

Perspective

Parent-adolescent relationship and internet addiction in young people

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Summary

Children and adolescents increasingly use the internet, raising concerns about problematic internet use (PIU), which is linked to addiction-like behaviours and dopamine stimulation similar to other addictions. PIU affects mental health, academic performance, and daily functioning, with boys more prone to gaming and girls to social networking. Factors include cognitive development, coping skills, and parental influence. Parental behavioural control can help, while psychological control may worsen PIU. Poor parent-adolescent communication and technophobia increase risk. As the prevalence of PIU is high, understanding parenting styles, communication, and socio-cultural factors is crucial for developing targeted interventions to prevent PIU in young people.

Background

Children are using the internet and technology more and at earlier ages. Research suggests that younger adolescents are more likely to develop internet addiction as a result of non-essential internet use¹ so internet addiction in adolescents is inversely proportional to age.² It is generally well understood that the use of devices such as smartphones affects the production of dopamine, which is a chemical associated with addiction to smoking, alcohol, and gambling. Children who use these devices often show a similar pattern of addiction.³ Children and adolescents use the internet as their primary

means of communication and socialization.⁴ Boys show greater addiction to online games whereas girls tend to be addicted more to social networks.⁵ Estimates suggest that approximately 30% of high school children have difficulties with their internet use.⁶

There is currently no universally agreed definition of internet addiction. However, there are several terminologies that refer to the phenomenon of internet addiction including 'problematic/pathological/compulsive'. Problematic internet use (PIU) is characterized by preoccupation, desire, impaired control, difficulty to quit, and disregard of negative consequences. It includes online games, social network services, pornographic sites, video collection, and excessive online shopping.⁷ Young people may be vulnerable to developing this given they face considerable challenges in many different domains. They are also in a stage of cognitive development and 8 may lack effective coping.⁸

PIU includes neglecting activities of daily living, negative psychological impacts and difficulties in having control over internet use.⁹ These are closely interlinked. It is well known that the potentially negative consequence of PIU in young people include affecting overall mental health as well as academic performance.¹⁰ The cause of mental health difficulties is multi-factorial and includes genetic, environmental and social influences. The increased use of technology at earlier ages makes this an important contributing factor to child development, well-being and mental health.

There are several reasons why young people may turn to using the internet and it may offer a sense of connection, however, it can also result in isolation. It is understood that the content of the digital world can present a warped view of societal norms which can feed into

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young people's sense of self, sense of identity and self-esteem. PIU can have a potentially negative impact on all aspects of a young person's life and there are several factors involved in its development, one of which relates to parents and the control they have.

Parental behavioural control and psychological control are different and may play a role in the development of PIU in young people.¹¹ Behavioural control is where parents try to monitor and manage their child's internet use¹² whereas psychological control is where parents may use unhelpful strategies like blackmail to manage their child's internet use.¹¹ Parental psychological control may lead to young people developing unhelpful coping mechanisms including PIU.¹²

As well as providing a supportive environment and minimising parental psychological control, the parent-adolescent relationship is vital and may affect the likelihood of a young person developing PIU.¹³ A recent meta-analysis concluded that a key contributing factor in the development of PIU in a child is parental technofeference (interference that technology may have in daily communication) and highlights that further research is required to better understand this.¹⁴ Adolescent PIU prevalence has been estimated to be 69.9% and these adolescents have lower quality of parent communication which suggests that parent training may effectively address PIU.¹⁵

It is well known that parents and carers play a central role in young person's wellbeing and development yet is less clear how the parent-adolescent relationship is linked to PIU in young people. There are several moderating factors and under-lying mechanisms related to parenting and internet addiction in young people including parenting style, communication, supervision, emotional/psychological support, parental expectations, attachment, parental internet use and socio-cultural factors. The interplay behind these factors remains to be fully understood and this is an important area to study as it is instrumental to develop a better understanding of the underlying media-ting factors to better inform the development of effective targeted and specific parenting support to prevent adolescents developing PIU.

References

1. Chemnad K, Aziz M, Al- Harahsheh S, Abdelmoneium A, Baghdady A, Alsayed Hassan D, Ali R. Assessing the Relationship Between the Type of Internet Use and Internet Addiction in Early and Middle Adolescents: Cross-Sectional Study From Qatar JMIR Hum Factors. 2025;12:e62955. doi:10.2196/62955
2. Lozano-Blasco R, Latorre-Martínez MP, Cortés-Pascual A. Screen addicts: A meta-analysis of internet addiction in adolescence. Child Youth Serv Rev. 2022;135: 106373. doi: 10.1016/j.childyouth.2022.106373
3. Liu M LJ. Relationship between peripheral blood dopamine level and internet addiction disorder in adolescents: a pilot study. Int J Clin Exp Med. 2015;6:9943–8.
4. Novaković S, Milenković S, Srećković M, Backović D, Ignjatović V, Capo N, et al. Children's Internet use and physical and psychosocial development. Front Public Health. 2023;11:1163458. doi: 10.3389/fpubh.2023.1163458.
5. Strittmatter E, Kaess M, Parzer P, Fischer G, Carli V, Hoven CW, et al. Pathological Internet use among adolescents: Comparing gamers and non-gamers. Psychiatry Res. 2015;228(1):128–35. doi: 10.1016/j.psychres.2015.04.029.
6. Oh WO. Factors influencing internet addiction tendency among middle school students in Gyeong-buk area. J Korean Acad Nurs. 2003;33(8):1135–44. doi: 10.4040/jkan.2003.33.8.1135.
7. Marin MG, Nuñez X, de Almeida RMM. Internet Addiction and Attention in Adolescents: A Systematic Review. Cyberpsychol Behav Soc Netw. 2021; 24(4): 237–49. doi: 10.1089/cyber.2019.0698.
8. Cerniglia L, Zoratto F, Cimino S, Laviola G, Ammaniti M, Adriani W. Internet Addiction in adolescence: Neurobiological, psychosocial and clinical issues. Neurosci Biobehav Rev. 2017;76:174–84. doi: 10.1016/j.neubiorev.2016.12.024.
9. Aiman El Asam, Muthanna Samara, Philip Terry. Prob-lematic internet use and mental health among British children and adolescents. Addict Behav. 2019; 90: 428–436. doi: 10.1016/j.addbeh.2018.09.007.
10. Corte-Real B, Cordeiro C, Pestana PC, Silva IDE, Novais F. Addictive Potential of Social Media: A Cross Sectional Study in Portugal. Acta Medica Portuguesa. 2023;36(3):162–6. doi: 10.20344/amp.18470.
11. Barber BK Stoltz, HE, Olsen J. Parental support, psychological control, and behavioral control: assessing relevance across time, culture, and method. Monogr Soc Res Child Dev. 2005;70(4):1–137. doi: 10.1111/j.1540-5834.2005.00365.x.
12. Zhu X, Deng C, Bai W. Parental control and adolescent internet addiction: the moderating effect of parent-child relationships. Front Public Health. 2023; 11: 1190534. doi: 10.3389/fpubh.2023.1190534.
13. Smetana JG, Rote WM. Guest (guest) IP: 62.6.35.35 On: Tue, 04 Mar 2025 Downloaded from www. annual-reviews. org. Guest (guest) IP: 62.6.35.35 On: Tue. 2025. doi:10.1146/annurev-devpsych-121318.
14. Zhang J, Zhang Q, Xiao B, Cao Y, Chen Y, Li Y. Parental Technofeference and Child Problematic Media Use: Meta-Analysis. J Med Internet Res. 2025;27:e57636. doi:10.2196/57636
15. Milkovich LM, Randell KA, Sherman AK, Moreno MA. Associations among Problematic Internet Usage in Adolescents, Parental Internet Factors, and Parent-Adolescent Communication. J Dev Behav Pediatr. 2025; 46(1):e40–e44. doi: 10.1097/DBP.0000000000001328.