



Summary of the Report on Digital Addictions in the Czech Republic 2022

Definitions and concepts of digital addictions

- The overuse of the internet and digital technologies affects a relatively large proportion of the population, causing a range of health disorders and negative impacts on individuals and their surroundings.
- Consensus on the definition of digital addiction does not yet exist. In general, it refers to the overuse of computers and mobile phones, or the overuse of the internet, it involves spending too much time by searching for information, using social networks, playing digital games, online watching films and series, watching pornography or online shopping.
- Digital addiction is usually defined as the compulsive use of digital technologies, in which an individual continues despite its negative consequences.
- So far, internet addiction and digital-related disorders are not defined in official mental disorder classifications (DSM-5 and ICD-10).
- Addressing digital addiction should involve monitoring the situation of overuse of digital technologies, its impacts and context (health and social), educating the public, early detection of addiction development as well as the provision of supporting services, and providing specialized addictology treatment.

Digital addictions policy and regulation

- Policy targeting the overuse of digital technologies is part of an integrated addiction policy in the Czech Republic.
- The main policy document defining the policy focus on addiction is the *National Strategy for the Prevention and Reduction of Harms Related to Addictive Behaviour 2019-2027*, which, together with the action plans, includes objectives and activities for the domain of the digital addictions.
- Other strategies focus on digitalisation processes, digital literacy and digital education, or cybersecurity issues; they do not address the issue of digital addiction at all.
- In media, the topic of digital addiction or over-use of digital technologies (internet, digital games or social networks) is increasingly discussed, particularly in relation to the effects of COVID-19 pandemic on children and adolescents.
- Most social networks allow an account to be created from the age of 13, some require the age of 16. Many children set up an account earlier, making intentionally false declarations when registering. The use of multiple profiles simultaneously and the creation of fictive profiles are common.
- The promotion of goods and services on the internet takes place not only through advertising, but also through marketing on social networks and via influencers. Influencers particularly affect children and adolescents who often imitate their lifestyles. Hidden online product advertising by influencers is problematic from the point of view of product marketing, which is not intended for those aged under 18 years.

Digital games, social networks and chat apps

- Digital games can be played through a variety of platforms, such as personal computers, game consoles, tablets, mobile phones and internet browsers.
- There are a number of game genres, the most widely used are action games, such as shooting games, combat games, adventure games, role playing games (RPGs), strategic games and simulators.

- Games are evaluated using the PEGI (Pan-European Game Information) system, which has five recommended ages – 3, 7, 12, 16 and 18 years. Compliance with these age groups is not supported by legislation and is therefore only recommended.
- Gambling disorders are most commonly associated with online games, which allow several thousand players to play the game at the same time (massive multiplayer online role playing games, MMORPGs).
- In a number of countries, playing digital games has become a cultural phenomenon. Tournaments are also organised in these games, with e-sport being referred to in this context.
- Loot boxes have become a common feature of digital games, i.e. virtual packets that a player can acquire during the game or buy in a virtual currency. In some EU countries, loot boxes are classified as gambling.
- Social networks are a rapidly developing form of online communication, based on feedback receiving and active communication with others. Chat apps are also regarded as social networks.
- In terms of content, social networks can be divided into platforms based on the sharing of information, photos, films, videos and music, and there are also professional social networks to maintain professional and professional contacts, or geolocation networks, to share activities with other users in relation to the location.
- Facebook, YouTube, WhatsApp, Instagram and TikTok are among the most used social networks in the Czech Republic.

Use of digital technologies among children and young people

- The overuse of digital technologies among children and adolescents is not systematically monitored, yet the topic of playing digital games and the use of social networks has been included in a number of studies. However, these studies use different screening instruments, which provide different estimates of the number of adolescents at risk of digital addictions.
- Excessive gaming of digital games, i. e. gaming for 4 hours a day or more, has been reported by 15-25 % of primary and 10-15 % of secondary school students in various studies. The prevalence of excessive gaming is 2-3 times higher among boys and decreases with age. Time spent on gaming is higher at weekends.
- According to the Internet Gaming Disorder scale (IGD), about 4 % of 11-19-year-olds fall into the category of gaming disorder. The prevalence of gaming disorder is 4 times higher among boys than among girls (6 %, and 1.5 % respectively).
- According to the Czech screening instrument, Digital Gaming Questionnaire, the prevalence of gaming addiction reached 8 % in the population aged 11-19 years, and problem gaming reached 13 %. Both gaming addiction and problem gaming were higher among boys (14 % and 16 %, respectively) than among girls (2 % and 10 %, respectively).
- According to the 3-item screening scale on subjective perception of problems related to gaming, a total of 13 % of students (22 % of boys and 4 % of girls) aged 15-16 and 12 % (21 % of boys and 3 % of girls) aged 17-18 fell into the category of excessive gaming.
- Excessive use of social networks, i. e. spending 4 hours or more a day on social media, is estimated at 25-30 % among primary and 45-50 % among secondary school students. Time spent on social media increases at weekends.
- According to the Social Disorder Media screening scale, 3-7 % of 11-15-year-olds are at risk related to the social media use.
- According to the 3-item screening scale, which focuses on subjective perception of problems, 34 % of students (25 % of boys and 43 % of girls) aged 15-16 and 27 % (17 % of boys and 35 % of girls) aged 17-18 fall into the risk category related to social networks use.
- Czech adolescents have on average 5 profiles on social media; the first profile is most often established at the age of 11–12 years.

Use of digital technologies in the adult population

- The overuse of digital technologies among adults is not systematically monitored. However, the topic of playing digital games and using social networks has been included in a number of studies.
- The internet is used daily by 75 % of the Czech adult population. 99 % of the population use a mobile phone, while 72 % use the internet in their mobile phone.
- The most common activities on the internet are reading news and searching for information (71 %), using social media (60 %), searching goods and shopping (52 %). Digital gaming is reported by 23 % of the population.
- On a regular working day, respondents spend 130-150 minutes a day on the internet in average (excluding work and studies), and 160-180 minutes a day at weekends. Men spend 20-30 minutes more on the internet per day than women. According to various studies, adults spend 80-100 minutes on a regular working day and 110-130 minutes at weekends by gaming, while on social media they spend 70-90 minutes per day on a regular working day and 90-110 minutes at weekends.
- Men are more likely than women to spend time online by digital gaming and watching pornography, while women are more likely to spend time on social media and shopping.
- According to the Excessive Internet Use screening scale, an estimated 5-6 % of people (6-7 % of men and 4-5 % of women) fall in the category of risk of digital addiction, with 1-2 % in the high risk category. The highest shares of people at risk of digital addiction are in the 15-24 age group (17-22 % depending on the study) and in the 25-34 age group (8-9 %), and the proportion of population at risk of digital addiction declines significantly with age.
- When extrapolating the survey results to the Czech population aged 15+ years, an estimated 445,000 people are at risk of digital addiction in the Czech Republic (95 % CI: 375-510,000 people), including around 253,000 men and 192,000 women. Estimated 125,000 (95 % CI: 90-160,000) fall into the category of high risk of digital addiction.
- Estimates of the proportion of people at risk of digital addictions are consistent across studies and stable over the past few years.

Health and social impacts and correlates of overuse of digital technologies

- The overuse of digital technologies is perceived as a serious public health problem, with a range of negative effects on individuals and their environment.
- The health effects of overuse of the internet and digital technologies are not systematically monitored in the Czech Republic.
- Direct effects of overuse of digital technologies include circadian disruption, neglecting personal hygiene, eating and/or sleeping, fatigue, headaches, eye pain, pain of back or other parts of the musculoskeletal system, and impaired time orientation.
- Long-term effects include reduced physical activity, obesity, reduced social contacts outside the online environment and loss of friends, conflicts in personal relationships, neglect of leisure activities, lack of concentration and problems at work or school.
- Compared to their peers, children and adolescents at the risk of digital addictions report 2-6 times more often a neglect of leisure activities, sleeping or eating problems, school problems (e.g. worse school performance) and impacts on time spent with friends and family. At the same time, in adolescence an association exists between the overuse of digital technologies and anxiety disorders, ADHD, depression, suicidal thoughts as well as aggression and alcohol consumption.
- Adults report eating neglect or sleeping disorders, discomfort when not being online, unsuccessful attempts to limit time on the internet, family and work problems, or neglect of friends and leisure activities.
- People in contact with addictology services for the overuse of digital technologies report sleeping disorders and/or hygiene neglect, neglect of work or school obligations, and concentration and attention problems.

Prevention of digital addictions

- Prevention of addictive behaviour targeting children and young people involves the prevention of digital addictions and is part of the broader school-based prevention of risky behaviours. The issue of digital addictions is usually part of the wider concept of safe behaviour online and the prevention of cyber-bullying.
- In 2020 and 2021, prevention in the school environment was affected by COVID-19-related measures. In response to the distant form of teaching, supportive activities were developed in the area of school primary prevention, addressing, among others, the topic of digital addictions.
- About 8 % of school-based prevention programmes in 2020/21 were targeted on the topics of gambling and the overuse of digital technologies.
- In Czech schools, almost 2,500 cases were handled in the 2020/21 school year in relation to digital addictions and/or gambling, representing 5 % of all recorded cases of risk behaviour handled by schools. These cases were most often handled at the second degree of primary schools and at the lower degree of grammar schools.
- The online training module *Technology and prevention* offers guidance to educators on the risks related to the use of digital technologies. The module, targeted at teachers, presents several rapid interventions aimed at children and, where relevant, their parents, with the aim of early detection and reduction of digital addiction problems.
- In 2021, altogether 20 programmes of specific primary prevention in the field of addictions were supported in the Czech Government Office/Council of the Government for Drug Policy Coordination subsidy procedure. Services record a higher demand from schools for the implementation of programmes focused on the topic of digital addictions and safe internet use, particularly after the period of distance learning.

Treatment and responses to digital addictions

- In the Czech Republic, specific treatment and counselling services directly targeting clients with problems related to the overuse of digital technologies do not currently exist.
- The traditional abstinence-oriented approach to addiction treatment is not widely applied to digital addictions. Digital technologies are a normal part of everyday life and abstinence from digital technologies and the internet can be a barrier to both the work and personal life.
- Treatment and other interventions for people who use digital technologies, or at the risk of digital addictions, aim to reduce the amount of time spent on digital technologies and to increase control over their use.
- Currently, in the Czech Republic, almost 300 addictology programmes of different types are estimated. According to the *2020 Addictology Services Census*, there were 109 programmes (37.3 %) in total in the Czech Republic that provided services to clients at risk of digital addiction.
- According to the final reports of the programmes supported in the Government Office subsidy procedure in 2017-2021, the number of programmes working with clients at risk of overuse of digital technologies increased from 21 to 37 programmes. At the same time, the number of clients in these supported services also increased from 83 to 313 clients per year.
- Apart from exceptions, clients at risk of digital addictions are reported by outpatient services, in a number of cases these are specialised outpatient programmes for clients at risk of problem gambling, and outpatient addictology programmes targeted at children and adolescents.
- Addictology programmes report an increasing number of children and adolescents (aged 10-18) exposed to digital addictions, especially excessive online gaming and social media use.
- Some health facilities reporting patients to health insurance companies, report patients with digital addiction using dg. F63.8 (other compulsive and impulsive disorders). Patients with dg. F63.8 are most commonly reported by psychiatric and clinical psychology facilities, as well as health facilities providing care in the addiction domain, psychiatric facilities for children and adolescents and health centres providing care in the addictive diseases domain.

- Since 2015, 150-180 people with digital dependence are reported annually to health insurance companies (dg. F63.8). In particular, the numbers of children and adolescents aged 10-19 years have increased. Whereas between 2015-2019 the number of children reported was 27-30 per year, in the next period, 36-46 patients in this age group were already reported annually.
- Since 2019, the National Telephone Quitting Hotline 800 350 000 has offered counselling to people with any addiction problem, including the overuse of digital technologies. In 2020, 76 individuals with behavioural addiction problem, 21 of whom reported a problem other than gambling.
- In the Czech Republic, several online counselling programmes are available, offering anonymous counselling also in the area of digital addictions, and providing links to other services.

Implications of COVID-19 in the field of the overuse of digital technologies

- In the Czech adult population, during the COVID-19 lockdown period, the use of internet, digital gaming, as well as time spent on social networks increased.
- Many children's activities have shifted to the online environment in connection with distance learning and reduction of leisure time activities. There has been a significant increase in the amount of free time children and adolescents spend on digital technologies.
- More than half of boys (56-58 %) and about a third of girls (27-35 %) spend more time on digital games than before the pandemic. Overall, 44-48 % of boys and 47-58 % of girls aged 11-15 spend more time on social media.
- The impacts of digital addictions also need to be seen in the context of mental health — often an increase in anxiety, mood changes, depression, aggressive behaviour, domestic violence, etc. is mentioned in the context of the COVID-19 pandemic — for both adults, and children and adolescents.
- The pandemic may have aggravated the problem for those already at risk of overuse of digital technologies and may have led to an increased need of seeking help and supporting services.
- The supply and use of online counselling and treatment services has increased during the pandemic.