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Social Media and Body Image from the Perspective of Secondary School Youth

Abstract

The study aimed to map the prevalence of social media disorder in secondary school youth. We used an abbreviated version of the Social Media Disorder Scale (SMD) and the Body Shape Questionnaire (BSQ-16B). The reliability of the questionnaires used in the research, indicates that they have sufficient internal consistency. A total of 637 respondents participated in the study. Their ages ranged from 15 to 19 years (AM=16.63). The results of the study showed social media impairment in 11.1% of the respondents, confirming a statistically significant difference in terms of the gender of the adolescents in favour of girls, and in terms of the degree of concern about their appearance, in favour of those who are more concerned about their appearance. Furthermore, a statistically significant difference in the degree of concern about their appearance in terms of gender, was confirmed in favour of girls.

Keywords

social media disorder, social media, secondary school youth, body image

1. Introduction

Social media is perceived differentially by many authors.¹ Meikle² characterises social media as the Internet and networked communication platforms, that enable both personal and public communication. This definition fits with social media platforms, such as Facebook or Instagram, which have become mainstays of popular culture. The use of social media is steadily increasing, with the number of social media users reaching 4.65 billion in April 2022.³

Social media has become an essential part of our lives. They play an important role in the lives of young people, who are the first generation to be in daily online contact with their peers through social media. The Slovak Youth Report⁴ states that young people on the threshold of 2018 are the first generation to fully use information and communication technologies and mobile communication from early childhood.

Undoubtedly, social media offer tremendous benefits to society by providing access and connection to people, services, information and opportunities that would not otherwise be possible. However, there is evidence, particularly in the field of adolescent mental health, of an association between social media use and higher depression and anxiety scores, poor sleep, low self-esteem, and body image concerns.⁵

Body image has become essential to mental health, self-esteem and well-being. In Western society, images of often-unattainable body ideals pervade films, magazines, television advertisements and social media sites, with these images generally reflecting photographs of thin idealised women.⁶

¹ C. Fuchs, *Social Media: A Critical Introduction*, London 2017, Sage.

² G. Meikle, *Social Media: Communication, Sharing and Visibility*, New York 2016, Routledge.

³ <https://www.statista.com/statistics/617136/digital-population-worldwide/> (30.12.2023).

⁴ Správa o mládeži, IUVENTA – Slovenský inštitút mládeže, 2018, p. 40.

⁵ Y. Kelly, A. Zilanawala, C. Booker, A. Sacker, *Social media use and adolescent mental health: findings from the UK millennial cohort study*, “EClinical Medicine” (2018), 6, pp. 59–68; Royal Society For Public Health, *Status of Mind: Social Media and Young People’s Mental Health and Wellbeing*, 2017.

⁶ A.L. Cory, S.R. Burns, *What did she say? An examination of the influence of conversation and media exposure on participant’s body objectification and anxiety*, “Psi Chi Journal of Undergraduate Research” (2007) 12(3), pp. 97–103.

Body image has become so familiar in the Czech and Slovak languages, that it is usually neither abbreviated nor translated.⁷ Under the term, it is possible to imagine body image, self-conception and body concepts perceived by us and the environment. The term body image was introduced in the 1930s by the Austrian neurologist and psychiatrist Paul Schilder, who defined the term body image as the image of our own body that we form in our mind.⁸ Since body self-image is usually defined as an attitude towards one's body, we can distinguish its cognitive, emotional and behavioural aspects.⁹ The cognitive side includes the idea of the dimensions of the body as a whole, the dimensions of its individual parts and their relation to each other. The affective components represent the relationship to one's body as a whole, its individual parts, and the relationship to one's physicality in general. And under the behavioural domain, fall all activities that are directed towards influencing our appearance (e.g. exercise, plastic surgery, dieting, etc.).¹⁰

As the most widespread form of mass communication, social media has influenced society in many ways in recent decades. The media are the only source of what the public sees and are directly responsible for the content presented to people through them. Unfortunately, the media has also become a mediator of sociocultural values that directly affect ideas about ideal body shape and size.¹¹ There are many different media types; therefore, how they influence people varies. These include newspapers, magazines, books, movies, radio, television, and the Internet.¹²

Several researches have been conducted which reveal that for both women and men, the perception of their own body is associated with negative feelings, and social media significantly contributes to this. The media is a transmitter

⁷ L. Fialová, *Body Image jak součást sebepojetí člověka*, Praha 2001, Karoinum, p. 270.

⁸ S. Fischer, J. Škoda, *Sociální patologie. Závažné sociálně patologické jevy, příčiny, prevence, možnosti řešení*, Praha 2014, Grada Publishing, a.s., p. 232.

⁹ K. Fialová, *Body Image jak součást sebepojetí člověka*, Praha 2001, Karoinum, p. 270.

¹⁰ D. Stackeová, *Tělesné sebepojetí v kontextu psychosomatiky a možnosti jeho ovlivnění*, 2007.

¹¹ M. McCabe, K. Butler, C. Watt, *Media influences on attitudes and perceptions toward the body among adult men and women*, "Journal of Applied Behavioural Research" (2007) 12(2), pp. 101–118.

¹² K.E. Mulgrew, D. Volcevski-Kostas, *Short term exposure to attractive and muscular singers in music video clips negatively affects men's body image and mood*, "Body image" (2012) 9, pp. 543–546.

of sociocultural values regarding ideal body shape and size, creating the idea of the perfect woman and man.¹³ In the issue at hand, there is increasing debate about whether male and female bodies portrayed in the media are a risk factor for negative body self-image.

A study by van den Eijnden, R. J. J. M., Lemmens, J. S., & Valkenburg, P. M. was a pilot study to investigate the validity and psychometric properties of the Social Media Disorders Scale. This study¹⁴, with more than 1000 adolescents (aged 10–17) in the Netherlands, found that the prevalence of social media disorders, as determined by the diagnostic cut-off point of the 9-item scale, ranged from 7.3% to 11.6% in 3 online samples.

The authors Ergun and Alkan conducted the first study to establish the association between social media disorder and ostracism. The study was conducted on a research sample of 864 adolescents aged 14–18. The reported study found a positive correlation between ostracism and social media disorder. Males who were not academically successful had no hobbies and scored high on the social media disorder scale, scored high on the ostracism scale.¹⁵

Another research conducted on the issue at hand was research to find out the relationship between social media disorder and loneliness. The research results showed that 107 (23.7%) respondents were classified with social media use disorder.¹⁶

Our study aimed to map the prevalence of social media disorder among secondary school youth and to analyse the level of concern about their appearance among secondary school pupils. We set the following research problem: *What are the risks of social media use in secondary school youth?*

¹³ M. McCabe, K. Butler, C. Watt, *Media influences on attitudes and perceptions toward the body among adult men and women*, "Journal of Applied Behavioural Research" (2007) 12(2), pp. 101–118.

¹⁴ R.J.J.M. van den Eijnden, J.S. Lemmens, P.M. Valkenburg, *The Social Media Disorder Scale*, "Computers in Human Behavior" (2016) 61, pp. 478–487.

¹⁵ G. Ergun, A. Alkan, *The Social Media Disorder and Ostracism in Adolescents: (OSTRACA-SM Study)*, "Eurasian J Med" (2020) 52(2), pp. 139–144.

¹⁶ L. Youssef, R. Hallit, N. Kheir, S. Obeid, S. Hallit, *Social media use disorder and loneliness: any association between the two? Results of a cross-sectional study among Lebanese adults*, "BMC Psychology" (2020) 8, Article number: 56.

2. Materials and Methods

Based on the theoretical and empirical background, we set the following research hypotheses:

H1: We hypothesise that there is a statistically significant difference in the prevalence of Social Media Disorder regarding the gender of secondary school youth in favour of girls.

H2: We hypothesise that there is a statistically significant difference in the prevalence of social media disorder regarding the degree of concern about one's appearance in favour of those who are more concerned about their appearance.

H3: We hypothesise there is a statistically significant difference in the degree of concern about one's appearance regarding the gender of secondary school youth in favour of girls.

The empirical research design was quantitative in nature, with the application of a research battery consisting of the following scales: Body Shape Questionnaire (BSQ-16B) and Social Media Disorder Scale (SMD), supplemented by demographic items.

The Body Shape Questionnaire (BSQ-16B) is a questionnaire about the level of concern reading one's body image, designed to measure worries about body shape and weight. The original 34-item questionnaire (BSQ₃₄)¹⁷ was later adapted into a 16-item questionnaire (BSQ-16B)¹⁸, and we use this abbreviated version in our research. The questionnaire outcome is a measure of concern with respect to one's appearance. Each item has a score of 1 to 6 with 'never' = 1 and 'always' = 6, and the total score is the sum across the 16 items, that is, a range of scores from 16 to 96. Based on this score, the respondent can be placed into one of four categories: less than 38 = no concern about their appearance; 38 to 51 = slight concern about their appearance; 52 to 66 = slight concern about their appearance; above 66 = strong concern about their appearance.

¹⁷ P.J. Cooper, M.J. Taylor; Z. Cooper; C.G. Fairburn, *The development and validation of the body shape questionnaire*, "International Journal of Eating Disorders" (1987) 6(4).

¹⁸ C. Evans, B. Dolan, *Body Shape Questionnaire: derivation of shortened "alternate forms"*, "International Journal of Eating Disorders" (1993) 13(3), pp. 315–321.

The Social Media Disorder Scale (SMD) is a short and straightforward scale for diagnosing social media addiction and is designed to detect social media disorders.

The SMD consists of nine yes/no questions about feelings with respect to social media. The items reflect the diagnostic criteria for social media addiction, which were based on the criteria for digital gaming addiction, according to the DSM-5 characteristics. The number of affirmative responses is counted in the scoring. The authors¹⁹ state that respondents have a social media disorder if they answer yes to five or more questions. Social media disorder is a behavioural addiction associated with depression, loneliness, narcissism, low self-esteem, poor sleep quality, and low academic performance.²⁰

We drew a sample consisting of N=637 respondents using convenience sampling. We distributed the questionnaires electronically from November 2021 to February 2022. There were 414 girls and 223 boys in the study sample. The mean age of the pupils was 16.63 years.

Statistical data analysis was performed using SPSS Statistics 22.0 for Windows statistical software. We carried out a comparative analysis. We used non-parametric tests such as the Mann-Whitney U test and Chi-square test of goodness-of-fit, to identify statistically significant differences and relationships between variables, as the variable did not show the normality of distribution for the population and each subset.

¹⁹ R.J.J.M. van den Eijnden, J.S. Lemmens, P.M. Valkenburg, *The Social Media Disorder Scale*, "Computers in Human Behavior" (2016) 61, pp. 478–487.

²⁰ G. Ergun, A. Alkan, *The Social Media Disorder and Ostracism in Adolescents: (OSTRACA-SM Study)*, "Eurasian J Med" (2020) 52(2), pp. 139–144.

3. Results

Table 1. Describing variables in the context of social media disorder – contingency table

No		Social media disorder		Total
		Yes		
Gender	Boy n % in G % in SMD	207 92.8% 36.6%	16 7.2% 22.5%	223 100.0% 35.0%
	Girl n % in G % in SMD	359 86.7% 63.4%	55 13.3% 77.5%	414 100.0% 65.0%
N Total % in G % in SMD		566 88.9% 100.0%	71 11.1% 100.0%	637 100.0% 100.0%

Legend: G=gender; SMD=social media disorder

Table 2. Comparison of boys and girls from the aspect of social media disorder

G	n	CHí2	p
Boys	223	5.464	0.019
Girls	414		

Legend: G=gender; n=number of participants in the group, CHí2=Chi square test, p=statistical significance

Table 1 shows a significant gender difference in the prevalence of social media disorder in favour of girls. It is further evident from Table 2 that there is a statistically significant difference in social media disorder between boys and girls at the significance level of $p \leq 0.05$ ($p=0.019$). Thus, within our research sample, social media disorder is more common in girls than boys. 7.2% of boys and 13.3% of girls have social media disorders.

Table 3. Difference in prevalence of social media disorder regarding the level of concern about one's appearance

	Social media disorder does not occur (n=566)		Social media disorder occurs (n=71)		Mann-Whitney U test	
	Mdn	SD	Mdn	SD	U-test	p
Level of concern about one's appearance	25.00	6.535	43.00	4.072	14,111.000	0.000***

Legend: n=number; Mdn=median; SD=standard deviation; U=test-hodnota Mann Whitney U-test; p=statistical significance

Table 3 shows that there is a statistically significant difference at the $p \leq 0.001$ ($p=0.000$) level of significance between secondary school pupils who have social media disorders and those who do not, in terms of concern about their appearance. This shows that in our research sample, those secondary school pupils who have social media disorders are more concerned about their appearance.

Table 4: Difference in the level of concern about their appearance regarding the gender of the pupils surveyed

	Boys (n=223)		Girls (n=414)		Mann-Whitney U test	
	Mdn	SD	Mdn	SD	U-test	p
Level of concern about one's appearance	26.00	18.913	38.00	22.664	30,626.000	0.000***

Legend: n= number; Mdn=median; SD=standard deviation; U-test=hodnota Mann Whitney U-test; p=statistical significance

Based on the research results from Table 4, we can conclude that H_3 is confirmed. There is a statistically significant difference between boys and girls in the level of concern about their appearance at the significance level of $p \leq 0.001$ ($p=0.000$). Girls are more concerned about their appearance than boys.

4. Discussion

The study aimed to map the prevalence of social media impairment and to analyse the level of concern about one's appearance among secondary school pupils.

Social media disorder was present in 71 respondents (11.1%), with a higher proportion of girls (n=55) than boys (n=16). There is a statistically significant difference in social media disorder between boys and girls at $p \leq 0.05$ level of significance ($p=0.019$). The tendency to addictive behaviour was also confirmed in their study, by the authors Lašek, Kalibová and Andršová²¹ – the more the pupils used the Internet, the more they were at risk of developing an addiction to it and also the tendency to use or abuse it on a daily basis. We also observed a statistically significant difference in the degree of concern about their appearance at the significance level $p \leq 0.001$ ($p=0.000$) in favour of girls. At the same time, more significant concern about their appearance is experienced by those secondary school pupils who have social media disorders. Based on our research findings, we can conclude that social media disorder may be associated with concerns about one's appearance in addition to depression, loneliness, narcissism, low self-esteem, poor sleep quality, and low academic performance.²²

Social networking sites are now dominant among adolescents and differ from traditional media, in that they may exacerbate the association between media exposure and body image. Due to the popularity and availability of technology in the form of smartphones, young people can connect to social networks constantly, which also increases their exposure to content that reinforces perceptions of the ideal body image.²³

Users also have more control over what content they watch on social networks. They can 'follow' certain people they know in real life (for example, friends and classmates), but also various celebrities and famous people. Correlational studies in the field have shown that spending time on social media, higher emotional engagement with technology, and engaging in activities that

²¹ J. Lašek, P. Kalibová, J. Andršová, *Adolescents and Information and Communication Technologies: Use and a Risk of Addiction*, "The New Educational Review" (2016) 44, pp. 72–83.

²² G. Ergun, A. Alkan, *The Social Media Disorder and Ostracism in Adolescents: (OSTRACA-SM Study)*, "Eurasian J Med" (2020) 52(2), pp. 139–144.

²³ M. Anderson, J. Jiang, *Teens, social media & technology*, "Pew Research Center", máj 31, 2018.

involve following and posting photos on social media, are associated with higher levels of dissatisfaction with one's body.²⁴

Adolescence is the time when concerns about body image, precisely in the face of ongoing changes, peak, especially in young women.²⁵ For adolescents, their own body becomes a particular object of concern.²⁶ Adolescents also tend to compare their bodies to their peers' physical qualities and the currently accepted ideal of beauty.²⁷ Concerning the issue at hand, we consider it essential to mention the research findings of Wadden et al.²⁸, which concluded that one of the most critical concerns in the lives of adolescent girls is precisely worrying about their figure.

Physical body image is significantly more important for women's self-esteem than for men.²⁹ Self-esteem is an important part of the psyche and, if low, can be a factor in the development of mental illness. Not meeting self-measures of the 'optimal' is psychologically challenging for women and can lead to depression or anxiety. Taking care of one's appearance is typically expected of a woman.

Adolescents spend a lot of time on social media, not only just posting photos and videos of themselves, but also liking and commenting on other people's photos and videos. When posting their photos, adolescents pay close attention to their physical appearance, and their photos or videos are often filtered and edited in a variety of ways. This reflects the social networking environment, which predominantly presents an appearance that is difficult to obtain and which is often unrealistic. These false portrayals create a gap between what young social media users actually look like and what they think they should look like, which can cause body image and self-esteem issues. The way adolescents

²⁴ G. Holland, M. Tiggemann, *A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes*, "Body image" (2016), 17, pp. 100–110.

²⁵ S. Grogan, *Body image: psychologie nespokojenosti s vlastním tělem*, Praha 2000, Grada Publishing a.s., p. 184.

²⁶ E. Mistrík, *Sejčová, L. Dobrý život a kult tela*, Bratislava 2008, Album, p. 145.

²⁷ M. Vágnerová, *Vývojová psychologie. Dětství a dospívání*, Praha 2012, Univerzita Karlova v Praze, p. 536.

²⁸ S. Grogan, *Body image: psychologie nespokojenosti s vlastním tělem*, Praha 2000, Grada Publishing a.s., p. 184.

²⁹ J.F. Sowislo, U. Orth, *Does Low Self-Esteem Predict Depression and Anxiety? A Meta-Analysis of Longitudinal Studies*, "Psychological Bulletin" (2013) 139 (1), pp. 213–240.

perceive their physical appearance contributes significantly to their self-esteem, especially for young women.³⁰

Young people who have a negative image of their body image are likely to feel more comfortable interacting socially with other people in a virtual environment where they can create their ideal self. A social network profile can often be accompanied by the careful creation of an image and reputation, in order to create an ideal digital self. People often present their ideal self on Facebook³¹ and the same can be assumed for other social networking platforms.

Based on the research findings, we recommend that schools strengthen the area of healthy lifestyle prevention through the school's professional staff, or reach out to counselling and prevention centres that offer a variety of prevention activities which are focused on self- and body image, mental health or healthy lifestyle.

Digital technologies are also increasingly impacting the quality of family relationships, as highlighted in a report published on www.commonssense-media.org entitled *The New Normal: Parents, Teens, Screens, and Sleep*³² Research findings show that up to 52% of parents admit to spending too much time using digital technology, 62% of parents and 29% of parents use digital technology in the late evening, which also determines poorer quality of their sleep.³³

Padilla-Walker, LM, Coyne, SM, Fraser, AM (2012), in their study entitled *Getting a High-Speed Family Connection*³⁴, found that excessive use of mobile phones in the family, watching TV together and playing video games are associated with higher quality family relationships, and conversely, engagement on social networking sites is associated with lower quality family relationships,

³⁰ S. Steinsbekk, L. Wichstrøm, F. Stenseng, J. Nesi, B. Wold Hygen, V. Skalická, *The impact of social media use on appearance self-esteem from childhood to adolescence – A 3-wave community study*, "Computers in Human Behavior" (2021), p. 114.

³¹ S. Zhao, S. Grasmuck, J. Martin, *Identity Construction on Facebook: Digital Empowerment in Anchored Relationships*, "Computers in Human Behavior" (2008) 24 (5), pp. 1816–1836.

³² <https://www.commonssensemedia.org/research/the-new-normal-parents-teens-screens-and-sleep> (30.12.2023).

³³ *The New Normal, Parents, Teens, Screens, and Sleep*, 2019.

³⁴ L.M. Padilla-Walker, S.M. Coyne & A.M. Fraser, *Getting a high-speed family connection: Associations between family media use and family connection. Family Relations: An Interdisciplinary*, "Journal of Applied Family Studies" (2012) 61(3), pp. 426–440.

as indicated by studies by authors such as Radesky, JS, Miller, AL, Rosenblum, KL, Appugliese, D., Kaciroti, N., Lumeng, JC (2015).³⁵

Therefore, in this context, they emphasize the need for a harmonious family environment between parents and children, communication between family members that strengthens the parent-child bonding relationship. Positive parent-child relationships, mutual trust and concern for the child, and spending time together can act preventively in the context of risky behaviours online.

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³⁵ J.L. Radesky, A. Miller, K.L. Rosenblum, D. Appugliese, N. Kaciroti, J.C. Lumeng, *Maternal mobile device use during a structured parent-child interaction task*, “Acad Pediatr” (2015) Mar–Apr., 15(2), pp. 238–244.

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