



THE INFLUENCE OF SOCIAL NETWORKS ON THE PREVALENCE OF BEHAVIORAL DISORDERS IN CHILDREN AND YOUNG PEOPLE

UTICAJ DRUŠTVENIH MREŽA NA UČESTALOST POREMEĆAJA U PONAŠANJU KOD DJECE I MLADIH

Lejla Kuralić-Čišić^{1*}, Emina Suljkanović-Djedović, Meliha Bijedić, Ranko Kovačević

¹Faculty of Education and Rehabilitation, Tuzla, Bosnia i Herzegovina

Original Scientific Article

Received: 27/08/2025

Revised: 13/10/2025

Accepted: 25/10/2025

ABSTRACT

This scientific research paper examines the connection between the use of social networks and the presence of internalized and externalized behavioral disorders in children and adolescents. By using multiple regression analysis, the effects of addiction to the Internet and social networks, time spent on the Internet and the frequency of using social networks on the problems of children and young people were investigated. The results show that predictors related to the use of social networks explain 12% of the variance of internalized behavioral disorders and 10% of externalized ones. Based on the obtained results, it can be concluded that the abuse of the Internet and social networks has a significant impact on the appearance of anxiety, depression, aggressiveness and impulsivity. The work points to the need for preventive measures and education of children, parents and teachers about the responsible use of digital technologies.

Key words: social networks, internet addiction, behavioral disorders, internalized problems.

SAŽETAK

Ovaj naučno-istraživački rad ispituje povezanost između upotrebe društvenih mreža i prisutnosti internaliziranih i eksternaliziranih poremećaja u ponašanju kod djece i adolescenata. Korištenjem višestruke regresijske analize, istraženi su uticaji zavisnosti od interneta i društvenih mreža, vremena provedenog na internetu i učestalosti korištenja društvenih mreža na probleme djece i mladih. Rezultati pokazuju da prediktori povezani sa korištenjem društvenih mreža objašnjavaju 12% varijanse internaliziranih poremećaja u ponašanju i 10% eksternaliziranih. Na osnovu dobivenih rezultata može se zaključiti da

* Correspondence author: Lejla Kuralić-Čišić, Faculty of Education and Rehabilitation, Tuzla, E-mail: lejla.kuraliccisic@untz.ba

zloupotreba interneta i društvenih mreža ima značajan uticaj na pojavu anksioznosti, depresije, agresivnosti i impulzivnosti. Rad ukazuje na potrebu za preventivnim mjerama i edukacijom djece, roditelja i nastavnika o odgovornoj upotrebi digitalnih tehnologija.

Ključne riječi: društvene mreže, ovisnost o internetu, poremećaji u ponašanju, internalizirani problemi.

INTRODUCTION

Excessive consumption of social networks and the Internet can lead to the development of social media addiction. It is worrying that people addicted to the Internet experience the same withdrawal symptoms as drug and alcohol addicts when they are unable to connect to the Internet. Social media addicts neglect their lives outside of the Internet, including family and friends, which worsens their development of interpersonal skills. Addiction develops more easily in depressed, shy, introverted and anxious people. Insecure people and people with low self-confidence are also more susceptible to this type of addiction (Škrgitić et al., 2020).

Technological progress brings many benefits, but also new obstacles in raising children who are affected by the influence of electronic media from an early age. The age limit for using digital media is moving higher and higher, which means that today's parents are one of the first generations that will have to figure out how to limit their children's screen time. It is undeniable that digital devices can provide endless hours of entertainment, and even offer educational content, but unlimited time in front of a screen can be harmful.

“Screenism” can often develop into a social disorder, as children refuse to interact with their environment due to excessive use of technology. Currently, there is scientific evidence of the possible development of addiction to the following behaviors: gambling, social networks, online video games, online pornography. What characterizes behavioral addictions is legality, i.e. they are products and behaviors that are legally available (some restricted to adults only). There is a certain continuum from use for entertainment or benefit through abuse to addiction. The line is very subtle. Addiction is defined as a state in which an individual continues to behave in a certain way in order to obtain a reward, even if there are negative or harmful consequences that outweigh the benefits. We can say that addiction has occurred at the moment when there is a loss of control and the continuation of excessive use despite the increasingly obvious disruption of other relationships, obligations and behaviors that are an integral part of our lives. Participating in all of the above behaviors strongly rewards our brain and creates a feeling of satisfaction that is easily accessible. But this also awakens an even greater need for them. And this is where the vicious circle of behavioral addictions begins to form. Other aspects of our lives begin to be neglected, the object of addiction begins to dominate, the person loses control over their own behavior. From a scientific point of view, we are guided by the following criteria when defining addiction *preoccupation, mood modification, tolerance development, withdrawal symptoms, conflicts, relapse*. In a way, the above criteria indicate the numerous unfavorable consequences of behavioral addictions that affect us as individuals, but also our relationships with close people, our hobbies, interests and our entire environment. One of the main characteristics of addiction is the loss of control over one's own behavior, and this actually means a kind of loss of control over oneself. It's as if

social networks, video games, gambling are taking over. Behavioral disorders are those behaviors that have negative consequences and are harmful both to the adolescent and to the wider environment, and that deviate from the norms of usual behavior for that age, gender, situation and environment; they can be present on a personal level and in the social environment and require professional help. One of the most common divisions of behavioral problems is precisely the division into externalized and internalized behavioral problems (Achenbach, 2007, Achenbach, Rescorla, 2001). Externalized behavioral problems are also called predominantly active behavioral problems and refer to insufficiently controlled and other-directed behaviors. Internalized problems or predominantly passive behavior problems refer to behaviors that are over-controlled and self-directed (Bouillet et al., 2007). Externalized behaviors create a problem for the environment, internalized are a problem for the children/young people themselves. Externalized behaviors include problems with attention, self-control, uncooperativeness, as well as antisocial, aggressive behaviors, while internalized disorders refer to depressive moods, withdrawal, anxiety, feelings of inferiority, shyness, hypersensitivity, and feelings of somatic difficulties. It should be emphasized that internalized and externalized disorders are often not excluded and that their positive relationship was established in many samples (Novak, Bašić, 2008). According to Ashford et al. (2008) internalized problems are intrapersonal disorders such as depression, anxiety and excessive fear (Achenbach et al., 1984), and they appear quite often, up to the age of sixteen, and approximately 15% of children experience emotional disturbances (Costello et al. 2003). Achenbach and his collaborators identified a total of eight syndromes that assume a set of symptoms of emotional, social and behavioral problems. By applying factor and cluster analysis, patterns of grouping of symptoms or forms of problematic behavior were observed and based on this, the following syndromes were identified: Anxiety-depression; Withdrawal-depression; Somatic complaints; Social problems; Thinking problems; Attention problems; Behavior that violates rules (lack of guilt if something is done wrong, lying, cheating, socializing with problematic children, swearing, using drugs, running away from home and school, violating rules of conduct at home, at school, etc.); and Aggressive behavior (physical confrontations, disobedience at school, spite, suspicion, "bad temper", threats to others, screaming, noise, destroying other people's things, etc.).

Research Goal

The goal of the research is to determine specific patterns of behavior of children and young people, and to examine the differences between students with behavioral disorders and internalized problems in terms of using social networks.

Research Hypothesis

H 1: There are clear statistical indicators of the impact of social networks on the prevalence of internalized and externalized behavioral problems, levels of loneliness, sense of belonging and social connectedness of children and youth.

Sample of respondents

The sample of respondents in this study consists of 700 primary and secondary school students, both genders. The research will be conducted in the municipalities of Dobož Istok, Gradačac and Gračanica.

Research method and measurement instruments

The research was conducted in the second semester of the 2023/24 school year, more precisely from the beginning of March to the end of May, after the research was approved by the Ministry of Science, Culture and Sports of the Tuzla Canton, and the consent of parents for the survey was obtained, as well as the school principals and the Teachers' Council, in which the research is to be conducted. For the purposes of this research, the following questionnaires were used:

1. Bergen Social Media Addiction Scale
2. The Child Behavior Checklist - CBCL
3. Questionnaire entitled "Use/abuse of social networks and occurrence of behavioral disorders"
4. Internet Addiction Scale (Chen)

Data processing methods

The research data were processed using the method of parametric and non-parametric statistics. Multivariate regression analysis was used to check the influence of social networks on internalized and externalized behavior disorders in children and young people. The results of the coefficient of determination were presented, and in order to see the separate influence of the predictor in explaining the common variance of the predictor and criterion, the beta coefficient was calculated, which represents the standard coefficient of the regression analysis. Research data were processed in the statistical package SPSS 25 for Windows.

RESULTS AND DISCUSSION

In order to verify the research hypothesis, a multiple regression analysis was applied. The goal of multiple regression analysis is to determine the relationship between a set of independent (predictor) and dependent variables (criterion). That is, the goal of regression analysis is to predict criteria using a system of predictors. The predictor variable in the study is the total results of internalized behavior problems, while the predictors, or criteria, are addiction to social networks, the Internet, daily time spent on the Internet and visiting social networks. The coefficient of determination (R^2) is important in regression analysis and is used to understand how much the model explains the variability of the dependent variable. From Table 1, it can be seen that this coefficient is 0.12, or 12% of the variability of internalized behavior problems in children and adolescents can be explained by the influence of social networks. Based on the results shown in Table 1, it can be concluded that social

networks at the level of statistical significance 0.01 affect the prevalence of internalized behavior problems in children and adolescents.

Table 1. Results of regression analysis

| Model | Sum of squares | df | Varijance | F | p |
|------------|----------------|-----|-----------|-------|------|
| Regression | 9603.11 | 4 | 2400.77 | 23.72 | .000 |
| Residual | 68898.79 | 681 | 101.17 | | |
| Total | 78501.90 | 685 | | | |

R= 0,35; R²= 0,12; adjusted R²= 0,12

Table 2 shows the results of the beta coefficient, which represents the standardized coefficient of the regression analysis. Logically, it is close to partial correlation because it shows the separate influence of the predictor in explaining the common variance of the predictor and the criterion. As in the correlation analysis, the sign of the beta coefficient is observed. In Table 2, it can be seen that internalized behavior problems in children and adolescents are most influenced by addiction to social networks, the Internet, and time spent on the Internet. Similar results were obtained by Nikolova S (2024) in a study she conducted to examine the impact of social media on the self-esteem of children and adolescents. The measure used was the Internet Addiction Test (IAT) and the Rosenberg Self-Esteem Scale. This study investigated the relationship between various variables related to Internet use in the adolescent Greek population. These variables include demographic data such as age, religion, and citizenship, as well as those related to the Internet, such as hours spent on social networks, preferences for online platforms - with an emphasis on Instagram and Facebook - as well as psychometric indices such as self-esteem. The study included a total of n = 85 participants, of whom 39 were male and 46 were female. The mean age was 15.129 (SD = 1.334). The results show that a proportion of participants are addicted to the Internet and actually prefer Instagram to Facebook, and that the majority of them (n = 22) use social media for 3-4 hours per day. Instagram was the platform of choice for 55 respondents, while the other 30 showed a preference. Many of the hypothesized factors such as gender and religion did not show a significant impact on the risk of Internet addiction. But what is most important in the results is that they show that the more time people spend online, the greater the likelihood of addiction and lower self-esteem.

Adolescents who show low self-esteem also show high addiction to Internet use and vice versa. For example, a relatively recent study showed that general and more inclusive variants (e.g., family) of self-esteem in adolescents are negatively associated with Internet addiction (Aydm and San, 2011). It seems that such a finding is comparable in different cultures as well (Sariyska et al., 2014). These findings—consistent with our own—may also lead to poor mental health prognosis (e.g., Budak et al., 2015). For example, low self-esteem plays a key role in depression and leads to excessive reliance on and addiction to the Internet (Bahrainian et al., 2014); This also applies to other psychopathologies, such as anxiety (Kumar and Mondal, 2018), stress and insomnia (Younes et al., 2016). In this case, it is important to understand the factors underlying the association between Internet addiction, psychopathology and self-esteem (Bozoglan et al., 2013). Interestingly, another study has

shown that self-esteem may not be such a significant predictor of Internet addiction, but rather that psychopathology (e.g., depression) and loneliness are more likely to be implicated (Ayas & Horzum, 2013). Other related studies have also included parenting practices, showing that parental rejection and overprotection may increase the risk of Internet addiction in children; interestingly, this association appears to be mediated by self-esteem (Yao et al., 2015). A more relevant approach to exploring the diverse (and complex) associations between dysfunctional Internet use and indicators of psychological well-being—such as self-esteem (Cardak, 2013; Cheung et al., 2013; Sharma & Sharma, 2018)—might be to use structural equation modeling (SEM), which is essentially conducting simultaneous multiple regressions. Indeed, a number of recent studies have examined the negative contribution of Internet addiction to various aforementioned indicators such as stress, depression, anxiety and loneliness in both sexes (Ostovar et al., 2016). A more recent study in China included social support in the context of Internet addiction and showed through SEM that emotional dysregulation can be considered a risk factor for Internet addiction, with social support acting as a protective factor (Mo et al., 2018); Interestingly, the same team of authors showed that excessive use of the Internet has negative consequences on academic aspirations (Mo et al., 2020).

Table 2. Beta coefficient results

| Model | Unstandardized coefficients | | Standardized coefficients | t | p |
|--|-----------------------------|------|---------------------------|------|-------------|
| | B | SG | Beta | | |
| Chen Internet Addiction Scale | .11 | .03 | .14 | 3.03 | .003 |
| Total berg scale scores | .45 | .10 | .19 | 4.18 | .000 |
| You spend most of your day on the Internet | 1.24 | .53 | .09 | 2.32 | .020 |
| You visit social networks | 1.21 | 1.18 | .03 | 1.02 | .305 |

In order to check whether there is an influence of social networks on the prevalence of externalizing behavioral disorders in children and youth, a multiple regression analysis was applied. The predictor variable in the study is the total results of externalizing behavioral problems, while the predictors, or criteria, are addiction to social networks, the Internet, daily time spent on the Internet and visiting social networks. The coefficient of determination (R^2) is important in regression analysis and is used to understand how much the model explains the variability of the dependent variable.

From Table 16, it can be seen that this coefficient is 0.01, or only 1% of the variability of externalizing behavioral problems in children and youth can be explained by the influence of social networks. Based on the results shown in Table 16, it can be concluded that social

networks affect the prevalence of externalizing behavioral disorders in children and youth at a statistical significance level of 0.01.

Table 3. Results of regression analysis

| Model | Sum of Squares | Df | Varijance | F | p |
|------------|----------------|-----|-----------|-------|-------------|
| Regression | 3322.16 | 4 | 830.54 | 16.52 | .000 |
| Residual | 34230.14 | 681 | 50.26 | | |
| Total | 37552.31 | 685 | | | |

R= 0,29; R²= 0,01; adjusted R²= 0,08

Table 4 shows the results of the beta coefficient and it can be seen that externalized behavioral disorders in children and young people are most influenced by addiction to social networks, addiction and time spent on the Internet.

Based on the results of the multivariate regression analysis, the research hypothesis is accepted.

Table 4. Results of the beta coefficient

| Model | Unstandardized coefficients | | Standardized coefficients | t | p |
|--|-----------------------------|-----|---------------------------|------|-------------|
| | B | SG | Beta | | |
| Chen Internet Addiction Scale | .05 | .02 | .10 | 2.05 | .040 |
| Total berg scale scores | .26 | .07 | .16 | 3.41 | .001 |
| You spend most of your day on the Internet | 1.07 | .37 | .11 | 2.85 | .004 |
| You visit social networks | .95 | .83 | .04 | 1.13 | .256 |

CONCLUSION

Social networks are an inevitable part of modern life, but their influence on behavior, especially among young people, can be serious and multi-layered. It is crucial to develop an awareness of potential risks, to take preventive measures in order to minimize the negative effects, and to use the advantages of social networks in a constructive way, such as facilitated communication, self-promotion, easy availability of information, etc. The spread and emergence of social networks have changed the way people interact and communicate in modern life. In today's society, the Internet is a ubiquitous force that has not only revolutionized the way information is accessed and disseminated, but has also changed the dynamics of human relationships and social interactions. This transformation is particularly profound among the younger population, where the Internet and social networks have become

an integral part of everyday life. The new era of communication is full of challenges and all members in the community should be careful and cooperate in order to protect our most vulnerable category, children and young people.

REFERENCES

1. Achenbach, T. M. et al. (2007). *Achenbach System of Empirically Based Assessment (ASEBA) - multicultural supplement to the manual for ASEBA school-age forms and profiles*, Nelson Education.
2. Achenbach, Thomas M.; Rescorla, Leslie A. (2001). *Manual for the ASEBA School-Age Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families. pp. 16–17. ISBN 978-0-938565-73-4. OCLC 53902766.
3. Aslam, S. (2022). Snapchat by the Numbers: Stats, Demographics & Fun Facts. Omnicore <https://www.omnicoreagency.com/snapchat-statistics/> (pristup: 19.8.2022.)
4. Aslam, S. (2022). TikTok by the Numbers: Stats, Demographics & Fun Facts. Omnicore <https://www.omnicoreagency.com/tiktok-statistics/> (pristup: 19.8.2022.)
5. Ayas, T., & Horzum, M. (2013). Relation between depression, loneliness, self-esteem and internet addiction. *Education*, 133(3), 283-290.
6. Ayas, T. & Horzum, M. B. (2013). Relation between depression, loneliness, self-esteem and internet addiction. *Education*, 133(3), 283-290.
7. Aydm, B., & San, S. V. (2011). Internet addiction among adolescents: the role of self-esteem. *Procedia-Social and Behavioral Sciences*, 15, 3500-3505.
8. Bahrainian, S. A., Alizadeh, K. H., Raeisoon, M. R., Gorji, O. H., & Khazaei, A. (2014). Relationship of Internet addiction with self-esteem and depression in university students. *Journal of preventive medicine and hygiene*, 55(3), 86
9. Bailey, C. A., & Ostrov, J. M. (2008). Differentiating forms and functions of aggression in emerging adults: Associations with hostile attribution biases and normative beliefs. *Journal of Youth and Adolescence*, 37(6), 713-722.
10. Bouillet, D., Uzelac, S. (2007). *Osnove socijalne pedagogije*. Zagreb: Školska knjiga.
11. Budak, E., Taymur, I., Askin, R., GUNGOR, B., Demirci, H., AKGUL, A., & Sahin, Z. A. (2015). Relationship between internet addiction, psychopathology and self-esteem among university students. *The European Research Journal*, 1(3), 128-135.
12. Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hatred lead to violence? *Journal of Personality and Social Psychology*, 75(1), 219-229.
13. Cardak, M. (2013). Psychological well-being and Internet addiction among university students. *Turkish Online Journal of Educational Technology-TOJET*, 12(3), 134-141.
14. Casale, S., & Banchi, V. (2020). Narcissism and problematic social media use: A systematic literature review. *Addictive Behaviors Reports*, 11. DOI: 10.1016/j.abrep.2020.100252
15. Cheung, J. C. S., Chan, K. H. W., Lui, Y. W., Tsui, M. S., & Chan, C. (2018). Psychological well-being and adolescents' internet addiction: A school-based cross-

- sectional study in Hong Kong. *Child and Adolescent Social Work Journal*, 35, 477-487.
16. Febrina, T. D., Suharso, P. L., & Saleh, A. Y. (2018). Self-esteem remaja awal: Temuan baseline dari rencana program self-instructional training Kompetensi diri. *Jurnal Psikologi Insight*, 2(1), 43-56.
 17. Hawi, N. S., & Samaha, M. (2017). The relations among social media addiction, self-esteem, and life satisfaction in university students. *Social Science Computer Review*, 35(5), 576–586. DOI: 10.1177/0894439316660340
 18. Mo, P. K., Chan, V. W., Wang, X., & Lau, J. T. (2020). Gender difference in the association between internet addiction, self-esteem and academic aspirations among adolescents: A structural equation modelling. *Computers & Education*, 155, 103921.
 19. Mo, P. K., Chan, V. W., Chan, S. W., & Lau, J. T. (2018). The role of social support on emotion dysregulation and Internet addiction among Chinese adolescents: A structural equation model. *Addictive behaviors*, 82, 86-93.
 20. Nikolova S., (2024) Social media addiction and self-esteem in young adolescents, South-West University "Neofit Rilski", Blagoevgrad, Bulgaria, Vol. 63 No. 5 (2024): Knowledge
 21. Novak, M., Bašić, J. (2008). Internalizirani problemi kod djece i adolescenata: obilježja i mogućnosti prevencije, *Ljetopis socijalnog rada*, 15(3), 473-497.
 22. Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of Adolescence*, 55, 51– 60. DOI: 10.1016/j.adolescence.2016.12.008
 23. Ostovar, S., Allahyar, N., Aminpoor, H., Moafian, F., Nor, M. B. M., & Griffiths, M. D. (2016). Internet addiction and its psychosocial risks (depression, anxiety, stress and loneliness) among Iranian adolescents and young adults: A structural equation model in a cross-sectional study. *International Journal of Mental Health and Addiction*, 14, 257-267
 24. Sariyska, R., Reuter, M., Bey, K., Sha, P., Li, M., Chen, Y. F., ... & Montag, C. (2014). Self-esteem, personality and internet addiction: A cross-cultural comparison study. *Personality and Individual Differences*, 61, 28-33.
 25. Sharma, A., & Sharma, R. (2018). Internet addiction and psychological well-being among college students: A cross-sectional study from Central India. *Journal of family medicine and primary care*, 7(1), 147
 26. Younes, F., Halawi, G., Jabbour, H., El Osta, N., Karam, L., Hajj, A., & Rabbaa Khabbaz, L. (2016). Internet addiction and relationships with insomnia, anxiety, depression, stress and self-esteem in university students: A cross-sectional designed study. *PloS one*, 11(9), e0161126
 27. Škrđević M. i Škare A. (2020) Ovisnost o internetu. Zavod za javno zdravstvo Zadar. <https://www.zjz-zadar.hr/hr/zdrav-zivot/mentalno-zdravlje-i-ovisnosti/402> (pristup: 26.09.2022).