

Selfitis, Narcissism, and Emotional Intelligence: Eliciting the Interrelation among Medical Students in Kolkata, West Bengal

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Abstract

Introduction: Selfitis, the obsessive behavior to take and share one's own photographs, is a popular activity among young adults. It is growing with the availability of cheap data and free social network services. Scientific literature considers it as an effort to emphasize self-importance in the context of inadequate social support. The aim was to assess the burden of selfitis among medical students and to identify factors associated with it. This cross-sectional study was conducted among 166 students of a medical college in Kolkata, from December 2019 to March 2020. **Materials and Methods:** The level of selfitis was assessed using the Selfitis Behavior Scale (SBS). Narcissism was evaluated using Narcissistic Personality Inventory-16 and emotional intelligence (EI) was assessed using the mind tool EI questionnaire. Quantitative data were expressed as mean (\pm standard deviation) or median (\pm interquartile range) and qualitative data were expressed in frequency and percentage. Binary logistic regression was done with the level of selfitis as a dependent variable and narcissistic trait, EI, and other sociodemographic, individual characteristics as the independent variable. **Results:** Around one-third (35.5%) of the respondents had borderline selfitis according to SBS. None of the respondents had acute or chronic selfitis. Perceived presence of recreational activity (adjusted odds ratio [AOR] - 15.71), availability of pocket money (AOR - 69.42), family support (AOR - 6.30), and narcissistic trait (AOR - 3.94) were positively associated with borderline selfitis. **Conclusions:** Around one-third had borderline selfitis. Narcissism and lack of perceived family support were found to be associated with it.

Keywords: Emotional intelligence, medical students, narcissism, selfitis, social media, social support

INTRODUCTION

The story of “selfitis” begins with the publication of a hoax article by Adobo Chronicles in 2014 claiming that the American Psychological Association (APA) decided “selfitis” as a mental disorder and defined it as “the obsessive compulsive desire to take photos of one's self and post them on social media as a way to make up for the lack of self-esteem and to fill a gap in intimacy.”^[1] Although APA categorically denied it, Balakrishnan and Griffiths in 2017 explored the concept and developed a scale to measure “Selfitis” related behavior.^[2]

As per the Oxford English Dictionary, “Selfie” is a “photograph that one has taken of oneself, typically with a smartphone or webcam and shared via social media.” It is a quite popular activity among young adults.^[3,4] Availability of handheld devices and the Internet at comparatively low prices and free

access to social media might have accelerated the growing trend of taking “selfie” among the younger generations.^[4]

However, taking selfie is not just taking a photograph, but an activity to emphasize one's individuality and self-importance, particularly for those who do not have adequate social support.^[2,5-8] Emotional intelligence (EI), the ability to understand and respond appropriately to his or her own and other's emotions, might be helpful in dealing with this behavior.^[9] It is also reported to be associated with the “narcissistic” personality trait.^[2,3,7,8,10-13] Among other variables, several studies found female gender to be a significant factor.^[5,14,15]

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Once developed, selfitis has the propensity to affect the daily activities of an individual.^[16] This is particularly pertinent for MBBS students. Any disruption during this period might not only affect their individual academic development and career but also might affect their future role in the health-care delivery system.^[17]

Despite such perceived significance related to health-care services, very few studies actually have been conducted on selfitis and its association with narcissism and EI.

Aim and objectives

- To assess the burden of selfitis among medical students in Kolkata, West Bengal
- To find the association, if any, between selfitis and selected background characteristics of the study participants.

MATERIALS AND METHODS

Study type, design, setting, and population

A descriptive, cross-sectional study was conducted from December 2019 to March 2020 among the students who were enrolled in the MBBS course in a medical college in Kolkata, West Bengal.

Sample size and sampling

Earlier studies had reported different levels of selfitis – ranging from 31% to 88% using different instruments in different settings.^[17-19] Due to this heterogeneity, the sample size was calculated considering the proportion of subjects with selfitis as 50%. This is likely to provide the largest sample size with a defined absolute precision. Assuming 10% absolute precision and 20% nonresponse rate, the final sample size becomes 110. Excluding the year-batches appearing university examination during the study period, 2 year-batches (semesters 1 and 3) were selected randomly for the study. Students without a smartphone or without Internet access in their gadgets were excluded from the study. All students enrolled in those 2 year-batches were approached for participation.

Methods of data collection

The study was conducted in accordance with the ethical principles laid down in the Declaration of Helsinki (2013). Following approval from the technical advisory committee and institutional ethics committee of the institute (vide memo no. CMSDH/IEC/162/01-2020; date: January 11, 2020), students of these two batches were shared an online questionnaire. At the beginning of the questionnaire, a consent form was there. They have to formally agree before filling the questionnaire properly. This questionnaire consisted of items on background characteristics of the students (age, gender, subjective socioeconomic status, perceived family support, and perceived adequacy of pocket money received) as well as standardized and validated questionnaires to assess the level of selfitis, narcissism, and EI. Due to the difficulty of students in reporting parental income, students were asked to rate their subjective socioeconomic status in a 5-point Likert scale, the options being poor, almost poor, just getting by,

living comfortably, and very well off.^[20] Respondents were also asked to rate their perception regarding their family support and adequacy of pocket money using dichotomous (Yes-No) options. The level of selfitis was assessed using the hexadimensional Selfitis Behavior Scale (SBS), a 20 item questionnaire proposed by Balakrishnan and Griffiths in 2018.^[2] Each item was rated in a five-point Likert scale where 1 signified strongly disagree and 5 strongly agree. The total score of SBS ranges from 20 to 100. This was further categorized as borderline, acute, and chronic selfitis with scores ranging 40–60, 60–80, and 80–100, respectively. Narcissistic personality trait was assessed using Narcissistic Personality Inventory-16 (NPI-16), a 16-item questionnaire with a possible score of zero or one for each question.^[21] The minimum obtainable score was 0 and maximum was 16; score >8 was considered as the cutoff for the narcissistic trait. Similarly, for evaluating EI, a 15-item scale was used.^[22] Each item was rated on a 5-point Likert scale. The lowest possible score was 15 and the highest possible score was 75. Scores below 35 were considered as low EI, 35–55 are considered to have acceptable EI, and scores above 55 are considered as a measure of emotionally intelligent person.

Data management and analysis

Responses of the online questionnaire were downloaded in a spreadsheet format. It was checked for duplicate or multiple entries from the submitted e-mail address. The data were then checked for consistency and prepared for analysis in GNU PSPP, version 1.2.0 (MA, Boston (USA): Free Software Foundation, Inc. 2020), an open source statistical software.^[23] Quantitative data were expressed as mean (\pm standard deviation) or median (\pm interquartile range[IQR]); depending on the distribution of the variable. Categorical data were expressed in frequency and percentage. Bivariate correlation between the scores was assessed using Pearson's correlation coefficient (r). Association of borderline selfitis with selected background characteristics of study participants was assessed using bivariate and multivariate binary logistic regression with no selfitis as reference.

RESULTS

Out of the 206 students in the 2 year-batches, 176 students were eligible for the study as per the inclusion and exclusion criteria. About 166 students ultimately completed the questionnaire; 3 students refused consent, and others did not respond in spite of three reminder e-mails. Hence, the response rate was 96.0%.

Among the respondents, 56.6% were from 1st semester (i.e., 2019 to 2020 batch). More than half of the participants were male (59.6%) and aged more than 19 years (56.1%). The mean age of the participants was 19.8 (\pm 1.2) years. Majority of the study participants (78.9%) reported that their families were living comfortably. All respondents had at least one social media account. The median (\pm IQR) number of social media accounts was 2.0 (\pm 1.0). Out of the various social media services available, WhatsApp was the most popular among

the respondents (98.1%), followed by Facebook (72.9%) and Instagram (51.9%) [Table 1].

According to SBS, 35.5% of respondents had borderline selfitis and the rest were free from selfitis; no respondents had acute or chronic selfitis. Regarding specific items of SBS, the highest proportion of respondents (24, 14.5%) strongly agreed to the item “Taking selfie provides better memories about the occasion and the experience,” followed by “I feel confident when I take a selfie” (15, 9.0%) [Table 2].

Around one-fifth of the participants (21.1%) had narcissistic traits. Only 23.5% of the respondents had low EI and the rest (76.5%) had acceptable EI. The total score obtained in NPI-16 and SBS was positively correlated ($r = 0.173$; $P = 0.026$). However, the EI had no significant correlation with either NPI-16 or SBS.

Bivariate analysis revealed that borderline selfitis was associated with the presence of perceived absence of recreational facility ($P < 0.001$), perceived adequacy of pocket money ($P = 0.001$), perceived lack of support from family members ($P < 0.001$), social media presence ($P = 0.037$), and presence of narcissistic trait ($P = 0.009$). Age, gender, perceived financial status, and EI of the respondents did not have any statistically significant association with borderline selfitis compared to the no selfitis group. Even after adjustment of age and gender of the respondents in the multivariate binary logistic regression model with no selfitis group as reference, the factors with statistically significant association remain unaltered. Nagelkerke R^2 value of the binary logistic regression model was 0.57 [Table 1].

DISCUSSION

Based on the availability of published literature, this cross-sectional study may be the first attempt to assess the level of selfitis among medical students in the eastern part of India using SBS. This study revealed that none of the students had acute or chronic selfitis. Almost one in every three students had borderline selfitis. Such an absence of acute or chronic selfitis is in contrast to global as well as national findings.^[24,25] This difference might be due to the difference in the study setting. The difficulty quotient of the MBBS entrance examination and MBBS curricula probably protected these students from the clutch of this addictive behavior. Findings from Indian study done among medical students are in accordance with this finding.^[18,26]

Unlike other studies, the present study failed to reveal any association of level of selfitis with age and gender of the respondents.^[3,4,14,15] The lack of association of age with the level of selfitis might be explained due to the homogeneity of the respondents with respect to their age. Studies have found that females are more likely to take and share selfie in the social media.^[15] However, in this study, the association between gender and selfitis could not be elicited. A similar finding was reported by Varma *et al.*^[26]

Scholars have argued that if an individual feels that he/she is being ignored or not getting enough support from his/her family members, he/she may be more prone to seek measures for elevating self-esteem. Acknowledgment from the peers received after posting selfies in social media might be helpful in instilling the sense of self-importance of an individual. It

Table 1: Association of the background characteristics of the respondents with their level of selfitis (n=166)

	Borderline selfitis (n=59)	OR (CI)	AOR (CI)
Age (years)			
≤19 (n=73)	24 (32.9)	1.13 (0.50-2.55)	1.15 (0.39-3.40)
19–21 (n=50)	22 (44.0)	1.81 (0.77-4.27)	1.19 (0.36-3.86)
≥21 (n=43)	13 (30.2)	Reference	Reference
Gender			
Female (n=67)	24 (35.8)	0.98 (0.51-1.87)	0.91 (0.36-2.29)
Male (n=99)	35 (35.4)	Reference	Reference
Presence of perceived recreational facility			
Inadequate (n=70)	44 (62.9)	9.09 (4.35-20.00)	15.71 (5.17-47.72)
Adequate (n=96)	15 (15.6)	Reference	Reference
Perceived adequacy of pocket money			
Inadequate (n=14)	11 (78.6)	7.69 (2.13-33.33)	69.42 (13.45-358.19)
Adequate (n=152)	48 (31.6)	Reference	Reference
Perceived family support			
Inadequate (n=27)	22 (81.5)	12.50 (4.35-33.33)	6.30 (1.77-22.38)
Adequate (n=139)	37 (26.6)	Reference	Reference
Narcissistic trait			
Absent (n=131)	40 (30.5)	Reference	Reference
Present (n=35)	19 (54.3)	2.70 (1.26-5.79)	3.94 (1.29-12.04)
EI			
Low EI (n=39)	15 (38.5)	0.84 (0.40-1.78)	1.12 (0.34-3.72)
Acceptable EI (n=127)	44 (34.6)	Reference	Reference

OR: Odds ratio, AOR: Adjusted odds ratio, CI: Confidence interval, EI: Emotional intelligence

Table 2: Distribution of responses to the Selfitis Behavior Scale (n=166)

Questions	Responses				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. Taking selfies gives me a good feeling to better enjoy my environment	65 (39.2)	36 (21.7)	43 (25.9)	18 (10.8)	4 (2.4)
2. Sharing my selfies creates healthy competition with my friends and colleagues	111 (66.9)	27 (16.3)	16 (9.6)	12 (7.2)	0 (0)
3. I gain enormous attention by sharing my selfies on social media	82 (49.4)	58 (34.9)	17 (10.2)	5 (3.0)	4 (2.4)
4. I am able to reduce my stress level by taking selfies	111 (66.9)	41 (24.7)	9 (5.4)	5 (3.0)	0 (0)
5. I feel confident when I take a selfie	53 (31.9)	50 (30.1)	37 (22.3)	11 (6.6)	15 (9.0)
6. I gain more acceptance among my peer group when I take selfie and share it on social media	84 (50.6)	35 (21.1)	32 (19.3)	13 (7.8)	2 (1.2)
7. I am able to express myself more in my environment through selfies	104 (62.7)	29 (17.5)	23 (13.9)	10 (6.0)	0 (0)
8. Taking different selfie poses helps increase my social status	125 (75.3)	24 (14.5)	16 (9.6)	0 (0)	1 (0.6)
9. I feel more popular when I post my selfies on social media	112 (67.5)	38 (22.9)	11 (6.6)	5 (3.0)	0 (0)
10. Taking more selfies improves my mood and makes me feel happy	96 (57.8)	35 (21.1)	21 (12.7)	13 (7.8)	1 (0.6)
11. I become more positive about myself when I take selfies	94 (56.6)	49 (29.5)	22 (13.3)	1 (0.6)	0 (0)
12. I become a strong member of my peer group through selfie postings	101 (60.8)	39 (23.5)	21 (12.7)	5 (3.0)	0 (0)
13. Taking selfies provides better memories about the occasion and the experience	48 (28.9)	11 (6.6)	36 (21.7)	47 (28.3)	24 (14.5)
14. I post frequent selfies to get more “likes” and comments on social media	119 (71.7)	32 (19.3)	9 (5.4)	5 (3.0)	1 (0.6)
15. By posting selfies, I expect my friends to appraise me	91 (54.8)	29 (17.5)	25 (15.1)	14 (8.4)	7 (4.2)
16. Taking selfies instantly modifies my mood	96 (57.8)	38 (22.9)	26 (15.7)	5 (3.0)	1 (0.6)
17. I take more selfies and look at them privately to increase my confidence	91 (54.8)	48 (28.9)	17 (10.2)	10 (6.0)	0 (0)
18. When I don't take selfies, I feel detached from my peer group	125 (75.3)	26 (15.7)	5 (3.0)	9 (5.4)	1 (0.6)
19. I take selfies as trophies for future memories	69 (41.6)	15 (9.0)	23 (13.9)	56 (33.7)	3 (1.8)
20. I use photo editing tools to enhance my selfie to look better than others	123 (74.1)	12 (7.2)	26 (15.7)	3 (1.8)	2 (1.2)

also provides a feeling of being socially connected. In this study, students having a perceived lack of family support and perceived inadequacy of pocket money were at higher risk of having borderline selfitis. The same is true if one is unable to express oneself through other recreational activities. The absence of recreational activities might dampen the self-esteem of an individual.^[27] The study revealed that borderline selfitis was significantly associated with perceived inadequacy of recreational facility.

Borderline selfitis was more likely to be present among narcissistic individuals. This finding is iterated by various hypotheses and studies.^[3,7,8,10-13,28] Some authors have proposed that taking and sharing of the selfie provide narcissistic individuals an avenue to fulfill their grandiose view of themselves.^[9,29,30] The findings of the present study concurred with this proposition. EI provides the ability to deal with stressful environmental challenges.^[31] In this study, no statistically significant association was found between EI and borderline selfitis (adjusted odds ratio [AOR] = 0.89 [0.27, 2.95]). This is in contrast to other studies which had reported a relationship between EI and selfitis.^[9,32] It might be due to the relative homogeneity of the present study group in relation to EI. Therefore, further studies are warranted to explore this issue in depth.

CONCLUSIONS

This study revealed that none of the respondents had acute or

chronic selfitis and only one-third of students had borderline selfitis. Perceived lack of social support, financial inadequacy, absence of recreational facilities, as well as narcissistic trait were associated with borderline selfitis. However, evidence in favor of interrelation between selfitis and EI could not be elicited in this study.

Limitation of the study

The study was cross-sectional in design, and as a result, temporality between narcissism and selfitis could not be commented upon. Being self-reported, quality check during filling up of the questionnaire could not be ensured. Social desirability bias might creep in during filling up of the questionnaire, although anonymity might prevent this bias to a certain extent.

Relevance of the study

This study is one of the first attempts in assessing the level of selfitis among Indian medical students using the SBS. It highlights the fact that acute or chronic selfitis is not a health problem among the studied medical students at least in the current context. Further studies with a representative sample from different Indian medical institutes are required for the generalization of the finding.

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Conflicts of interest

There are no conflicts of interest.

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