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Technological Dependence and its Psychological Impacts on the Daily Lives of Young University Students

Technological Dependence And Psychic Impacts On The Daily Life Of Young University Students

Chrystopher de Oliveira

Pietra Aparecida dos Santos

Rodrigo Padilha

Rosana Valinas Llausas - Advisor

Summary

Currently, relationships between people have undergone changes, from connection to interaction with one another, face-to-face conversations, and ways of sharing experiences; these methods have been preserved by technology. New mobile technologies, while bringing numerous conveniences to our daily lives, have also taken on a priority role, modifying and weakening interpersonal relationships, making us technologically dependent without us realizing it. Therefore, our general objective was to study the psychological impacts that technological dependence can cause. The specific objectives were to identify and highlight the main characteristics of technological dependence in the population of young university students. As a theoretical framework, we used Behavior Analysis and a quantitative research methodology. For data collection, an electronic questionnaire with 22 closed questions was conducted using the Google Forms platform. The results highlight nomophobia, a relevant factor in characterizing technological dependence.

Keywords: Technology dependence; daily life; mobile devices;

Abstract

Currently, relationships between people have undergone changes, from connection to interaction with one another, face-to-face conversations, and ways of sharing experiences; these methods have been preserved by technology. New mobile technologies, while bringing numerous conveniences to our daily lives, have also taken on a priority role, modifying and weakening interpersonal relationships, making us technologically dependent without us realizing it. Therefore, our general objective was to study the psychological impacts that technological dependence can cause. The specific objectives were to identify and highlight the main characteristics of technological dependence in the population of young university students. As a theoretical framework, we used Behavior Analysis and a quantitative research methodology. For data collection, an electronic questionnaire with 22 closed questions was conducted using the Google Forms platform. The results highlight nomophobia, a relevant factor in characterizing technological dependence.

Keywords: Technological dependence; daily life; mobile devices.

1. INTRODUCTION

Modern society is marked by many advancements, including in the technology sector.

Furniture that never stops innovating. Every minute, more conveniences appear on the market with a single...

Objective: To reach the end consumer who craves these new products. Given this constant advancement...

new technologies, the growing popularity of apps, social networks, online games, streaming

Through media and other forms of electronic entertainment, technological dependence has become a

A problem that is becoming increasingly common in the vast majority of developed countries.



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The use of mobile devices has brought about significant changes in all spheres of our society, influencing individual, social and work relationships, being indispensable. Its use for daily tasks, taking up space in our lives.

Among the various sectors impacted by technology, the area of education stands out, more specifically in the population of young university students.

Therefore, it is important to understand to what extent this technological dependence can be... considered "normal".

This article aims to study the psychological impacts of... Technological dependence can cause this. The specific objectives are to identify and highlight the... Key characteristics of technological dependence in the young university student population.

We can hypothesize and initially answer that technological dependence can cause psychological impacts, which can affect interpersonal relationships, leading to social isolation, being a threat to our mental health.

Soon, this topic will be a central focus within the field of mental disorders, because Even with the increasing use of these technologies every day, there is still a normalization of them. abuses, because they believe that excessive use is something natural nowadays.

2. TECHNOLOGICAL DEPENDENCE

Addiction is defined as: "subjection," "a person who is unable to break free from a habit." (FERREIRA, 2020).

Technology addiction is a condition in which a person becomes excessively dependent on technology. dependent on technologies such as smartphones, computers, tablets and other types of devices Electronics. This dependence can significantly affect daily life, including work, education, personal relationships, mental and physical health.

The issue of technological dependence is not solely related to The intensity of use that the individual makes of these devices, but also their improper use, where the individual leaves behind their personal and family relationships and daily activities to prioritize the use of mobile devices (KHOURY, 2018, p.19).

It is important to note that technological dependence is different from dependence on... substances, since the first is potentiated by the excess time spent and the rapid access to the projected images, while the second is enhanced by absorption by the current. blood.

In fact, there are differences in the mechanisms that lead to substance dependence and... Technological dependence. However, it is important to remember that both types of dependence



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These changes involve the brain and can lead to compulsion, loss of control, and behavioral issues.

impulsive. Furthermore, it is noteworthy that abstinence from technological dependence can manifest

emotional symptoms similar to drug withdrawal, according to Melo, Rodrigues, Da Silva, De

Abreu, Ribeiro and Bernardino (2018, p. 6):

While substance dependence is potentiated by absorption into the bloodstream, technological dependence is caused and potentiated by the excessive amount of time spent, where there is quick access to connect and the short time between clicking and receiving images.

Withdrawal symptoms related to substance dependence, such as alcohol and other drugs, will depend on each individual. However, when we talk about technology, especially if it is censored/prohibited by a parent or someone close to the dependent person, a certain degree of verbal protest is usually expressed, including outbursts of strong emotions, feelings of loss, unease, separation, frustration, and a feeling that something is missing. Often, outbursts of anger and resentment can manifest, such as manipulation, blackmail, and coercion.

Some behaviors that can be observed include: the individual may exhibit

the inability to disconnect from the use of technology, continuously checking calls.

lost emails, SMS messages, checking social media, irritation at being in places without *Wi-Fi*, being

unable to go anywhere without the device, feeling the need to always be connected to it.

The virtual world is causing us to forget about real life and failing to recognize this problem.

While it has many features and applications, it's important to highlight that:

In recent decades, the intense use of cell phones in individuals' daily lives has been observed. The mass popularization of these devices is due to technological advancements and reductions in access costs. Despite this, concern regarding the limits of their use is relevant (KING, NARDI and CARDOSO, 2014, p. 199).

A study conducted by the Getúlio Vargas Foundation (FGV) in 2021 indicates that...

The Brazilian population has approximately 440 million digital devices, including computers,

notebook, tablet and smartphone, with two per inhabitant. (MEIRELLES, 2021, Online)

Although it does not categorize the abusive use of mobile devices, the DSM does categorize the use

Abusive use of electronic games is classified as Internet Gaming Disorder, according to the DSM-5 (2014, p.

796):

Internet gaming disorder is a pattern of excessive and prolonged internet gaming that results in a cluster of cognitive and behavioral symptoms, including progressive loss of control over gaming, tolerance, and withdrawal symptoms analogous to those of substance use disorders. As with substance-related disorders, individuals with internet gaming disorder continue to sit in front of a computer and engage in gaming activities despite neglecting other activities. They typically devote 8 to 10 hours or more per day to this activity and at least 30 hours per week. If prevented from using a computer and forced to return to gaming, they become agitated and rebellious. They frequently go for long periods without eating or sleeping. Normal obligations, such as school or work, or family obligations are neglected. This condition is distinct from internet gaming disorder because money is not at risk.

The consequences according to the DSM-5 (2014, p. 797) are:

Internet gaming disorder can lead to academic failure, job loss, or marital breakdown. Compulsive gaming behavior tends to discourage normal social, academic, and family activities. Students may experience declining grades and ultimately academic failure. Family responsibilities may be neglected.



2.1 Nomophobia

A new term that has been used to characterize technological dependence is nomophobia.

which according to King et al, 2014, p.4:

The term nomophobia originated in England from the expression "*no-mobile*," meaning without a cell phone. This expression was combined with the Greek word *phobos*, meaning phobia, fear. The association of the words resulted in the term nomophobia. The modern world saw the need to create a specific nomenclature that could represent the feelings and sensations that were being observed in individuals related to new technologies. Therefore, the word nomophobia found its place to designate the discomfort or anguish caused by the fear of being incommunicado or by the impossibility of communication through cell phones, computers, or the internet (being *offline*).

The creation of this term helped raise awareness about this phenomenon and promote a

A broader discussion about the healthy use of mobile technologies. And also, regarding the term

Regarding nomophobia, it's important to highlight that:

Until recently (2008), there was no term to explain the feelings and sensations caused by the inability to communicate via cell phone or computer, nor to understand the pathological dependence on these devices; now there is, and it is nomophobia. Some symptoms observed in patients with nomophobia were distress, discomfort, insecurity, and anxiety when they were unable to connect to the internet, or without a computer or cell phone. These symptoms and sensations, when related to the aforementioned devices, are called nomophobic, and nomophobic behaviors are the signs that the experienced eyes of mental health professionals need to identify a primary anxiety disorder and refer the patient for treatment. Nomophobia is merely a warning sign of the presence of a primary disorder." (King et al. 2014, p. 5).

In short, nomophobia is the fear of being without a cell phone and without internet access (King et al. 2014).

According to Bragazzi and Del Puente (2014, p. 155), we can say that:

Nomophobia is considered a disorder of contemporary virtual and digital society and refers to the anxiety, discomfort, nervousness, or distress caused by a lack of contact with a computer or cell phone. In general, nomophobia is a pathological fear of being without contact with technology.

Without a doubt, the use of mobile devices brings us many conveniences and benefits, and its use becomes indispensable; however, it is necessary to understand what constitutes a "normal" addiction and a pathological dependence, according to King et al. (2014, p. 18):

"Normal" dependence is that which allows us to take advantage of all the technology for personal growth, work, social relationships, among other things. Even if it is used daily and for many hours, it does not constitute a pathological dependence. Pathological addiction is accompanied by personal, social, and behavioral inadequacy, and needs to present symptoms in its history to be diagnosed. Nomophobic behavior (feelings of distress, discomfort, anxiety, and nervousness when unable to communicate through these devices) serves as a sign of a possible disorder that should be investigated and treated.

It is understood that the use of mobile devices is still very common, generating many conveniences in everyday life.

However, continuous, inappropriate, and tireless use has been leading to changes significant in habits, customs, behaviors, emotions, and personal and social relationships.

Nomophobia is a new, yet undeniable, field of study, demonstrating that this is a growing area.



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A vast amount of knowledge needs to be explored further by researchers, given the astronomical consumption of devices in our country.

Although the term nomophobia is not in the DSM (Diagnostic and Statistical Manual of Mental Disorders). Mental Disorders), according to Bragazzi and Del Puente (2014, p.160):

Even though nomophobia was not included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), much more attention has been given to the psychopathological effects of new technologies, and interest in this topic will grow in the near future, with attention and care taken not to codify normal behaviors as pathological.

Research conducted by Ramos (2022) shows that Brazilians spend more than half of their time... of their lives on the internet, adding up the seven days of the week for a total of 91 hours online, this This represents an average of four days a week, which is equivalent to 197 days per year, considering that... Life expectancy in the country is currently 75.9 years, which translates to 41 years and three months. 13 days, representing 54% of the population's lifespan.

Although this topic is not currently being researched in Brazil, it certainly will be. This is a topic that will be explored extensively in the future.

3. ANALYSIS OF BEHAVIOR AND TECHNOLOGICAL DEPENDENCE

Behavior analysis is a psychological approach that emerged in the 1940s. based on the studies of the American psychologist B.F. Skinner, who, according to him, human behavior It is influenced by the environment in which it occurs and can be modified through contingencies of reinforcement (SKINNER, 1953).

Through this, their goal is to understand how people learn and how their Behaviors are influenced by environmental events, and can also be modified accordingly. to achieve specific goals.

Considered a natural science, behavior analysis, according to Moreira and Medeiros (2019, p.213), "it is a science, it is a profession", being an area of knowledge that includes The individual through their relationship with the environment.

Behavior analysis is both a science and a psychological approach, whose The focus of study is behavior resulting from interaction with the environment, the environment being not only one place, since it encompasses how each being interacts with this space, therefore, the Behavior can be affected by the presence of other people, along with social variables and economic or mechanical variables such as movement, sound, etc. (MOREIRA and MEDEIROS, 2019, p. 214).

From a behavioral analysis perspective, technological dependence can be seen as a problematic behavior that arises from the individual's interaction with the environment. technological (MOREIRA AND MEDEIROS, 2019, p. 143).



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According to behavioral analysis, behaviors are shaped by the environment.

in which they occur through reinforcement contingencies. In this sense, dependence

Technological use can be seen as a behavior that is positively reinforced by constant use.

of technology (MOREIRA AND MEDEIROS, 2019, p. 215).

Furthermore, behavioral analysis also considers the role of emotions and...

thoughts in the regulation of behavior. In the case of technological dependence, the individual may

to experience negative emotions, such as anxiety and stress, when one does not have access to technology.

These emotions can further reinforce the behavior of constantly using technology.

as a way to avoid these unpleasant emotions.

Finally, behavioral analysis also considers the importance of the social context in

regulation of human behavior. In this sense, technological dependence can be

influenced by social factors, such as the family environment and the culture of technological consumption in

that the individual is embedded in (MOREIRA AND MEDEIROS, 2019, p. 50).

In summary, technological dependence can be understood from the perspective of analyzing...

behavior as behavior shaped by reinforcement contingencies, emotions and

thoughts related to the use of technology, and social factors that influence the context in which

The behavior occurs.

To illustrate this, if the consequence is pleasant, the frequency of the behavior may increase.

Increase (reinforce) the behavior, and if the consequence is unpleasant, the frequency of the behavior will decrease.

(punishment).

Skinner (1953) explains that positive reinforcement is defined as the strengthening of a

response due to the presentation of a specific stimulus to her that causes her

Continue the behavior because it is a motivating factor or a desirable event.

Negative reinforcement, on the other hand, consists of increasing the frequency of a response because of...

removal of a positive or negative stimulus (Skinner, 1953). Skinner (1987), however, explains that the

Positive reinforcement has two effects:

(...) the effect of pleasure and reinforcement. They occur at different times and are felt as different things. When we feel pleasure, we are not necessarily feeling a greater inclination to act in the same way (...). On the other hand, when we repeat the behavior that was reinforced, we do not feel the effect of pleasure that we had felt at the moment the reinforcement occurred (SKINNER, 1987, p. 17).

Therefore, we can say that the behavior was positively reinforced when it increases

frequency, however, does not always represent something good for the person, and can often cause

damage.

Therefore, the main basis of this theory is the relationship between behavior and the environment, being

We modify the environment and are modified by the consequences of these actions.

The research carried out by Da Silva Melo, Rodrigues, Da Silva, Abreu, Ribeiro and Bernardino



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In 2018, a qualitative method of a descriptive nature was used, with the purpose of observing families that

They don't interact as much at the table, eating together during meals and talking about various subjects.

By exchanging experiences and life stories, the general objective was to demonstrate the psychological damage that...

Technology can impact the family in contemporary society.

A study conducted by Nunes, Abdon, Brito, Silva, Santos, Martins, Meira and Frota (2021), brought as its theme Factors related to smartphone addiction in adolescents of a region in Northeast Brazil, where the research aims to assess smartphone addiction.

from a region in the Northeast and had 286 participants, aged between 15 and 19, and was conducted as a quantitative research method.

The research carried out by Modesto, Fonseca and De Sousa (2022) aimed to observe the prevalence of nomophobia in university students who were in university education.

Due to remote work during the pandemic, the goal was to identify the prevalence of smartphone, internet, and social media use.

In the investigated sample, test the relationship between nomophobia and intensity of smartphone and internet use.

and social networks. 72 students participated in the research, and the instrument used was a scale.

Psychometrics to Identify Levels of Intoxication and Nomophobia.

The research carried out by Moromizato, Ferreira, Souza, Leite, Macedo and Pimentel (2017) had

with the objective of investigating the relationship between internet use and social media as causes of

Disorders such as anxiety and depression were examined, and therefore a quantitative study was conducted with medical students, with a total of 169 participants, 107 women and 62 men, showing

that 98.8% (167) of participants use the internet and/or social media daily. But it was not

No statistical association was found between internet use and problems and symptoms such as anxiety and depression.

The study conducted by Cappellozza, Salati, Moraes and Muniz (2017) aimed to

to observe the individual motivating factors behind the particular use of Information Technologies in work and the relationship of Digital Distraction as a major reason for loss of attention in

Workers during the performance of their activities. 311 participants took part, representing 67.8%.

32.2% of respondents were male (211 people) and 100 were female (32.2%).

(people), aged between 23 and 65 years old, and all were employed at the time of the conducting the research.

The research carried out by Santos, Cruz, Cardoso, Da Silva, Campos, Da Cunha, Santos da Silva and Ferreira (2021) studied the quality of life and the risk of nomophobia in the use of

smartphones; with a quantitative and descriptive character, the questionnaire with 25 closed questions was applied on the Google platform, through social networks, where it reached a group of 96

people between September and October 2018.



4. METHOD

For this research, we used the quantitative method, which focuses on data collection and analysis of numerical data, using statistical and mathematical techniques to draw conclusions and to make inferences.

This method aims to identify causal relationships between the variables under study, or at least to establish statistically significant associations, allowing researchers to do generalizations about the population under study and draw conclusions based on empirical evidence. according to Silva and Simon *apud* Silva, Lopes and Júnior (2014, p.1):

Quantitative research only makes sense when there is a very well-defined problem and there is information and theory regarding the object of knowledge, understood here as the focus of the research and/or what one wants to study. To clarify further, quantitative research is only done when one knows the qualities and has control over what one is going to research.

4.1 Participants

Ninety people from different colleges, various courses, and backgrounds participated in this research. various regions of the state of São Paulo, from February to March 2023, all of Participants signed the Free and Informed Consent Form (TCLE), being as This is a mandatory requirement to begin your participation.

The research was approved, with a Certificate of Presentation for Ethical Review number. (CAAE) 65501822.6.0000.5510, in accordance with the requirements of Resolution No. 510/2016 of National Health Council.

4.2 Instruments

This research was disseminated through social media (*Facebook, Instagram and WhatsApp* and (among other things) an electronic questionnaire was applied. with 22 structured and closed-ended questions through the Google Forms platform, after approval from the Research Ethics Committee.

4.3 Procedure

Data collection began on February 6th and ended on March 31st, 2023, obtaining... data from groups with affinity to the prerequisites, university students, from the state of São Paulo, aged between 18 and 28 years, regardless of race, physiology, social class, Religion, sexuality, and gender identity.

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The 22 questions were in multiple-choice format, with 21 being single-choice and 1 being multiple-choice.

Multiple choice, see Graph 7 where there is more than 1 answer per participant represented in the graph.

This study was also conducted using bibliographic sources, where a...

data collection addressing the topic of technological dependence and nomophobia, based on

Materials already published, such as books and scientific articles, are stored in databases such as Scielo and Pepsic.

and among others, with the intention of expanding on the issues surrounding the use of these technologies and their applications.

5. RESULTS AND DISCUSSION

To analyze the responses obtained through the electronic questionnaire, we segregated the

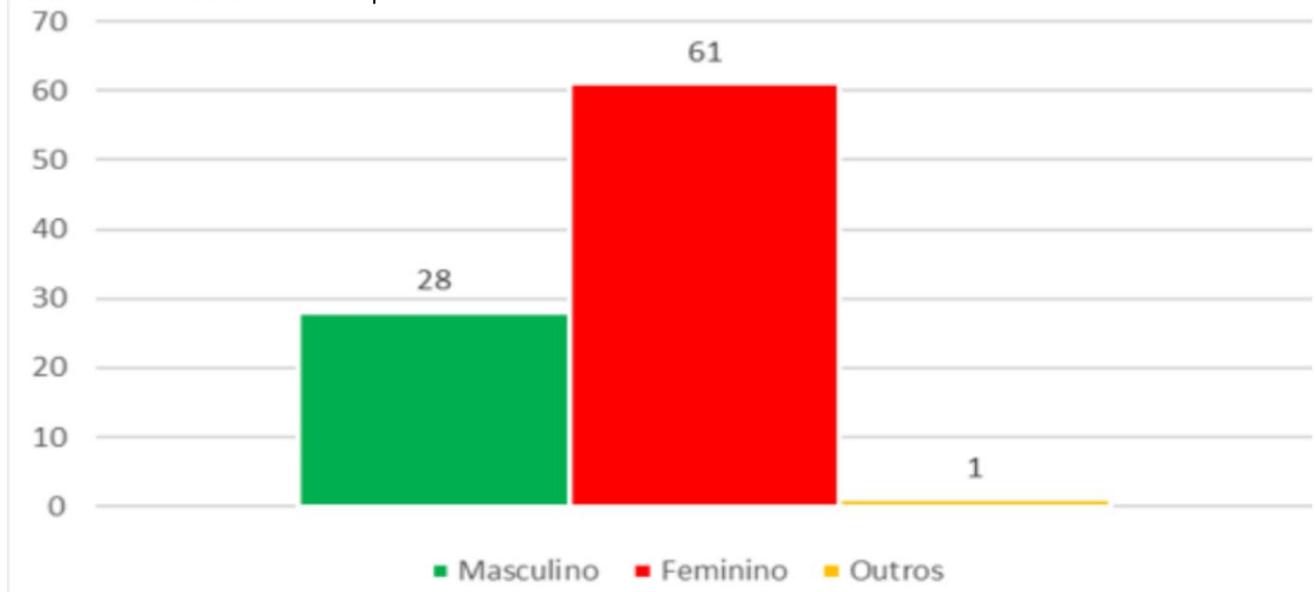
More significant results, as described below.

Ninety people from various universities and courses, from the most varied backgrounds, participated in this research.

regions of the state of São Paulo, of which we point out the sociodemographic characteristics of the sample,

Starting with gender, as shown in Graph 1, and by age group, as shown in Graph 2.

Chart 1 - Total Number of Participants



Source: Authors' own work.

Of the 90 participants who answered the questionnaire, 61 identified as gender.

There were 28 female and 28 male participants, with only 1 participant identifying with other gender identities.

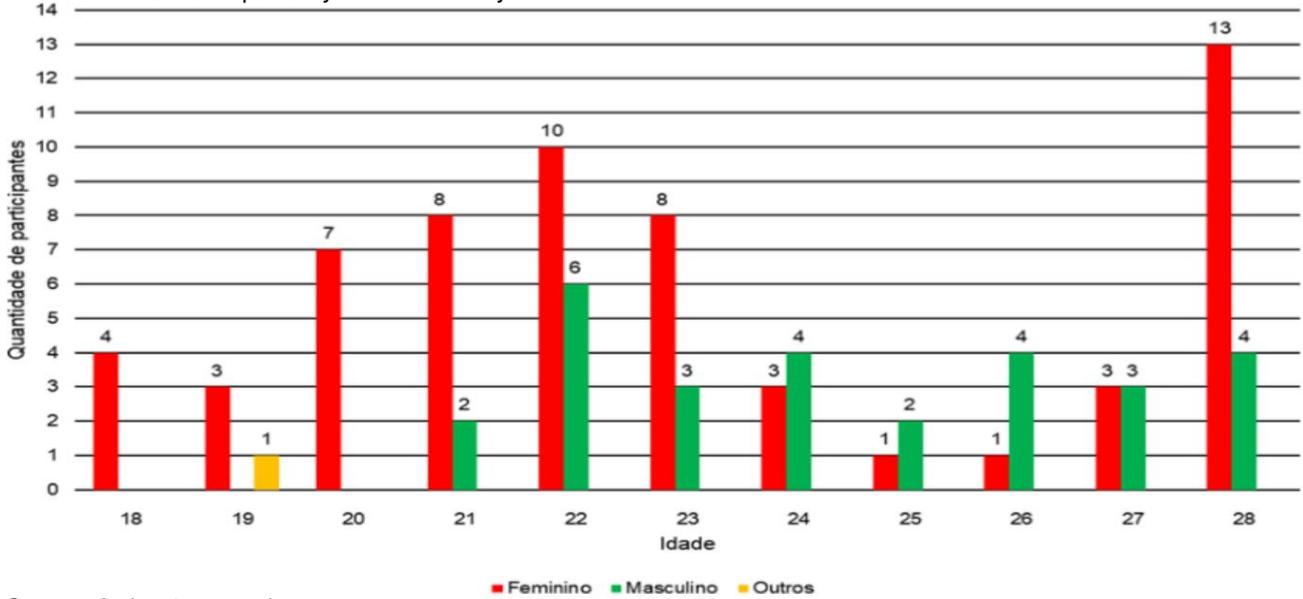
In the study by Nunes et al. (2021), there was a predominance of male individuals.

(53.1%) compared to 46.9% of the female gender, which contradicts the data presented in our research, which shows a predominance of women.

Within this population, there is an age difference between the genders (male and female).

as shown in Graph 2.

Chart 2 - Total Participants by Gender Identity



Source: Authors' own work.

The data presented in graph 2 demonstrates a predominance of women, with 13 having...

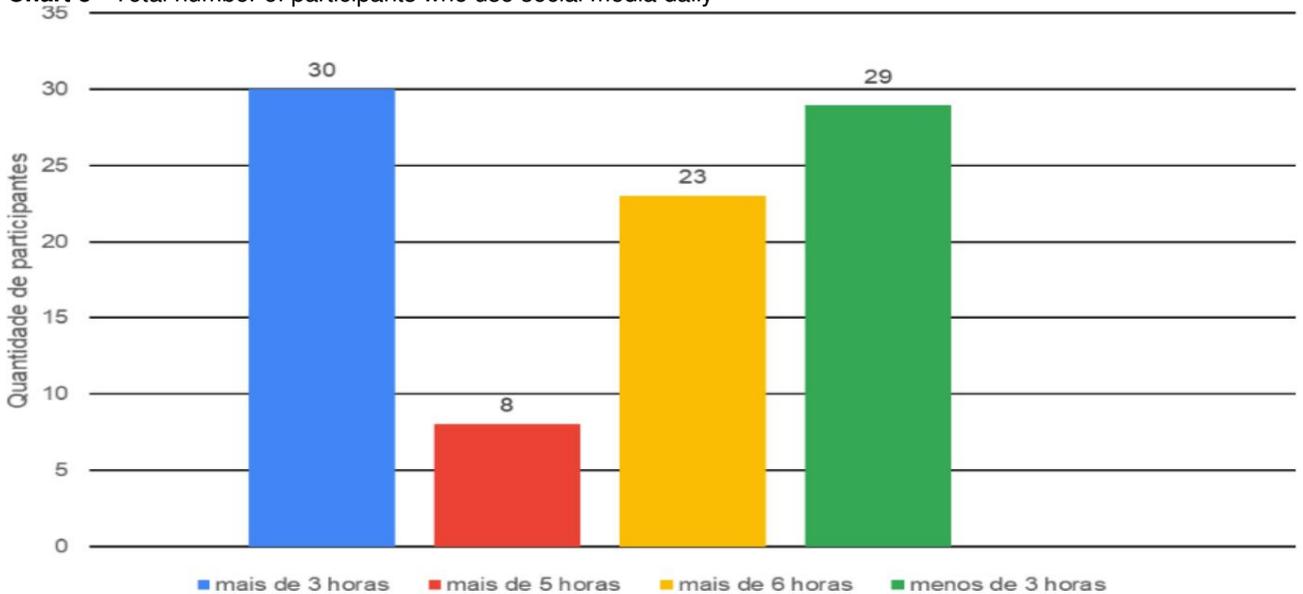
The average age is 28 years, while among men the predominant age is 22 years.

In the research by Nunes, et al. (2021), it is reported that there was a predominance of participants under the age of 18. (30.8%) aged 17.

In the research carried out by Modesto, et al. (2022), with university students from different courses, of In public institutions, the majority of participants (68.10%) are female, with ages ranging from Between 18 and 42 years old.

Graph 3 shows the number of hours that participants use the social media daily.

Chart 3 - Total number of participants who use social media daily



Source: Authors' own work.

Regarding the number of hours that participants reported using the internet, it was observed that 61 participants spend three hours using the internet (30 spend more than three, 8 more than five and 23

(more than six hours), only 29 participants stay for less than three hours.

Research by Moromizato et al. (2017) shows that most participants Men and women generally use the internet between 3 and 5 hours daily, therefore 34% that the minority consists of people who only use it for less than 1 hour a day, therefore only 4%. 169 students participated in the research by Moromizato et al. (2017), including 107 women and 62 men, with a median age of 21 years.

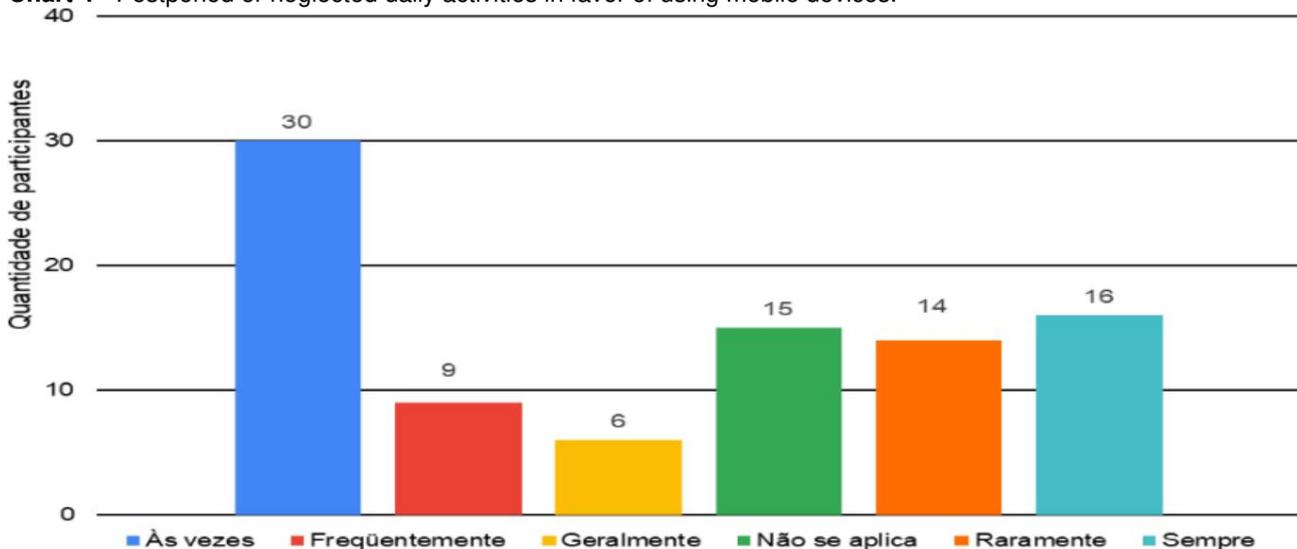
In this survey, among the female population, 14.44% use it for more than 5 hours per day. Comparing with the research carried out by Melo, et al., (2018) with adolescents aged Between the ages of 15 and 20, they admit to spending a good portion of their time connected to the internet, above 5 hours.

Research conducted by Moromizato et al (2017) shows that 98.8% (167) make use of internet and/or social networks, with 47.3% (61) indicating this as the main reason for using them. instant messaging applications, others reported the main reason and the quick search of information possessing 22.5% (29), while other responses were, 18.6% (24) social networks, 8.5% (11) entertainment, and 3.1% (4) news.

According to Modesto et al. (2012, p. 10), "For other purposes, the greater the intensity "The more people use it, the higher the rates of nomophobia."

Graph 4 shows the results regarding how many times negligence or Postponing daily activities to make way for the use of mobile devices:

Chart 4 - Postponed or neglected daily activities in favor of using mobile devices.



Source: Authors' own work.

Looking at the data in Graph 4, it can be observed that the majority of the sample population tends...

postponing or neglecting activities, which aligns with Moromizato et al. (2017, p. 501) who

The text states, "The problem with internet use can be associated with addictive behavior."

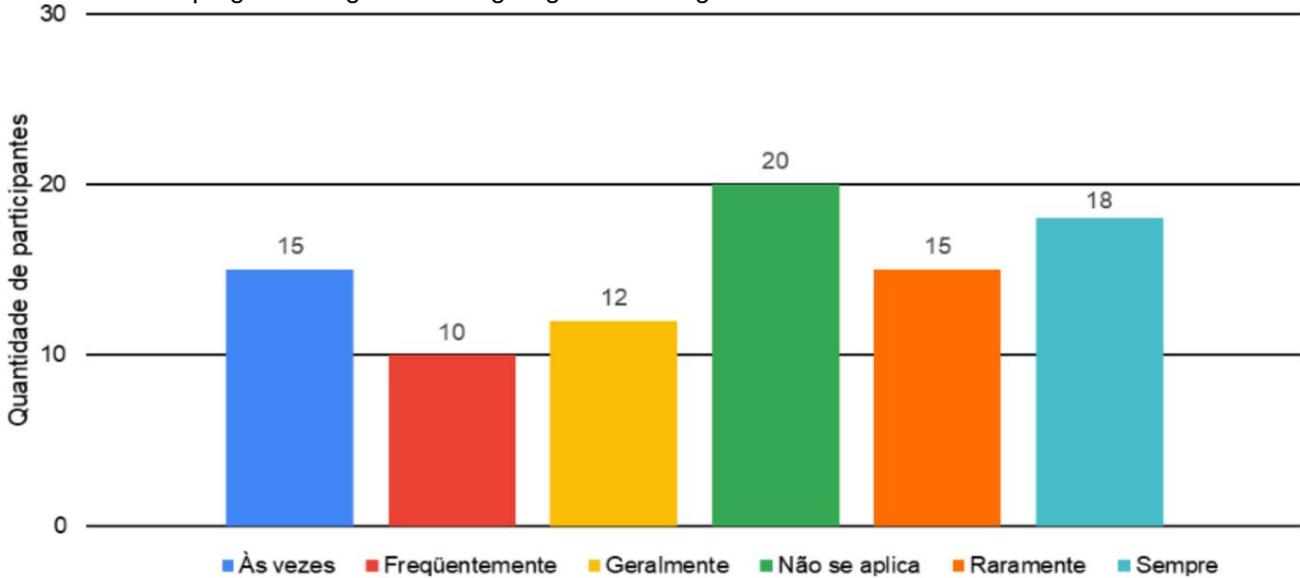
being more susceptible in individuals who seek external stimulation and express more intolerance.

"to boredom."

Graph 5 shows the percentages of times these devices were used.

to escape suffering or to find relief from feelings:

Chart 5 - Escaping suffering or relieving negative feelings



Source: Authors' own work.

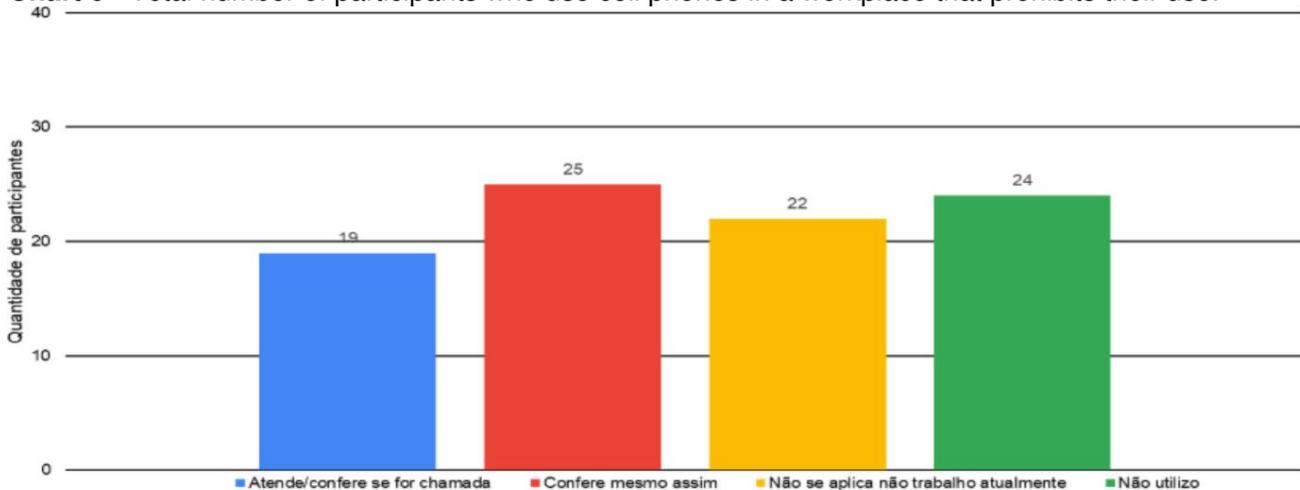
The data shows that 20 participants do not use the internet to escape suffering.

but 70 participants report using it, with varying frequency (sometimes, often, usually, rarely) to escape something unpleasant. According to Davis (2001), this mechanism of Self-awareness could be explained by the student's difficulty in perceiving their own behaviors. escaping reality to avoid suffering, or even to perceive the onset of some morbidity, because This style of self-awareness hinders problem-solving and does not generate knowledge.

Graph 6 shows the percentages of cell phone use in the workplace.

where its use is not permitted:

Chart 6 - Total number of participants who use cell phones in a workplace that prohibits their use.



Source: Authors' own work.

The data collected in this research shows that 44 participants use cell phones. even though it is prohibited (19 answers/checks if called and 25 checks even if not called).

In the research by Cappellozza et al. (2017), 87.5% of participants responded that they use,

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During work hours, communication applications such as WhatsApp, Skype, and others are used.

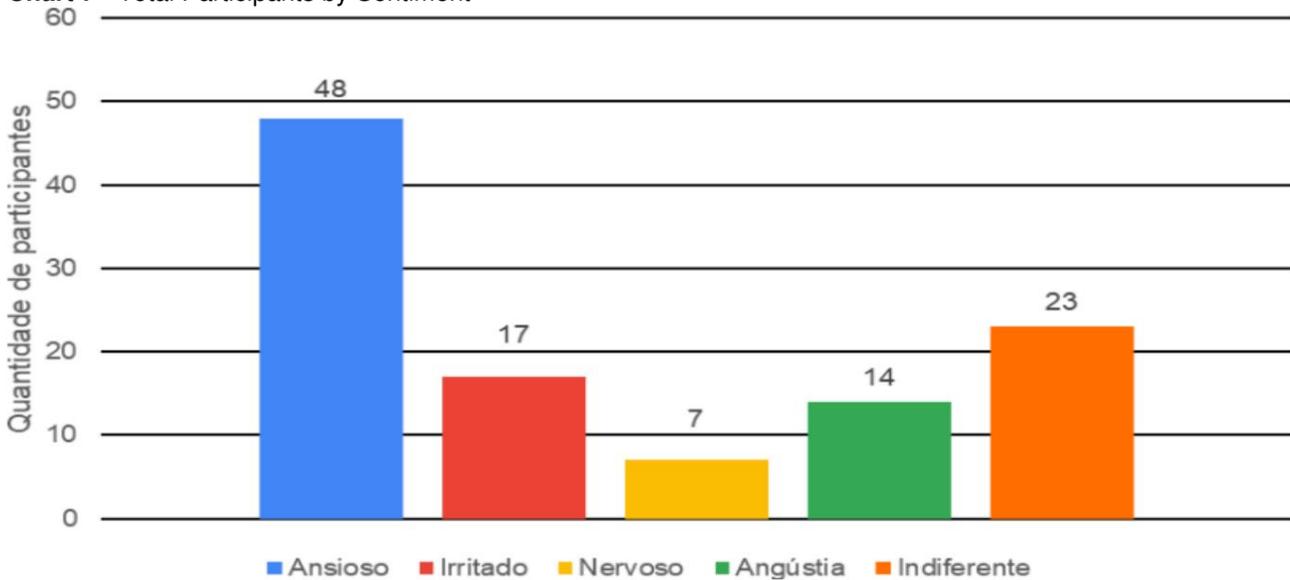
Access to social media is also significant, with 70.42% reporting that they access social media during

The workday. The use of cell phones for personal reasons accounts for only 10.61% of...

Respondents said they do not use it in this way, while 30.23% access their cell phones eight times a day. times, or more.

Graph 7 presents the results regarding the feeling of being *offline*:

Chart 7 - Total Participants by Sentiment



Source: Authors' own work.

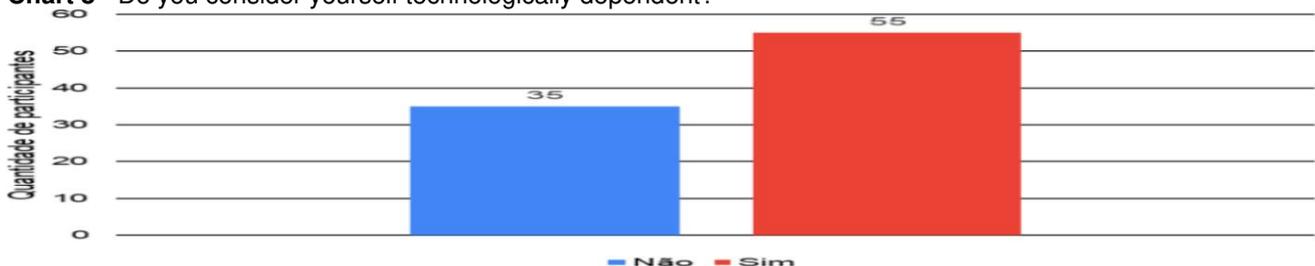
The data obtained in this research demonstrates that 86 participants have already felt something for being *Offline* (anxiety, irritation, nervousness or distress) and 23 participants feel indifferent.

According to King et al. (2014), these data show emotional dependence caused by lack of internet connection, this behavior being characterized as nomophobia, being It is necessary to investigate and treat.

The data found in our research contradict the results presented by Santos. et al (2021) in which 9.4% of the population reported feeling anxiety or other symptoms when they are *offline*.

Graph 8 describes the results based on each participant's relationship with the Use of mobile technologies:

Chart 8 - Do you consider yourself technologically dependent?



Source: Authors' own work.

The results indicate that 61.11% of participants consider themselves dependent.

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technological, while 38.89% say they do not. These data diverge from the research carried out by Da Silva Melo et al. (2018) in which none of the interviewees admitted to being technologically dependent.

6. FINAL CONSIDERATIONS

This article aimed to describe the psychological impacts of addiction.

Technological change can have an impact on the young university student population.

Based on the analysis of behavior, which can help identify contingencies. environmental measures to control excessive technology use behavior and develop strategies. effective ways to modify this behavior.

According to the research results, it can be seen that the university student population makes constant use of a mobile device in their daily life, using it every day and maintaining- Always close, connected even during bedtime.

The results obtained confirmed the hypothesis, showing a statistically significant relationship. Significant among the variables under analysis, based on the data obtained, technological dependence may to cause psychological impacts on interpersonal relationships, leading to social isolation and triggering a range of psychological problems, including depression and anxiety. This confirmation reinforces the notion that technological dependence represents a threat to our mental health.

However, this research has made it clear that mobile technologies do This is part of the daily routine for university students who use mobile devices for various purposes. such as studying, research work, watching movies, playing games, and relationships, for this reason... The population studied may develop this behavioral disorder given these specific characteristics. The symptom of anxiety is observed, evidencing nomophobia, a relevant factor for characterizing the condition. Technological dependence.

It's important to point out that it's not possible to measure how much usage time is good or bad. Technological dependence is characterized when the use of these devices is affecting daily life. resulting in intense suffering, such as psychological, personal, and relationship problems. social.

Therefore, we believe that these points are interesting for society to reflect upon. the conscious use of these technologies, thus seeking a healthy relationship with them. They are very useful in our daily lives, but self-control and conscious use are necessary. Let everyone understand their own limits.

Among the contributions of this work to psychology, we highlight:

Awareness: By highlighting this behavior, we can lead people to reflect. about their own habits and behaviors in relation to Critical Analysis: encouraging people to To conduct a critical analysis of modern technologies and their role in society, this includes evaluation.



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of the advantages and disadvantages of these technologies, as well as a reflection on how they

They influence the way we think, work, relate to each other, and even have fun.

REFERENCES

AMERICAN PSYCHIATRIC ASSOCIATION. Diagnostic and Statistical Manual of Mental Disorders - DSM-5. Translated by Maria Inês Corrêa Nascimento et al. 5th ed. Porto Alegre: Artmed, 2014.

BRAGAZZI, NL; DEL PUENTE, G. A proposal for including nomophobia in the new DSM-V. Psychology Research in Behavior Management, v. 7, p. 155, 2014

CAPPELLOZZA, A.; SALATI, GH; MORAES, M.; MUNIZ, LM Personal Use of Technologies At Work: Motivators and Effects of Professional Distraction. 2017.

Davis, R. A. (2001). A cognitive-behavioral model of pathological Internet use. Computer. Human. Behav., 17(2): 187-195. Available at: [http://dx.doi.org/10.1016/S0747-5632\(00\)00041-8](http://dx.doi.org/10.1016/S0747-5632(00)00041-8). Accessed on: 13/05/2023.

DA COSTA Marques, Christopher; SOUZA, Weilan Carvalho; DE SOUZA, Julio Cesar Pinto. The dependence of technology in the mental health of adolescents. Brazilian Journal of Health Review, v. 4, n. 5, p. 23077-23096, 2021.

DA SILVA, Dirceu; LOPES, Evandro Luiz; JUNIOR, Sérgio Silva Braga. Quantitative research: elements, paradigms and definitions. Journal of Management and Secretarial Studies, v. 5, n. 1, p. 01-18, 2014.

DA SILVA MELO, Diego Gomes et al. TECHNOLOGICAL DEPENDENCE: THE DISEASE OF CONTEMPORARY TIMES IN THE FAMILY CONTEXT. 2018.

DEPENDENCE, *In*: DICIO, Online Portuguese Dictionary, Santo André, 7GRAUS, 2023.

Available at: <https://www.dicio.com.br/dependencia/>. Accessed on: April 9, 2023.

FERREIRA, Aurélio Buarque de Holanda. Aurélio Dictionary of the Portuguese Language. 5th ed. Curitiba: Positivo, 2020.

KHOURY, Julia Machado. Characterization of the neuropsychological and physiological aspects of smartphone addiction. 2018

KING, Anna Lucia Spear; NARDI, Antonio Egidio; CARDOSO, Adriana. Nomophobia: addiction to computers, the internet, social networks? addiction to cell phones?: the impact of new technologies on individuals' daily lives: clinical, cognitive-behavioral, social and environmental aspects. Publisher: São Paulo: Atheneu, 2014.

MEIRELLES, Fernando de Souza. Brazil has two digital devices per inhabitant, reveals FGV research. FGV Portal. Available at: <https://portal.fgv.br/noticias/retrospectiva-2021-brasil-tem-dois-dispositivos-digitais-habitante-revel-pesquisa-fgv>. Accessed on August 2, 2022.



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MELO, Diego Gomes da Silva; RODRIGUES, Elaine Lopes Ferreira; DA SILVA, Gizélia de Matos; DE ABREU, Mayara Lúcia Oliveira Faustino; RIBEIRO, Stevem; BERNARDINO, Suzana.

TECHNOLOGICAL DEPENDENCE: THE DISEASE OF CONTEMPORARY TIMES

FAMILY CONTEXT. Psychology.pt, 2018

MOREIRA; Márcio B.; MEDEIROS, Carlos A. de; Basic principles of behavior analysis.

Porto Alegre - RS: Artmed, 2019.

MODESTO, João Gabriel; FONSECA, Giovanna Araújo; DE SOUSA, Geisianny Pereira. The Use of Technology and Nomophobia in University Students. Journal

Online Knowledge, v. 2, p. 6-20, 2022.

MOROMIZATO, MS; FERREIRA, DB; SOUZA, LS; LEITE, RF; MACEDO, FN;

PIMENTEL, D. The Use of Internet and Social Networks and its Relationship with Indications of Anxiety and Depression in Medical Students. 2017.

NUNES, PPB; ABDON, AV; BRITO, CB; SILVA, FVM; SANTOS, I. CA; MARTINS, DQ; MEIRA, PMF; FROTA, MA. Factors related to smartphone dependence in adolescents from a region of northeastern Brazil. 2021.

RAMOS, Guilherme, Brazilians spend more than half of their lives on the Internet, research estimates.

Tech Tudo. Available at: < <https://www.techtudo.com.br/noticias/2022/05/brasileiros-passam-mais-da-metade-de-suas-vidas-na-internet-estima-pesquisa.ghtml> >. Accessed on August 2, 2022.

SANTOS, Karen Helena Costa et al. Analysis of quality of life and risk for nomophobia in smartphone use. Research, Society and Development, v. 10, n. 6, p. e43210615880-e43210615880, 2021.

SILVA, Bruna et al. THE ADOLESCENT AND TECHNOLOGICAL DEPENDENCE: A STUDY GUIDED FROM A SYSTEMIC PERSPECTIVE. Undergraduate Thesis - Psychology, 2020.

SKINNER, BF; JOÃO CARLOS TODOROV; RODOLPHO AZZI. Science and human behavior. São Paulo, SP: Martins Fontes, 2003.