EXCESSIVE INTERNET USE AND PARENT-CHILD RELATIONSHIP

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Abstract

The main objective of this study was to investigate the connection between problematic Internet use and the parent-child relationship. Starting from Vygotsky's theory (1978), which emphasized the importance of interaction in child development, the present research is based on identifying changes in children's and parents' behavior, when using the Internet. The participants (N = 204) completed the KPS scale of parental satisfaction, the index of family distress (FDI), the scale of family communication (FPSC) and the PCIAT index, for excessive Internet use. The results showed a statistically significant association between problematic internet use and parental satisfaction, family communication, family distress.

Keywords: internet, parent-child relationship, family communication, internet addiction

Introduction

Over the years, society has continued to grow, making technology an integral part of our life. Due to the increasing use of mobile devices at home, there has been a significant increase in children's oriented applications and electronics (children are the targets of over 80% of the best-selling applications in the educational category of the iTunes store; Shuler, Levine & Ree, 2012). Asking how much children use technology and how much they are exposed to it, Kabali et al (2015) mention that most families own TVs (97%), tablets (83%) and smartphones (77%). Taking all this into consideration, surely, the impact of technology on the development of children, adolescents but also on the quality of relationship with others is one of the most studied topics currently and there are many conflicting opinions. Thus, the main objective of this research is to investigate the relationship between excessive internet use among children and the interaction between them and their parents.

Kirkorian, Pempek, Murphy, Schmidt & Anderson (2009) have shown that background television influences the quality of relationships between adults and child, in that, in this condition, the interaction between the two decreases and the active engagement of the parent in conversation is lower. Parents tend to adopt passive behavior, approving what the child tells them, but without maintaining eye contact with him. Pempek, Demers, Hanson, Kirkorian & Anderson (2011) have shown that, in laboratory conditions, during the viewing of programs for children, the quality and quantity of interactions decreased. However, parents use the contents of programs as a basis for conversation. When parents use mobile devices during their interaction with the child, Kildare and Midlemiss (2017) argue that they are less sensitive and responsive (verbal, non-verbal) to their needs, which could lead to poorer quality interaction and children can then engage in risky behaviors to attract parents' attention. While, exactly partents could be the ones counseling their children to stay healthy in the process of interaction with electronic devices (Goian, 2019). They

could be helped by specialists represented by psychologists and/or social workers who are skilled in communication techniques and proper language to be used with children in this interaction (Goian, 2004, Goian, 2010).

Literature shows that there is a significant association between the family environment and the use of technology, an uncertain family environment being associated with the excessive use of the internet and mobile phones (Tudorel & Vintila, 2020).When analyzing the attitudes of parents regarding the use of media devices, Genc (2014) mentions that there are parents who have a positive attitude, explaining the benefits of using technology (improving motor and cognitive skills, visual memory, etc.), but also parents who have a negative attitude, because they believe that smartphones can cause physical or mental problems in the future, children becoming introverted and leading an isolated life (Gavrila-Ardelean, M. & Gavrila-Ardelean, L., 2018). However, the parents have not taken any measures to reduce the time spent around technology. Kostyrka-Allchorne, Cooper & Simpson (2016) suggest that parents generally consider the effects of media use to be positive, monitoring the content their children access, but not how much they use technology. Mascheroni (2013) identifies that parents' attitudes towards smartphones are ambivalent: while it is the father who decides to give the child a mobile phone, the mothers are more skeptical and worried because children lack experience and critical abilities and they are vulnerable to the existing inappropriate content.

Because time spent by children in the presence of technology is getting longer as the years go by, the researchers tried to observe how media affects their development using certain theories to try to explain their hypotheses (Gavrila-Ardelean, M. & Gavrila-Ardelean, L., 2017).

Vygotsky's theory (1978) argues that learning takes place in the area of proximal development, more specifically, the distance between the child's current level of development and his or her potential development (which he can achieve with the help of others). Therefore, since Vygotsky believed that interactions with others lead to an internalization of the cognitive processes first learned in the social context, it is necessary to consider that a fruitful parent-child interaction is necessary for the proper development of the child. Farrant and Zubrick (2012) show that reading with your child, as well as mutual attention between the child and his/her parent, leads to an early development of the preschooler's vocabulary. Gregory and Rimm-Kaufman's study (2008) mentions that a healthy mother-child interaction, measured during kindergarten is associated with an increased likelihood of completing studies and academic success. Connell and Prinz (2002) identify an increase in social skills, school preparation, receptive communication among preschoolers from poor families when parents were receptive to their emotions and needs. At the same time, the consistent response of mothers to children's needs has been associated with an increase in cognitive and social skills (Landry, Smith, Swank, Assel & Vellet, 2001).

Since most of the previous studies were focused on the impact of watching TV shows on the interaction between parent and child, the present study aims to observe the impact of smartphones, in terms of excessive use of internet on the relationship between the two parties involved. At the same time, this study measures the relationship between parents and preschoolers, not only through the level of communication, but also through parental satisfaction and family distress.

The hypotheses of this study were:

H1. The higher the level of overuse of the Internet among children, the lower the level of parental satisfaction.

H2. There is a positive association between the level of internet overuse and family distress.

H3. There are differences between parents who use and those who do not use media devices at home to solve work-related tasks, regarding family communication.

Methodology

This study presents a non-experimental, correlational and comparative design.

Participants

The present study had 204 participants, of which 170 were female (83.33%) and 34 were male (16.67%), ranging in age from 20 to 51 years (M = 32.99). Of the 204 subjects, 182 stated that they were married, 10 divorced, 9 single and 3 others (in a relationship/cohabitation). 57.84% had higher education, 40.69% secondary education and 1.47% others. Of these, 50% worked in the private sector, 19.61% in the public sector, 22.06% were not currently employed and 8.33% stated that they were their employees. The children of the subjects ranged in age from 0-8 years (M = 4.59), 111 of them being female (54.41%) and 93 were male (45.59%).

Research instruments

To measure the interaction between parents and children, the following instruments were used:

Parental satisfaction. The Kansas Parental Satisfaction Scale (Kansas et al., 1985) was used to measure this concept. It contains 3 items measured on a Likert scale from 1 (extremely dissatisfied) to 7 (extremely satisfied). Scoring is done by summing item responses. A low score means a low degree of parental satisfaction, whereas a high score means a high degree of parental satisfaction. In this study, Cronbach's Alpha of the KPS scale was .85.

Family distress. The Family Distress Index (Family Distress Index, McCubbin, Thompson, and Elver, 1996) was used to measure the severity of distress in terms of family problems and lack of harmony. The questionnaire has 8 items reflecting the low degree of problem-solving, tension, conflict and disorientation either in the case of a single-family member or in the family, as a unitary whole, being measured on a Likert scale from 0 (not a problem) at 3 (big problem). Summing up the scores obtained on each item, we can say that a high score means a high degree of family distress. The present study showed an excellent internal consistency (Cronbach's Alpha = .91) of the FDI index.

Family communication. To assess this, the family problem-solving scale (Family Problem-Solving Communication, McCubbin, McCubbin & Thompson, 1996) was used. This instrument has ten items designed to measure the two dominant patterns (positive vs. negative) in family communication. The FPSC can be scored in two ways, namely: summing all items to obtain a total score or summing the items belonging to each scale. In the present study, the FPSC scale had an acceptable internal consistency (.78) to good (.82), in the case of omitting item 5.

Excessive internet use. To measure the level of internet use, the PCIAT (Parent-Child Internet Addiction Test, Young, 2016), which is based on the Internet Addiction Test (Young, 1998), was used (Alpha Cronbach = .82, good validity, strongly correlates with personal use of the internet; Wydianto & McMurran, 2004) and developed to evaluate children who are suspected of over-

using technology. The questionnaire has twenty items, reported on a Likert scale from 0 to 5, where 0 (does not apply) and 5 (always), the total score is obtained by summing all the responses to the items. A high score indicates the probability that the child for whom the parent completed the questionnaire is an Internet addict. The internal consistency of the PCIAT instrument in this study was excellent (.92).

Procedure

After the participants were assured of the confidentiality and anonymity of the data, they were asked to give their consent to participate in the research. The subjects completed the questionnaire both in virtual format, with the help of Google Forms, being recruited in the online environment, through groups for parents, but also in physical format (pencil and paper form), through kindergartens, primary schools or playgrounds for children, where parents were approached to complete the questionnaire. The completion time was 20 - 25 minutes, and the data were used for scientific purposes only, which is confidential and anonymous.

Results

After completing the questionnaires, the raw data obtained were processed and analyzed in the SPSS program. Performing a descriptive analysis of the variables involved in the study, we report the central tendency indicators as follows:

Table 1. Descriptive statistics for the study variables

Variable	***M***	***SD***
Internet overuse (PCIAT)	13.10	12.6
Parental satisfaction (KPS)	16.55	2.98
Family distress (FDI)	5.75	6.22
Family communication (FPSC)	24.51	4.36

Note: M = Mean; SD = Standard deviation

Hypothesis 1 argues that the level of parental satisfaction of the participants will decrease as the level of children's internet use is increased. Because the analyzed data were not symmetrical, both variables analyzed having asymmetric distributions, the nonparametric Spearman correlation was applied. The results (see Table 2) obtained from the investigation of the relationship between the level of parental satisfaction and the level of internet use showed a weak, negative, statistically significant relationship between the two variables $r_s(202) = -.346$, $p < .001$. Therefore, the hypothesis was supported.

Table 2. Correlation between excessive internet use and parental satisfaction

Rs	KPS	PCIAT
PCIAT	-.346**	1
KPS	1	-

Note: **p < .01; KPS = parental satisfaction; PCIAT = excessive internet use

Hypothesis 2 argues that the higher the level of family distress, the higher the level of children's internet use. To test this hypothesis, the nonparametric Spearman correlation was used, because the symmetry assumption of the two analyzed variables was not supported. Following the results (see Table 3), a weak, positive, statistically significant relationship was observed between family distress and the level of internet use among children rs (202) = .202, p <.01. Therefore, the hypothesis was supported.

Table 3. Correlation between excessive internet use and family distress

Rs	FDI	PCIAT
PCIAT	.202**	1
FDI	1	-

Note: **p < .01; FDI = family distress; PCIAT = excessive internet use

Hypothesis 3 states that parents will report different scores regarding family communication. These differences would be due to the use or non-use of the smartphone and the internet at home, to solve work-related tasks. Due to the lack of symmetry of the studied data, the nonparametric Mann-Whitney U test was used to investigate if there are differences between these two groups, regarding family communication. This gives U = 3784, p (bidirectional) <.05, r = .17 and we also report significant differences between the mean of the group using the smartphone at home (M = 94.61) and the mean of the group not using the smartphone at home (M = 116.36) regarding family communication (see Table 4). Thus, the hypothesis was supported.

Table 4. Comparisons between the group that uses the smartphone at home and the one that does not use it

Scale	The group that uses (N = 130) M (mean)	The group that does not use (N = 74) M (mean)	Mann Whitney-U test
FPSC	94,61	116,36	3784*

Note: FPSC = family communication; *p < .05

Discussion

The main objective of the research was to investigate the relationship between the excessive use of the internet among children and the interaction between them and their parents. In this research, the relationship between parents and children was measured using several concepts such as family distress, family communication and parental satisfaction.

The results of the first hypothesis show us how the more children spent more time online, the lower the level of parental satisfaction. The connection between the two variables is also found in Mascheroni's study (2013), which suggests that parents are becoming increasingly dissatisfied with children's behavior, as they use the internet only for fun and communication. Thus, the parents impose certain limits regarding the children's internet use. This association between the two variables is also found in Ko, Yen, Yen, Lin & Yang's study (2007), indicating a low degree of parental satisfaction related to family functionality when children use the internet very often and in Turow & Nir's study (2000), which states that parents are dissatisfied with children's online behavior, especially when they provide extremely easy personal information. The

hypothesis is statistically significant, but the magnitude of the correlation is weak; this can be explained either by the lack of a practical importance of the results, or by the lack of the effect in reality (increased risk of committing a type I error).

The results of the second hypothesis show us how the relationship between parents and children, in terms of an increased level of family distress, increases the internet use among children. This association is also found in the study of Kim, Chae, Im & Sin (2004), which shows that domestic violence, lack of family cohesion can increase the internet use and in the study of Lam, Peng, Mai and Jing (2009) which illustrates how experiencing recent stressful events in the family can increase media use among adolescents. At the same time, Leung's study (2006) suggests that stressful events in the family are related to the increased use of the internet among children and adolescents, in particular, because by doing this activity, it helps them to change their negative state through the social support they receive. Also, in the case of this hypothesis, the magnitude of the Spearman correlation is weak, with an increased risk of having a Type I error or that the results are not of practical importance.

The third hypothesis suggests that parents who spend time online at home, have a lower level of communication with family than those who do not spend time online at home to solve work-related tasks. The effect obtained from the comparison is a large one, being significant both statistically and practically. These were also mentioned by Kim et al (2004), Wartberg et al (2014), Jackson et al (2003), who stated in their studies that internet use can harm family communication.

Limitations

The first limitation of the study is the lack of a scale for measuring social desirability/lying and losing motivation in completing the questionnaires used. Because one parent has completed the questionnaires for his child, he may have slightly distorted the reality to meet social expectations (the child is well educated, does not use the Internet too often, I am a good parent.). At the same time, the participants could have lost their motivation during the completion of the questionnaire and only offer extreme scores, to finish the task as soon as possible.

Another limitation would be that only one parent completed the questionnaire. It is for both parents to fill out the questionnaires to see if their perspectives coincide or even another close relative, who would have offered an unbiased perception of the issues covered in the study. Thus, the answers would have had a higher degree of accuracy.

The third limitation refers to the sample of participants chosen, namely its inequality when we consider the gender of the respondents which should make us pay attention when generalizing the results to the entire population. We have a predominantly female perspective, although the number of participants in terms of gender should have been relatively equal to have a holistic view of the investigated concepts. This is why it is ideal for both parents to complete the questionnaires. Also, in order to obtain valid and robust results, future studies should take into consideration to use a validated and culturally adapted scale (Tudorel et al., 2019; Vintilă et al., 2018).

Conclusions

As the study has shown, there may be a connection between the problematic use of the Internet among children and the relationship that is established between them and their parents. This issue should be further investigated taking into account all the aspects necessary to obtain results as close to reality as possible. It is necessary to understand the mechanisms behind

children's internet addiction, how this dependency has an impact on the family but also how certain family factors can increase media use.

In the context of an increasingly technological contemporaneity in which children are increasingly using smartphones we ask ourselves what is the middle way by which we can ensure that they are safe from the dangers that arise with the internet use and that they just take the advantages that technology offers?

How can we help parents cope with everyday problems so that they do not neglect their children, prompting them to seek online support? And how can we guide the children to keep in touch with their parents, even if the parents are not experts in using devices? Future studies could investigate the effect of exposure to the natural environment in strengthening the relations between parents and their children, since the beneficial effect of nature on physical, mental health and behavior are already known (Swami et al., 2019).

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