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Navigating Emotions And Screens: Emotional Intelligence As The Key To A Balanced Digital Life For Teens

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Abstract: This study investigates the relationship between emotional intelligence, problematic social media use, and image-related activities on social media among adolescents. Conducted with 1109 students from Italian lower secondary schools, the research employs questionnaires to assess emotional intelligence, problematic social media use, and image-related activities on social media. The findings reveal a significant negative correlation between emotional intelligence and problematic social media use and. It also found that adolescent who report high propensity to have image-centred interactions on social media are at a greater risk for developing social media addiction. Furthermore, the study identifies image-related activities as a partial mediator between emotional intelligence and problematic social media use. The paper concludes with recommendations for promoting healthier patterns of use, and interventions aimed at promoting emotional intelligence skills to mitigate potential harms associated with social media platforms.

Keywords: emotional intelligence; social media; adolescents

1. Introduction

Emotional intelligence (EI) since its introduction by Salovey and Mayer in 1990 (Salovey & Mayer, 1990) and subsequent popularization by Goleman in 1995 (Goleman, 1995), has garnered significant attention in academic spheres, influencing domains such as education, organizational behavior, and broader societal contexts. One conceptualisation sees EI as an ability to accurately perceive emotions, use emotions to facilitate thinking, understand emotions and their meanings, and manage emotions in oneself and others (Mayer et al., 2016). According to this concept, EI can be evaluated through objective assessments using 'maximum performance' tests (Mayer et al., 2008). Another conceptualization views EI as a dispositional trait (TEI), which refers to a constellation of behavioral dispositions and self-perceptions concerning one's ability to recognize, process, and utilize emotion-laden information (Petrides et al., 2007). Following this approach TEI can be evaluated through self-report questionnaires (Petrides et al., 2007).

In Italy, as in many countries, the annual increase in the use of media devices underlines the ubiquitous presence and perceived value of media and social networks as valuable resources for individuals, including children and adolescents (Bozzola et

al., 2022). According to the National Statistics Institute (ISTAT), 96.6% of young people between 11 and 14 years old use the Internet, 86.3% of them every day, and this percentage rises to 98.3% for young people between 15 and 17 years old (93.5% every day) (ISTAT, 2022). In today's media-saturated world, adolescents utilize platforms such as WhatsApp, Instagram, SnapChat, and Facebook not only for entertainment but also for communication (Crone & Konijn, 2018). The motivation for this study arises from the recognition of the intertwined nature of emotional intelligence and social networks in today's digital landscape. As adolescents increasingly navigate these platforms, the potential impact on emotional well-being becomes a critical area of exploration. Research supports a connection between technology-based social comparison, feedback-seeking, and depressive symptoms (Nesi & Prinstein, 2015). Social media use is associated with body image concerns and disordered eating (Holland & Tiggemann, 2016). Moreover, excessive engagement with social media and the increase in the time spent on the internet raises the issue of problematic social media use (PSMU) (Bilgin et al., 2020). According to Kuss and Griffith (2011) excessive use could lead to addiction characterized by all addiction components. The use of social networking sites may lead to preoccupation (salience) and mood alterations (mood modification), requiring increased time and energy for the same effects over time (tolerance), and cessation may result in withdrawal symptoms and subsequent relapse (Griffiths & Kuss, 2017).

The present study aims to investigate the relationship between EI, PSMU and image-related activities performed on social media among adolescents. Specifically, the objectives of the study are to analyze the relationship between emotional intelligence and problematic social media use and to investigate the potential mediating role of image-related activities.

2. Materials and Methods

2.1 Participants and Procedures

The population of the research consists of 1109 students studying in 6 lower secondary schools. The research was conducted during April of the 2023 academic year. The age of the participants ranges from 10 to 14 (Mage = 12.12, SD =.907). 49.1% of the students in the final sample were girls (n= 551), 49.7% were boys (n=558).

A letter explaining the aims and rationale of the study was sent to the headmasters and teachers in each school involved. Informed consent was obtained from parents. All participants filled out the questionnaire individually in their classrooms, after brief group instruction on the answer formats. Administration of all materials lasted approximately 45 minutes.

2.2 Measures

Emotional Intelligence: The short form of the "Trait Emotional Intelligence Questionnaire – Child" (TEIQue-CSF) (Mavroveli et al., 2008)) was used to assess emotional intelligence. The questionnaire has been validated for Italian children and adolescent by Russo (2012). It consists of thirty-six five-point Likert-type questions.

Bergen Social Media Addiction Scale: The BSMAS contains six items reflecting core addiction elements (salience, mood modification, tolerance, withdrawal, conflict, and relapse) Each item is answered on a 5-point Likert scale ranging from 1 (*very rarely*) to 5 (*very often*). Sample items include: "How often during the last year have you used

social media so much that it has had a negative impact on your job/studies?" and "How often during the last year have you felt an urge to use social media more and more?". The BSMAS has been validated for Italian adolescent by Monacis et al. (2017).

Instagram Image Activity Scale: The scale is designed to measure the frequency of activities related to images performed on social media. Participants were asked to indicate how often they engaged in different types of image-related activities using a 5-point Likert scale (1 - almost never; 5 - almost always) (Di Gesto et al., 2020). High scores on the scale correspond to high use of social media for image-related activities.

2.3. Data analysis

IBM SPSS Statistics 23.0 was used to conduct the analyses (SPSS Inc., Chicago, IL, USA). Descriptive statistics and Spearman correlations between of all study variables were analysed. The mediation analyses were conducted using the PROCESS model 4 (Hayes, 2022).

EI was the antecedent variable, PSMU was the outcome variable, and activities related to images performed on social media (IIAS) was the mediator. The assumptions of normality, multicollinearity, independence of errors, and homoscedasticity were tested before the analyses. Sociodemographic variables, such as age and sex, were entered as covariates, The bootstrapping method (i.e., 5,000 resamples) was used to assess the statistical significance of the indirect effects, using 95% confidence intervals. An effect was considered significant if the 95% CI did not include zero.

3. Results

Means, standard deviations, and Spearman correlations are presented in Table 1. As shown, EI and PSMU had a significant and negative correlation (r=-0.345). While PSMU is significantly and positive correlated with IIAS (r=0.474).

Table 2 present the results of the simple mediation model. The results indicate a significant total effect of EI on PSMU, B=-3.5063, SE = 0.2795, p <0.0000. Regarding the covariates, the total effect of age and sex on PSMU was not significant, respectively B=-0.1382, SE=0.1496, p=0.3555 and B=0.2568, SE=0.2713, p=0.3440. Moreover, all the direct effects were statistically different from zero (p<0.001). There is a negative direct effect of EI on IIAS, B=-0.0904, SE=0.0368, p=0.0142 and a positive effect of IIAS on PSMU B=3.6590 SE=0.2023, p=0.0000. The indirect effects show that IIAS mediated between EI and PSMU (indirect effect = − 0.3306, BootSE = 0.1408, 95% CI [− -0.023, -0.489].

Table 1. Descriptive Statistics and Correlations Between Study Variables.

	Means	SD	1	2	3
EI	3.38	0.49	1	-0.341**	-0.08**
PSMU	12.45	4.76		1	0.474**
IIAS	2.25	0.59			1

**p<0.001

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Table 2. Effects in the Mediation Model.

	B	SE	t	p	LLCI	ULCI
Total Effect						
EI->PSMU	-3.5063	0.2795	-12.5456	0.0000	-4.0547	-2.9579
Age->PSMU	-0.1382	0.1496	-0.9244	0.3555	-0.4317	0.1552
Sex->PSMU	0.2568	0.2713	0.9468	0.3440	-0.2755	0.7891
Direct Effect						
EI ->IIAS	-0.0904	0.0368	-2.4555	0.0142	-0.1626	-0.0182
IIAS ->PSMU	3.6590	0.2023	18.0855	0.0000	3.2620	4.0560
EI ->PSMU	-3.1757	-0.2457	-12.9248	0.0000	-3.6578	-2.6936
Indirect Effect	**Effect**	**BootSE**	**BootLLCI**	**BootULCI**		
EI->IIAS->PSMU	-0.3306	0.1408	-0.023	-0.489		

4. Disussion

Contemporary teenagers seem to have accepted society's demand for continuous online connectivity and they are engaged in a culture of sharing, for example, images, status updates and likes(Kuss & Griffiths, 2011; Ståhl, 2017). Following this observation the present study aimed to investigate the relationship between EI and PSMU among adolescents, with a specific focus on the mediating role of IIAS. The significant and negative correlation between EI and PSMU suggest that adolescents with higher levels of EI may be less likely to develop problematic social media habits. These findings are consistent with Henning's (2021) statements, suggesting that lower EI scores may represent a vulnerability factor or significant risk for the onset of addiction-related problems, including both substance use disorders and behavioural addictions. Adolescents who may lack adequate coping skills to manage negative emotions arising from stressful situations may attempt to distract themselves and avoid associated uncomfortable feelings through involvement in social networking sites activities. Such online activities, along with other problematic Internet-based behaviours, may function as maladaptive coping mechanisms, and they may use these activities to displace negative emotions, escape from reality, or attempt to regulate feelings of loneliness, depression, anxiety, and stress, despite the potential negative consequences of using these strategies (Gioia et al., 2021). The results also showed that higher EI was associated with reduced image-related social media activities, e.g. post a video or a photo of themselves, look at the profiles of their friends, see photos or videos posted by celebrities, etc. Young people with more developed EI may prefer to engage in meaningful offline interactions rather than seeking gratification and approval through online activity. According to Digennaro and Iannaccone (2023) girls are more engaged in image-related social media activities and seek more approval than boys. Not surprisingly, there is a direct impact of IIAS on PSMU, indicating that individuals who engage in higher levels of image-related social media use are more likely to develop problematic behaviors associated with it. For instance, the intensity of the use of a of a well-known social media platform like Facebook has been correlated to the development of addiction to that specific platform (Brailovskaia et al., 2020). However, Boer (2021) argues that high levels of social media use are not linked to adverse effects on mental health, instead, it is viewed as a common behavior during

adolescence. On the other hand, addictive social media usage can have detrimental impacts on mental well-being.

The mediation analysis provided evidence for a partial role of IIAS in mediating the relationship between EI and social media; in particular, an increase in EI intelligence is associated with a reduction in problems related to the use of social media, and this effect is mediated by a decrease in image-related activities on social media.

Social media offer communication opportunities to maintain and deepen existing relationships, but also to build new relationships, in fact, according to the results of the study of Pediconi and Brunori (2019), more than 40% of adolescents use social media to communicate with others and more than 14% to meet new people. Clearly in today's society, where social media is deeply integrated into the daily lives of many young people, both minimal and excessive use of social media can have negative impacts on wellbeing and adolescents who use social media sparingly may experience a lack of social interaction and miss out on important social information, while those who excessively use social media may displace meaningful offline activities(Boer et al., 2022). Therefore, it is essential to support adolescents in adopting a critical approach to the use of social media, recognizing their role as tools to promote sociability without considering them the main priority, ignoring the value of face-to-face interactions and personal connections outside of the digital world. Support provided by both schools and families in navigating online environments and social media and develop awareness of the strengths and weakness of this platform is an urgent and pressing challenge (Taibi et al., 2023). It may be helpful to encourage parents to be actively involved in paying attention to their teenagers' use of smartphones and social media (Abi-Jaoude et al., 2020). Perhaps the most effective strategy to reduce media-related risks is a strategy based on open discussion, with a focus on positive engagement and guidance (Chen & Shi, 2019).

Also interventions aimed at promoting emotional intelligence skills may prove beneficial in mitigating the risk of social media addiction among adolescents. School-based social and emotional learning (SEL) programmes could represent a method for improving social and emotional well-being in students. Such programs have frequently led to significant reductions in students' emotional distress, conduct problems, and mental health issues(Carroll et al., 2020). This intervention should enable teenagers to recognise and handle their emotions, set and accomplish positive goals, promote the ability to understand and respond to the emotions of others in an empathetic way, make informed and responsible decisions to overcome obstacles and stressful situation (Elias et al., 2015).

5. Conclusions

In conclusion, this study underscores the importance of EI in the context of adolescent social media use. The findings suggest that higher levels of EI may serve as a protective factor against problematic social media behaviors. Additionally, the identification of image-related activities on social media as a partial mediator highlights the need to consider specific online activities in understanding social media addiction. These insights have implications for interventions aimed at promoting healthy online behaviors among adolescents, emphasizing the importance of enhancing emotional intelligence and fostering social media literacy. It is important to acknowledge that the conclusions drawn from these findings may be constrained by certain limitations inherent in the study design. These include the use of a

cross-sectional research design, which limits the ability to establish causal relationships between variables. Additionally, the non-probabilistic sampling method employed in the Italian context may introduce biases and affect the generalizability of the results to the broader population. Lastly, reliance on self-report questionnaires for data collection may be subject to response biases and inaccuracies.

Further research in this area could explore the efficacy of interventions targeting EI and social media literacy as means to promote healthy online behaviors among adolescents.

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