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Social media challenges among adolescents – unconscious danger or peer pressure? Dangerous consequences of modern adolescents' games

Wyzwania młodzieżowe – nieświadomość zagrożenia czy presja rówieśników? Niebezpieczne konsekwencje zabaw współczesnych nastolatków

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Abstract

Computers, tablets and smartphones enable young people to quickly communicate, share data and obtain information. The progressive technological and information development, in addition to its many positive functions, also promotes certain risks. Young people online are exposed to harmful content and behaviour that has negative consequences for their health and life. Adolescence is a time of particular vulnerability to sensation-seeking, succumbing to peer pressure and engaging in risky behaviour. During this time, adolescents' social and personal value is dependent on the social relationships they establish and their popularity on social media. Undoubtedly, the Internet and social media are an important space in which adolescents spend their free time, but also an area where they can experience potential danger. Internet challenges have become a particularly popular form of entertainment among young people in recent years. Dangerous forms of activity undertaken by adolescents under the influence of a peer group or, very often, short videos posted on popular Internet portals are not the result of difficult and traumatic experiences or affective disorders, but a phenomenon considered quite normal among adolescents. This approach to the issue makes it all the more alarming, as it affects the entire population of young people and promotes various forms of self-harm. The online space can become a place for sharing techniques or practices of self-harm. Research indicates that images rather than textual information are an important source of self-harm actions. Early episodes of self-harm become a strong predictor of interpersonal and psychiatric problems, suicide attempts and suicide itself. Low public awareness of the dangers of the so-called viral challenges among youth makes it difficult to intervene early and prevent the spread of self-destructive tendencies. The aim of this article is to present popular challenges undertaken by young people under the influence of peer group pressure and social media in order to show their contribution to the development of self-harm. The consequences of these behaviours, as well as possible preventive measures to reduce this dangerous trend will be presented.

Keywords: self-harm, adolescence, challenges, peer pressure

Streszczenie

Komputery, tablety czy smartfony umożliwiają młodzieży szybszą komunikację, udostępnianie danych i zdobywanie informacji. Postęp technologiczny i informacyjny przynosi wiele korzyści, ale sprzyja również rozwojowi pewnych zagrożeń. Młodzież w sieci jest narażona na szkodliwe treści oraz zachowania, które mają negatywne konsekwencje dla zdrowia i życia. Okres dojrzewania jest czasem szczególnej podatności na poszukiwanie wrażeń, uleganie presji rówieśników i podejmowanie ryzykownych zachowań. W okresie adolescencji wartość społeczna i osobista nastolatków zależy od nawiązywanych relacji towarzyskich oraz popularności w mediach społecznościowych. Niewątpliwie internet i *social media* stanowią istotną przestrzeń, w której młodzież spędza wolny czas, ale są także obszarem doświadczania potencjalnego niebezpieczeństwa. W ostatnich latach szczególnie popularną formą rozrywki wśród młodych ludzi stały się wyzwania internetowe. Niebezpieczne formy aktywności podejmowane przez nastolatki pod wpływem grupy rówieśniczej lub – bardzo często – krótkich filmików zamieszczanych na popularnych portalach w internecie nie są rezultatem trudnych, traumatycznych przeżyć ani zaburzeń afektywnych, ale zjawiskiem uznawanym przez młodzież za coś zupełnie normalnego. Takie podejście do omawianej kwestii sprawia, że staje się ona tym bardziej niepokojąca, bowiem dotyczy całej populacji młodzieży, a ponadto przyczynia się do promowania różnych form samookaleczeń. Przestrzeń online może stać się miejscem wymiany technik lub praktyk dokonywania samookaleczeń. Badania wskazują, że to obrazy, a nie informacje tekstowe stanowią istotne źródło działań autodestrukcyjnych. Wczesne epizody samouszkodzeń stają się silnym predyktorem problemów interpersonalnych

i psychicznych, a także prób samobójczych i samobójstw. Niska świadomość społeczna zagrożeń wynikających z tzw. wiralowych wyzwań młodzieżowych utrudnia zarówno podejmowanie wczesnych interwencji, jak i zapobieganie rozprzestrzenianiu się tendencji autodestrukcyjnych. Celem tego artykułu jest opisanie popularnych wyzwań podejmowanych przez młode osoby pod wpływem presji grupy rówieśniczej lub mediów społecznościowych oraz ukazanie ich udziału w rozwoju samookaleczeń. Omówione zostaną również konsekwencje tych zachowań i możliwości działań prewencyjnych ograniczające ten niebezpieczny trend.

Słowa kluczowe: samouszkodzenia, dorastanie, wyzwania, presja rówieśnicza

INTRODUCTION

Adolescence tends to be referred to as the transitional phase between childhood and adulthood. It is then that young people experience changes in physiological, personality and social functioning, as well as shape their autonomy and identity. It is also during this phase of life that they are more strongly impacted by social media due to their increased focus on peer behaviours and social feedback (Armstrong-Carter et al., 2023). These media increasingly become a space for sharing information, chatting, promoting social justice activities and sensation seeking (Armstrong-Carter and Telzer, 2021; Pouwels et al., 2021). The tendency to seek new experiences is particularly noticeable during adolescence, when ongoing hormonal and social changes enhance young people's motivation to take risks and explore new stimuli, as well as increasing maladaptive behaviour (Crone and Konijn, 2018; Dahl et al., 2018). As indicated by research findings (Geusens and Beullens, 2019; Knoll et al., 2015; Nesi et al., 2018), influence of the peer group, and sometimes content posted by them, is more strongly connected with and increases the degree of dangerousness of risky behaviours. Focusing more on their benefits than their negative consequences, young people willingly take on challenges with the expectation of online popularity and likes on social networks. Under the guise of being appreciated, liked and admired by others, young people are subjected to the "tyranny of visibility" (Sibilia, 2008). Adolescents are more likely to participate in threatening challenges to increase the chance of online visibility (Deslandes et al., 2020). According to the impression management theory (Goffman, 1959), during social interactions we are motivated to make certain impressions on others and behaviours that contribute to gaining their attention and acceptance. According to research (Deslandes et al., 2020; Shroff et al., 2021), the need for acceptance and social belonging is one of the main reasons for taking on challenges.

Adolescents are increasingly seeking instant gratification, pursuing quick pleasure and losing control over their own behaviour. Excessive use of the Internet can contribute to increasing psychosocial disorders associated with fatigue, depression, anxiety, isolation and learning difficulties (Gołembowska, 2017). Adolescents perceive harmful games and behaviours as a risky yet attractive form of activity, which is the reason for their extraordinary popularity on various online portals. Common online activities range from dipping one's head in a bag full of charcoal, through consuming large amounts of cinnamon, to behaviour that violates the law, such as breaking into a school (Deslandes and Coutinho, 2022). Deslandes et al. (2020), as well as Miranda and Miranda (2021) showed that there is an abundance of challenges posted on YouTube, which attract considerable attention from children and adolescents. Young people aspire to gain recognition among their peers – even at the cost of possible health difficulties. Completing these challenges can lead to self-harm, conflicts with others and even death in extreme cases.

Challenge information spreads rapidly through social networks. Adolescents do not consider the risk of online challenges contributing to the growing problem of self-harm (Chu et al., 2018). Social media may in some ways reinforce, accentuate or normalise self-harm and suicide behaviours (Arendt, 2019; Brown et al., 2018; Lewis and Baker, 2011).

They may also contribute to an increase in self-harm behaviour through the phenomenon of "contagion" (Lupariello et al., 2019), with young people beginning to follow self-harm content and, over time, attempting such practices themselves. Arendt et al. (2019) found that exposure of young people to self-harm on Instagram (viewing posts depicting a person deliberately harming themselves) was associated with an increased risk of suicidal and self-harm behaviour occurring after one month. Daine et al. (2013) showed that the Internet can have both positive and negative effects on young users. The beneficial impact of the Internet is associated with forming support groups, working out coping mechanisms together or providing support to those experiencing loneliness. Peer support in mental health recovery has also gained importance (Idenfors et al., 2015). A particular role is attributed to support from individuals who have had similar experiences and come together to share their stories and receive support. The negative impact of the Internet, on the other hand, is linked to the normalisation of self-harm by providing access to suicidal content or showing drastic images showing different types of self-harm.

Peer pressure may also contribute to increased self-aggressive behaviour. During adolescence, young people

develop self-esteem based on peer approval (Harter et al., 1996). Research conducted to date points to some social motivations for self-harm among adolescents. These include the pursuit of prestige (Walsh, 2006), group membership, social acceptance and the need for intimacy (Snir et al., 2018). The desire for attention, concern or influence over others is another motivator leading to self-harm (Walsh, 2006). Seeing that a particular behaviour is fashionable among a larger group of people, adolescents begin to imitate it in order to fit in with the others and gain acceptance (Centifanti et al., 2016; Heilbron and Prinstein, 2008). Contact with peers who approve of or practise self-injury may intensify this type of behaviour among adolescents (Fox et al., 2015).

The scars resulting from self-harm are often masked by young people and sometimes accidentally discovered by carers or doctors. The growing trend of online challenges is linked to a high level of unawareness of the risk on the part of parents, carers and teachers, and easy access to the materials used in viral social media challenges (e.g. salt, ice, chilli spice, cinnamon, nutmeg or flammable substances). In order to prevent this phenomenon, it is necessary to show the dangers of young people's seemingly inconspicuous behaviour, to make them aware of the mental and physical consequences of such activities, and to provide early education against such behaviours (Chu et al., 2018). The paper discusses examples of online challenges and their consequences for adolescent health, as well as the specifics of adolescence, the issue of self-harm and preventive measures.

ADOLESCENCE – THE PERIOD OF "STORM AND STRESS"

The specificity of functioning and development during adolescence is determined biologically (genes, temperament), socially (family, peer and school relationships) and culturally (contact with media, including television, the Internet, and computer games) (Chęć, 2020). During adolescence, young people fulfil specific developmental tasks, which include achieving new, more mature relationships with peers, adopting masculine or feminine roles, accepting changes in physique, achieving economic and emotional independence from parents, developing personal attitude to marriage and family living, choosing and preparing for an occupation, and developing their own world view (Havighurst, 1981). Particularly in the first phase of adolescence, there is a noticeable increase in the role of peers and the desire to achieve an appropriate social status (Blakemore, 2019; Nelson et al., 2019). Popularity in the peer group is an important social goal and a measure of prestige and importance (Dawes and Xie, 2014). The peer community becomes a place for sharing both positive and difficult experiences, thereby creating spaces of safety, belonging, self-confidence, and knowing oneself and others (Fonagy

et al., 2019). The impact of the peer group on a young person may be a positive (learning, shaping desirable behaviours) and negative (reinforcing unsafe behaviours, publishing online content about harmful behaviour) (Huang et al., 2014).

Adolescence is also a time of experiencing stress and anxiety. This developmental phase is characterised by greater emotional instability (compared to other developmental stages) and an increased risk of mental health problems, as well as social and emotional disorders (Suksasilp et al., 2021). It is also a period of higher frequency of externalising (e.g. conduct disorders, negative group membership) and internalising (e.g. anxiety or depressive disorders, suicidal thoughts) behaviours. At this time, young people are highly vulnerable to peer exclusion. Young people gain popularity in a group through risky behaviours (Choukas-Bradley et al., 2015). Adolescents show a greater tendency to engage in risky behaviour in the presence of peers. This tendency is associated with excessive sensitivity to peer judgement and fear of social exclusion (Blakemore, 2018).

Social media have become an important part of adolescents' daily functioning. They are one of the most popular ways of spending leisure time (chatting, sharing interests with others), exchanging information, and communicating (Bányai et al., 2017). Despite many examples of positive impact, they also contribute to promoting negative behaviours, such as the already mentioned risky challenges, online violence or sexting (Tartari, 2015).

The content presented on social media may promote unsafe behaviours, such as self-harm. Viewing self-harm images may promote engaging in this type of behaviour (Jacob et al., 2017). Images and videos can evoke a physical response, create a strong desire to harm oneself and inspire engagement in such practices (Brown et al., 2018; Jacob et al., 2017). The visual aspects of self-harm, from images of blood to noticeable bruises, can be clear signs of physical self-harm (Sternudd, 2014). O'Connor et al. (2014) found that 18% of secondary-school students were influenced to self-harm by social networking sites.

Online violence, cyberbullying in particular, is bullying with the use of digital technologies, such as Twitter (now X), Facebook or instant messaging, including text messaging (Menesini et al., 2012). In their study in a sample of 1,034 children aged 9–12 years, Patchin and Hinduja (2022) found that one in five students had experienced cyberbullying as a witness, bully or victim. McKenna and Bargh (2000), on the other hand, found that greater anonymity on the Internet promotes stronger hostility in interpersonal interactions. Mesch (2009) assessed a sample of 935 young people and found that victims and bullies were adolescents who actively spent time on social media. These media can also be used as tools to promote cybersuicides (Cash et al., 2013). It happens that young people search forums, Internet blogs for instructions or

tips on how to successfully commit suicide. Suicide attempts and suicides influenced by the Internet are referred to as cybersuicides (Rajagopal, 2004). Cash et al. (2013) assessed 1,038 MySpace posts collected from publicly accessible profiles. A total of 40,000 profiles were analysed. The study found that adolescents communicated suicidal thoughts in direct responses to negative experiences (personal experiences, substance use, complicated mental health). Social media creates a space where adolescents can share information about the ways of committing suicide and about suicide victims. This fosters motivation to imitate such behaviour, which is referred to as the "Werther effect" (Eichenberg, 2008). Approximately 8–17% of European adolescents are exposed to content that increases the risk of self-harm by feeling bullied and experiencing psychological problems (Smahel et al., 2020).

Sexting is defined as sending or receiving sexual contents via mobile phone, Internet sites, Facebook or other Internet social networking sites (Krieger, 2017). In European Union countries, 15% of adolescents aged 11–16 years have received and 3% have posted or sent sexual messages (Livingstone et al., 2011).

THE RISK AND RISKY BEHAVIOURS IN ADOLESCENTS IN SELECTED PSYCHOLOGICAL CONCEPTS

Adolescents have a drive for rapid gratification and pursuing quick pleasure while losing control of their behaviour (Gołembowska, 2017). Braams et al. (2015) showed that adolescence is a time of increased sensitivity to risk, rather than an increase in risky activities. The higher tendency to engage in risky activities is associated with greater social vulnerability, peer vulnerability in particular (Blakemore and Mills, 2014). When young people notice that some harmful behaviour has a high social value, they are more likely to engage in such behaviour to achieve certain social goals (Blakemore and Mills, 2014). According to Studenski (2004, p. 30), the risk is sometimes defined as "uncertainty relating to the possibility of achieving a pursued or intended goal, [...] indicates the likelihood of experiencing harm, loss or damage when participating in some endeavour or following certain activities". Risky behaviour in children and adolescents is associated with engaging in a variety of activities that are considered harmful to physical and mental health and development, as well as contrary to social norms (Jessor et al., 1998). According to the assumptions of problem behavior theory (Jessor, 1987; Jessor and Jessor, 1977), engaging in such activities is the result of the interaction of both individual personality characteristics and the environment. As pointed out by Jessor and Jessor (1975), young people who behave in a risky manner enjoy greater support from their peer group in doing so. The peer cluster theory by Oetting and Beauvais (1986) emphasises

the contribution of psychosocial factors. The tendency of adolescents to engage in risky behaviours depends on a number of factors, including family background (adverse family relationships), socioeconomic status (low status) and individual predispositions (needs, personality, values, beliefs). A young person's functioning is strongly influenced by peers (Oetting and Beauvais, 1986). Particular vulnerability to peer influence occurs during the period of intense neurohormonal activity (13–16 years of age). Zuckerman's concept of sensation seeking emphasises the tendency of young people to seek a variety of new sensations and experiences. Adolescents engage in experience-seeking by pursuing physical, financial, legal and social activities (Zuckerman 1979). Their goal is to maintain optimal levels of arousal. Since boredom and monotony are undesirable in this group, they will opt for variable activity behaviours.

EXAMPLES OF HAZARDOUS CHALLENGES AMONG YOUTH

Recently, an increase in life and health-threatening games has been noticeable among adolescent. Videos published online are the most common inspiration for a variety of dangerous challenges. Social media may somewhat contribute to the stimulated activity of biological systems responsible for the increased sensitivity of young people to the feedback and rewards associated with experimenting with health-threatening substances (Sherman et al., 2016). During adolescence, certain stimulants can alter stimuli and cortical responses (Blakemore and Frith, 2005), especially in subcortical regions associated with emotion and reward processing (Brenhouse and Andersen, 2011). The dopaminergic system and related regions in the striatum are implicated in two common features of adolescence: escalation in risk-taking behaviours and increased desire to spend time with and earn the approval of peers (Steinberg, 2008). Research by O'Brien et al. (2011) found that the presence of peers increases the propensity to engage in risky behaviour and receive immediate reward. There is then an increased activation of the brain's stimulus processing system (e.g. ventral striatum and orbitofrontal cortex). Smith et al. (2014) showed a similar relationship for the activity of biological systems when peers were connecting online.

Dangerous games spread quickly through channels such as Facebook, YouTube and TikTok. Examples of risky challenges include eraser, fire, salt and ice, cinnamon, nutmeg, deodorant and laundry pod challenges, as well as choking game and Benadryl challenge.

"The eraser challenge" involves participants rubbing their skin with an eraser as hard as they can. The winner is the person who can withstand the pain and resulting burn the longest (Deklotz and Krakowski, 2013). Young people are unaware of the risk of infection that

can develop as a result of such activities. They treat the acquired wounds as "trophies" rather than stigmata of self-abuse. During interviews with professionals, some adolescents admit that they had no intention of hurting themselves. They justify their actions with curiosity and the desire to impress their friends. Participants of dangerous challenges have mostly never experienced depressive episodes, suicidal thoughts or self-harm. They are often surprised that such behaviour may lead to permanent scarring or post-inflammatory dyspigmentation (Deklotz and Krakowski, 2013).

"The fire challenge" involves setting oneself on fire using a flammable substance (e.g. isopropyl alcohol or acetone) and attempting to extinguish the fire before developing severe burns. Young people then share their outcomes in videos posted on social media (Avery et al., 2016). Such "games" result in first- and second-degree burns (Jauregui, 2014).

In yet another challenge, a reaction between salt and ice is used (the attraction of salt and water molecules leads to their mixing and neutralising ionic forces by salt), where salt lowers the melting point of the ice. This reaction causes a burning sensation, eventually leading to second-degree burns (Zack et al., 2014). The dermatoses resulting from this challenge may clinically and histopathologically resemble blistering disease, highlighting the need for a thorough interview with affected adolescents and their family members to diagnose the actual causes (Prechtl, 2020).

The cinnamon and nutmeg challenges have also become popular in recent years. The first challenge involves swallowing a teaspoon of ground cinnamon without drinking any water. About 51,000 videos with this stunt have appeared on YouTube since 2012 (Grant-Alfieri et al., 2013). They often feature a group of teenagers watching as someone taking the challenge starts coughing and choking. Cinnamon consumed in excessive amounts can trigger a strong vomiting reflex and a burning sensation in the oral cavity and the pharynx. "Cinnamon challenge" can lead to poisoning, a visit to the emergency department and even hospital admission if the affected person requires mechanical ventilation due to breathing difficulties (Grant-Alfieri et al., 2013). Cinnamon is a burning-tasting powder composed of cellulose fibres that are bioresistant and biopersistent, and therefore do not dissolve or biodegrade in the lungs. The described challenge may contribute to hypersensitivity, asthma, lung cysts or chronic lung disease (Grant-Alfieri et al., 2013). The nutmeg challenge is a popular TikTok challenge. Ingestion of this spice results in strong excitation after a few hours. This is because it contains myristicin and elemicin, which have anticholinergic and psychotropic effects and, together with metabolites, can be characterised by hallucinogenic effects (Atherton, 2020).

"The deodorant challenge" involves closely spraying aerosol deodorant on bare skin for as long as possible.

Two ways of completing this task are popular among teenagers – spraying deodorant on the skin for a predetermined length of time or for as long as possible. When aerosol deodorant is spayed on skin at a distance of about 5 cm, the skin temperature drops to about –40°C (Prechtl, 2020). Mixing of expanded aerosol particles with warm air leads to frostbites (Möhrenschlager et al., 2011). The rapid drop in temperature can cause skin irritation and, in extreme cases, severe skin damage requiring transplants (Tan et al., 2008).

The "tide pod challenge" involves chewing a laundry detergent capsule until it breaks. This dangerous behaviour may be found, among others, on Twitter (now X) and Snapchat. Swallowed detergents cause severe irritation to the oral, oesophageal, epiglottic and tracheal mucosa. In 2012, the Carolinas Poison Center and the Poison Control Center at Children's Hospital of Philadelphia reported cases of vomiting, altered mental status and respiratory distress in children after ingesting laundry pods.

The essence of the "choking game" is to restrict oxygen supply to the brain. Through self-asphyxiation, adolescents attempt to achieve a state of euphoria (Guilheri et al., 2017). Accidental or intentional fainting sometimes occurs. Choking games are associated with blocking the blood supply to the brain, which also prevents oxygen from reaching the alveoli. Adolescents often use their hands, belt or shoelaces for this purpose. Temporary oxygen deprivation can cause brief euphoric states or induce falling sensations or visual and auditory hallucinations (Re et al., 2015). This dangerous experiment takes two forms – prolonged apnoea, and compression or suffocation. The former involves holding one's breath for as long as possible, while the latter involves carotid compression (with a hand or belt) by the adolescent themselves or another person, leading to cerebral hypoxia and syncope. Dizziness and visual or auditory hallucinations may also occur (Ullrich et al., 2008). Repeated hypoxia exposure may have adverse consequences, such as impaired cognitive and motor function or impaired vision (Cortey et al., 2016).

In 2020, Johnson & Johnson, the manufacturer of Benadryl, issued a warning about dangerous experimentation with the drug after the death of a 15-year-old girl who had consumed a large amount of diphenhydramine. The challenge became popular on TikTok. Users were encouraged to ingest a significant amount of diphenhydramine to put themselves into a state of intoxication and record their reactions. In 2018, 21,500 exposures to diphenhydramine occurred in the United States in the paediatric population (Gummin et al., 2019). After ingestion of diphenhydramine, symptoms such as mucosal dryness, pupil dilation, skin flushing, delirium or urinary retention occur (Minhaj and Leonard, 2021). A 13-year analysis of data on adverse effects of exposure to this substance conducted in various poison centres

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showed that agitation, hallucinations, drowsiness and pupil dilation were common in children (Palmer et al., 2020).

The presented exemplary challenges illustrate the diversity of destructive behaviours undertaken by adolescents. They emphasise the role of curiosity, seeking acceptance, recognition, or copying the actions of peers. Young individuals taking up challenges not necessarily experience depressive episodes, suicidal thoughts or self-harm (Deklotz and Krakowski, 2013). Actually, they tend to be surprised by the consequences of their actions. Early engagement in self-destructive behaviours is considered one of the strong predictors of suicide attempts and suicidal death in the future (McLoughlin et al., 2015). Ribeiro et al. (2016) demonstrated that individuals experiencing self-harm are exposed to over twice the risk of attempting suicide and one-and-a-half times the risk of death by suicide compared to those not engaging in self-destructive behaviour.

SELF-HARM AMONG ADOLESCENTS

The period of adolescence is characterised by anxiety, frequent stressful circumstances, developmental issues, and even psychopathology, which may contribute to self-harm (Hawton et al., 2012). The DSM-5 diagnostic criteria of mental disorders (American Psychiatric Association, 2014) define non-suicidal self-injury (NSSI) as occurring when "the individual repeatedly inflicts shallow, yet painful injuries to the surface of his or her body" (American Psychiatric Association, 2014, p. 804). The ICD-11 classification system defines NSSI is an intentional injury to the body, mostly through cutting, scratching, burning, biting, hitting, or needle-sticking (Hall and Melia, 2022).

In addition to physical injury, self-harm may increase the risk of depression and substance abuse (Hetrick et al., 2020). Furthermore, self-injurious behaviours may be reinforced by difficult experiences, such as abuse, feelings of hopelessness, or mood disorders. By engaging in self-harm, adolescents attempt to cope with negative emotions, stress, feelings of isolation and rejection. The experienced mental discomfort often becomes a motivation for damaging one's own body (Landstedt and Gillander Gådin, 2011; Townsend et al., 2016).

Recently, a dangerous phenomenon of using the Internet as a means to access and disseminate content related to self-harm has emerged. It creates an apparent space of privacy and anonymity. It also serves as a platform for communication, creation, sharing, and sending information, photographs, and videos showing physical injuries (Jacob et al., 2017). Some of the reasons for seeking information about self-harm and sharing it online include experiencing discomfort, seeking relief or attention, following trends, or the desire to verify the reactions of others to the published behaviour (Gámez-Guadix et al., 2020).

Unfortunately, it should be emphasised that such harmful content often enjoys immense popularity online. Based on collected data, Brown et al. (2018) demonstrated that young people published 32,000 images of self-harm over 4 weeks. Self-harm information is predominantly disseminated by girls (Gillies et al., 2018), probably because they are more likely to experience emotional or behavioural difficulties, which manifest, for example, as somatic or psychological discomfort, and show greater tendency to seek social support (Whitlock et al., 2006).

Young individuals utilise information and communication technology to publish and share degrading and harmful content (Patchin and Hinduja, 2022). Videos featuring self-harm show information on the wounds suffered as a result of self-harm, an indication of their number and reactions to the resulting body damage (Gámez-Guadix et al., 2020).

According to the integrated theoretical model of the development and maintenance of self-injury (Nock, 2010), individuals engage in self-harming acts because they perceive them as effective methods of regulating experienced emotional, cognitive (intrapersonal factors), or environmental (interpersonal factors) states. Taylor et al. (2018) conducted research on the functions of non-suicidal self-injury and found that the intrapersonal function (inducing a positive mood, self-punishment) was most common, whereas the interpersonal function related to displaying one's own suffering to others (seeking help, support) was less common. Zhu et al. (2021) observed that anxiety increased the likelihood of self-harm at 6-month intervals between successive research measurements. Gámez-Guadix et al. (2022) demonstrated that advanced depression and anxiety increased the risk of self-harm on the Internet. Research conducted by Taylor et al. (2018) showed that self-harm could play a role in emotion regulation. Adolescents with anxiety symptoms or more severe depression may engage in self-harm to alleviate the suffering they experience (Zhu et al., 2021).

Adolescents who do not receive support in their daily school, family, or personal difficulties from close relatives, friends, and acquaintances will seek it online. Internet interactions can lead to the normalisation of self-harming behaviours (behaviours that are undertaken by the majority of peers, often considered normal within a specific group of adolescents due to their prevalence) or encourage self-harm. For example, adolescents are active on forums, where they receive support, but also experience reinforcement of self-injurious behaviours (Jacob et al., 2017). Gámez-Guadix et al. (2020) showed that adolescents engaging in self-harming behaviours seek help, advice, and acceptance.

The significant risk associated with self-destructive behaviours lies in their tendency to become habitual. Fixed patterns leading to self-harm can be therapeutically

challenging (Owens and Charles, 2016). Early initiation of such behaviours by adolescents is associated with an increased risk of repeated self-harm and, in later stages, a higher risk of suicide attempts (Gillies et al., 2018).

ACTIONS TO PREVENT RISKY BEHAVIOUR AMONG ADOLESCENTS

Identification of factors that increase the incidence of or help protect against self-injury should be the primary goal of preventing self-harm. Family is one of the key protective factors against self-destructive behaviours. A sense of support, closeness, and love from the family reduces the risk of self-harm among adolescents (Gámez-Guadix et al., 2022), while lack of attention and acceptance exacerbates these behaviours (Mitchell and Ybarra, 2007) and contributes to seeking attention from others (Taylor et al., 2018). Open communication, understanding, support, and positive feelings in the immediate environment can significantly contribute to reducing self-harm tendencies (Evans et al., 2004).

It has been emphasised that friends (Doyle et al., 2015) and school (Hasking et al., 2015) play an important role in intervention efforts aimed at young people at risk of self-harm. Friends are a significant source of support for teenagers, although it should be noted that they are usually not sufficiently prepared to provide help in cases of self-destructive behaviour. Educational programmes aimed at raising awareness among adolescents about the risks and available support options can have a significant impact. Educators and teachers also play an important role. Furthermore, collaboration between schools and mental health professionals can be a significant preventive measure. Initiatives promoting mental health in schools coordinated by mental health nurses are examples of such efforts (Onnela et al., 2014). Additionally, the possibility of parental consultation with specialists expands awareness of risks and forms of support for young individuals. Collaboration between schools and mental health specialists can aid the early detection of potential teenage problems and prompt action at the early stages of risk identification. Promoting knowledge about mental health, strengthening family relationships, and expanding support networks will counteract the stigma associated with low self-esteem, depression, suicidal thoughts, or various forms of self-destructive behaviours (Santos et al., 2021).

CONCLUSIONS

Viral online challenges are a dangerous trend that is gaining popularity among adolescents. Low awareness of the risks and the unpredictability of the consequences of these activities for health and life further escalate such behaviours among different adolescent age groups, often leading to even more harmful self-destructive behaviours.

Adolescents are prone to engaging in harmful behaviours, which may be health- and life-threatening, as evidenced by the exemplary challenges. However, seemingly ordinary or even hilarious activities performed as part of games and published online can lead to adverse mental or physical consequences in young people.

Awareness of the dangers that arise during adolescence, the difficulties experienced by young people in the dimensions of biological, cognitive, social, and emotional functioning, can become an important factor in shaping appropriate support. Building relationships and a wide support network by those close to young people will significantly contribute to their protection against engaging in dangerous activities published online. Increasing the awareness of the dangers among parents, teachers, and caregivers should be an important preventive measure. Early education showing the risks associated with such trends is also crucial.

Conflict of interest

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Author contributions

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