



AN INVESTIGATION OF THE IMPACT OF SOCIAL MEDIA ON THE PROCESS OF IDENTITY EXPLORATION AND THE EMERGENCE OF EATING DISORDERS IN STUDENT LIFE

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Abstract:

As the physical and psychological well-being has become a cultural and public health focus in Western countries, the impact of social networking sites has been highlighted, especially for the young who are in the process of identity formation. For them, the rapidly evolving social media world is increasing in importance as the main arena for socializing, experimentation, exploration and communication. Studies connect the exposure of adolescents and young adults to social media with body image dissatisfaction and eating disorders (ED), mainly bulimia, anorexia and binge eating. Especially the media cultivating beauty ideals are predictors of the development of eating pathology. The aim of this study is to investigate the relationship between social media platforms and eating disorders in students and whether their use influences the process of identity formation. With a sample of 158 students from the University of Patras, the measuring instruments used in the study were a structured questionnaire to investigate the effect of social media on eating disorders and the process of identity exploration and the Bulimic Investigatory Test, Edinburgh (BITE) questionnaire to investigate the episodes of binge eating, predisposition to bulimia nervosa and the cognitive and behavioral manifestations of bulimia.

Keywords: social media, identity, eating disorders (ED), Bulimic Investigatory Test Edinburg (BITE), binge eating, bulimia, anorexia

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1. Introduction

Research has found associations between social media use and ED pathology. In particular, dependence on social media has been associated with an increased risk for eating disorders (ED), especially among young adults who have easier access to the internet and spend more time on social networking (Bressel, 2020; Barker, 2009). Social media can create a climate of social comparison and preoccupation with slimming and beauty, which can pose risks for the development of emotional problems, such as depression and social anxiety. In this regard, the widespread use of social media triggers the extreme pursuit of slimming and beauty among young people, who in the face of beautiful images on social media are more likely to resent their physical image (Muniz & Luu, 2022). Those who are more dissatisfied with their appearance are more likely to suffer from depression, with a risk of developing eating disorders. Previous studies have shown that young adults who use Facebook are becoming more and more dissatisfied with their appearance (Musaiger, Al-Mannai & Tayyem, 2013). To that end, social media addiction and the propensity for eating disorders are closely intertwined in many ways (Barker, 2009; Elsayed, 2021).

The use of social media is more common among students than among other adults. Young adults primarily use social media for communication, entertainment and professional development, thus rendering it a necessity for college students (Dollarhide & Drury, 2021). At the age of 18-25, which is the period of emerging adulthood, identity formation is particularly important. The period of emerging adulthood is also the time of self-focus, when there is a preoccupation with the self, and mental resilience is built according to the difficulties that the adult individual faces. However, being focused on self-development is not the same as being "self-centered", as in the case of teenagers, for example, who are more self-centered than emerging adults (Lakioti, 2011; Konstantopoulou et al., 2022).

Identity formation consists of the pursuit of different life opportunities and possibilities in order to eventually make important life decisions. This phase of life includes a wide range of opportunities for identity formation (Arnett's Theory of Emerging Adulthood, 2022). Students continue to improve their sense of self as they relate to others. According to Erik Erikson (1970) identity formation is highlighted as the primary indicator of successful development in student life (as opposed to role confusion, which is an indication of unsuccessful fulfillment of the task of student life). Erikson (1970), referred to the fifth psychosocial task of life as confusion of identity versus roles, when students must work through the complexity of finding their own identity. In this respect, since individuals are affected by how they managed all the previous psychosocial crises of childhood, this student stage is a bridge between the past and the future, between childhood and adulthood. Hence, in Erikson's view, the main questions for a student are "Who am I?" and "Who do I want to be?" (Erikson, 1970). This crisis is positively resolved by the acquisition of identity and the acquisition of loyalty (faithfulness) as a new virtue, after the students have reexamined the goals and values of

their parents and their culture. Some students adopt the values and roles their parents expect of them, while others develop identities that come into conflict with their parents but align with a group of student peers. This is a common practice as peer relationships are a central focus in college students' lives (Lange & Costley, 2020).

Pursuant to the above, nowadays the Internet has become an extension of the expressive dimension of adolescence or adulthood. On the Internet, young people talk about their lives and concerns, they plan the content they make available to others and they evaluate other people's reactions while expecting social approval from others. When they connect, young people talk about their daily habits and their lives. With every post, picture or video they upload, they can question who they are and try out profiles that differ from the ones they have in the "real" world (Sinaku, 2020). In this respect, social media is often blamed for increasing the incidence of eating disorders, as the images on the media idealize and promote the thin body, e.g. models and celebrities, thus motivating or even forcing viewers to strive to have the same body type. Social media is accused of distorting reality, in the sense that the people portrayed in the media are either naturally thin, and therefore not representative of normality, or unnaturally thin as a result of putting too much pressure on themselves to look like their ideal image.

Eating Disorders (ED) are psychological disorders in which individuals adopt inappropriate eating habits and display extreme feelings, thoughts and behaviors about food intake, weight and body image. The most common EDs are anorexia nervosa and bulimia nervosa, psychogenic bulimia and Binge Eating Disorder (BED). For the person with Binge Eating Disorder food is an obsession they cannot get out of their mind. It is also common for patients with BED to suffer from comorbidities such as depression, anxiety, personality disorders and obsessive-compulsive disorder. While anorexia and bulimia are almost ten times more common in women than in men, the rates of other eating disorders are not clear. It is worth noting that the typical onset of eating disorders occurs in late childhood to early adulthood, while eating disorders appear to be lower in less developed countries (Galmiche, Déchelotte, Lambert & Tavolacci, 2019). As eating problems are particularly prevalent in young adults, universities could be the optimal environment to prevent the onset of eating disorders (ED) through psychological intervention. In this respect, preventing eating disorders in student life can have significant, small to moderate effects on eating disorder symptoms and risk factors (Harrer, Adam, Mag & Baumeister, 2020).

During emerging adulthood, many young adults leave home and begin university education, which is a period that also coincides with the onset of many mental and behavioral disorders. The prevalence of eating disorders peaks in late adolescence, with the transition to university being a critical period (Muniz & Luu, 2022). It is estimated that 2-4% of young adults have eating disorders. Estimates of the twelve-month prevalence of disordered eating in college students are broad, ranging from 17% to 90% for female students and 8% to 30% for male students, with median estimates of approximately 54% for females and 19% for male students (Harrer, Adam, Mag, & Baumeister, 2020). Symptoms of an eating disorder often progress to a full-blown eating

disorder, and appear to be even more prevalent in the abovementioned age group. Eating disorders and eating problems in college students are associated with a range of detrimental consequences for both the individual and society. These include lower academic functioning and functional communication, comorbid mental and physical conditions, suicide and relative mortality. In this light, universities could be the optimal setting for preventive eating disorder interventions, as they can usually provide the large-scale infrastructure needed for the creation, dissemination and delivery of such interventions, either on-site or via the Internet (Harrer, Adam, Mag, & Baumeister, 2020). The aim of the current study is to investigate whether the use of social networking sites/SNS (i.e., the degree of dependent relationship with SNS, the total time/day of use) and specific social media activities are associated with altered person identity formation and eating disorders such as bulimia, which is characterized by binge eating.

2. Methods

During the period of the current research on the impact of social media on the process of identity exploration and eating disorders in student life, 158 students of the University of Patras completed the questionnaires. The method used was a random probability, which enabled the researchers to make a probability statement based on data collected randomly from the targeted demographic, followed by data analysis using SPSS 22. The present study was implemented from 08 March 2022 to 02 May 2022. Our survey questionnaire was created using the web survey software (<https://docs.google.com/forms>) and it was designed in a way that legitimizes the respondents' trust. As in many quantitative surveys, the checklists and the type of questions in the rating scale form the major part of the survey, as they help to simplify and quantify the attitude of the respondents. The study protocol was approved by the Board of Directors of the Department of Education Sciences and Social Work of the University of Patras (19553/15/3/2022).

The web-based questionnaire we used for the study is a salient type of survey questionnaire used to collect web-based data for quantitative market research. This is one of the dominant and most reliable methods for Internet-based or web-based research. In a web-based survey, people receive an email containing the survey link, which clicks the respondents to a secure online survey tool where they can take the survey or complete the survey questionnaire. Web-based surveys are preferred by researchers as they are cost-effective, faster and with a wider reach. The main benefit of a web-based questionnaire is flexibility. Respondents are free to participate in the survey at their leisure using a desktop computer, laptop, tablet or mobile phone. The formatted questionnaire was 57 questions and the questions that made up the questionnaire were multiple choice questions, questions with rank order responses and five-point Likert-type response scale questions (Kalogeraki, 2020).

2.1 Instruments

The research tool of the present study is a structured questionnaire, which was implemented as follows: a) socio-demographic data b) questions on Internet use / social media c) questions on the effect of social media on the process of identity exploration d) questions on the effect of social media on eating disorders and e) the Bulimic Investigatory Test, Edinburgh (BITE) questionnaire. In the first part (questions 1 to 9) we sought to learn the demographic information of the student respondents which referred to gender, age, education, marital status, medication and mental health. This helped us to identify whether the results of the survey varied across different groups of students (e.g. age, gender, and course of study). The second part of the questionnaire included questions related to internet and social media use (questions 10 to 14). The aim of the questions was to identify how much time students spent on social media and why they used it (e.g., information, communication, leisure time, socializing, entertainment, fashion). In the third part of the questionnaire, which includes questions 15 to 22, we sought information about the identity exploration process. More specifically, the questions focused on the impact of social media on the emotional world of the individual and on their friendships and romantic relationships (e.g., what is the main emotion that arises from using social media? Do you think that the relationships you form on the Internet are real/long-term?). The fourth part offered information about food intake disorders and whether they were a result of social media (questions 23 and 24).

The questions from the Bulimic Investigatory Test Edinburg (Henderson and Freeman 1987), as translated into Greek by the Eginitio Hospital team, included questions 25 to 57. BITE was designed to measure episodes of binge eating and the cognitive and behavioral manifestations of bulimia. With regard to the Edinburgh Bulimic Investigatory Test Edinburg (Henderson & Freeman, 1987), Henderson and Freeman, (1987) found that data from two different populations demonstrate satisfactory reliability and validity. The scale has measures of both symptoms and severity and it covers all elements of the DSM-III definition of bulimia nervosa and Russell's definition of bulimia nervosa. Nevertheless, the questionnaire is more than a functional checklist of these diagnostic criteria (Henderson & Freeman, 1987). Subsequently, Resch, (2003) recorded data from some Hungarian studies as showing satisfactory reliability and validity. The BITE test is suitable in national settings to demonstrate loss of control status with binge eating and predisposition to bulimia nervosa. In addition, the test is very sensitive for measuring the effectiveness of treatment and changes in symptoms, however, it was estimated that the test alone is not sufficient for the diagnosis of binge eating and bulimia nervosa disorders (Resch, 2003).

2.2 Statistical analysis

Out of a total of 158 people in the sample, 28 (17.7%) checked "Male" and 130 (82.3%) "Females". 59 participants (37.3%) were "up to 20 years old", 66 (41.8%) "21 to 22 years old" and 33 (20.9%) "23 years old and above" (see Table 1).

Table 1: Gender

1. Gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	28	17,7	17,7	17,7
	Female	130	82,3	82,3	100,0
	Total	158	100,0	100,0	

For the question item: "How frequent is your weekly Internet/social media use?" 155 participants (98.1%) answered "Daily" and 3 (1.9%) answered "3-5 times a week". For the question: "How frequent is your daily internet/social media use?", 29 respondents (18.4%) answered "Up to 2 hours", 93 (58.9%) "3-5 hours", 32 (20.3%) "6-8 hours" and 4 (2.5%) "More than 9 hours" Table 2. For the question: "What is the main reason for which you use social media?" 79 participants (50.0%) answered "Communication". For the question "the main feeling that comes from using social media?" 61 participants (38.6%) stated "Freedom of thoughts-emotions", 91 (57.6%) "Escape from reality" and 6 answered (3.8%) "Improved ego projection". For the item: "Students' social behavior does not differ in real life from virtual life, 76 participants (48.1%) answered, "Not at all".

Table 2: How often do you use the Internet/ the social media on a daily basis?

Valid		Frequency	Percent	Valid Percent	Cumulative Percent
	Up to 2 hours	29	18,4	18,4	18,4
	3-5 hours	93	58,9	58,9	77,2
	6-8 hours	32	20,3	20,3	97,5
	More than 9 hours	4	2,5	2,5	100,0
	Total	158	100,0	100,0	

When asked if they believe that the relationships formed on the Internet are real/long-term, 44 participants (27.8%) answered "Yes" and 114 (72.2%) "No" Table 3. The results of students' responses to the question "whether social media affects your body image" 38 students (24.1%) answered "Not at all", 37 (23.4%) answered "A little", 40 (25.3%) answered "Neutral", 28 students (17.7%) answered "Quite a bit" and 15 (9.5%) "Very much". The results of the sample responses to the question of whether it sometimes happens to them that they eat so much that they stop because of physical discomfort, 79 students (50.0%) answered "Yes" and 79 (50.0%) "No". When asked if the thought of getting fat terrifies them, 89 students (56.3%) answered "Yes".

Table 3: Do you believe that the relationships formed on the Internet are real/long term?

Valid		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	44	27.8	27.8	27.8
	No	114	72.2	72.2	100,0
	Total	158	100,0	100,0	

In order to investigate the research hypothesis of whether the gender of the students affects the difference in social behavior between real and virtual life, a non-parametric Kruskal Wallis test was conducted. The test investigated differences in the rank distribution of the samples between the students' gender and the difference in social behavior between real and virtual life. Identical with sig. value of $0.179 > 0.05$ the analysis is not statistically significant at 0.01 levels, hence there is the retention of null hypothesis H_0 . Thus, the gender of the students and the different social behavior between real and virtual life are independent. In the same way, the year of study and the main reason for using social media are independent. Regardless of the year of study, the main reasons for which students use social media are: information, communication, leisure and entertainment. When investigating whether their family status influences their view that social media affects the body image, a non-parametric Kruskal Wallis test was conducted. The test investigated differences in terms of sample rank - distribution (Rank) between family status and the view that social media affects the body image. According to sig. value $0.019 < 0.05$ the analysis is statistically significant at 0.01 level so there is the rejection of null hypothesis H_0 (see Table 4). Therefore, family status and the view that social media affects the body image are dependent. It is interesting to see that in extended families, social media does not affect the body image of the members, whereas social media does affect the body image of the members of single-parent families.

Table 4: Non-parametric Kruskal Wallis test of variables: «Family status and the view that social media affects your body image are independent»

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig	Decision
1	The distribution of 24. Does social media affect your body image? It is the same across categories of 5. What is your family status?	Independent Samples Kruskal-Wallis Test	,019	Reject the null hypothesis

Note: Asymptomatic significance is displayed. The significance level is ,05.

Age and following a regular daily diet plan are independent variables. Also, the way the students in the sample use their free time and the degree to which they are influenced by the modern beauty ideals promoted by social media are independent variables. The Scale Statistics of the Edinburgh questionnaire (see Table 5), give the mean, the variance, the standard deviation of the subscale questions and the number of questions that make up the subscale. From the value $46.4310 / 29 = 1.6$ it is observed that the respondents regarding the Edinburgh questionnaire tend to answer (No) i.e., they have a negative approach overall to the questions that make up the questionnaire (Manolopoulou, 2012; Dranou, 2018).

Table 5: Scale Statistics of the Edinburgh questionnaire

Scale Statistics			
Mean	Variance	Std. Deviation	No. of Items
46,4310	18,647	4,31826	29

The analysis of the Bulimic Investigatory Test, Edinburgh (BITE) questionnaire, gives a symptom score of 12. According to the literature, a score of less than 15 suggests that there are not many thoughts and attitudes among the student respondents (158 people) that are consistent with an eating disorder. The total score for questions 30, 31a-d and 51 gives an indication of the severity of this phenomenon - with a score/score of 5, which is the baseline. This implies an eating disorder in 9 student respondents representing 5.7% of the total sample. Moreover, according to the findings, the gender of the students who participated in the survey and the difference in social behavior between real and virtual life is independent of underlying eating disorders, which is consistent with the findings of Manolopoulou (2012) and Dranou (2018). The same is true for the year of education and the main reason for social media use, which are independent of underlying eating disorders. On the contrary, family status and the opinion that social media affects body image are dependent on underlying eating disorders. Furthermore, age and following a regular daily eating schedule are independent of underlying eating disorders. Finally, the answers of the sample on the item regarding the way they utilize their free time and the degree of influence by the modern ideals of beauty that are projected by social media, are independent of underlying eating disorders.

3. Results

The Social Network is becoming increasingly important in today's world as it has a deeper impact both on society and on traditional media. In this respect, social media platforms are of increasing importance in our lives, as they are the places where we "showcase" our experiences. They also reflect a variety of dimensions regarding our place in the virtual and the real social life of the physical world. Both domains make people play specific characters in the social arena, with social media allowing for identity expression, exploration and experimentation which is naturally inherent to the human experience (Bressel, 2020; Gomez, 2021). However, to understand group interactions on social platforms it is important to understand the motivations of actors. Individuals are enabled to present themselves to others and determine how they wish to be perceived, while this modus operandi also helps them connect with other people, interact with them and participate in the activities they wish to engage in. Online communication offers many ways to connect with others: i.e., individuals may or may not use their real names and they can also open as many accounts as they want (Bressel, 2020; Gomez, 2021).

Regarding the Social Demographics of the present research 28 students (17.7%) were male and 130 (82.3%) were female. The largest percentage of the sample, 66 persons (41.8%), were "21 to 22 years old". 67 (42.4%) answered "Faculty of Education and Social Work" and 86 (54.4%) were in the "2nd" and "4th" year. 127 participants (77.2%) stated "Member of a Nuclear Family" and 125 (79.1%) answered "No" to the question on whether they had experienced a physical health problem in the last six months. 145 (91.8%) answered "No" to the question of whether they had experienced a mental health problem in the last six months. 145 (91.8%) participants answered "No" to the question: "Are you

taking medication for the above mental health problem?". To the question: "Do you take part in any other type of treatment for the above mental health problem?" 128 students (81.0%) answered "No". Regarding the data on internet/social media use (social media), the largest percentage of the sample, 68 participants (43.0%), answered that they spend most of their free time "With friends". Weekly internet/social media use is "Daily" for 155 students (98, 1%) and daily Internet/social media use is "3-5 hours" for 93 (58.9%) participants. The main reason for using social media is "Communication" for 79 students (50.0%), while for 93 students (58.9%) the "Instagram" is the main social media they use. Concerning the data on the impact of social media on the identity exploration process, the main emotion that results from the use of social media is "Exit from reality" for 91 students (57.6%). In the question: "Is your social behavior in real life different from virtual life?" 76 participants (48.1%) answered "Not at all". For 98 respondents (62.0%) friendships are established through university, while in the question: "How often do you meet your friends?" 86 (54.4%) students answered "Every day". Romantic relationships are established through Personal initiative for 60 participants (38.0%), while in the question: "How often do you meet your partner?" 83 (52.5%) students answered, "I don't have a partner". 114 (72.2%) participants believe that the relationships they enter via the Internet are not real/long-term, while 82 (51.9%) do not want to live in an era without the use of the Internet/social media.

With regards to the data on the effect of social media on food intake disorders in the question: "Are you influenced by the modern beauty ideals promoted by social media?" the mean value is 2.7152 and it tends to the "Neutral" option. For the question: "Does social media influence your body image?" the mean value is 2.6519 and tends to the "Neutral" option. In addition, 90 students (57.0%) in the sample do not follow a regular daily diet plan, while 150 participants (94.9%) are not on a strict diet. It is interesting to see that, 126 participants (79.7%) do not feel like a failure if they violate their diet for once, while 143 students (90.5%) do not count the calories of anything they eat even if they are not on a diet. Lastly, 111 students from the sample (70.3%) have never fasted for a whole day.

4. Related works

The study by Verschueren, Claes, Bogaerts and Palmeroni (2018), focused on identity formation, a key developmental task in adolescence that has been increasingly linked to the development of eating disorders. Their main aim was to examine the temporal sequence between eating disorder symptoms and identity formation. Their results showed bidirectional effects between eating disorder symptoms and identity formation. Identity confusion appeared to increase vulnerability to body dissatisfaction and bulimia symptoms, whereas identity formation appeared to protect against their development. In addition, identity composition also seemed to protect against the development of the tendency for subtlety. At the same time, physical dissatisfaction and bulimia symptoms positively predicted identity confusion and negatively predicted identity synthesis over

time. In conclusion, their study adds to the growing body of literature on identity and eating disorders by focusing on their temporal interaction in a community sample of adolescents. As bidirectional effects emerged, a greater emphasis on identity formation in eating disorder prevention programs is supported (Verschuere, Claes, Bogaerts, & Palmeroni, 2018).

The study by Hardy et al. (2021), examined the roles of identity formation and moral identity in predicting student mental health (anxiety and depressive symptoms), health risk behaviors (risky alcohol use and sexual risk-taking) and psychological well-being (self-esteem and meaning). Their results suggest that both identity formation (e.g., identity commitment and identity composition) and identity content (e.g., moral identity) may be risk or protective factors for a range of health outcomes. The interesting, fairly consistent and quite strong pattern of relationships between identity and health in their study confirms the important role that identity plays in health and well-being, at least for college students in the United States. Professionals can better serve this population if they have knowledge of identity development and function. To better inform theory and practice, further conceptual, empirical, and applied work is needed to explore the roles that various aspects and domains of identity (e.g., religion, career, academic goals, health and sport) play in physical, mental and emotional health and well-being (Hardy et al., 2021) (see Table 6).

Potterton, Richards, Allen, and Schmidt (2020), documented Eating Disorders in emerging adulthood (college students). Eating Disorders (ED) during the transition to adulthood can derail social, psychological, and professional development. Effective treatment is paramount, yet the treatment needs of young adult students are typically less well met than those of adolescents. In recent years, there has been a significant shift in the way developmental psychologists understand the transition to adulthood, with this phase of life being re-conceptualized as "emerging adulthood" (EA) (~18-25 years). Engaging with evolving developmental research is likely key to providing more effective care for youth experiencing ED (Potterton, Richards, Allen, & Schmidt, 2020) (see Table 6).

Barker (2009), studied adolescents' motivations for social network site use with an effect on gender, group identity and collective self-esteem. His study assessed motivation for social network site (SNS) use, group belonging, collective self-esteem, and gender effects in older adolescents. Communication with peer group members was the most important motivation for SNS use. Participants with high positive collective self-esteem were strongly motivated to communicate with their peer group via SNS. Women were more likely to report high positive collective self-esteem, and higher overall use and use of SNS to communicate with peers. Women also posted higher means for the group, passing time, and entertainment. Negative collective self-esteem was associated with social compensation, suggesting that those who felt negatively about their social group used SNS as an alternative to communicating with other group members (Barker, 2009). It is a fact that physical dissatisfaction and disordered eating are common problems among young adult students. Low self-esteem (self-esteem/SE) has been found to be a

reciprocal predictor of physical dissatisfaction and a significant predictor of the development of eating pathology (Santarossa & Woodruff, 2017). The literature suggests that exposure to media that cultivates beauty ideals influences body image (body image/BI), eating behaviors (eating behaviors/EBs), and low self-esteem both in men and women. However, the Internet is rapidly evolving, as is the use of media, including social networking sites (SNSs), and it is quickly becoming the main source of media used by young adult students (Gündüz, 2017). (see Table 6).

Table 6: Researches listed

Research	Title	Subject	Research Cases	Conclusions
Verschueren, M., Claes, L., Bogaerts, A., & Palmeroni, N. (2018)	“Eating Disorder Symptomatology and Identity Formation in Adolescence: A Cross-Lagged Longitudinal Approach”	Eating disorder symptomatology, comprising both psychological and behavioral aspects of subclinical eating concerns, constitutes a clear precursor of developing eating disorders. It is crucial to investigate its antecedents and correlates to subsequently inform eating disorder prevention programs.	The present study focused on identity formation, a core developmental task in adolescence, that has increasingly been linked to eating disorder development. Our main aim was to examine the temporal sequence between eating disorder symptomatology and identity formation.	the present study adds to the growing body of literature on identity and eating disorders by focusing on their temporal interplay in a community sample of adolescents. As bidirectional effects emerged, a greater emphasis on identity formation in eating disorder prevention programs is advocated.
Hardy, S. A., Francis, S. W., Zamboanga, B. L., Kim, S. Y., Anderson, S. G., & Forthun, L.F. (2021, 2 9).	“The roles of identity formation and moral identity in college student mental health, health-risk behaviors, and psychological well-being”	This study examined the roles of identity formation and moral identity in predicting college student mental health (anxiety and depressive symptoms), health-risk behaviors (hazardous alcohol use and sexual risk taking), and psychological well-being (self-esteem and meaning).	Structural equation models found that identity maturity (commitment making and identity synthesis) predicted 5 of the health outcomes (except sexual risk taking), and moral identity predicted all of the health outcomes. In most cases identity maturity and moral identity also interacted in predicting mental	The maturity and specific contents of identity may both play unique and often interactive roles in predicting college student health. Thus, college student health might be bolstered by helping them establish appropriate identity commitments.

			health and psychological well-being, but not health-risk behaviors.	
Potterton, R., Richards, K., Allen, K., & Schmidt, U. (2020, January 31).	"Eating Disorders During Emerging Adulthood: A Systematic Scoping Review"	Eating disorders (EDs) during the transition to adulthood can derail social, psychological, and vocational development. Effective treatment is of paramount importance, yet young adults' treatment needs are typically less well met than those of adolescents.	A systematic scoping review was conducted in accordance with the Joanna Briggs Institute guidelines for scoping reviews. Three databases (Psychinfo, PubMed, Embase) were searched for papers which explicitly focused on EDs during EA. No restrictions as to publication type, language, study design, or participants were applied. Included studies were assessed for developmental "informedness," and findings were qualitatively synthesized.	Existing research indicates that the EA concept is relevant for understanding EDs during the transition to adulthood, and ED services should implement adaptations which exploit the opportunities and overcome the challenges of this developmental stage. EA is currently an underused concept in ED research, and future engagement with the developmental literature by both researchers and clinicians may be key to understanding and treating EDs during transition to adulthood.
Barker, V. (2009, 4 10).	"Older Adolescents' Motivations for Social Network Site Use: The Influence of Gender, Group Identity, and Collective Self-Esteem"	This study assessed motives for social network site (SNS) use, group belonging, collective self-esteem, and gender effects among older adolescents.	Participants high in positive collective self-esteem were strongly motivated to communicate with peer group via SNS. Females were more likely to report high positive collective self-esteem, greater overall use, and SNS use to	Females also posted higher means for group-in-self, passing time, and entertainment. Negative collective self-esteem correlated with social compensation, suggesting that those who felt negatively about their social group

			communicate with peers.	used SNS as an alternative to communicating with other group members. Males were more likely than females to report negative collective self-esteem and SNS use for social compensation and social identity gratifications.
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5. Conclusions

The gender of the students and the existence of a difference in social behavior between real and virtual life are independent, as is the year of study with the main reason for using social media. Similarly independent is the way the sample uses its free time with the degree of influence by the modern beauty ideals projected by social media, and age with the regular daily diet program. In contrast, family status and the opinion that social media influence body image are dependent variables.

The present study extended previous research efforts by examining the relationship between social media dependence and the risk for ED. According to the preceding literature review, an association was found between time spent on social media and ED pathology. According to the results of the Bulimic Investigatory Test, Edinburgh/BITE, and the integrated cognitive-behavioral theory of ED, a feedback loop is identified whereby exposure to body-related stimuli activates and reinforces excessive concern for one's body, which in turn re-activates attention biases towards body-related stimuli (Williamson, White, York-Crowe & Stewart, 2004; He & Yang, 2022). The frequency of this feedback loop serves to create or maintain ED, and this process could potentially explain the finding of a relationship between frequent social media use and the risk of ED and, by extension, the overall image of the individual. Similarly, it may be that frequent exposure to certain social media content reinforces body-related concerns in individuals, causing cognitive biases that ultimately lead individuals to selectively watch that particular social media content. According to many theories, an extreme desire to lose weight is associated with the development and maintenance of eating disorders (Barker, 2009; Hardy, et al., 2021).

As expected, people with high social media dependence had a significantly higher risk of eating disorders than those with lower social media dependence. This fact intertwines with the ability to plan which is a key aspect of cognitive function and requires individuals to identify and organize the steps necessary to achieve a goal. Today, the use of social media has become an important aspect of the social life of individuals.

Social identity theory states that the way people perceive their own identity is influenced by their surrounding environment and their social connections. However, when the dependence on social media decreases, they can identify themselves more in real-life environments compared to the social media environments they circulate in, e.g. the environment: "thinness is beauty". This study contributes to the existing literature by expanding our understanding of the relationship between the indiscriminate use of social media and the identity-creation process in student life as well the eating disorders among students. Last but not least, it is important to note that given the moderating effect of various socio-demographic or daily habits of students this study was able to demonstrate the relationship and the degree of influence of social media use on the process of identity formation and eating disorders in student life. Clearly, social media use is a double-edged sword, as, on the one hand, it makes our daily life more convenient, while at the same time it can have a negative impact on our health.

6. Limitations of the research

As in any study, there are several limitations which should be acknowledged. To begin with, the duration of the present study coincided with the management of the pandemic COVID-19. However, due to the electronic research tool/questionnaire used, no problem was created in the present study. In this respect, the limitation was overcome by creating an electronic questionnaire on the online platform, Google Forms and making it available directly through social media. Secondly, although the sample size ensured the precision of our estimates and empowered us to draw more solid conclusions, the sample size of 158 students from the University of Patras could have been larger within the time frame we had set to conduct the study. Thirdly, the present study should be interpreted in light of the fact that there are also other factors, such as self-esteem and personality, which may influence the relationship between social media use and eating disorders in student life. In future research, these factors should be taken into account. Finally, the sample population, i.e., undergraduate students at the University of Patras, suggests that the results of this study may not be able to be widely generalizable to other countries or cultures. However, despite these limitations, this research has important practical implications. In particular, by randomly sampling a large sample of undergraduate students at the University of Patras, we were able to examine a wide range of eating disorder risks, thus contributing to early prevention in young people from ED.

Conflict of interest statement

The authors declare no conflicts of interest.

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