



Psychological Correlates of Perfectionistic Self-Presentation Among Social Media Users

Anantha Ubaradka, Indian Institute of Technology, Indore, India*

 <https://orcid.org/0000-0002-7709-1073>

Ayesha Fathima, Kristu Jayanti College (Autonomous), India

Shreya Batra, Kristu Jayanti College (Autonomous), India

 <https://orcid.org/0000-0002-6947-7929>

ABSTRACT

The recent burgeon on social media usage has contributed to much research examining the role of enmeshing psychological and psychosocial factors. Concerning the existing scenario, this study investigates the networking between narcissism, self-esteem and perfectionistic self-presentation among Facebook and Instagram users. Perfectionistic self-presentation is a major constituent of young people's identity development and may intensify during the transition to college. Against this backdrop, the study was conducted on 578 Indian students who belonged to the age range of 18-24 years. The result showed that perfectionistic self-presentation was predicted by self-esteem, narcissism, and intense usage of Instagram. The result also divulged the current trend and proclaimed that Instagram is a major online platform where perfectionistic self-presentation is portrayed to salvage the deflated self-esteem.

KEYWORDS

College Students, Facebook Intensity, Ideal-Self, Instagram Intensity, Narcissism, Perfectionistic Self-Presentation, Self-Esteem, Social Media Behaviour

INTRODUCTION

Man, since the dawn of time has adapted, assimilated and survived in the world partly due to his incessant connectivity and kinship with other fellow beings. Aristotle had rightly opined that 'man is a social animal' and whether it was through letters in the past or with the current advancements in technology, we have come a long way in how we form and maintain relationships with those around us. In the past two decades, we have witnessed the myriad ways in which technology has successfully revolutionized connectivity chiefly through the incorporation of various social media platforms. This

DOI: 10.4018/IJCBPL.324089

*Corresponding Author

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

trend involves the technologies that are interactive and computer-mediated, allowing the users to create and share ideas, and information through various forms of expressions in these online communities. Although, social media is generally defined as any medium that allows individuals to connect and interact, this definition has been considered too broad as it would mean that forms of communication like television or telegraph are also to be considered social mediums. Across the world, the number of individuals that have incorporated social media in their lives has grown to nearly 3.5 billion at the outset of 2019, with a whopping 288 million new users.

The studies about Facebook have crossed millions whereas Instagram is slowly getting importance and is still an understudied topic (Salomon, 2013). Instagram, an American SNSs that was primarily focused on sharing photos and videos among its users, is currently owned by Facebook, Inc. Instagram was cleverly named as such to be short for instant telegram and it was launched in 2010 and had a surprisingly instantaneous growth and popularity. The main feature of the application is that it permits the users to upload videos and photos to it, these can be edited with the help of different filters, which are organized effectively using tags and particular location information (Hu et al., 2014). The posts from any account can be shared either publicly or with a private list of account holders or followers (Landsverk, 2014). The users of the platform can also browse the content of other users using the above-mentioned tags or location information while also having access to content that is trending or otherwise most viewed by people in a particular region on the platform as a whole. Users can furthermore show their support, acknowledgement or appreciation by 'liking' the photos and following other users to add their content to their particular and individualized feed. Concerning this existing scenario, this study investigates how psychological factors such as narcissism, self-esteem and perfectionistic self-presentation relate to Facebook and Instagram usage.

Narcissism

Narcissism is characterised by inflated self-constructs specifically associated with the traits like intelligence, dominance, and appeal (Brown & Zeigler-Hill, 2004; Buffardi & Campbell, 2008; Campbell et al., 2002; Gabriel et al., 1994). The initial studies of narcissism emerged in the late 1970s where three dominant trends of an individual's self-obsessed nature were noticed (Emmons, 1987). One trend affirmed the manifestation of society into extremely narcissistic (Mazlish, 1982; Nelson, 1977) wherein the tendency was evinced by the characteristics such as racism, sexism and nationalism. The second trend revolved around the phenomenon of self-serving bias (Harvey & Weary, 1984; Snyder, Stephan, & Rosenfield, 1978) that was included with cognitive and narcissistic overtones (Greenwald, 1980). The third trend narrowed the focus of narcissism to the clinical domain with multifarious aetiology. The present study chiefly propagates the amalgamation of the first two trends, wherein narcissism was viewed in the social context and as a cognitive facet.

With the exponential growth of social media, the recent studies are more focussed on connecting narcissism in the frame of online behaviour, predominantly dividing it into two opposite dimensions such as grandiosity and vulnerability between which an individual would vacillate (Wink, 1991; Wright & Edershile, 2018). Firstly, the grandiose type of narcissism enmeshed with exhibitionism and self-importance which are characterized by the reflection of ideas with grandiosity, often overlapping with aggression (Miller et al., 2011; Wink, 1991). Be at variance with grandiosity, vulnerable narcissists are a 'covert' type marked by hypersensitivity, defensiveness, and insecurity (Ahn et al., 2015; Dickinson & Pincus, 2003; Miller et al., 2011; Wink, 1991). Research indicates both grandiose and vulnerable narcissism has a noteworthy impression on social media usage where Social Networking Sites (SNSs) can be manifested into specific platforms for narcissistic dreams to unfold (Ahn et al., 2015; Andreassen et al., 2017; Casale et al., 2016; McCain & Campbell, 2018). People share self-enhancing content with their potential audience which may or may not be true with themselves and eventually receive feedbacks (McCain & Campbell, 2018). Many of the time, the positive feedbacks act like reinforcing agents which further increase the tendency of similar behaviour with an escalation of their confidence as well as self-esteem. However, the negative reflection of the

shared information can also mirror their limitations and shortcomings, which can eventually lead to self-esteem damage (Heine et al., 2008).

Self-Esteem

Self-esteem is generally seen in the lens of self-concept for its emotional component (Heatherton & Wyland, 2003) and is responsible for various social functions including online behaviour across the social media platforms. The contribution of Facebook and Instagram in alleviating the ability of socialization thereby supporting self-esteem has been elaborated by many researchers (Ellison et al., 2007; Gonzales & Hancock, 2011; Valkenburg et al., 2006). The most common conclusion drawn in the recent literature suggests that individuals with depleted self-esteem are the intense users of Social Networking Sites (SNSs) and they do that primarily to uplift their self-image and deprived self-esteem (Andreassen et al., 2017; Błachnio et al., 2016; Denti et al., 2012; Gonzales & Hancock, 2011; Steinfield et al., 2008). Social media provides an opportunity for self-disclosure which is most evident from existing literature that people with shallow levels of self-esteem have increased self-disclosure related behaviour. Because, even a slight chance to communicate with others on SNSs may be massively valuable for these individuals to obtain intimacy (Forest & Wood, 2012). The aptitude to reflect carefully about what to say and disclosing personal information in an idealistic way can direct self-presentation behaviours.

Perfectionistic Self-Presentation

The very stratagem of Social Networking Sites (SNSs) is to connect people within various networks of relationships such as family, friends in addition to efficiently allowing a new tie-up with acquaintances and strangers. As SNSs are the potential belvederes to influence others, the spectrum of self-presentation behaviours and the perfectionistic attitudes behind that may assume the importance. Perfectionistic Self-Presentation is a major constituent of young people's identity development and may intensify during the transition to college, as a need arises to redefine themselves with new people (Yang & Brown, 2016). It is also a dimension related to impression management (Hewitt et al., 2003) in which people interact with others typically representing a favourable and idealistic portrayal of one's self (Baumeister & Leary, 1995; Goffman, 1978). Earlier research also discussed that perceived perfection demanded from others and concealing perceived imperfection went hand in hand with personality pathology (Hewitt et al., 2011). The study also explained that insisting on perfection from others and oneself is not entirely unrelated to personality pathology. The heights of these expected perfections are unfathomable. What happens if there happens to be a never-ending perceived failure to achieve high standards? Maintaining and sustaining perfection on any platforms including social media can be capable of leading to negative mental health which may further lead to suicide (Roxborough et al., 2012). It is observed from the previous literature that, greater levels of narcissism coupled with lessened self-esteem increased the frequency of online activities and the associated self-promotional behaviours (Mehdizadeh, 2010). The performance of displaying autobiographic descriptions flamboyantly has become a recent trend and a frequent portrayal of 'ideal self' is evident among a few users of social media. The anonymous social media arena has turned into a royal road for many trivial friendships with a tyranny of self-promotions and false-identity constructions. (Buffardi & Campbell, 2008; Zhao et al., 2008). Along with the inflated grandiosity, there is an implicit failure of self-constructs (i.e., self-esteem) which is equally responsible for the development of perfidious identity. The constant interplay between narcissism and dismayed self-esteem is collectively leading to the representation of perfectionistic self-presentation in social media. Interestingly, this phenomenon is highly noticed in an online setup rather than in a real-life scenario because of varied reasons: (1) Anonymity; (2) Limited chance of confrontation; (3) Availability of tools that can help to depict an ideal-self (i.e., photo editors) and many more. The present research tries to explore the aforementioned factors in the realm of social media behaviour and the epicentre lies in exploring the influence of narcissism, self-esteem and intense social media usage on perfectionistic

self-presentation behaviour among the populace. Furthermore, this research also stresses upon the noticeable paradigm shift that has been happening since the inception of Instagram which is sequentially leading to the possible decline of the conventional Facebook domain. Though the latter media is still working at its best, the reciprocation of the above discussed psychological constructs is not perspicuously evident as compared to its counterpart (i.e., Instagram). Thus, stratification is made in the present study, analysing the relationship between the constructs on both Facebook and Instagram usage. Altogether, to understand the entire phenomenon in a better way, the study tries to answer two research questions: (1) Do narcissism, self-esteem and intense social media usage (i.e., Instagram and Facebook) predict perfectionistic self-presentation behaviour; (2) Does Instagram intensity predicts perfectionistic self-presentation better than Facebook intensity.

METHOD

Participants

The participants were college students falling within the age of 18 to 24 years, pursuing their masters/graduation in different colleges of India. The survey was distributed to 578 college students among them 221 were males (38.3%), 353 were females (61.09%), and 4 participants did not prefer to disclose their gender. By using the screening questions, it was found that 231 participants were the predominant users of Instagram and 346 of them were using Facebook the most. The majority of the participants belonged to urban parts of India who constituted nearly 90% of the overall sample size.

Measures

Facebook Intensity Inventory (Ellison et al., 2007)

The eight items scale was used to measure the participant's active engagement and emotional connection with Facebook. The questionnaire adopted a Five Point Likert Scale (1=strongly disagree and 5=strongly agree). The scale has a strong reliability value, reaching the Cronbach's Alpha of 0.83 (Pettijohn II, T. F., LaPiene, K. E., Pettijohn, T. F., & Horting, A. L., 2012) and in the present study also ($\alpha=0.87$, $N=347$). The same questionnaire was modified to assess Instagram intensity as well. However, wordings of each item was retained as it was in the original scale and the Cronbach's alpha was found to be very high ($\alpha=0.89$, $N=231$).

Narcissistic Personality Inventory or NPI-16 (Ames et al., 2006)

The 16-items scale of narcissism originally had 40 items. The questionnaire employs the forced-choice method of giving a response and measures subclinical narcissism rather than an underlying narcissistic personality disorder. Though there is a marked difference in the reliability strength between 40-item ($\alpha=0.84$) and the 16-item scales ($\alpha=0.72$) scale, the two measures meet at $r=0.90$ (Mehdizadeh, 2010).

The Perfectionistic Self-Presentation Scale (Hewitt et al., 2003)

This is a 27 items scale that measures the interpersonal expression of perfectionistic behaviour. Participants respond on Seven-Point Likert Scale. The questionnaire has adequate validity and reliability as it is tested on varied backgrounds with diverse constructs ((Hewitt et al., 2011; Mackinnon & Sherry, 2012).

Self-Esteem Scale (Rosenberg, 1965)

This 10 items scale is one of the most used psychological tools in the world which assesses the positive and negative feelings about the self. The responses are given on a Four Point Likert scale ranging from "strongly disagree" to "strongly agree." Though it has been nearly five and a half decades, the scale is immensely used today for its appropriate validity and reliability (García et al., 2019; Rizwan et al., 2012; Sinclair et al., 2010).

Procedure

College Students were recruited for the study based on whether they were having an active Facebook and Instagram account. The responses were collected via Google forms and the consent letter was mentioned at the beginning of the survey. Following their consent, participants were administered five different sections of the questionnaire which assessed all the aforementioned variables with the required demographic details. The present research explains the social media behaviour of users with two different models, considering the Instagram users and Facebook users separately. Responses of the participants were coded in Excel and statistical analysis was done with the help of SPSS 23.0.

RESULTS

Table 2 presents the descriptive statistics and correlation analysis of the constructs. It is evident from Table 2 that, Instagram Intensity was positively related to perfectionistic self-presentation and the relationship was significant ($r=0.18$, $p<0.05$). However, it is correlated negatively with self-esteem and positively with Narcissism, but neither of the relationships was significant. Perfectionistic self-presentation was positively correlated with narcissism ($r=0.27$, $p<0.05$). It is also found that perfectionistic self-presentation was negatively correlated with self-esteem ($r=-0.28$, $p<0.05$), given that both the relationships were significant.

Table 1. Demographic details of the participants

Demographic detail	Groups	N	%
Gender	Males	221	38.3
	Females	353	61.09
	Prefer not to say	04	0.0057
SNS used	Only Facebook	0	0%
	Only Instagram	231	66.6%
	Both Facebook and Instagram	347	100%
Place of birth	Urban	440	76
	Rural	138	24
Current residence	Urban	520	89.6
	Rural	58	10.4
Total		578	100

Table 2. Descriptive statistics and correlation between the constructs among Instagram users

Construct	r				M	SD	Z _{skewness}	Z _{kurtosis}
	1	2	3	4				
1. INI	-	-	-	-	18.8	5.9	-0.64	0.15
2. NARC_II	0.04	-	-	-	3.9	2.7	0.68	0.07
3. SES_II	-0.12	0.09	-	-	27.9	4.3	0.50	-0.03
4. PSPS_II	0.18**	0.27**	-0.28**	-	115.9	28	-0.41	0.27

Note: N=231 ** $p<0.05$, INI=Instagram intensity; NARC_II= Narcissism with respect to Instagram; SES_II= Self-esteem with respect to Instagram; PSPS_II= Perfectionistic self-presentation with respect to Instagram.

Table 3 represents a 3-Step Hierarchical Multiple Regression Analysis was performed to investigate, whether the addition of different constructs accounted for the change in variance of the preceding predictors. INI was the predictor at step 1, NARC_II was entered at step 2 and finally, SES_II was added at the last step.

At step 1, INI significantly explained 3% of the total variance (adjusted R^2) on PSPS_II ($R^2 = 0.034$, $F(1, 229) = 8.139$, $p < 0.01$) and it successfully predicted PSPS_II ($\beta = 0.185$, $p < 0.01$). The addition of NARC_II at step 2 significantly improved the prediction with 9.6% of the total variance on PSPS_II ($R^2 = 0.104$, $F(2, 228) = 13.165$, $p < 0.001$) and the change in variance was significant ($\Delta R^2 = 0.069$, $F \text{ change}(1, 228) = 17.601$, $p < 0.001$).

At Step 3, the addition of SES_II once again significantly explained an overall 18% (adjusted R^2) of variance on PSPS_II ($R^2 = 0.189$, $F(3, 227) = 17.682$, $p < 0.001$), and the change was significant, ($\Delta R^2 = 0.086$, $F(1, 227) = 24.054$, $p < 0.001$).

Table 4 presents the descriptive statistics and correlation analysis of the constructs. It is very evident that Facebook intensity was only correlated with self-esteem ($r = 0.10$, $p > 0.05$) and was not correlated with narcissism and perfectionistic self-presentation. Whereas, perfectionistic self-presentation was positively correlated with narcissism ($r = 0.22$, $p < 0.05$) and negatively correlated

Table 3. Values on stepwise regression concerning Instagram users

Variable	β	SE	t
Step 1			
Constant			22.161***
INI	0.185	0.236	2.853**
Step 2			
Constant			19.609***
INI	0.175	0.228	2.795**
NARC_II	0.263	0.513	4.195***
Step 3			
Constant			13.899***
INI	0.140	0.219	2.320*
NARC_II	0.293	0.491	4.878***
SES_II	-0.297	0.306	4.904***

Note: N=231 * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, INI=Instagram intensity; NARC_II= Narcissism with respect to Instagram usage; SES_II= Self-esteem with respect to Instagram usage; Dependent variable: PSPS_II= Perfectionistic self-presentation with respect to Instagram usage.

Table 4. Descriptive statistics and correlation between the constructs among Facebook users

Construct	r				Mean	SD	Z _{skewness}	Z _{kurtosis}
	1	2	3	4				
1. FBI	-	-	-	-	13.29	5.95	0.05	-0.19
2. NARC_FB	-0.09	-	-	-	4	2.69	0.72	0.41
3. SES_FB	0.10	0.17**	-	-	28.1	4.67	-0.17	0.32
4. PSPS_FB	-0.05	0.22**	-0.30**	-	113.2	23	-0.33	0.03

Note: N=347, ** $p < 0.05$, FBI=Facebook intensity; NARC_FB= Narcissism with respect to Facebook; SES_FB= Self-esteem with respect to Facebook; PSPS_FB= Perfectionistic self-presentation with respect to Facebook.

with self-esteem ($r=-0.30$, $p<0.05$). However, self-esteem was positively related to narcissism. All the aforementioned relationships were significant at a 95% confidence level.

Table 5 represents a 3-Step Hierarchical Multiple Regression Analysis was performed to investigate, whether the addition of different constructs accounted for the change in variance of the preceding predictors. FBI was the predictor at step 1, NARC_FB was entered at step 2 and finally, SES_FB was added at the last step.

At step 1, FBI significantly explained 0.5% of the total variance (adjusted R^2) on PSPS_FB ($R^2 = 0.03$, $F(1, 345) = 0.88$, $p>0.01$) and it did not predict PSPS_II ($\beta = 0.185$, $p<0.01$). Addition to this, the model fit was not significant enough to explain the influence of FBI on PSPS_FB.

The addition of NARC_FB at step 2 significantly improved the prediction with 22.7% of the total variance on PSPS_FB ($R^2 = 0.052$, $F(2, 344) = 9.35$, $p<0.001$) and the change in variance was significant ($\Delta R^2 = 0.049$, $F \text{ change}(1,344) = 17.78$, $p<0.001$). In the 2nd step, NARC_FB successfully predicted the PSPS_FB and this influence was significant.

At Step 3, the addition of SES_FB further improved the model by explaining an overall 41% (adjusted R^2) of variance on PSPS_FB ($R^2 = 0.172$, $F(3,343) = 23.704$, $p<0.001$), and the change was significant, ($\Delta R^2 = 0.120$, $F(1, 343) = 49.764$, $p<0.001$). Addition to this, SES_FB significantly predicted PSPS_FB along with NARC_FB.

DISCUSSION

‘I’m a bit of a perfectionist’, is a phrase we hear much too often. Be it at friends, self-introduction and even during job interviews when asked about individual introspected weakness. Social media is not devoid of witnessing such perfectionistic self-presentation behaviour often. The observation from this study showcases that perfectionistic self-presentation behaviour among both the users of Facebook and Instagram was significantly influenced by Instagram usage, narcissism and self-esteem. According to the World Health Organisation, perfectionism is increasing and is a hotbed for a surplus of mental health-related disorders. The young population has grown overly sensitive towards the standards they hold for themselves which sometimes may lead to harsh self-punishment

Table 5. Values on stepwise regression analysis concerning Facebook users

Variable	β	SE	t
Step 1			
Constant			38.273***
FBI	-0.050	0.208	-0.938
Step 2			
Constant			29.849***
FBI	-0.031	0.204	-0.581
NARC_FB	0.222	0.450	4.216***
Step 3			
Constant			21.156***
FBI	0.012	0.192	0.239
NARC_FB	0.286	0.428	5.706***
SES_FB	-0.354	0.247	-7.054***

Note: N=347 * $p<0.05$, ** $p<0.01$, *** $p<0.001$, FBI=Facebook intensity; NARC_FB= Narcissism with respect to Facebook usage; SES_FB= Self-esteem with respect to Facebook usage; Dependent variable: PSPS_FB= Perfectionistic self-presentation with respect to Facebook usage.

and constant corrections in their appearance, behaviour etc. and have started to harbour irrational beliefs and unrealistic expectations. Ranging from their academic performance, their appearance and the things they own 'should' be perfect following the pre-eminent contemporary myth that social media is reinforcing these young minds. When this tyranny of 'should' is not sufficed, it grows agitation, intolerance and other emotions mostly resulting in a lowered self-esteem and a heavy-duty practice of vicious self-punishment. The phenomenon where deflated self-esteem can direct towards perfectionistic behaviour at online platforms such as Instagram and Facebook is highly evident in this particular study. Social media, however, has become a clutch for those obsessed with winning the validation of others by continuous flawless performance. For the times when the standards are not met, it brings out perpetual anxiety, guilt and shame due to the perceived inadequacies.

The major outcome of the study proclaims the negative association between intense usage of Instagram and self-esteem. In other words, the study concludes that as self-esteem decreases in an individual, he/she would eventually try to restore this psychological imbalance in the form of an uphill and persistent involvement in SNSs. This negative association was also shared between self-esteem and self-presentation behaviours in the background of social media usage. As self-esteem decreases, through self-presentation behaviours, the person may intensify his/her usage on Instagram to regain self-esteem. In earlier research, self-presentation was portrayed as posting behaviour in which an individual's picture and caption posting were assessed and it was found that self-esteem was highly linked with posting goofy and filtered photos (Hill & Denman, 2016). Still and all, few studies focus on StudiVZ and Facebook suggest there is no influence of self-esteem on self-presentation (Krämer & Winter, 2008). However the literature about Instagram is way too less and the present study supports the idea of online communities being the greater platforms to showcase self-presentation and other identity construction behaviours (Mehdizadeh, 2010).

When studying narcissism on social media, plenty of literature exists supporting its association with the intense use of SNSs and self-presentation behaviours (Dumas et al., 2017; Sheldon & Bryant, 2016). Paramboulakis, Skues, and Wise (2016) proclaimed in their research that vulnerable narcissism was better associated with Instagram intensity especially in certain behaviours like sending requests for followers. While, grandiose narcissism was highly associated with posting up pictures and captions on Instagram walls (Moon et al., 2016). Even though many of the users' accounts involve curated feeds of their brand whether it is fashion, food, art etc, the profiles on this platform involve the users uploading their self-portraits otherwise known as selfies which are the perfectionistic self-presentation behaviours (Goldberg, 2017; March & McBean, 2018; McCain et al., 2016).

CONCLUSION

Overall, the study observes all three constructs: self-esteem, narcissism and Instagram intensity having an influence on perfectionistic self-presentation on Instagram users, thus partially answering the first research question of the study. Moreover, Narcissism stands out to be the most significant positive predictor of perfectionistic self-presentation and self-esteem is observed to be the most significant negative predictor of perfectionistic self-presentation.

Narcissism and self-esteem are influencing the perfectionistic self-presentation among Facebook users but unlike in Instagram, the self-presentation behaviour is hardly influenced by their Facebook usage. Thus, the second research question is answered, concluding the fact that Instagram intensity greatly influences self-presentation rather than Facebook. Compared to Instagram, the intensity of usage is very less among Facebook users and the trend signifies the users preferring Instagram its conventional counterpart. One of the chief reasons for choosing one social medium over another could be the privacy it provides to its users, its popularity and the community it has formed. Shane-Simpson, Manago, Gaggi, and Gillespie-Lynch(2018) in their study found that Instagram was a popular medium among college students and the participants who preferred Facebook over Instagram were found to have reportedly lower levels of self-disclosure while having higher levels of bonding social capital

alluding to the nature of users on these platforms. Taking a slightly different sample than the usual youth with regards to online platforms.

Although there have been several studies done concerning social media behaviours in India, they often focus on addiction and influence among young users. However, the result of the present study mainly signifies SNSs are very dynamic and the preference of the users can be changed massively with the inclusion of the new platform. Instagram is a comparatively newer platform than its counterparts which can attract users to display certain behaviours. This study represents one of such trends where people are exhibiting perfectionistic self-presentation to regain their self-esteem on Instagram. With the rising photo-sharing and networking service, Instagram is receiving commendable attention more than any other online platform right at the moment and this study strongly welcomes researchers to explore more on psychological factors and behaviours associated with it.

REFERENCES

- Ahn, H., Kwolek, E. A., & Bowman, N. D. (2015). Two faces of narcissism on SNS: The distinct effects of vulnerable and grandiose narcissism on SNS privacy control. *Computers in Human Behavior*, 45, 375–381. doi:10.1016/j.chb.2014.12.032
- Ames, D., Rose, P., & Anderson, C. (2006). The NPI-16 is a short measure of narcissism. *Journal of Research in Personality*, 40(4), 440–450. doi:10.1016/j.jrp.2005.03.002
- 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. doi:10.1016/j.addbeh.2016.03.006 PMID:27072491
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529. doi:10.1037/0033-2909.117.3.497 PMID:777651
- 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. doi:10.1016/j.paid.2015.11.018
- Brown, R. P., & Zeigler-Hill, V. (2004). Narcissism and the non-equivalence of self-esteem measures: A matter of dominance? *Journal of Research in Personality*, 38(6), 585–592. doi:10.1016/j.jrp.2003.11.002
- Buffardi, L. E., & Campbell, W. K. (2008). Narcissism and Social Networking Web Sites. *Personality and Social Psychology Bulletin*, 34(10), 1303–1314. doi:10.1177/0146167208320061 PMID:18599659
- Campbell, W. K., Rudich, E. A., & Sedikides, C. (2002). Narcissism, self-esteem, and the positivity of self-views: Two portraits of self-love. *Personality and Social Psychology Bulletin*, 28(3), 358–368. doi:10.1177/0146167202286007
- Casale, S., Fioravanti, G., & Rugai, L. (2016). Grandiose and Vulnerable Narcissists: Who Is at Higher Risk for Social Networking Addiction? *Cyberpsychology, Behavior, and Social Networking*, 19(8), 510–515. doi:10.1089/cyber.2016.0189 PMID:27362922
- Denti, L., Barbopoulos, I., Nilsson, I., Holmberg, L., Thulin, M., Wendeblad, M., Andén, L., & Davidsson, E. (2012). *Sweden's largest Facebook study*.
- Dickinson, K. A., & Pincus, A. L. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. *Journal of Personality Disorders*, 17(3), 188–207. doi:10.1521/pedi.17.3.188.22146 PMID:12839099
- Dumas, T. M., Maxwell-Smith, M., Davis, J. P., & Giulietti, P. A. (2017). Lying or longing for likes? Narcissism, peer belonging, loneliness and normative versus deceptive like-seeking on Instagram in emerging adulthood. *Computers in Human Behavior*, 71, 1–10. doi:10.1016/j.chb.2017.01.037
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook “Friends:” Social Capital and College Students’ Use of Online Social Network Sites. *Journal of Computer-Mediated Communication*, 12(4), 1143–1168. doi:10.1111/j.1083-6101.2007.00367.x
- Emmons, R. A. (1987). Narcissism: Theory and measurement. *Journal of Personality and Social Psychology*, 52(1), 11–17. doi:10.1037/0022-3514.52.1.11 PMID:3820065
- Forest, A. L., & Wood, J. V. (2012). When social networking is not working: Individuals with low self-esteem recognize but do not reap the benefits of self-disclosure on Facebook. *Psychological Science*, 23(3), 295–302. doi:10.1177/0956797611429709 PMID:22318997
- Gabriel, M. T., Critelli, J. W., & Ee, J. S. (1994). Narcissistic illusions in self-evaluations of intelligence and attractiveness. *Journal of Personality*, 62(1), 143–155. doi:10.1111/j.1467-6494.1994.tb00798.x
- García, J. A., Olmos, F. C., Matheu, M. L., & Carreño, T. P. (2019). Self-esteem levels vs global scores on the Rosenberg self-esteem scale. *Heliyon*, 5(3), e01378. doi:10.1016/j.heliyon.2019.e01378 PMID:30963120
- Goffman, E. (1978). *The presentation of self in everyday life*.
- Goldberg, G. (2017). Through the looking glass: The queer narcissism of selfies. *Social Media + Society*, 3(1), 2056305117698494. doi:10.1177/2056305117698494

- 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*, 14(1–2), 79–83. doi:10.1089/cyber.2009.0411 PMID:21329447
- Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *The American Psychologist*, 35(7), 603–618. doi:10.1037/0003-066X.35.7.603
- Harvey, J. H., & Weary, G. (1984). Current issues in attribution theory and research. *Annual Review of Psychology*, 35(1), 427–459. doi:10.1146/annurev.ps.35.020184.002235 PMID:19400623
- Heatherston, T. F., & Wyland, C. L. (2003). *Assessing self-esteem*.
- Heine, S. J., Takemoto, T., Moskaleiko, S., Lasaleta, J., & Henrich, J. (2008). Mirrors in the head: Cultural variation in objective self-awareness. *Personality and Social Psychology Bulletin*, 34(7), 879–887. doi:10.1177/0146167208316921 PMID:18453391
- Hewitt, P. L., Blasberg, J. S., Flett, G. L., Besser, A., Sherry, S. B., Caelian, C., Papsdorf, M., Cassels, T. G., & Birch, S. (2011). Perfectionistic self-presentation in children and adolescents: Development and validation of the Perfectionistic Self-Presentation Scale—Junior Form. In *Psychological Assessment*, 23(1, pp. 125–142). American Psychological Association. doi:10.1037/a0021147
- Hewitt, P. L., Flett, G. L., Sherry, S. B., Habke, M., Parkin, M., Lam, R. W., McMurtry, B., Ediger, E., Fairlie, P., & Stein, M. B. (2003). The interpersonal expression of perfection: Perfectionistic self-presentation and psychological distress. In *Journal of Personality and Social Psychology*, 84(6), 1303–1325). American Psychological Association. doi:10.1037/0022-3514.84.6.1303
- Hill, A., & Denman, L. (2016). Adolescent Self Esteem and Instagram: An Examination of Posting Behavior. *Concordia Journal of Communication Research*, 3(1), 4. doi:10.54416/NTGE5234
- Hu, Y., Manikonda, L., & Kambhampati, S. (2014). What we instagram: A first analysis of instagram photo content and user types. *Eighth International AAAI Conference on Weblogs and Social Media*. AAAI. doi:10.1609/icwsm.v8i1.14578
- Krämer, N. C., & Winter, S. (2008). Impression management 2.0: The relationship of self-esteem, extraversion, self-efficacy, and self-presentation within social networking sites. *Journal of Media Psychology*, 20(3), 106–116. doi:10.1027/1864-1105.20.3.106
- Landsverk, K. H. (2014). *The instagram handbook* (2014 edition). PrimeHead Limited.
- Mackinnon, S. P., & Sherry, S. B. (2012). Perfectionistic self-presentation mediates the relationship between perfectionistic concerns and subjective well-being: A three-wave longitudinal study. *Personality and Individual Differences*, 53(1), 22–28. doi:10.1016/j.paid.2012.02.010
- March, E., & McBean, T. (2018). New evidence shows self-esteem moderates the relationship between narcissism and selfies. *Personality and Individual Differences*, 130, 107–111. doi:10.1016/j.paid.2018.03.053
- Mazlish, B. (1982). American narcissism. *The Psychohistory Review*.
- McCain, J. L., Borg, Z. G., Rothenberg, A. H., Churillo, K. M., Weiler, P., & Campbell, W. K. (2016). Personality and selfies: Narcissism and the Dark Triad. *Computers in Human Behavior*, 64, 126–133. doi:10.1016/j.chb.2016.06.050
- McCain, J. L., & Campbell, W. K. (2018). Narcissism and social media use: A meta-analytic review. *Psychology of Popular Media Culture*, 7(3), 308–327. doi:10.1037/ppm0000137
- Mehdizadeh, S. (2010). Self-Presentation 2.0: Narcissism and Self-Esteem on Facebook. *Cyberpsychology, Behavior, and Social Networking*, 13(4), 357–364. doi:10.1089/cyber.2009.0257 PMID:20712493
- Miller, J. D., Hoffman, B. J., Gaughan, E. T., Gentile, B., Maples, J., & Keith Campbell, W. (2011). Grandiose and Vulnerable Narcissism: A Nomological Network Analysis. *Journal of Personality*, 79(5), 1013–1042. doi:10.1111/j.1467-6494.2010.00711.x PMID:21204843
- Moon, J. H., Lee, E., Lee, J.-A., Choi, T. R., & Sung, Y. (2016). The role of narcissism in self-promotion on Instagram. *Personality and Individual Differences*, 101, 22–25. doi:10.1016/j.paid.2016.05.042

Nelson, M. C. (1977). *The narcissistic condition: A fact of our lives and times*.

Paramboukis, O., Skues, J., & Wise, L. (2016). An exploratory study of the relationships between narcissism, self-esteem and Instagram use. *Social Networking*, 5(2), 82–92. doi:10.4236/sn.2016.52009

Rizwan, M., Aftab, S., Shah, I., & Dharwarwala, R. (2012). Psychometric Properties of the Rosenberg Self-esteem Scale in Pakistan Late Adolescent. *The International Journal of Educational and Psychological Assessment*, 10, 125–138.

Roxborough, H. M., Hewitt, P. L., Kaldas, J., Flett, G. L., Caelian, C. M., Sherry, S., & Sherry, D. L. (2012). Perfectionistic self-presentation, socially prescribed perfectionism, and suicide in youth: A test of the perfectionism social disconnection model. *Suicide & Life-Threatening Behavior*, 42(2), 217–233. doi:10.1111/j.1943-278X.2012.00084.x PMID:22380005

Salim, F., Rahardjo, W., Tanaya, T., & Qurani, R. (2017). Are self-presentation of Instagram users influenced by friendship-contingent self-esteem and fear of missing out? *Makara Hubs Asia*, 21(2), 70–82. doi:10.7454/mssh.v21i2.3502

Salomon, D. (2013). Moving on from Facebook: Using Instagram to connect with undergraduates and engage in teaching and learning. *College & Research Libraries News*, 74(8), 408–412. doi:10.5860/crln.74.8.8991

Shane-Simpson, C., Manago, A., Gaggi, N., & Gillespie-Lynch, K. (2018). Why do college students prefer Facebook, Twitter, or Instagram? Site affordances, tensions between privacy and self-expression, and implications for social capital. *Computers in Human Behavior*, 86, 276–288. doi:10.1016/j.chb.2018.04.041

Sheldon, P., & Bryant, K. (2016). Instagram: Motives for its use and relationship to narcissism and contextual age. *Computers in Human Behavior*, 58, 89–97. doi:10.1016/j.chb.2015.12.059

Sinclair, S., Blais, M., Gansler, D., Sandberg, E., Bistis, K., & Locicero, A. (2010). Psychometric Properties of the Rosenberg Self-Esteem Scale: Overall and Across Demographic Groups Living Within the United States. *Evaluation & the Health Professions*, 33(1), 56–80. doi:10.1177/0163278709356187 PMID:20164106

Snyder, M. L., Stephan, W. G., & Rosenfield, D. (1978). Attributional egotism. *New Directions in Attribution Research*, 2, 91–117.

Steinfeld, 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*, 29(6), 434–445. doi:10.1016/j.appdev.2008.07.002

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(5), 584–590. doi:10.1089/cpb.2006.9.584 PMID:17034326

Weiten, W. (2004). *Psychology: Themes and variations Belmont*. Wadsworth, Thomson Learning.

Wink, P. (1991). Two faces of narcissism. *Journal of Personality and Social Psychology*, 61(4), 590–597. doi:10.1037/0022-3514.61.4.590 PMID:1960651

Wright, A. G. C., & Edershire, E. A. (2018). Issues resolved and unresolved in pathological narcissism. *Current Opinion in Psychology*, 21, 74–79. doi:10.1016/j.copsyc.2017.10.001 PMID:29059578

Yang, C., & Brown, B. B. (2016). Online self-presentation on Facebook and self-development during the college transition. *Journal of Youth and Adolescence*, 45(2), 402–416. doi:10.1007/s10964-015-0385-y PMID:26534776

Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on Facebook: Digital empowerment in anchored relationships. *Computers in Human Behavior*, 24(5), 1816–1836. doi:10.1016/j.chb.2008.02.012

Anantha Ubaradka is a diligent researcher with experience in conducting quantitative research, especially in the fields of applied social psychology, cyberpsychology and applied cognition. She has meticulously investigated diverse avenues to achieve desired outcomes and is self-motivated in data analysis, obtaining expectation-exceeding results through modern tools and software.

Ayesha Fathima pursued psychology academically for 5 years (2016-2021). During that time, she had the wonderful opportunity to collaborate and work on several research projects with fellow peers and professors. Taking that passion for research and psychology ahead, she is currently in the field of User Experience (UX) trying to help companies better understand and serve their users.

Shreya Batra works with children with special needs in Bangalore, India. She has worked as a guest lecturer for organisations like Indian Navy, Symbiosis College and other private organisations. She likes research and enjoys exploring topics like social media, self-esteem and therapy. She graduated from Kristu Jayanti College, Autonomous in the year 2021 with a Masters degree in Psychology (Clinical) and is currently pursuing her post graduate diploma in psychological counselling.