Exploring the Links Between Social Media Addiction, Body Satisfaction, and Subjective Well-Being Among Adolescents

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https://doi.org/10.62345/jads.2024.13.3.9

Abstract

The current study examined Social media addiction, body satisfaction, and subjective well-being among adolescents. For this purpose, the sample for the current study was calculated by the G power formula (F, t, χ2, Z, and exact tests) 300 participants were selected through the convenient sampling technique (139 Boys and 161 Girls), adolescents with the age range of 10-19 from different colleges and universities of Faisalabad. The Co-relational research design was used in the current study. The variables under research were measured using the following scales: The Bergen Social Media Addiction Scale (Andreassen et al., 2016), the Body Shape Questionnaire (Cooper et al., 1987), the Rosenberg Self-Esteem Scale (Rosenberg,1965), the Work & Social Adjustment Scale (Marks et al., 2002), ICP Subjective Well-Being Scale (Diener's, 1984). Using SPSS version 26, descriptive statistics, correlation, and t-tests were used to evaluate the current research hypothesis. Results of the correlation analysis revealed that there is a significant negative relationship between social media addiction and body satisfaction. In contrast, body satisfaction and subjective well-being were significantly positively related, and subjective well-being with body satisfaction showed no ties. The findings will benefit adolescents and management in schools and universities by providing a healthy environment and social skills to reduce social media addiction. Excessive social media use negatively impacts adolescents' body satisfaction and overall well-being. For adolescents, there is a need for educational programs and open communication to promote healthy online habits and to reduce social media's negative effects, with parental support playing a crucial role.

Keywords: Social Media, Media Addiction, Body Satisfaction, Subjective Well-being.

Introduction

Social media refers to digital technology that facilitates the exchange of ideas and information via online communities and networks, including text and images. Social media users can give input by liking and commenting on it. Front and personal photos are the most famous content to upload on social media. Usually, social media includes user-generated content. Excessive concern about social media, a persistent need to use or connect on social media, and devoting so much time and effort to social media that it interferes with other vital elements of life are all signs of social media addiction. The narrative material encourages interaction through discussions, likes, shares, and comments.

Nowadays, people spend a considerable amount of time on the Internet, expressly through smartphone use, which offers a multitude of other functions, such as excessively calling,

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Compliance with ethical standards: There are no conflicts of interest (financial or non-financial). This study did not receive any funding.

sending, and receiving messages. For instance, Internet usage on such devices is widespread. In particular, in everyday life, it can be seen that teenagers spend most of their time on their smartphones, surfing the Internet. Furthermore, aspects of the accessibility of smartphones are increasing, and the time they spend on the Internet is increasing. For this cause, despite its benefits, many studies have been showing problematic use of the Internet (Shapira et al., 2000). Body dissatisfaction is a person's unfavorable subjective assessment of physical attributes, such as shape, weight, muscularity, and tone. It usually results from differences between a person's honest and platonic souls (Grogan & Richards, 2002). For many years, body dissatisfaction has been prevalent among young women and is becoming more commonplace among males as well. It is linked to several negative consequences, such as low self-esteem, eating disorders, and general poor mental health (Griffiths et al., 2017 & Mond et al., 2013). There is strong evidence that the popular media's idealized picture of male and female bodies has raised dissatisfaction levels (Cramblitt & Pritchard, 2013). Recently, researchers have investigated the connections between body dissatisfaction and the utilization of social media platforms that involve sharing and modifying people's photos and experiences. According to (Thompson et al., 1999), sociocultural models of body dissatisfaction strongly emphasize the media's role in the creation, growth, and preservation of a negative evaluative body image. Although much research has been done on the effects of more conventional media, such as TV and magazines, on users' perceptions of their bodies, more research needs to be done on the impact of more recent media, like social networking sites, on the Internet.

Adolescent females are more prone to excessive social networking and negative body image than males (Jones et al., 2004; Lawler & Nixon, 2011). This is significant as body dissatisfaction is linked to low self-esteem, eating disorders, and emotional distress. Identifying ways to improve body satisfaction in this group is crucial for prevention. Adolescence, a critical period for identity formation, places significant value on physical appearance (Harter, 2006). Peer acceptance, especially regarding thinness, is crucial for girls (Oliver & Thelen, 1996), and peer pressure shapes beauty standards (Thompson et al., 1999). Social media exacerbates body dissatisfaction through constant image sharing (Perloff, 2014). Male adolescents are less satisfied with their bodies due to muscular ideals, while females desire thinness (Knauss et al., 2008). Body dissatisfaction and eating disorders are now global issues influenced by western media, as shown by the Fiji islands study (Becker, 2004). Western ideals have spread to non-western societies through globalization.

Subjective well-being, which includes happiness, life satisfaction, and morale, has both affective and cognitive components (Kozma & Stones, 1980 & Diener et al., 1997). Life satisfaction falls under cognitive well-being, while happiness is part of affective well-being. In Chinese culture, subjective well-being is seen as overall life contentment. Social comparison on social networking sites (SNS) can increase usage, as users feel a fear of missing out (FOMO) when viewing others' fulfilling experiences (Przybylski et al., 2013). This can negatively impact mood and life satisfaction and contribute to SNS addiction (Stead & Bibby, 2017; Yin et al., 2021). People may repeatedly turn to social media to boost life satisfaction, creating a cycle of dependency and potential addiction (Reer et al., 2019). This study suggests this cycle could drive excessive SNS use, mainly influenced by online social comparisons.

Theoretical and Conceptual Framework

According to sociocultural theory, the media is one of the many locations through which appearance standards are promoted and maintained, and exposure to these influences can impact the emergence and care of body dissatisfaction as well as mental working. Accordingly, it has been suggested that social media use, which frequently features perfect survives and looks, may lower feelings of well-being and body satisfaction (Perloff, 2014). Reviews have found a minor bad relationship between body satisfaction and social media use (Holland &

Tiggemann, 2016). Studies on well-being have found similar results, with higher social media use linked to lower well-being (Orben et al., 2019). Agreeing with sociocultural theory, internalization of look standards and contrasts is a mediating factor in the relations between social media usage and body satisfaction and well-being. This is supported by exploration showing that social media use increases internalization and judgments (Fardouly et al., 2015). Because of the perfect performance and content on social media, this is likely to lead to unfavorable self-evaluations.

Materials and Methods

Tools for pursuing studies are now being employed;

1. The Bergen Social Media Tendency Scale (Andreassen et al. 2016)
2. Body Shape Questionnaire (Cooper et al., 1987)
3. Morris Rosenberg's Self-Esteem Scale (1965)
4. Work and Social Welding Scale (Marks et al., 2002)
5. ICP Subjective Well-Being Scale (SWBS) (Diener's,1984)
6. Sheet with demographic information
7. Consent that is informed

Study Design

The present study utilized a quantitative, correlational research design. This approach was chosen because it allows for examining relationships between two or more variables without manipulating them, which is suitable for understanding associations among naturally occurring phenomena (Health, 2018). A correlational design is particularly appropriate for this study as it aims to explore the relationship between social media addiction, body satisfaction, and subjective well-being among adolescents. This design enables the identification of trends and patterns in the data, offering insights into potential correlations that can inform future research and interventions.

Sample Technique

A convenience sampling technique was employed to select participants for this study. Non-probability or non-random sampling, convenience sampling, and study participants are based on pragmatic factors like ease of access, proximity, availability at a specific time, or willingness to participate (Dornyei, 2007). This method involves selecting participants based on their availability and willingness to participate, making it particularly useful in educational settings where students are readily accessible. While convenience sampling may introduce some limitations in terms of generalizability, it was deemed appropriate for this exploratory study, as the primary goal was to understand the relationships between variables within a specific adolescent population in Faisalabad.

Procedure

The study's methodology, including the topic and materials, was approved by the Advanced Study and Research Board of Riphah International University, ensuring ethical compliance and academic rigour. Data were collected from adolescents attending different educational institutions in Faisalabad, including KIPS College, Khas Academy, and Riphah International University. These institutions were selected based on their accessibility and willingness to participate, which aligns with the convenience sampling approach.

Participants were provided with a packet containing a consent form, demographic sheet, and several validated questionnaires: The Bergen social media addiction scale, Body shape questionnaire, Rosenberg self-esteem scale, Work & social adjustment scale (W&SAS), and ICP subjective well-being scale (SWBS). Before distribution, participants were fully informed

about the study's purpose, procedures, and the voluntary nature of their involvement. This step was crucial to ensure informed consent and adherence to ethical standards.

To further justify the procedure, the confidentiality of responses was emphasized to alleviate any privacy concerns, which is particularly important when dealing with sensitive topics such as body image and social media use. Detailed instructions were provided to guide participants in completing the questionnaires accurately, and the process was supervised to maintain the integrity of the data collection.

The entire data collection process lasted one month, and each participant took approximately 50 minutes to complete the forms. The time allotted was based on pre-testing to ensure that participants could thoughtfully respond without feeling rushed, thus enhancing the reliability of the data. Upon completion, participants were thanked for their cooperation, and their contribution was acknowledged as vital to the success of the research.

Results

Data analysis was conducted using the Statistical Procedure for the Social Sciences (SPSS—26) version. Descriptive analysis, reliability analysis, and correlation statistics tools were used.

Table 1: Demographic characteristics of the sample (Frequency and percentages (N=300)

Characteristics		f	%
Age	10-19	300	100
Gender	Boy	139	46.3
	Girl	161	53.7
Qualification	Primary	7	2.3
	Secondary	123	40.3
	BS	170	57.3
Family system	Joined	113	37.7
	Nuclear	173	57.7
	Hostelize	14	4.7
Occupation	Students	282	94
	Jobians	18	6.0
Father occupation	Businessman	103	34.3
	Doctor	5	1.7
	Lawyer	3	1.0
	Teacher /lecturer/professor	23	7.7
	Landlord	1	.3
	Other	165	55.0
Mother occupation	House wife	272	90.7
	Jobian	28	9.3

The aforementioned table indicates that 46.3% of respondents were men and 53.7% were women. The majority of respondents were between the ages of 10 and 19, and the qualifications are indicated by percentage and frequency. Three categories are used to group it: primary, secondary, and BS. Primary was the first class, with a proportion of 2.3%. With a percentage of 40.3% in the secondary second class, BS respondent were 57.3%. In above table this show the family system it consists 3 categories 37.7% respondents were joined, 57.7% respondent were nuclear, 5% respondent were Hostelize, respectively. Then the next frequencies are for occupation 94% of respondent are student, 6.0% respondent are job holder. Other frequencies are for father occupation it consists of 6 categories 34.3% respondents were businessman, 1.7% respondent were doctor, 1.0% respondent were lawyer, 7.7% respondent were

teacher/lecturer/professor, 0.3% respondent were landlord, 55% respondent were other respectively. The demographic question was mother occupation it consists of 2 categories 90.7% respondents were housewife, 9.3% respondent were Jobian.

Table 2: Cronbach's Alpha for the research Measures (N=300)

Research measure	A	Items
Rosenberg Self-esteem	53.9	10
Work & social adjustment	.693	5
Body shape questionnaire	.958	34
Bergen social media addiction	.743	6
ICP subjective well being	.680	29

According to the findings displayed above in the table, variables were used to define the dependability using the data. Rosenberg self-esteem scale has Cronbach's alpha value as 53.9, Work & social adjustment scale as .693, Body shape questionnaire as .958, the Bergen social media addiction. Scale as .743 and ICP subjective wellbeing scale as .680. Examining the specific values of each variable reveals that the data has strong reliability, as indicated by the Cronbach's Alpha score.

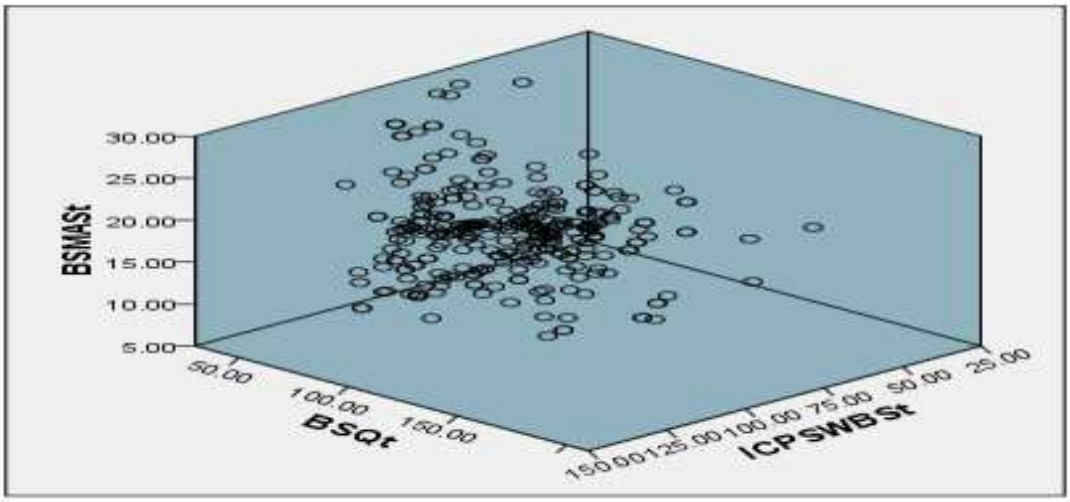
Table 3: Inter correlation between study variables: BSQt, BSMASt, and ICPSWBSt

Measure	BSQt	BSMASt	ICPSWBSt
BSQt	-	.262**	.057
BSMASt	-	-	.081
ICPSWBSt	-	-	-

Note: ** Correlation is significant at the 0.01 level (2-tailed)

The correlation between the research variables is shown in the above table. The relationship between BSQt and ICPSWBSt positive (r= .057), and with BSMASt negitive (r= .262). The correlation of BSMASt with ICPSWBSt found no relationship (r= .081).

Figure 1: Three-D Scatter Plot Showing the Relationship between BSQt, BSMASt, and ICPSWBSt among Adolescent (N=300*)*



The image is a 3D scatter plot representing the relationship between three variables, labeled as "BSMASt," "BSQt," and "ICPSWBSt." The plot displays a collection of data points scattered within a shaded, cubic space. The data points are marked by small circles, densely clustered around the center of the plot, indicating a possible correlation or concentration of values. The axes are labeled with numerical values, where "BSMASt" ranges from 5.00 to 30.00, "BSQt" ranges from 50.00 to 150.00, and "ICPSWBSt" ranges from 25.00 to 150.00. The shaded area within the cube adds depth and dimension to the graph, providing a clear visual representation of how the data points are distributed across these three dimensions.

Table 4: A comparisons based on gender differences in term of social media addiction, body satisfaction and subjective wellbeing among adolescents (n=300)

Variables	Boy *(n = 101)*		Girl *(n =149)*			*95% of CI*	
	M	*SD*	*M*	*SD*	*t*	*LL*	*UL*
ICPSWBS	86.69	10.72	87.77	11.28	-.84	-3.58	1.44
BSMAS	16.23	5.63	16.06	4.78	.27	-1.02	1.35
BSQ	79.84	30.50	86.47	37.05	-1.67	-14.4	1.05

Note: P < .05=, P < .01=, P < .001=**, CI= Confidence Interval, LL= Lower Limit, UL= Upper Limit, M= Mean, SD= Standard Deviation, t= Degree of Freedom (N-2), ICPSWBS= ICP SUBJECTIVE WELL-BEING SCALE, BSMAS= The Bergen Social Media Addiction Scale and BSQ= Body Shape Questionnaire

The above table depicts the gender differences between the study variables. Tables shows there would be significant gender differences exist in BSQt (male 79.84 & female 86.47) respectively. But there does not exist significant gender differences in BSMASt (male 16.23 & female 16.06) and in ICPSWBSt (male 86.69 & female 87.77).

Discussion

This section discusses the findings from the study on social media addiction, body satisfaction, and subjective well-being among adolescents. The analysis, conducted using SPSS software, included inferential statistical tests to explore the relationships between these variables and to address the research hypotheses.

Hypothesis 1: Relationship between Social Media Addiction and Subjective Well-Being

The first hypothesis proposed a significant relationship between social media addiction (SMA) and subjective well-being (SWB) among adolescents. The results indicate a strong negative correlation between SWB and SMA, with a path coefficient of -0.251. The R^2 value for SMA is 0.425, reflecting moderate explanatory power for this dependent variable. However, the explanatory power for SNS Intensity (SI) and SWB is relatively weak, with R^2 values of 0.000 and 0.039, respectively. Despite the significant association found between SI and NS, the R^2 value for this relationship is low (0.011). Additionally, no significant association was found between SI and SWB ($p = 0.127$), nor between SE and SI. Although some hypotheses were supported with high significance ($p < 0.001$), two hypotheses were not empirically supported, with p-values close to or above the threshold (Koç & Turan, 2021).

Hypothesis 2: Relationship between Body Satisfaction and Subjective Well-Being

The second hypothesis examined the relationship between body satisfaction and SWB, focusing on the mediating effects of acceptance and positive reappraisal. The results showed

that body satisfaction had a significant indirect effect on negative affect through acceptance (-.19, 95% CI [-.31, -.09]) and positive reappraisal (-.12, 95% CI [-.20, -.06]), with confidence intervals not including zero. The indirect effects through primary control and social comparison were not statistically significant (-.01, 95% CI [-.05, .02] and -.03, 95% CI [-.07, .01], respectively), (Hayes, 2017).

Hypothesis 3: Gender Differences in Social Media Addiction, Body Satisfaction, and Subjective Well-Being

The third hypothesis explored gender differences in social media addiction, body satisfaction, and SWB. The descriptive analysis revealed that 33.8% of the sample met the criteria for addiction, with a notable gender disparity: 61.3% of males versus 16.9% of females. A chi-square test indicated a significant difference in addiction rates between genders (chi-square = 12.77, $p = 0.002$). The analysis of loneliness showed no significant gender differences ($p = 0.2$). However, men reported higher levels of personal satisfaction and self-esteem compared to women, with chi-square results supporting these differences (p-values < 0.01). Self-esteem, body image satisfaction, and the 2D:4D ratios were examined in relation to SNS addiction, with no significant correlations found (p-values > 0.05). The 2D:4D ratio was associated with SNS addiction for both genders, with no significant gender difference (Aparicio-Martínez et al., 2020).

Conclusion

In conclusion, our study reveals a strong link between social media addiction and decreased body satisfaction, which significantly impacts adolescents' subjective well-being. The constant exposure to unrealistic beauty standards on social media exacerbates negative body image and self-comparison, leading to increased feelings of loneliness, anxiety, and depression. These findings underscore the urgent need for targeted interventions, such as educational programs and open communication between teens, parents, and educators, to promote healthier online habits and support adolescents in developing positive self-worth and mental well-being.

Recommendations

Adolescents need to understand the impact of excessive social media use on body satisfaction and well-being. Educational programs can promote healthy online habits and resilience against negative effects. Parents should engage in open communication about social media use. Schools and universities can implement supportive interventions. Policymakers can use these findings to inform regulations to minimize social media's negative impacts on adolescents' mental health. Further research is needed to explore the mechanisms and develop effective interventions.

- Raise awareness in schools and colleges about social media's negative impacts on body satisfaction and well-being.
- Encourage open parent-child conversations about social media use.
- Incorporate social media literacy into curriculums to help adolescents critically evaluates content.
- Set guidelines for healthy technology use, promoting screen time limits and encouraging physical activities.

References

- Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook addiction scale. *Psychological reports, 110*(2), 501-517.

- Aparicio-Martínez, P., Ruiz-Rubio, M., Perea-Moreno, A. J., Martínez-Jiménez, M. P., Pagliari, C., Redel-Macías, M. D., & Vaquero-Abellán, M. (2020).Gender differences in the addiction to social networks in the Southern Spanish university students. *Telematics and Informatics*, *46*, 101304.
- Becker, A. E. (2004). Television, disordered eating, and young women in Fiji: Negotiating body image and identity during rapid social change. *Culture, medicine and psychiatry*, *28*, 533-559. doi.org/10.1007/s11013-004-1067-5
- Cooper, P., Taylor, M., Cooper, Z., & Fairburn, C. G. (1987). The development and validation of the Body Shape Questionnaire. *International Journal of Eating Disorders*, *6*, 485–494.
- Cramblitt, B., & Pritchard, M. (2013). Media's influence on the drive for muscularity in undergraduates. *Eating behaviors*, *14*(4), 441-446.
- Diener, E., Suh, E., & Oishi, S. (1997). Recent findings on subjective well-being. *Indian journal of clinical psychology*.
- Dornyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.
- Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body image*, *13*, 38-45. doi.org/10.1016/j.bodyim.2014.12.002
- Griffiths, S., Murray, S. B., Bentley, C., Gratwick-Sarll, K., Harrison, C., & Mond, J. M. (2017). Sex differences in quality of life impairment associated with body dissatisfaction in adolescents. *Journal of Adolescent Health*, *61*(1), 77-82.
- Grogan, S., & Richards, H. (2002). Body image: Focus groups with boys and men. *Men and masculinities*, *4*(3), 219-232. doi.org/10.1177/1097184X02004003001
- Harter, S. (2006). The development of self-representations in childhood and adolescence. *Handbook of child psychology*, *6*.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- Health, W. (2018). *Psychology Research Methods.* Cambridge University Press; 134-156.
- Holland, G., & Tiggemann, M. (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body image*, *17*, 100-110. doi.org/10.1016/j.bodyim.2016.02.008
- Jones, D. C., Vigfusdottir, T. H., & Lee, Y. (2004). Body image and the appearance culture among adolescent girls and boys: An examination of friend conversations, peer criticism, appearance magazines, and the internalization of appearance ideals. *Journal of adolescent research*, *19*(3), 323-339.
- Knauss, C., Paxton, S. J., & Alsaker, F. D. (2008). Body dissatisfaction in adolescent boys and girls: Objectified body consciousness, internalization of the media body ideal and perceived pressure from media. *Sex roles*, *59*, 633-643.
- Koç, T., & Turan, A. H. (2021). The relationships among social media intensity, smartphone addiction, and subjective wellbeing of Turkish college students. *Applied Research in Quality of Life*, *16*(5), 1999-2021. doi.org/10.1007/s11482-020-09857-8
- Kozma, A., & Stones, M. J. (1980). The measurement of happiness: Development of the Memorial University of Newfoundland Scale of Happiness (MUNSH). *Journal of gerontology*, *35*(6), 906-912. doi.org/10.1093/geronj/35.6.906
- Lawler, M., & Nixon, E. (2011). Body dissatisfaction among adolescent boys and girls: the effects of body mass, peer appearance culture and internalization of appearance ideals. *Journal of youth and adolescence*, *40*, 59-71. doi.org/10.1007/s10964-009-9500-2
- Moghal, f., & khanam, s. J. (2015). Development of icp subjective well-being scale (swbs). *Pakistan journal of clinical psychology*, *14*(2).

- Mond, J., Mitchison, D., Latner, J., Hay, P., Owen, C., & Rodgers, B. (2013). Quality of life impairment associated with body dissatisfaction in a general population sample of women. *BMC Public Health*, *13*, 1-11. doi.org/10.1186/1471-2458-13-920
- Mundt, J. C., Marks, I. M., Shear, M. K., & Greist, J. M. (2002). The Work and Social Adjustment Scale: a simple measure of impairment in functioning. *The British Journal of Psychiatry*, *180*(5), 461-464.
- Oliver, K. K., & Thelen, M. H. (1996). Children's perceptions of peer influence on eating concerns. *Behavior therapy*, *27*(1), 25-39. doi.org/10.1016/S0005-7894(96)80033-5
- Orben, A., Dienlin, T., & Przybylski, A. K. (2019). Social media's enduring effect on adolescent life satisfaction. *Proceedings of the National Academy of Sciences*, *116*(21), 10226-10228. doi.org/10.1073/pnas.1902058116
- Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research. *Sex roles*, *71*, 363-377. doi.org/10.1007/s11199-014-0384-6
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in human behavior*, *29*(4), 1841-1848. doi.org/10.1016/j.chb.2013.02.014
- Reer, F., Tang, W. Y., & Quandt, T. (2019). Psychosocial well-being and social media engagement: The mediating roles of social comparison orientation and fear of missing out. *New Media & Society*, *21*(7), 1486-1505.
- Rosenberg, M. (1965). Rosenberg self-esteem scale. *Journal of Religion and Health*. doi.org/10.1037/t01038-000
- Shapira, N. A., Goldsmith, T. D., Keck Jr, P. E., Khosla, U. M., & McElroy, S. L. (2000). Psychiatric features of individuals with problematic internet use. *Journal of affective disorders*, *57*(1-3), 267-272. doi.org/10.1016/S0165-0327(99)00107-X
- Stead, H., & Bibby, P. A. (2017). Personality, fear of missing out and problematic internet use and their relationship to subjective well-being. *Computers in Human Behavior*, *76*, 534-540. doi.org/10.1016/j.chb.2017.08.016
- Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment, and treatment of body image disturbance*. American Psychological Association. doi.org/10.1037/10312-000
- Yin, L., Wang, P., Nie, J., Guo, J., Feng, J., & Lei, L. (2021). Social networking sites addiction and FoMO: The mediating role of envy and the moderating role of need to belong. *Current Psychology*, *40*, 3879-3887. doi.org/10.1007/s12144-019-00344-4