

The relation between internet usage and anxiety in children

A relação entre o uso de internet e ansiedade em crianças

La relación entre el uso de internet y la ansiedad en los niños

RESUMO

Objetivo: Avaliar os comportamentos de uso de internet/jogos e traços de ansiedade em crianças que buscaram ajuda psicológica, tendo-se como hipótese que a dependência de internet/jogos pode ser frequente em crianças com sintomas ansiosos. Método: O método deste trabalho é em delineamento transversal e se trata de um estudo descritivo com abordagem qualitativa para análise dos resultados. A pesquisa foi composta por uma amostra de conveniência com responsáveis de crianças entre 7 e 11 anos. Resultados: Os resultados mostraram que a maioria das crianças possuem traços de ansiedade. Além disso, também foram identificados indícios de dependência da internet. Conclusão: Existe a possibilidade de associação entre crianças ansiosas e crianças que são dependentes de internet.

DESCRIPTORES: Ansiedade; Uso de internet; Tecnologia; Transtorno de Adição à Internet.

ABSTRACT

Objective: Evaluate the use of Internet / games and anxiety levels in children seeking for psychological help, considering as a hypothesis that the addiction to games / Internet may be frequent in children with anxious symptoms. Method: The method of this research has a cross-sectional design and it's a descriptive study with qualitative approach regarding to the analysis of the results. The survey was composed by a convenience sample of parents or guardians of children who aged from 7 to 11. Results: The results have shown that in general children behave anxiously. Conclusion: There may be some connection between children who are anxious and children who are addicted to internet.

DESCRIPTORS: Anxiety; Internet use; Technology; Internet Addiction Disorder

RESUMEN

Objetivo: Evaluar los comportamientos de uso de Internet / juegos y los rasgos de ansiedad en niños que buscaron ayuda psicológica, con la hipótesis de que la adicción a Internet / juegos puede ser frecuente en niños con síntomas de ansiedad. Método: El método de este trabajo es transversal y se trata de un estudio descriptivo con enfoque cualitativo para analizar los resultados. La investigación consistió en una muestra de conveniencia con tutores de niños entre 7 y 11 años. Resultados: Los resultados mostraron que la mayoría de los niños tienen rasgos de ansiedad. Además, también se identificó evidencia de adicción a Internet. Conclusión: Existe la posibilidad de una asociación entre los niños ansiosos y los niños dependientes de Internet.

DESCRIPTORES: Ansiedad; Uso de Internet; Tecnología; Trastorno de Adicción a Internet.

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INTRODUCTION

Anxiety has been a relevant topic addressed in this century. Gomes, Fernandes and Nóbrega (2016),^{1,2} define anxiety as an emotional state that involves psychological, social and physiological issues and that can affect the person at any stage of their life. The authors go on to say that for anxiety to be considered pathological, it needs to be disproportionate to the situations experienced.² There are characteristics such as persistence and intensity that differentiate anxiety considered normal from the so-called “pathological” and, therefore, characterize anxiety disorders.

Anxiety is a potential mental health problem that, if left untreated, can cause serious harm to people, and according to the DSM-V,³ pathological anxiety is identified as a comorbidity in other mental disorders. Data from the World Health Organization indicate that the prevalence of people with anxiety disorders worldwide is 3,6%. In the American continent, this mental disorder is even more prevalent, reaching 5,6% of the population. And, in Brazil, anxiety is present in 9,3% of people, having the highest number of cases of anxiety among all countries in the world.⁴

It is initially thought that anxiety affects only people over 18 years of age, but Melo, Lima (2020)⁵ argue that anxiety disorders affect children and that they even have difficulty understanding the exaggeration contained in the worry, unlike an adult, for example. Regarding the impact on children's development, Zuanetti et al. (2018)⁶ pointed out in a recent research that children with pathological anxiety or attention deficit hyperactivity disorder have cognitive alterations related to memorization, listening and learning. There is then a possible risk for the child population regarding the development of anxiety at this stage of life when they are responding to so many eliciting stimuli from their environment, which undoubtedly includes technology, for example.

Despite positive or apparently extraordinary aspects being linked to the advance-

ment of the Internet, this tool has been leaving traces of dependence. Studies like the one from Park, Han, Roh (2017)⁷ point to the various addictive behaviors associated with this technology. Among the typical addictive behaviors, in this study, playing intensely, shopping online and using social networks stand out.

Internet addiction may be closely linked to the malfunction of some regions of the brain, such as the prefrontal cortex, which according to Young, Abreu (2019),⁸ it is responsible for much of the decision-making and has its function impaired by simply not being used.

When an individual is on the internet, all stimuli are on the screen and there is no need to search their memory or make complex decisions. In addition to the dependence of individuals for decision making, there is also the risk of desiring immediate rewards for their actions. For example, people who play video games very often have changes in the release of dopamine in the striatum region.⁹ One can, therefore, observe the great influences of the Internet on people's lives and some other research can help to understand the incidence of Internet addiction.

Regarding risks, a qualitative study carried out by Santos et al. (2020)¹⁰ in a Basic Health Unit in the interior of São Paulo showed that children not supervised by their guardians have very quick and easy access to inappropriate content for their age, containing violence and so on.

There are not only risks related to the use of communication tools, but there are also risks for the child's development, one of the examples would be sleep.

Sleep can be an important and relevant factor for a child's development. A study was carried out with students aged 8-16 years on this topic, which indicated that students (both children and teenagers) internet users present a decrease in the amount of hours slept and an increase in the need for sleep.¹¹

Other studies that investigated factors that impact the sleep of adolescents were carried out, showing that there is an association between health behaviors, sleep ha-

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bits (behaviors that compete with sleep, for example, ingestion of caffeine-based stimulants at night for being able to play online) and sleep quality in young people.¹²

This work, therefore, points to the probable risk of Internet dependence in children and the appearance of anxiety. These themes are frequently approached in the literature, possibly due to the recurrence of cognitive and social impairments arising from internet addiction or anxiety. The aim of this study was to qualitatively assess the behavior of internet use of games and the levels of anxiety in children who sought psychological help, from the perspective of their parents.

METHOD

This study has a cross-sectional design and is a descriptive study with a qualitative approach to the analysis of results, an approach that has been widely used by academic professionals in the field of Psychology.¹³ This work sought to identify, in the responses of those responsible, what is the relationship between internet addiction and anxiety.

The convenience sample of this research consisted of parents or guardians of children who were patients at the University of Santo Amaro school service. The sample had about 30 guardians, one per child. It was based on children from the school clinic, who should be between 7 and 11 years old, with schooling between the second year and the sixth year of elementary school, of both sexes and patients from the teaching service of the University of Santo Amaro, located in the South area of São Paulo. As an inclusion criterion, guardians who had children within the proposed age were considered. Children who were younger or older than the proposed range and children with intellectual deficit or other disabling medical condition were excluded from the study.

The sample was selected for convenience, that is, attendance at the psychological consultation was taken advantage of to be invited to participate in the research. The participating guardians signed the free in-

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formed consent form and participated in the conversation circles on the premises of the Universidade da Zona Sul of São Paulo. To allow access to the clinic, first, contact was made with the coordinator of the Psychology course for permission to formally carry out the research.

On the days of data collection, the application of the survey was adapted to the time available to parents and children in the clinic. Invitations to participate in the research were made hourly at the reception of the clinic, randomly and open to all guardians who waited for the children to be seen. However, the target audience of the survey was announced so that those responsible were aware of the data sought by the survey. Those responsible who were interested were invited to participate in a waiting room group on “Habits of internet use and games in children – Myths and truths”. Each group lasted approximately 40 minutes, thus respecting the children’s care time, which was 50 minutes.

Each conversation circle began with a clarification on the research steps so that those responsible were in agreement with the use of information for research purposes.

After contextualizing the research topic, the topic “The use of the internet and games by children: what is the role of parents?” was discussed with parents. This discussion was thought of as a moment for those responsible to express how much they knew about the research topic, as well as to verify their perception of their children’s use of the internet and how they deal with its use. From discussions, it was then possible to clarify for the participants, the relevance of the topic to the present time. This discussion had characteristics of qualitative evaluation of results. After each group was carried out, the parents were returned to the reception of the service.

The data collection process took place until composing the research sample. Due to the flow of lectures, the help of other Psychology students was necessary to help with data collection.

Data were analyzed qualitatively considering the speech of those responsible.

The study proposal was submitted for authorization by the Coordination of the Psychology Course on the use of the school service space for research. It was also submitted to the Ethics Committee for Research on Human Beings at Universidade Santo Amaro (UNISA). The objective with this action was to develop a Course Conclusion work that followed the Institution's recommendations as well as the ethical guidelines for research on human beings. Those responsible signed the consent form so that the data could be used in the research results, always seeking to maintain the integrity and confidentiality of the identity of the participants. CAAE number, Brazil platform: 19012719.6.0000.0081.

RESULTS AND DISCUSSION

In the rounds of conversations held with those responsible for the research topic, it was possible to observe some relevant aspects, such as the importance of control and imposition of limits, the degree of children's interest in the internet and irritability or aggressiveness when the child is without the tool.

I always try to talk to him but I worry because when I'm away I can't control what he's watching. (S.02)

He has an established time to be on the internet, which is from 4 pm to 7 pm, when he has finished school activities and household chores, but I know that he bypasses this established period because we work outside the house and we can't control it. (S. 07)

I spend a lot of my time working, trying to control my work, calling to see if it's in video games, games or watching cartoons. He loses track of time. (S. 15)

I see that the best way to improve usage time is by setting limits for children and proposing activities.

(S. 28)

There is a convergence in the discourse of parents, who complain about the lack of control and suggest, as a solution, to impose limits on time and the way in which technology is used. Patrão, Fernandes (2019) 14 talk about the fact that guardians are fundamental in their children's education also in relation to the use of the internet. As observed in the participants' speech trend, parents may encounter challenges in trying to mediate use, perhaps because of the dependence already installed in the child, the absence or the fact that most guardians are already dependent on technological tools, just like their children.¹⁵

Discourses related to the parents' perception of internet use, the consequence of the dependent interaction with the tool and actions to improve it also appeared.

If someone calls at the time he is using it or the internet goes down, he screams, he gets extremely nervous, we can't do family programs, because when I take the internet off, he gets anxious. (S. 03)

She misses the internet when she can't use it. As if it were an obligation to finish what she was doing when she was connected. (S. 13)

I restrict its use during the week, but when it comes Friday, Saturday and Sunday, I let him use it freely, except during meal times. He is looking forward to Friday's arrival and when use is discontinued he becomes nervous. He is restless and only calm on the internet. (S. 23)

I remember a story from the state where a 12-year-old child who was addicted to the internet lived and after her parents decided to take the internet away, she ended up committing suicide, I worry about that. I'm a teacher, you know, I see the addictive behavior of children and how they don't do well in scho-

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olwork. (S. 26)

Parents were distressed by their children's use of the internet and attributed motor agitation and irritability behaviors to a possible dependence. To this information, Rosa et al.¹⁶ (2020) mention that certain behaviors characteristic of chemical dependence are present in those who use the internet excessively, such as motor agitation, which would, in theory, explain why children are calmer when in contact with the technological tool. This data brings to memory aspects related to the brain reward circuit, which is activated in the brain through the memorization of a pleasant situation that commonly has high degrees of release of the neurotransmitter Dopamine.¹⁷

Also Rosa et al.¹⁸ (2020), argue that internet-dependent subjects will need increasingly higher levels of exposure to the screens in order to feel pleasure. These traits are perceived by parents, who observe that their children cannot distance themselves from the tool and that this would alleviate anxiety and agitation in them.

Parents also reported anxious behaviors in their children. Regarding this point, it is known that there is a possible relationship between anxiety and internet addiction. This relationship was studied in a survey carried out by Weinstein et al. (2015)¹⁹ with 120 university students. As a result, it was possible to observe that dependence on the tool makes people have low social relationship skills and, consequently, individuals feel anxious and afraid related to social contact. Another worrying fact is that anxiety and depression are psychiatric disorders that are also observed in children who use technological tools, as observed in a study in Turkey revealing a percentage of anxious or depressed children in 22% of the sample.²⁰

In short, it was possible to perceive the connection of internet dependence and anxious traits through the parents' discourse, they themselves name their children's behavior as anxious. In addition to anxiety, in the conversation circle, parents complained a lot about their children's disrespect for the established limits, which also favored the hypothesis of dependence in the sample.

CONCLUSION

It was possible to better understand the connection between anxiety and internet addiction. In response to the objective, most of those responsible for the sample mentioned internet addiction as a frequent problem at home and associated, according to their own speech, anxiety and typical behaviors of anxious individuals.

The conversation circles brought important information to the research results and it was also possible to observe the difficulty that parents have in supervising their children's internet use. It was also possible to understand that those responsible see the use of the internet as a danger to children.

It is relevant that this study is reopened to try to clarify the prevalence between the internet and anxiety among children, perhaps because of the relevance of the topic and the fact that younger and younger children are starting to use the tool, and this can be worrying.

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