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Study Factor in Spiral Educational System Approach using social media

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ABSTRACT: The ever-growing use of social media has facilitated the ease of communication all over the world. The benefits of social media encompass the business and commercial industry along with the social spheres of life. Virtual platforms have offered a wide range of social platforms such as Facebook, Instagram, WeChat, Twitter, YouTube and so on. The comforting experience with such mediums of interaction is alluring and sufficient to prompt people to make excessive use of social media which in turn leads to its problematic use i.e., Social Media Addiction (SMA). Having evidential insights on the repercussions of excessive use of social media, it becomes essential to empirically study the predisposing factors leading to SMA. A convenience sample of 284 undergraduate and postgraduate students from the private universities in the state of Rajasthan was considered for the purpose of the study. The data was analysed using Structural equation modelling (SEM). Based on the literature narcissism, individualist ic orientation (IO), and collectivistic orientation (CO) have been a significant predictors of body image (BI) and self-esteem (SE) which were further hypothesized to positively affect SMA in students. The results revealed that narcissism, IO, CO, BI and SE have a significant influence on susceptibility to SMA. The study has relevant implications in the field of mental and physical health interventions.

Keywords: Social Media Addiction (SMA), Narcissism, Cultural Orientation, Body Image (BI), Self-Esteem (SE).

1. INTRODUCTION

Necessity to communicate and belong to each other is one of the basic needs that human beings strive for. With the advancement in technology there have developed new ways of interaction with people who are far beyond vicinity. There are drastic changes in interpersonal communication and interaction that can easily be seen worldwide [1][2]. This has led to faster communication and has given human beings a new platform to express themselves through socialmedia (Snapchat, facebook, Instagram, WeChat, twitter, youtube etc.). Social media has its own benefits and contributes to the commercial industry by connecting directly to a larger audience and establishing networks in the business world. Moreover, it has proven to be an effective mode in establishing social ties and nurturing the social relationships. Although, social media contributes in maintaining social relationships which eventually affects physical and mental health [3], overuse of the same is reported to be negatively affecting various domains of life. A large population including younger generation, teenagers, adults, and old age are found to be the apparent users on all socialmedia platforms. Adolescents are at the highest risk due to the amount of exposure and techno friendly competence. With excessive use of social media, the potentiality of social media addiction has taken its toll. Use of social media, is addictive, when its excessive use hampers the everyday life to such an extent that it interferes withthe daily tasks of an individual [4][5]. The usage of social media is seen to be increasing at a faster rate [6]. The impact is evidently noticeable in terms of both physical (blurred vision,

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carpal tunnel syndrome, headaches etc.) and psychological (depression and isolation, guilt etc.) domains of health [7] in all age groups.

With the spurt of social media addiction, it becomes essential to understand and assess the predisposing factors that have been researched upon in the recent years such as self-esteem, a cognitive appraisal of self-worth and affective experiences [8]. In simple terms, self-esteem is "the evaluative aspect of self-knowledge that reflects how much people like themselves" [9]. Body image, a subjective evaluation of physical appearance [10] and narcissism, an inflated self-concept is also found to have links with addictive tendencies. Addiction in terms of social media varies across cultures [11]. Individualistic (focus on self) and collective orientations (focus on social values and interdependence) to culture have an impact on the construal of self which is directly related to the high and low levels of self-esteem. Cultural orientation is the "degree to which individuals are influenced by and actively engage in the traditions, norms, and practices of a specific culture" [12]. Individualistic cultural orientation is also found to be related to narcissistic tendencies [13]. Individual differences are evident in self-esteem and narcissism subject to cultural background. The present research work is an analysis of these predisposing factors of SMA through SEM.

2. LITERATURE REVIEW

In the recent years SMA has caused concern and is leading towards deterioration of mental and physical health. It has been estimated that there will be around 3.09 billion social media users around the world by the end of 2021 [14]. Social media has been reported to be more addictive than addictive substances such as cigarettes and alcohol [15]. Social Networking sites such as, Facebook has taken over the parental control required for regulating and monitoring the behaviour of children [16] Psychological and social factors affecting SMA include lack of family love [17] and conflict between parents and children [18]. It was asserted that when parents fail to provide guidance to children with regard to using social media positively, along with negligence from parents is one of the factors contributing to SMA [19]. Children feeling lonely in absence of the parents are more likely to be addicted to social media [20]. Although, building and maintaining relationships with other users on social media has become convenient [21], self-disclosure leads to impression of trustworthiness that aids in formation of new relationships [22]. Virtual platforms have their own benefits but increasing use of social media has raised concerns about potential adverse repercussions [23] on mental health. Studies on SMA assert that social media addicts demonstrate behavioural symptoms and are negatively affecting the mental health of individuals [24]. Positive associations have been found between excessive use of social media such as, FB and psychiatric symptoms of disorders such as anxiety, depression, body image dissatisfaction [25]. Personality traits such as narcissism are found to be linked with SMA in a manner that SM offer a conducive environment to gratify narcissistic needs [26] such as need for attention and approval. Narcissism which refers to "one's capacity to maintain a relatively positive self-image through a variety of self-, affect-, and field-regulatory processes" [27], is found to be associated with fragile and unstable self-esteem [28]. Trait narcissism which is found in non-pathological conditions can be divided into grandiose and vulnerable narcissistic tendencies [29]. Traits such as dominance and aggression represent the grandiose narcissism, on the other hand,

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defensiveness, and hypersensitivity to the opinion of others is reflected in vulnerable narcissism [30]. It is found that social networking sites provides a good platform to the users to display grandiosity and receive attention that is desired [31]. The 'mask model' asserts that feelings of inadequacy and inferiority are masked by the positive self-views of the narcissists [32][33][34]. Evidential connections have been stated between SMA and self-esteem [35][36][37][38][39] Addiction to social media has been found to be related to higher narcissism and lower self-esteem [40]. Individuals having low levels of self-esteem are found to spend more time on social media to enhance their self-esteem and self-image [41][42][43][44]. It is asserted that people having fewer social connections recompense on facebook through making more friends and gaining popularity [45][46]. Feedback, from online friends, whether positive or negative, can improve or deteriorate self-esteem respectively [47]. Another related aspect to self-esteem is the body image (BI) which can be referred to as a subjective evaluation of one's physical attributes. Biopsychosocial factors such as, self-esteem, puberty, social comparison and physical self-concept are found to be impacting the BI in children[48]. Developing self-perceptions during the phase of adolescence [49], while experiencing puberty adversely affect healthy BI [50][51]. BI has been found to have positive correlations with SMA [52][53]. Cultural connotations of BI reportedly differ and individuals from different cultural groups have different body ideals [54][55]. Research shows that cultural messages [56] and standards of society [57] are influential in the development of body image. Idealistic thin body concept popular in western societies [55] and assumptions such as, thin is attractive and fat is unattractive are precursors of BI dissatisfaction [58]. Getting "likes" on social media may enhance the positive perception of BI whereas, seeing people posting selfies may even negatively impact BI [59][60]. Body image affects an individual's self-esteem which is a by-product of culture. Assessment of the factors contributing to the increasing rate of SMA becomes imperative looking at its adverse impact on society at large. Factors like self-esteem, narcissism, BI have been identified as precursors of SMA, but cultural influences have been less researched upon in the same context.

RESEARCH OBJECTIVES

1) To study the predisposing factors of SMA in undergraduate and post graduate students in Rajasthan.
2) To examine the impact of predisposing factors on SMA among the students.

3. THEORETICAL MODEL AND HYPOTHESIS DEVELOPMENT

Based on the previous research, it is accepted that addictive tendencies are the amalgamation of biological, psychological, and social factors [61]. Maladaptive cognitions amplified by environmental factors, lack of self-presentational skills, inclination towards virtual over face-to-face interaction, expectation of positive outcomes along with deficient self-regulation are some of the factors contributing to SMA [62]. Individualistic and collective cultural orientations, Narcissism, Body image, Self-esteem are factors that are interlinked with each other, and which may be relevant for examining the onset of SMA. Therefore, this study proposes to recognize combination of these factors as predictors of SMA.

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A) **Narcissism:** It is a personality trait characterized by inflated self -concept. Narcissism is found to be associated with body image [63] and self-esteem [28]. Individuals having overemphasized liking for their own self are found to have positive body image which eventually effects the SE. Hence, the following hypotheses can be formulated:

H1: Narcissism has a significant influence on body image of students

H2: Narcissism has a significant influence on self-esteem of students

B) **Collectivistic orientation:** Cultural orientation is "the degree to which individuals are influenced by and actively engage in the traditions, norms, and practices of a specific culture" [12]. In collectivistic cultural orientation people connect with their cultural values and stresses on the goals of their culture [64]. BI and SE have found to have different connotations in collectivistic culture, which means that culture impacts the perception of body image and development of self-esteem. Therefore, it can be stated that:

H3: CO significantly effects the BI of students

H4: CO significantly effects the SE of students

C) **Individualistic orientation:** In this cultural orientation, people focus on self and stress on their on values system and goals, unlike the collectivistic orientation [64]. There are associations found between individualistic orientation and body image [54][55]. Thus, it is hypothesized that:

H5:IO has significant impact on BI of students

H6:IO has significant impact on SE of students

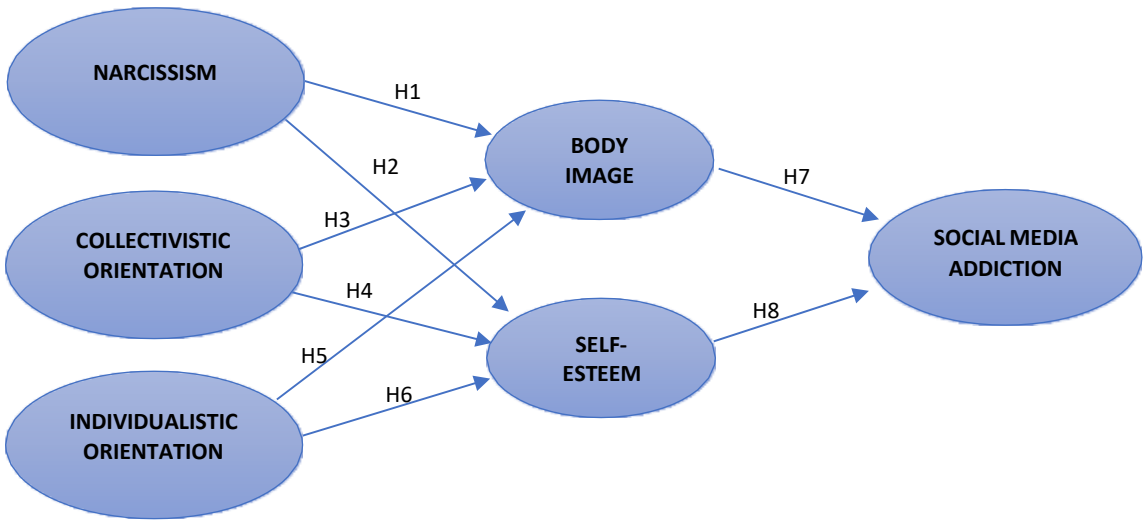
D) **Body Image:** It refers to the subjective evaluation of individual's own physical attributes. BI has been found to have strong connections with SMA [65]. Therefore, it can be stated that:

H7: BI has a significant positive impact on SMA among students

E) **Self-esteem:** It is defined as the evaluative aspect of self-knowledge that reflects how much people like themselves [9]. Self-esteem has found to be linked with SMA [11]. Hence, this study suggests that:

H8: SE has a significant positive impact on SMA among students.

Fig. 1: Theoretical Model of the Study



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4. RESEARCH METHODOLOGY

4.1 Scale Measurement and Sampling Method: With the aim of establishing the determining factors of social media addiction among the young students in various universities and colleges in Rajasthan state, an online survey was conducted, using a structured questionnaire. Further, to serve the purpose of the study, total six constructs were identified from the literature i.e., Narcissism, Collective Orientation, Individualistic Orientation, Body Image, Self Esteem, and Social Media Addiction. Out of which, Narcissism, collective orientation, and individualistic orientation were considered as significant predictors of body image and self-esteem, which were further hypothesized to positively affect social media addiction in young students. The questionnaire items for individual constructs were taken from the various standard scales developed or used to measure the constructs and measured on the 5-point Likert type scale for total 26 questionnaire items Therefore, the questionnaire items for the constructs were extracted from the following standardized scales: (a) Individualism and collectivism scale [66], (b) The Narcissistic Personality Inventory [67] (c) Dresden Body Image Questionnaire (DBIQ) [68], (d) Rosenberg Self-esteem Scale [69] and (e) Social Media Addiction Scale - Student Form [70]

Aiming at the attaining the purpose of the study, a sample of total 284 students (UG, PG and above) from universities and colleges of Rajasthan was identified using convenient sampling method. The sample size was identified using rule of thumb i.e., per variable 10 observation as minimum requirement for sample size [71]. The sample included 161 males (56.6%) and 123 females (43.3%) with 181 UG students (63.7%) and remaining 103 students (36.2%) of PG and above. Additionally, 135 (47.5%) were from technical stream whereas, remaining 149 (52.4%) were from non-technical stream of study. Further, sample's demographic profile is shown in table 1 below.

Table 1: Demographic profile of the Respondents

DEMOGRAPHICS		**No. of Respondents**	**% of Respondents**
GENDER	Male	161	56.6
	Female	123	43.3
Level of Education	UG	181	63.7
	PG and above	103	36.2
Stream	Technical	135	47.5
	Non-Technical	149	52.4
Type of Family	Nuclear	173	60.9
	Joint	111	39.0
Domicile	Rural	86	30.2
	Urban	198	69.7
Residing Status	Hosteler	168	59.1
	Day scholar	116	40.8

5. DATA ANALYSIS: The data analysis includes testing constructs' validity and examining the structural relationships between the constructs which was conducted using Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM) with the help of SPSS and AMOS 23 software. Initially, the reliability scores were calculated using Cronbach's Alpha for assessing reliability and examining the internal consistency among the variables of the study.

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The scores for Cronbach's alpha were ranging between .804 and .896, which shows good internal consistency among the constructs' items (>/= 0.70) [71]. The reliability output for the constructs is shown in the table 2 below:

Table 2: Reliability Assessment Output

Construct	Narcissism	Collectivistic Orientation	Individualistic Orientation	Body Image	Self-Esteem	Social media Addiction
Cronbach's alpha	.835	.845	.844	.885	.896	.804

5.1 CFA- To fulfil the purpose of assessing the model or to test the model fit, Structural Equation Modelling (SEM) was used. Many fit indices were used to examine the model fit to the data i.e., NFI, CFI, TLI, IFI, RMSEA, CMIN/DF etc. The output of the fit indices is shown in the table below, whichdepicts that all the model fit indices scores were found to be under the threshold limit (TLI, IFI, CFI, NFI ≥ .9; RMSEA ≤ .05; CMIN/DF ≤ 3) suggested by [72][73]. Therefore, it indicated that the measurement model fits well with the data.

Table 3: Measurement Model Output

Fit Indices	CMIN/DF	CFI	IFI	TLI	NFI	RMSEA
Measured value	1.550	.969	.969	.960	.919	.044

With an aim to examine validity and confirming the constructs, CFA was used. For this, convergent and discriminant validity of the constructs was assessed. Convergent validity of the constructs is assessed to check if construct causes maximum variance which is assessed by using prerequisite criterion i.e., AVE should exceed 0.50 threshold [74]. The output shown in table 4 below indicates that AVE values for each construct is more than 0.50. Therefore, it satisfies the condition for the convergent validity. Further, discriminant validity is assessed by comparing AVE with MSV i.e., for fulfilling the condition of discriminant validity, AVE for each construct should be more than its MSV [74]. Therefore, discriminant validity is also assessed based on the output in table 4 below which indicates that AVE for every construct is more than its MSV.

Table 4: Validity Assessment (Fornell- Larcker Scale)

	CR	AVE	MSV	MaxR(H)	SMA	NAR	CO	IO	BI	SE
SMA	0.701	0.549	0.238	0.910	**0.741**					
NAR	0.837	0.506	0.394	0.938	0.197	**0.712**				
CO	0.847	0.650	0.366	0.955	0.247	0.605	**0.806**			
IO	0.850	0.654	0.192	0.965	0.265	0.046	0.316	**0.809**		

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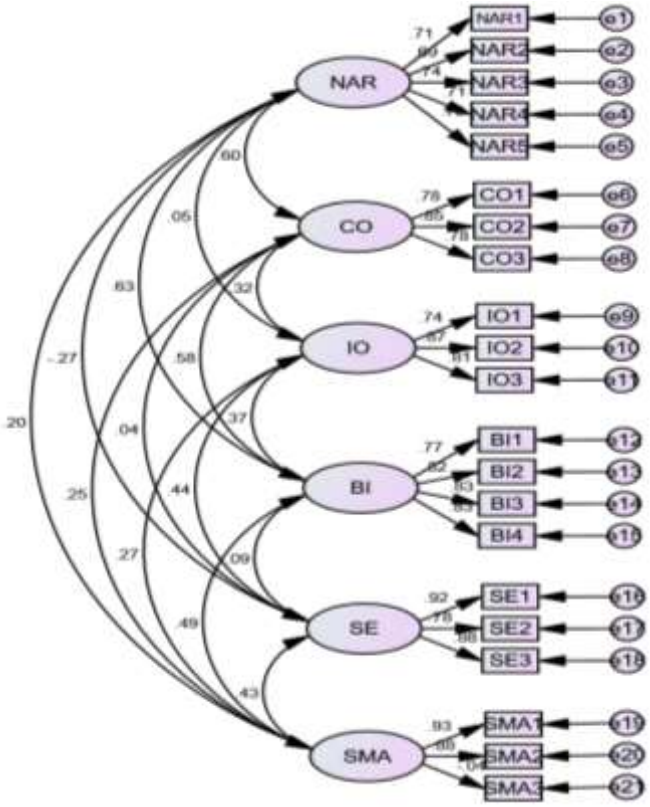
BI	0.885	0.659	0.394	0.972	0.488	0.628	0.585	0.369	**0.812**	
SE	0.898	0.746	0.192	0.979	0.430	-0.268	0.039	0.438	0.088	**0.864**

Fig. 2: Measurement Model



5.2 Hypotheses Testing: The study used structural equation modelling, to test the formulated hypothesesusing path coefficients for each directional relationship of between the variables under the study. The hypotheses of the study were tested using standardized path coefficients (β) and critical values (CR). The hypotheses of the study were tested using decision rule (β≤1 and p-value ≤ .05). The figure 2 below,shows the final measurement model output of the study. Further, table 3 below shows the output summary for hypotheses tests at different significance levels (.05, .01, and .001).

Table 4: Summary for Hypotheses Tests for Individual Parameter

ɔothesis	**Paths**	**SEM Output**			**Results**
		Standardised β	**C.R. (tvalue)**	**P value**	
H1	NAR →BI	.489	5.844	***	Supported
H2	NAR→SE	-.343	-3.898	***	Supported
H3	CO →BI	.198	2.475	.013	Supported

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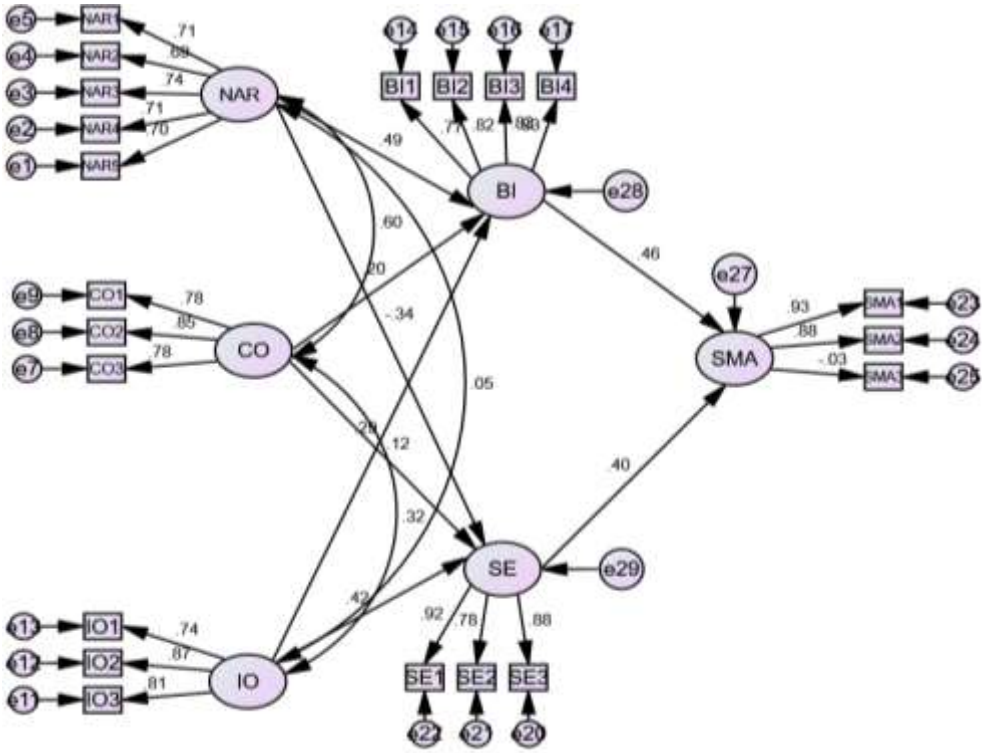
H4	CO→SE	.117	1.289	.197	Not Supported
H5	IO →BI	.286	4.651	***	Supported
H6	IO→SE	.421	5.912	***	Supported
H7	BI →SMA	.457	7.576	***	Supported
H8	SE→SMA	.397	7.023	***	Supported

Fig. 2. Final Measurement Model Output



6. DISCUSSION AND CONCLUSION

This study was conducted in the state of Rajasthan to assess the predictors of social media addiction among UG and PG students. It further aimed at understanding the impact of individualistic and collectivistic cultural orientation, narcissism, body image and self-esteem on the problematic use of social media or SMA. The results revealed that narcissistic traits have direct impact on the BI and SE in turn effect the use of social media which is supported by [28][63]. It can be stated that narcissistic traits can play a significant role in SMA as supported by [26]. It is further revealed that Individualisticand collectivistic cultural orientation also impacts the BI and SE among students that can be referred in [54][55]. [75] asserts that increase or decrease in individualism significantly affect the use of internet, which may also be applicable to SMA. Contrastingly, it has been found that collectivistic orientation does not impact the SE which was found to be supported by [76][77] It may further be concluded that SMA in students is directly affected by the BI and SE which are found to be linked with the narcissistictraits and cultural orientations. Hence, narcissistic traits and cultural orientations may have a significant impact and can be considered amongst the predisposing factors to SMA.

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7. LIMITATIONS AND FUTURE SCOPE

The impact of SMA can be seen all over the globe with such a faster pace it may become fatal for the entire human race. The study attempted to assess the predisposing factors leading to the increase in SMA. Although there may be many such unmeasured and unidentified aspects that are still left to be explored. The study was limited to the students in the state of Rajasthan, India, which may be further taken ahead assessing the precursors globally and in all age groups. Factors like narcissism and cultural orientations may also be explored as influential determinants of susceptibility to SMA. Efforts made in this this direction may help society in restricting and regulating the behaviour through applicable interventions for maintenance of mental and physical health which is the need of the hour.

8. REFERENCES

1. Smith, A., & Anderson, M. (2018). Social media use in 2018. Retrieved from http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/
2. Stone, C. B., & Wang, Q. (2018). From conversations to digital communication: The mnemonic consequences of consuming and sharing information via social media. Topics in Cognitive Science, 2018, 1-20. https://doi.org/10.1111/tops.12369.
3. Umberson, D., & Karas Montez, J. (2010). Social relationships and health: A flashpoint for health policy. *Journal of health and social behavior*, *51*(1_suppl), S54-S66.
4. Griffiths, M. D. (2000). Internet addiction: Time to be taken seriously? Addiction Research, 8, 413–418. https://doi.org/10.3109/16066350009005587.
5. Griffiths, M. D. (2012). Facebook addiction: Concerns, criticism, and recommendations: A response to Andreassen and colleagues. Psychological Reports, 110, 518–520. https://doi.org/10.2466/01.07.18.PR0.110.2.518- 520.
6. Statista. (2018). Number of worldwide social network users 2010–2021. Retrieved 9 May 2018, from https://www.statista.com/statistics/278414/number-of-worldwidesocial-network-users.
7. PsychGuides. (2018). Computer/internet addiction: Symptoms, causes and effects. Retrieved from https://www.psychguides.com/guides/computerinternetaddiction-symptoms-causes-and-effects.
8. Murphy, C. M., Stosny, S., & Morrel, T. M. (2005). Change in self-esteem and physical aggression during treatment for partner violent men. *Journal of Family Violence*, *20*(4), 201.
9. Zeigler-Hill, V., and Jordan, C. H. (2010). "21. Two faces of self-esteem: implicit and explicit forms of self-esteem," in Handbook of Implicit Social Cognition: Measurement, Theory, and Applications, eds B. Gawronski and B. K. Payne (New York, NY: Guilford Press), 392–4.
10. Cash, T. F., & Pruzinsky, T. (2004). Body image: A handbook of theory, research, and clinical practice. The Guilford Press.
11. Zhang, L., Amos, C., McDowell, C. (2008). A comparative study of Internet addiction between the United States and China. CyberPsychology and Behavior, 11(6), 727-729.
12. Tsai, J. L., & Chentsova-Dutton, Y. (2002). Models of cultural orientation: Differences between American-born and overseas-born Asians. In K. Kurasaki, S. Okazaki, & S. Sue (Eds.), Asian American mental health: Assessment theories and methods (pp. 95–106).

DOI: 10.52783/se.v1i43.6

13. Paris, J. (2014). Modernity and narcissistic personality disorder. *Personality disorders: Theory, research, and treatment*, *5*(2), 220.
14. Statista (2020). Number of social media users worldwide from 2010 to 2021 (in billions). Retrieved from < https://www.statista.com/statistics/278414/number-ofworldwide-social-network-users.
15. Peacock, A., Leung, J., Larney, S., Colledge, S., Hickman, M., Rehm, J., ... & Degenhardt, L. (2018). Global statistics on alcohol, tobacco and illicit drug use: 2017 status report. *Addiction*, *113*(10), 1905-1926.
16. Zebron, S., Sigauke, E., Musingafi, M. C., Campus, M. W. R., & Campus, M. R. (2013). Impact of the Facebook on parent-child relationship in the African Context: The Zimbabwean Experience. In *Information and knowledge management* (Vol. 3, No. 9, p. 31).
17. Huang, H., & Leung, L. (2009). Instant messaging addiction among teenagers in China: Shyness, alienation, and academic performance decrement. *CyberPsychology & Behavior*, *12*(6), 675-679.
18. Yen, J. Y., Ko, C. H., Yen, C. F., Wu, H. Y., & Yang, M. J. (2007). The comorbid psychiatric symptoms of Internet addiction: attention deficit and hyperactivity disorder (ADHD), depression, social phobia, and hostility. *Journal of adolescent health*, *41*(1), 93-98.
19. Kirik, A. M., Arslan, A., Çetinkaya, A. & Gül, M. (2015) A Quantitative Research on the Level of Social Media Addiction among Young People in Turkey. International Journal of Science Culture and Sport (IntJSCS). 3(3). 108-122. doi: 10.14486/IntJSCS444.
20. Manickam, L. S. (2013). Integrative change model in psychotherapy: Perspectives from Indian thought. *Indian Journal of Psychiatry*, *55*(Suppl 2), S322.
21. Jermsittiparsert, K, Sriyakul, T., & Pamornmast, C. (2012). An Empirical Proposal on Power, Knowledge and Truth of Correlations among the Minimum Wages, Foreign Direct Investment in the Industrial Sector and Export. Social and Management Research Journal, 9(1), 21-33. https://doi.org/10.24191/smrj.v9i1.5210.
22. Christofides, E., Muise, A., & Desmarais, S. (2009). Information disclosure and control on Facebook: are they two sides of the same coin or two different processes?. CyberPsychology & Behavior, 12, 341-345.
23. Müller, K. W., Dreier, M., Beutel, M. E., Duven, E., Giralt, S., & Wölfling, K. (2016). A hidden type of internet addiction? Intense and addictive use of social networking sites in adolescents. Computers in Human Behavior, 55, 172–177. https://doi.org/10.1016/j.chb.2015.09.007.
24. Pantic, I. (2014). Online social networking and mental health. CyberPsychology, Behavior, and Social Networking, 17, 652–657.
25. Frost, R. L., & Rickwood, D. J. (2017). A systematic review of the mental health outcomes associated with Facebook use. Computers in Human Behavior, 76, 576–600. https://doi.org/10.1016/j.chb.2017.08.001.
26. Bergman, S. M., Fearrington, M. E., Davenport, S. W., & Bergman, J. Z. (2011). Millennial, narcissism, and social networking: What narcissists do on social networking sites and why. Personality and Individual Differences, 50, 706–711. https://doi.org/10.1016/j.paid.2010.12.022

DOI: 10.52783/se.v1i43.6

27. Pincus, A. L., Ansell, E. B., Pimentel, C. A., Cain, N. M., Wright, A. G., & Levy, K. N. (2009). Initial construction and validation of the Pathological Narcissism Inventory. *Psychological assessment*, *21*(3), 365.
28. Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological inquiry*, *14*(1), 1-26.
29. Hendin, H. M., & Cheek, J. M. (1997). Assessing hypersensitive narcissism: A reexamination of Murray's Narcissism Scale. Journal of Research in Personality, 31, 588–599.
30. Dickinson, K. A., & Pincus, A. L. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. Journal of Personality Disorders, 17, 188–207
31. Barry, C. T., & McDougall, K. H. (2018). Social Media: Platform or Catalyst for Narcissism?. *Handbook of trait narcissism*, 435-441.
32. Kernberg, O. (1975). Borderline Conditions and Pathological Narcissism. New York, NY: Jason Aronson.
33. Kohut, H., and Wolf, E. S. (1986). "The disorders of self and their treatment: an outline," in Essential Papers on Narcissism, ed. A. P. Morrison (New York, NY: New York University Press), 175–196.
34. Emmons, R. A. (1987). Narcissism: theory and measurement. J. Pers. Soc. Psychol. 52, 11–17. doi: 10.1037/0022-3514.52.1.11
35. Aydm, B., & San, S. V. (2011). Internet addiction among adolescents: the role of self-esteem. Procedia-Social and Behavioral Sciences, 15, 3500-3505.
36. Bahrainian, S. A., Alızadeh, K. H., Raeisoon, M. R., Gorji, O. H., & Khazaee, A. (2014). Relationship of Internet addiction with self-esteem and depression in university students. Journal of preventive medicine and hygiene, 55(3), 86-89.
37. Kim, J. E., Han, K. S., Kang, H., & Hong, Y. S. (2016). Internet use of korean adolescents: a test of causal model. International Journal of Applied Engineering Research, 11(2), 1036-1141.
38. Mei, S., Yau, Y. H., Chai, J., Guo, J., & Potenza, M. N. (2016). Problematic Internet use, well-being, self-esteem and self-control: Data from a high-school survey in China. Addictive behaviors, 61, 74-79.
39. Zhang, R. (2015). Internet dependence in chinese high school students: relationship with sex, self-esteem, and social support. Psychological reports, 117(1), 8-25.
40. Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive behaviors*, *64*, 287-293.
41. Błachnio, A., Przepiorka, A., & Rudnicka, P. (2016). Narcissism and self-esteem as predictors of dimensions of Facebook use. *personality and individual differences*, *90*, 296-301.
42. Denti, L., Barbopuolos, I., Nilsson, I., Holmberg, L., Thulin, M., Wendeblad, M., ... & Davidsson, E. (2012). Sweden's largest Facebook study.
43. Gonzales, A. L., & Hancock, J. T. (2011). Mirror, Mirror On My Facebook Wall: Effects of Exposure to Facebook On Self-Esteem. CyberPsychology, Behavior, and Social Networking, 79–83.
44. Steinfield, C., Ellison, N. B., & Lampe, C. (2008). Social Capital, Self-Esteem, and Use Of Online Social Network Sites: A Longitudinal Analysis. Journal of Applied Developmental Psychology, 434-445.

DOI: 10.52783/se.v1i43.6

45. Barker, V. (2009). Older adolescents' motivations for social network site use: The influence of gender, group identity, and collective self-esteem. CyberPsychology & Behavior, 12, 209–213.
46. Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on Facebook. CyberPsychology, Behavior, and Social Networking, 13, 357–364.
47. Valkenburg, P. M., Peter, J., & Schouten, A. P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. CyberPsychology & Behavior, 9, 584–590.
48. Petrie, T. A., Greenleaf, C., & Martin, S. (2010). Biopsychosocial and physical correlates of middle school boys‟ and girls‟ body satisfaction. Sex Roles, 63, 631-644. https://doi.org/10.1007/s11199-010-9872-5.
49. Croll, J. (2005). Body Image and Adolescents. The Journal of Social Psychology.
50. Mulgrew, K. E., Volcevski-Kostas, D., & Rendell P. G. (2014). The effect of music video clips on adolescent boys‟ body image, mood, and schema activation. Journal of Youth and Adolescence, 43, 92-103.
51. Kantanista, A., Osinski, W., Borowiec, J., Tomzczak, M., & Krol-Zielinska, M. (2015). Body image, BMI, and physical activity in girls and boys aged 14-16 years. Body Image, 15, 40-43.
52. Peris, M., Maganto, C., & Garaigordobil, M. (2018). Escala de riesgo de adicción-adolescente a las redes sociales e internet: fiabilidad y validez (ERA-RSI).
53. Tiggemann, M., & Slater, A. (2013). NetGirls: The Internet, Facebook, and body image concern in adolescent girls. International Journal of Eating Disorders, 46, 630-633. https://doi.org/10.1002/eat.22141.
54. Roberts, A., Cash, T. F., Feingold, A., & Johnson, B. T. (2006). Are black-white differences in females' body dissatisfaction decreasing? A meta-analytic review. *Journal of consulting and clinical psychology*, *74*(6), 1121.
55. Swami, V., Frederick, D. A., Aavik, T., Alcalay, L., Allik, J., Anderson, D., ... & Zivcic-Becirevic, I. (2010). The attractive female body weight and female body dissatisfaction in 26 countries across 10 world regions: Results of the International Body Project I. *Personality and social psychology bulletin*, *36*(3), 309-325.
56. Voelker, D. K., Reel, J. J., & Greenleaf, C. (2015). Weight status and body image perceptions in adolescents: current perspectives. Adolescent Health, Medicine and Therapeutics, 6, 149. https://doi.org/10.2147/AHMT.S68344.
57. Rafindadi, A. A., & Kondo, K. A. (2018). Public Finance and Rural Development in Nigeria: Empirical Evidence from the Structural Equation Modeling. Asian Economic and Financial Review, 8(11), 1313-1339.
58. Morrison, T. G., Kalin, R., & Morrison, M. A. (2004). Body-image evaluation and body-image investment among adolescents: A test of sociocultural and social comparison theories. Adolescence, 39, 571.
59. Grogan, S. (2016). Body image: Understanding body dissatisfaction in men, women and children. Taylor & Francis.
60. Chua, T. H. H., & Chang, L. (2016). Follow me and like my beautiful selfies: Singapore teenage girls‟ engagement in self-presentation and peer comparison on social media. Computers in Human Behavior, 55, 190-197.

DOI: 10.52783/se.v1i43.6

61. Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance use*, *10*(4), 191-197.
62. Turel, O., & Serenko, A. (2012). The benefits and dangers of enjoyment with social networking websites. *European Journal of Information Systems*, *21*(5), 512-528.
63. Jackson, L. A., Ervin, K. S., & Hodge, C. N. (1992). Narcissism and body image. *Journal of Research in Personality*, *26*(4), 357-370.
64. Triandis, H. C. (1996). The psychological measurement of cultural syndromes. *American psychologist*, *51*(4), 407.
65. O'Reilly, I. (2018). Social Media and its associations with body satisfaction, exercise and eating habits in undergraduate students.
66. Triandis, H. C. & Gelfland, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. Journal of Personality and Social Psychology, 74, 118-128.
67. Raskin, R., & Hall, C. S. (1981). The Narcissistic Personality Inventory: Alternative form reliability and further evidence of construct validity. *Journal of personality assessment*, *45*(2), 159-162.
68. Pöhlmann, K., Roth, M., Brähler, E., & Joraschky, P. (2013). The Dresden Body Image Inventory (DKB-35): validity in a clinical sample. *Psychotherapie, Psychosomatik, Medizinische Psychologie*, *64*(3-4), 93-100.
69. Rosenberg, M. (1965). Rosenberg self-esteem scale (RSE). *Acceptance and commitment therapy. Measures package*, *61*(52), 18.
70. Sahin, C. (2018). Social Media Addiction Scale-Student Form: The Reliability and Validity Study. *Turkish Online Journal of Educational Technology-TOJET*, *17*(1), 169-182.
71. Nunnally, J. C. (1978). *Psychometric Theory: 2d Ed*. McGraw-Hill.
72. Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. (2006). Multivariate data analysis . Uppersaddle River.
73. Steiger, J. H. (1980). Tests for comparing elements of a correlation matrix. *Psychological bulletin*, *87*(2), 245.
74. Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.
75. Arpaci, I., Kesici, Ş., & Baloğlu, M. (2018). Individualism and internet addiction: the mediating role of psychological needs. *Internet Research*.
76. Kitayama, S., & Karasawa, M. (1997). Implicit self-esteem in Japan: Name letters and birthday numbers. *Personality and social psychology bulletin*, *23*(7), 736-742.
77. Kobayashi, C., & Greenwald, A. G. (2003). Implicit-explicit differences in self-enhancement for Americans and Japanese. *Journal of Cross-Cultural Psychology*, *34*(5), 522-541.