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## **The influence of social media on developing body image dissatisfaction and eating disorders**

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## ABSTRACT

### INTRODUCTION

Social media platforms are commonly used worldwide, affecting every-day living of billions of people. It may impacts both self-esteem and self-evaluation of its users. Formed by social influence, the ideal beauty standards lead to an unhealthy comparison, need of external validation and pursuit of ideal appearance. Induced body image dissatisfaction could be the cause of many different eating disorders or rigorous exercises. Promoted by media, ideal body-image creates unhealthy focus on BMI, weight and shape of one's own body.

### PURPOSE

The aim of this study is to present the current state of knowledge on the impact of social media on evolving dissatisfaction with body image, followed by eating disorders.

### METHODS

For the purposes of writing this article, the available literature was reviewed. The database of medical publications – PubMed database and publicly available books was searched, using keywords such as social media and body image disorders, eating disorders.

### RESULTS

According to reviewed studies, spending more time on following social media intensifies body image disorders among both young women and men, as a result of negative upward comparison of their external appearance. A problematic social media use, passive and focused on image-related platforms, heightens a risk of developing a self-dissatisfaction and body concerns. Disordered eating behaviors are significantly connected to a frequent use of an image-related social media platforms.

### CONCLUSIONS

Maintaining a healthy relationships with peers and parents protects self-esteem of adolescents and lowers the risk of body-image and eating disorders. A greater focus should be put on educating young people about their value, self-assessment and healthy relations.

**KEYWORDS:** body image disorders, self-body image, social media, eating disorders

## INTRODUCTION AND PURPOSE

Continually rising number of social media users all over the world was rated over four billion people in 2021, with growing statistics to reach six billion by 2027 (1). Which is why, it can definitely be perceived as a strong source of daily information, communication and amusement. But also as a learning tool and social networking place. (2) Wide access to social media and its popularity in most of people's lives might generate some influence on their mental health and self-perception. Since everyone can choose what to follow in social media, there is a diversity of how it affects the user. Starting with improved well-being, while creating healthy relationships and achieving an advantage from rapid information and easy

connection to others. (3) Being followed by not having any affection on self-esteem of most of the social media users, or impacting only minority with individual determinants. (4) Ending with disturbed self-body image, general body dissatisfaction and objectified body consciousness, triggered by following social media. (5, 6, 7) Well-established in media, ideal body standards are examined to have a negative impact, especially on women. (8) A strong desire to become skinny, as well as, general body dissatisfaction are associated with popularity of perfect photos, posted on socials, what in a bigger perspective could cause a body image concerns. (9) It is building the objectified body consciousness, meaning the tendency to view oneself as an object to be looked at and evaluated by others. (10) This kind of self-objectifying may be a possible factor in developing depression, unhealthy behaviors and disordered eating. (7, 11, 12, 13)

In recent years, many studies were conducted concerning the influence of social media on developing body image disorders, followed by eating disorders. The aim of this review is to summarize the current state of knowledge, introduce the existing data on psychological background of developing body concerns and eating disorders, finally presenting future directions to reduce the negative outcomes of social media exposure.

## KNOWLEDGE

### BODY IMAGE AND SOCIAL COMPARISON

The complex definition of the body image consist of subjective thoughts and feelings about the individuals appearance. It combines the perception, feelings and beliefs about the body, simultaneously with a body concerning behaviors. (14) That said, self-perception may vary from a real image. Due to a theory of L. Festinger, self-evaluation and the need to evaluate is often based on comparison to other people, what can explain the social influence processes and the competitiveness as an impact for a higher aspirations. Although, it is important to choose the right comparison target. Disproportionately upward comparison targets usually lead to envy and contrast rather than to motivate and assimilate. (15, 18) When the divergence between perceived and idealized body image occur, the person is experiencing body dissatisfaction. (14) Considering physical appearance comparisons, people often choose extremely dissimilar targets to approach, such as models, celebrities and fitness trainers. (6) Resulting in dissatisfaction with their bodies and a wide range of negative emotions, including low self-esteem. However, the final outcome of social media comparison depends mostly on individual conditioning and a style of use. (4) Adolescents use socials to create a better version of themselves and take feedback on how they present. Young women, more than men, need their interpersonal relationships while building their self-esteem and self-perception. (16) Female adolescents are endangered more by appearance targeted platforms, which increase body dissatisfaction. (17) What is important, adolescents who are considered emotionally healthy, sustain relationships and communication via internet, gain more positives from social media use. (3)

### PROBLEMATIC SOCIAL MEDIA USE

Not only individual susceptibilities should be considered at fault in developing demonstrated disorders. What must be taken into account is also a problematic social media use. Users who tend to stay passive, meaning observe without interactions, and follow a higher number of strangers accounts are putting themselves in the risk of harmful consequences. It increases negative social comparison and reduces positive outcome of interacting and communicating with others. (19) Although, maintaining an active communication with more attractive social media user, in contrast to a family member, still increases dissatisfaction with one's own appearance. (18) Exposure to mainly image-related platforms such as Instagram, Snapchat,

Pinterest and Facebook most likely enhances comparison, when happens daily. It should be emphasized that over 50% of young adults uses Instagram every day. (20) The frequency of social media use is a significant factor for developing body-image disorders. A research conducted during COVID-19 lockdown, when activity in the internet and socials escalated, discovered a crucial relationship between a high frequency of social media use and a bigger risk of body-image disorder, exceptionally pursuit for skinniness. (21) Another article, by Wilksch SM and others, acknowledge a correlation between social media use and eating disorders development. Additionally revalidating a significance of the time spent on social media as a risk factor and noticing the problem relates to even younger ones than expected. (13) Overall time spent in the internet by adolescents is prolonging, with a higher social media use among girls. Also, female young ones more often become addicted to social platforms, in contrary to boys, who preferably spend more time on playing games. (22)

#### PARENTS SUPPORT RELEVANCE

The support of parents is significant to avoid the body image concerns, which young people experience. (23) What is disturbing, parents often have difficulties in reporting the time their children spent on using smartphones. Some of them have poor insight into their children internet activities. It reveals a limited control of children behaviors and threat preventions. (24, 22) Furthermore, it has been proven that positive bond with mother, especially, protects a child from a destructive willingness to adjust and endanger of body disorders. (25) It supports the assumption, that stable and deep relationships are desired for a proper self-esteem development among young adolescents, resulting with a lower probability of self-body image disappointment while comparing to strangers.

#### EATING DISORDERS

The presence of social media in everyday life of adolescents, in particular, jeopardises their physical satisfaction and increases the tendency of eating disorders. (7) In a research of Rachel. F Rodgers, where assembled data about body image concerns, divided internationally, were summarized, a significance between appearance dissatisfaction and impaired mental health was observed. (23) Social media triggers disordered eating behaviors and unhealthy focus on weight, among young users, both sexes. Comparably to body concerns, the amount of the time spent on following social media is a significant factor in developing unhealthy eating behaviors. What is also worrying, this kind of mental disorder affects more and more young people. (13) Adolescents compare themselves with other users and pursue the ideal body image in the need for external acceptance in social media. Although they are conscious of its negative influence on their body-image and eating behaviors, they are willing to adjust. (6) With recent trends to achieve both thin and muscular body, social media was found to be the only source of comparison to the ideal body appearance. (26) A different - slim-thick trend, with slim waist and more curved hips, popularized also in social media, was found to cause more dissatisfaction and probably provides more harm for women body than the thin-trend. (27) In both cases a higher external comparison, escalates body dissatisfaction and makes a user more vulnerable to a mental and eating disturbance. The desire of achieving the perfect body shape is preceded by the pursuit for social acceptance. Matching the beauty standards improves self-esteem and self-evaluation. Falling short of expectations with self-body image determines the behaviors to achieve the external satisfaction. (7) This may lead to unhealthy habits concerning food choices and intensity of exercises. When it comes to food, restricting is the most popular eating disorder, followed by overeating and purging. (8)

## CONCLUSIONS

In conclusion, it appears comparison is important in the matter of social life, relationships and community membership. It can be beneficial when it motivates and inspires to do better. On the contrary, when comparing with completely dissimilar targets with entirely different life situation, it may result in a negative self-perception and dissatisfaction. This could subsequently cause a variety of eating disorders and incorrect self-body image. In most analyzed articles, it is stressed that the time spent on social media had the greatest impact on developing those disorders among its users. With persistently extending time of screen use this should be considered as the biggest endangerment. User's own predispositions and vulnerabilities may determine the level and variety of social media's affection. Additionally, the style of following social media and the engagement in communication also has its reflection on impacting users in a specific way. Where being passive, avoiding communication and focusing on strangers accounts intensify comparison, then self-objectification and self-dissatisfaction. Whilst maintaining relationships and communication with peers and family members supports mental health and general positive influence of existing in social media. Deep and healthy relations with parents, particularly with mother, are also a crucial factor, which helps to develop a better self-esteem and protects from an unhealthy pressure to compare and adjust.

That being said, more focus should be placed on preventing and lowering concerns about bodies and external appearances. Young adolescents should be educated to build their self-esteem, based on positive relationships in real life with their peers and family, self-care and healthy habits. Parents should focus on creating deep and healthy relationships with their children. More educative strategies should be used to promote healthy use of social media. Finally, a healthy and individually differentiated body-image should be promoted by influencers and health workers via social media platforms.

## REFERENCES

1. Number of social media users worldwide from 2017 to 2027. *Statista S. Dixon, Feb 13, 2023* <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>
2. Farsi D. Social Media and Health Care, Part I: Literature Review of Social Media Use by Health Care Providers. *J Med Internet Res.* 2021 Apr 5;23(4):e23205. doi: 10.2196/23205. PMID: 33664014; PMCID: PMC8056296.
3. Jo S, Jang MY. Concept analysis of adolescent use of social media for emotional well-being. *Int J Nurs Pract.* 2023 Feb;29(1):e13116. doi: 10.1111/ijn.13116. Epub 2022 Oct 30. PMID: 36310404.
4. Cingel DP, Carter MC, Krause HV. Social media and self-esteem. *Curr Opin Psychol.* 2022 Jun;45:101304. doi: 10.1016/j.copsyc.2022.101304. Epub 2022 Feb 2. PMID: 35245885.
5. Terhoeven V, Nikendei C, Bärnighausen T, Bountogo M, Friederich HC, Ouermi L, Sié A, Harling G. Eating disorders, body image and media exposure among adolescent girls in rural Burkina Faso. *Trop Med Int Health.* 2020 Jan;25(1):132-141. doi: 10.1111/tmi.13340. PMID: 31710750; PMCID: PMC8609432.
6. Rounsefell K, Gibson S, McLean S, Blair M, Molenaar A, Brennan L, Truby H, McCaffrey TA. Social media, body image and food choices in healthy young adults: A mixed methods systematic review. *Nutr Diet.* 2020 Feb;77(1):19-40. doi: 10.1111/1747-0080.12581. Epub 2019 Oct 3. PMID: 31583837; PMCID: PMC7384161.

7. Jiotsa B, Naccache B, Duval M, Rocher B, Grall-Bronnec M. Social Media Use and Body Image Disorders: Association between Frequency of Comparing One's Own Physical Appearance to That of People Being Followed on Social Media and Body Dissatisfaction and Drive for Thinness. *Int J Environ Res Public Health*. 2021 Mar 11;18(6):2880. doi: 10.3390/ijerph18062880. PMID: 33799804; PMCID: PMC8001450.
8. Aparicio-Martinez P, Perea-Moreno AJ, Martinez-Jimenez MP, Redel-Macías MD, Pagliari C, Vaquero-Abellan M. Social Media, Thin-Ideal, Body Dissatisfaction and Disordered Eating Attitudes: An Exploratory Analysis. *Int J Environ Res Public Health*. 2019 Oct 29;16(21):4177. doi: 10.3390/ijerph16214177. PMID: 31671857; PMCID: PMC6861923.
9. Powell E., Wang-Hall J., Bannister J.A., Colera E., Lopez F.G. Attachment security and social comparisons as predictors of Pinterest users' body image concerns. *Comput. Hum. Behav.* 2018;83:221–229. doi: 10.1016/j.chb.2018.01.039.
10. Manago, A. M., Ward, L. M., Lemm, K. M., Reed, L., & Seabrook, R. (2015). Facebook involvement, objectified body consciousness, body shame, and sexual assertiveness in college women and men. *Sex roles*, 72(1), 1-14.
11. Dakanalis A, Carrà G, Calogero R, Fida R, Clerici M, Zanetti MA, Riva G. The developmental effects of media-ideal internalization and self-objectification processes on adolescents' negative body-feelings, dietary restraint, and binge eating. *Eur Child Adolesc Psychiatry*. 2015 Aug;24(8):997-1010. doi: 10.1007/s00787-014-0649-1. Epub 2014 Nov 22. PMID: 25416025.
12. Rodgers, R. F. (2015). *The Relationship Between Body Image Concerns, Eating Disorders and Internet Use, Part II: An Integrated Theoretical Model. Adolescent Research Review*, 1(2), 121–137. doi:10.1007/s40894-015-0017-5
13. Wilksch SM, O'Shea A, Ho P, Byrne S, Wade TD. The relationship between social media use and disordered eating in young adolescents. *Int J Eat Disord*. 2020 Jan;53(1):96-106. doi: 10.1002/eat.23198. Epub 2019 Dec 3. PMID: 31797420.
14. Hosseini SA, Padhy RK. Body Image Distortion. 2022 Sep 5. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan–. PMID: 31536191.
15. Festinger L. A theory of social comparison processes. *Hum. Relat.* 1954;7:117–140. DOI: 10.1177/001872675400700202.
16. Mann RB, Blumberg F. Adolescents and social media: The effects of frequency of use, self-presentation, social comparison, and self esteem on possible self imagery. *Acta Psychol (Amst)*. 2022 Aug;228:103629. doi: 10.1016/j.actpsy.2022.103629. Epub 2022 May 31. PMID: 35661975.
17. Cohen, R., Newton-John, T., & Slater, A. (2017). The relationship between Facebook and Instagram appearance-focused activities and body image concerns in young women. *Body Image*, 23, 183–187. doi:10.1016/j.bodyim.2017.10.002
18. Hogue JV, Mills JS. The effects of active social media engagement with peers on body image in young women. *Body Image*. 2019 Mar;28:1-5. doi: 10.1016/j.bodyim.2018.11.002. Epub 2018 Nov 12. PMID: 30439560.
19. Jean Marks, R., De Foe, A., & Collett, J. (2020). *The Pursuit of Wellness: Social Media, Body Image and Eating Disorders. Children and Youth Services Review*, 105659. doi:10.1016/j.childyouth.2020.105659
20. Sidani JE, Shensa A, Hoffman B, Hanmer J, Primack BA. The Association between Social Media Use and Eating Concerns among US Young Adults. *J Acad Nutr Diet*. 2016 Sep;116(9):1465-1472. doi: 10.1016/j.jand.2016.03.021. Epub 2016 May 5. PMID: 27161027; PMCID: PMC5003636

21. Vall-Roqué H, Andrés A, Saldaña C. The impact of COVID-19 lockdown on social network sites use, body image disturbances and self-esteem among adolescent and young women. *Prog Neuropsychopharmacol Biol Psychiatry*. 2021 Aug 30;110:110293. doi: 10.1016/j.pnpbp.2021.110293. Epub 2021 Mar 2. PMID: 33662532; PMCID: PMC8569938.
22. Bagot KS, Tomko RL, Marshall AT, Hermann J, Cummins K, Ksinan A, Kakalis M, Breslin F, Lisdahl KM, Mason M, Redhead JN, Squeglia LM, Thompson WK, Wade T, Tapert SF, Fuemmeler BF, Baker FC. Youth screen use in the ABCD® study. *Dev Cogn Neurosci*. 2022 Sep 1;57:101150. doi: 10.1016/j.dcn.2022.101150. Epub ahead of print. PMID: 36084446; PMCID: PMC9465320.
23. Rodgers RF, Laveway K, Campos P, de Carvalho PHB. Body image as a global mental health concern. *Glob Ment Health (Camb)*. 2023 Feb 27;10:e9. doi: 10.1017/gmh.2023.2. PMID: 36861019; PMCID: PMC9970735.
24. Wade NE, Ortigara JM, Sullivan RM, Tomko RL, Breslin FJ, Baker FC, Fuemmeler BF, Delrahim Howlett K, Lisdahl KM, Marshall AT, Mason MJ, Neale MC, Squeglia LM, Wolff-Hughes DL, Tapert SF, Bagot KS; ABCD Novel Technologies Workgroup. Passive Sensing of Preteens' Smartphone Use: An Adolescent Brain Cognitive Development (ABCD) Cohort Substudy. *JMIR Ment Health*. 2021 Oct 18;8(10):e29426. doi: 10.2196/29426. PMID: 34661541; PMCID: PMC8561413.
25. de Vries DA, Vossen HGM, van der Kolk-van der Boom P. Social Media and Body Dissatisfaction: Investigating the Attenuating Role of Positive Parent-Adolescent Relationships. *J Youth Adolesc*. 2019 Mar;48(3):527-536. doi: 10.1007/s10964-018-0956-9. Epub 2018 Nov 26. PMID: 30478819; PMCID: PMC6394528.
26. Roberts SR, Maheux AJ, Hunt RA, Ladd BA, Choukas-Bradley S. Incorporating social media and muscular ideal internalization into the tripartite influence model of body image: Towards a modern understanding of adolescent girls' body dissatisfaction. *Body Image*. 2022 Jun;41:239-247. doi: 10.1016/j.bodyim.2022.03.002. Epub 2022 Mar 17. PMID: 35306356.
27. McComb SE, Mills JS. The effect of physical appearance perfectionism and social comparison to thin-, slim-thick-, and fit-ideal Instagram imagery on young women's body image. *Body Image*. 2022 Mar;40:165-175. doi: 10.1016/j.bodyim.2021.12.003. Epub 2021 Dec 27. PMID: 34968854.