherwise "Syndrome the hampering staff" since it causes accidents by talking on the cell phone, including the cause of collisions or automobiles to other people, cause impact when crossing even avenues Either by sending messages, reviewing these or shirking of the world with the games or into social networks that perhaps using them properly would facilitate in style and quality of life, however it



has been observed that lose the attention to the people, that is immune from reality in order to meet subjective aspects that tend to be unrealistic, since it does not answer properly, or even answer to any question, they are in another world.

In the university represent similarly obstacles to learning, they holed up in the cyber-space and they are oblivious to the reality, to develop the sensitivity with your colleagues or with the possibility of learning in the real-world scenario.

It is enough to see that people collide with others when walking and use the cell phone, with poles, cars, to see the risk of driving vehicles sending messages or answering calls, 400,000 accidents in Mexico and of them 100,000 dead people, just look inside the Family as social networks consume daily intra-family relationships, as it impacts the one who is Phubbing, who cannot live without the cell phone and who has been a victim in his person by limiting cognitive development and has facilitated insecurity or extortion to those who they devote themselves to that.

Conclusions

The new information and communication technologies has led to a significant impact in today's society, in the ITU 2016 report, the registration of cell phone use in countries with available data exceeds 85% in people aged 15-74, which favors that increasing the social concern for the influence that they can exercise these technologies in the development and personal setting, especially when it comes to the stage of adolescence and youth.

The impact of addiction to the media, the internet and the usefulness of the cell phone is therefore a risk to their health, to hinder emotional relationships within the family.

The negative impact of using the cell phone when driving a vehicle and its addiction (Phubbing) causes accidents and impacts on morbi-mortality and within the family generates difficulties in daily family relationships and personal impact on cognitive and emotional health.

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Conflict of interest

The authors declare that there is no conflict of interests for the publication of this research paper.

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