

Assessment of selfie addiction among professional medical students of Rama Medical College Hospital and Research Centre, Mandhana, Kanpur

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Abstract

Introduction: Selfie is a self-portrait photograph, typically taken with a digital camera or camera phone held in the hand or supported by a selfie stick. Selfies are often shared on social networking services such as Facebook, Instagram and Twitter. Considering the relationship between personality and selfie-posting behaviors, the study was undertaken to determine the demographics and psycho-social effect of the selfie users, the frequency and nature, reasons and impact of selfies taken.

Methodology: It was a cross-sectional observational study conducted among 487 undergraduate medical students of all the batches of Rama Medical College & Research Centre, Mandhana, Kanpur. Out of total 481 enrolled medicos who were selfie users, 100 students were randomly selected by simple randomization method & were interviewed. Data collected and entered in Microsoft Excel sheet & were analyzed using SPSS version 21.

Results: Out of total 100 medicos, more (55%) were female & 45% were male. Majority of medicos 43% were interested in head & face selfie shot, out of this majority 72.1% were female & 27.9% were male students. Followed by Body shot 29%, female 69% & male 31% medicos. Minimum selfie shot 13% were with surrounding. There is a significant association between selfie type and gender (Chi-square value is 14.067 and $p=.003$). Maximum 47 % medicos were involved in average daily 4-6 frequency of taking selfie. Mood is altered depending on number of likes and comments on my selfie.

Conclusion: Based on the study it can be conclusively said that age and gender affects the number of selfies one clicks. Be it a behavioral change, peer pressure is a psychological phenomenon in which people do something primarily because other people are doing.

Keywords: Selfie, Narcissism, Social networking, Social Media.

Introduction

Selfies are intended to present a flattering image of the person, especially to friends whom the photographer expects to be supportive. A selfie⁽¹⁾ is a self-portrait photograph, typically taken with a digital camera or camera phone held in the hand or supported by a selfie stick. Selfies are often shared on social networking services such as Facebook, Instagram and Twitter. A selfie orchestrated during the 86th Academy Awards by host Ellen De Generes is the most retweeted image ever.^(2,3)

In India, BJP Prime Ministerial candidate Narendra Modi posted a selfie on Twitter after voting in Gandhi Nagar, India. The post became a major trending item on the micro-blogging platform 4.⁽⁸⁾ A photograph of Pope Francis with visitors to the Vatican was called an usie by The Daily Dot,^(5,6) and TMZ has used the term to describe a selfie taken of celebrity couple Justin Bieber and Selena Gomez.^(7,8) In April 2014, a man diagnosed with body dysmorphic disorder recounted spending ten hours a day attempting to take the "right" selfie, attempting suicide after failing to produce what he perceived to be the perfect selfie.⁽⁹⁾

Psychological studies conducted in 2015 among social media users suggested the relationship between selfie-posting behaviors and narcissism. Narcissism can be defined as inordinate fascination with oneself or excessive self-love means self-centeredness or

smugness or egocentrism.⁽¹⁰⁾ While Psychosocial means relating to the interrelation of social factors and individual thought and behavior.⁽¹¹⁾ Body dysmorphic disorder (BDD) is a mental disorder characterized by the obsessive idea that some aspect of one's own appearance is severely flawed and warrants exceptional measures to hide or fix it. In BDD's delusional variant, the flaw is imagined.^(12,13) A person who is so selfie-obsessed that they post copious amounts of selfies on their social media with no purpose other than to say "look at me!".⁽¹⁴⁾ A more recent study examining the relationship between personality and selfie-posting behaviors suggests that extroversion and social exhibitionism positively predict frequency of selfie posting, whereas self-esteem is generally unrelated to selfie-posting behaviors.⁽¹⁵⁾ Extraversion or extroversion means the act of directing one's interest outward or to things outside the self or the state of having thoughts and activities satisfied by things outside the self.⁽¹⁶⁾ Social exhibitionism means an act of social exposure or the act or practice of behaving so as to attract attention to oneself. (Medical Dictionary)

The first known selfie-related death occurred 15 March, 2014, when a man electrocuted himself on top of a train.⁽¹⁷⁾ 2014, 'The Year of the Selfie', was also the year Makati and Pasig, 'Selfie Capital of the World', saw their first selfie-related death when a 14 year old girl fell from the 3rd floor staircase landing to the

2nd.⁽¹⁸⁻²¹⁾ Even though a rage, the phenomenon of selfie taking has never been studied in India from a scientific perspective. There has been an exponential rise in selfie taking among youth that operates a smartphone.⁽²²⁾ Certain studies have reported selfie taking being linked to psychopathologies such as grandiosity, narcissism, and body dysmorphic disorder.⁽²³⁾

Grandiosity refers to an unrealistic sense of superiority- a sustained view of oneself as better than others that causes the narcissist to view others with disdain or as inferior- as well as to a sense of uniqueness: the belief that few others have anything in common with oneself and that one can only be understood by a few or very special people.⁽²⁴⁾ Considering the relationship between personality and selfie-posting behaviors, the study was undertaken to determine the demographics and psycho-social effect of the selfie users, the frequency and nature, reasons and impact of selfies taken.

Methodology

It was a cross-sectional observational study conducted among 487 undergraduate medical students

of all the batches of Rama Medical College & Research Centre, Mandhana, Kanpur. Out of total, 481 enrolled medicos who were selfie users, 100 students were randomly selected by simple randomization method & were interviewed. Out of selected 100 medicos, 45 medicos were found to be male & 55 were females. Semi-structured open & closed ended questionnaire were used as study tool. Questions were related to their overview about selfie, use of social media, frequencies of selfies, and their psychological aspects related to selfies. Age group of 17-26 years was taken in the study. People who did not make the cut-off for these age groups were excluded from the study. Verbal consent was taken from every individual before filling the questionnaire. Total duration of study was of 3 months in year 2013. All the participants were informed about right to quit at any time without need for any explanation. A socio-demographic proforma was designed to collect basic data relevant to the study and this along with all the scales were administered in a group setting in one session itself. Ethical clearance was taken from ethical committee of medical college. Data collected and entered in microsoft excel sheet & were analyzed using SPSS version 21.

Results

Table 1: Distribution of Selfie user medicos according to different age group

Age-group of Medicos	GENDER(n=100)				Total
	Male		Female		
	Number	Mean Age (in Yrs.)± SD	Number	Mean Age (in Yrs.) ± SD	
17-19yrs.	21(46.7%)	20.27±2.20	13(23.6%)	21.25±2.0	34(34.0%)
20-22 yrs	15(33.3%)		30(54.5%)		45(45.0%)
23-25 yrs	9(20.0%)		15(21.8%)		21(21.0%)
Total	45		55		100

The table 1 shows out of total 100 medicos, more (55%) were female & 45% were male. Out of total 34% medicos in 17-19yrs age group, male were more (46.7%) than female (23.6%) while in 20-22yrs age group out of total 45% (maximum) medicos, female (54.5%) were more than male (33.3%). Mean age of selfie user male medicos were 20.27 years ± Std. Deviation 2.20 while Mean age of selfie user female medicos were 21.25 years ± Std. deviation 2.0.

Table 2: Distribution of medicos according to Types of Selfie shot taken

Gender	Types of Selfie shot taken				Total
	Head/face shot	Body shot	with surroundings	with friends	
Male	12(27.9%)	20(69.0%)	8(61.5%)	5(33.3%)	45.0%
Female	31(72.1%)	9(31.0%)	5(38.5%)	10(66.7%)	55.0%
Total	43.00%	29.00%	13.00%	15.00%	100(100%)
Pearson Chi-Square =14.067 df = 3 p value = .003					

The table 2 shows majority of medicos 43% were interested in head & face selfie shot, out of this majority 72.1% were female & 27.9% were male students. Followed by Body shot 29%, female 69% & male 31% medicos. Minimum selfie shot 13% were with surrounding. Chi-square test was applied to see if there is any association between gender and types of selfie shot taken. Chi-square value is 14.067 and p = .003. This implies that there is a significant association between selfie type and gender. Females were more inclined to take head/face shot (72.1%) whereas 69% males took body shot.

Table 3: Distribution of Medicos according to Main reason of taking selfie

Main reason of taking selfie	Gender		Total
	Male	Female	
To send to friends	5(11.1%)	7(12.7%)	12(12.0%)
put on social media	8(17.8%)	9(16.4%)	17(17.0%)
To show people I have friends	3(6.7%)	4(7.3%)	7(7.0%)
due to boring	4(8.9%)	9(16.4%)	13(13.0%)
To share current lifestyle	13(28.9%)	12(21.8%)	25(25.0%)
For attention	2(4.4%)	3(5.5%)	5(5.0%)
Other Reasons	10(22.2%)	11(20.0%)	21(21.0%)
Total	45(100%)	55(100%)	100(100%)
Pearson Chi-Square = 1.763, df = 6 , p value = 0.940			

The table 3 shows distribution of medicos according to main reason of taking selfie. Majority of medicos 25% took selfie to share their current life-style followed by to put on social media(17%), to send to friends ((12%), due to boring 13% & minimum 5% for attention. The association between reasons for taking selfies and gender has been analyzed statistically by applying chi-square. The association is statistically not significant (p=0.940). Thus almost similar reasons were responsible for this phenomenon in both males and females.

Table 4: Distribution of Medicos according to Frequency of taking Selfie (average in a day)

Frequency of taking selfie	Gender		Total
	Male	Female	
1--3	25(55.6%)	6(10.9%)	31(31%)
4--6	16(35.6%)	31(56.4%)	47(47%)
7—9 or >	4(8.9%)	18(32.7%)	22(22%)
Total	45.00%	55.00%	100 (100%)
Pearson Chi-Square=24.587 , df = 2 , p value = 0.0001			

The table 4 shows distribution of medicos according to average daily frequency of taking selfie. Maximum 47% medicos were involved in average daily 4-6 frequency of taking selfie followed by 31% medicos with 1-3 frequency of selfie & minimum 22% medicos with 7-9 or > daily frequency of using selfie .There is an association between gender-wise distribution of of medicos and Frequency of taking selfie (average in a day) & was found to be statistically significant. (Pearson Chi-Square=24.587, df = 2, p value = 0.0001)

Table 5: Distribution of medicos according to impact of selfie*

Impact of Selfie	Yes	No
1. Selfies empower me	40%	60%
2. Create occasions to take more selfies	30%	70%
3. Usually spend more time taking selfies than I intend to	36%	64%
4. Force my friends to delete a group selfies where I am not looking good.	37%	63%
5. Take selfies only when I look good.	52%	48%
6. Spend some time before a mirror I click a selfie.	37%	63%
7. Clicking selfies has increased my admirers.	36%	64%
8. Ritual for me to click a selfie everytime I go out.	36%	64%
9. Mood is altered depending on number of likes and comments my selfie receives.	33%	67%
10. Group avoids me because of my selfie habit.	24%	76%
* % exceeds 100 due to Multiple Responses		

The Table 5 depicts the impact of selfies on medicos, 40% medicos say ' Yes' i.e., they are empowered by selfie, 30% students told that selfie Create occasions to take more selfies. 36% told that they usually spend more time in taking selfies than one intend to, 37% told that they force their friends to delete a group selfies where they are not looking good, 52% told that they take selfies only when look good. 33%

told that Mood is altered depending on number of likes and comments my selfie receives, 24% told that Group avoids them because of their selfie habit. 36% medicos told that ritual for them to click a selfie everytime they go out, 36% told that clicking selfies has increased my admirers. Majority of medicos accepted that multiple responses are related to impact of selfie.

Majority of medicos were taken selfie when were in public (66%) followed by alone or at home 20% , at work 9% & minimum 5% selfie shot was taken in college. (Fig.1).

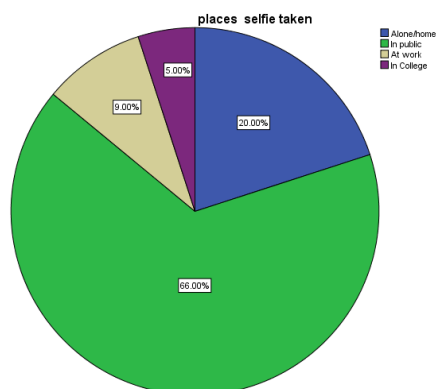


Fig. 1: Showing places where Selfie was taken (in percentage)

Discussion

The table 1 shows out of total 100 medicos, more 55% were female & 45% were male. Out of total 34% medicos in 17-19yrs age group, male(46.7%) were more than female(23.6%) while in 20-22yrs age group out of total 45% (maximum) medicos, female (54.5%) were more than male (33.3%). Mean age of selfie user male medicos were 20.27yrs ± 2.20 while Mean age of selfie user female medicos were 21.25yrs ± 2.0. The present finding is almost similar to findings of Kela et al study as among 250 students who participated, 56% (140) were females and 44% (110) were males & 80% of the students were in the age group 18-21 and only 20% were in the age group 22-25 years.⁽²⁵⁾

The table 2 shows majority of medicos 43% were interested in head & face selfie shot, out of this majority 72.1% were female & 27.9% were male students. Followed by Body shot 29%, female 69% & male 31% medicos. Minimum selfie shot 13% were with surrounding. Chi-square test was applied to see if there is any association between gender and types of selfie shot taken. Chi-square value is 14.067 and p = .003. This implies that there is a significant association between selfie type and gender. Females were more inclined to take Head/face shot (72.1%) whereas 69% males took body shot.

Majority of medicos were alone or were taken selfie when were in public (66%) followed by alone or at home 20% , at work 9% & minimum 5% selfie shot was taken in college (Fig.1). This is similar to study

conducted by Saroshe et al. study showing 30% people prefer to take selfies at home alone, 59% prefer to take them in public, 3% said at work, 1% at school/college, whereas 7% said they prefer selfies in the bathroom.⁽²⁶⁾

The table 3 shows distribution of medicos according to main reason of taking selfie. Majority of medicos (25%) took selfie to share their current lifestyle with close relatives followed by to put on social media (17%), to send to friends (12%), due to boring 13% & minimum 5% for attention. The association between reasons for taking selfies and gender has been analyzed statistically by applying chi-square. The association is statistically not significant (p=0.940). Thus almost similar reasons were responsible for this phenomenon in both males and females. Present findings are almost similar to results of Saroshe et al. study,⁽²⁶⁾ showing around 15% people took selfies mainly to send to a friend. 14% to put on social media, 13% because they were bored, 3% to show people they have friends, 21% take selfies to share their current lifestyle with their family. 3% said they take selfies for attention, whereas 31% said they had other reasons for taking selfies.

This table 4 shows distribution of medicos according to average daily frequency of taking selfie. Maximum 47 % medicos were involved in average daily 4-6 frequency of taking selfie followed by 31 % medicos with 1-3 frequency of selfie & minimum 22% medicos with 7-9 or > daily frequency of using selfie. There is an association between gender-wise distribution of of medicos and Frequency of taking selfie (average in a day) & was found to be statistically significant. (Pearson Chi-Square=24.587, df=2, p value=0.0001) The present finding is opposite to Saroshe et al. (2016) study, showing 10% people take 1-3 selfies daily & only 3% said the number of selfies taken by the everyday is 4-6.⁽²⁶⁾

Table 5 depicts the impact of selfies on medicos, 40% medicos say' Yes' i.e., they are empowered by selfie, 30% students told that selfie create occasions to take more selfies. 36% told that they usually spend more time in taking selfies than one intend to, 37% told that they force their friends to delete a group selfies where they are not looking good,.52% told that they take selfies only when look good. 33% told that mood is altered depending on number of likes and comments my selfie receives, 24% told that Group avoids them because of their selfie habit. 36% medicos told that ritual for them to click a selfie everytime they go out, 36% told that clicking selfies has increased my admirers. Majority of medicos accepted that multiple responses are related to impact of selfie. The present study showing the impact of selfies on medicos, they are giving more time on selfie, creating occasions to take more selfies, most of them feel pressure to look good, selfie empowering them. This shows excessive self love i.e., developing Narcission.⁽¹⁰⁾ Mood is altered depending on number of likes and comments & clicking

selfies has increased admirers. There is interrelation of social factors and individual thought and behavior, this means psychosocial behavior is developing in medicos using selfies.

Conclusion

Based on the study it can be conclusively said that demographics like age and gender affects the number of selfies one clicks. Be it a behavioral change, peer pressure or the band wagon effect; a psychological phenomenon in which people do something primarily because other people are doing it, regardless of their own beliefs, which they may ignore or override,⁽²⁷⁾ everybody has experienced selfies. They are new in and gender and age do play a vital role in it, this is evident from the data collected that more female respondents are involved in clicking selfies anytime anywhere. Female respondents are more obsessed with selfie as compared to the male respondents; majority agreed that selfie boosted their confidence. A person who is so self-obsessed that they post copious amounts of selfies on their social media with no purpose other than to say "look at me!"⁽¹⁴⁾ On the whole female respondents are more narcissists. Overall it was found that gender affect frequency, number & nature of selfies one clicks. Psychosocial factor affects the number of selfies one clicks, selfie taken exhibit narcissist characteristic, overall impact of taking selfies is negative. In the study, none of the respondents claimed to have never clicked a selfie and this is leading to a behavioral change which can be positive or negative.

Recommendation

In order to save our young generation from being technology-addicted and selfie-obsessed, several remedies should be adopted. These include Behavioral counseling emphasizing on self-motivation and self-control on unnecessary use of social media, giving quality time to family and friends. Cognitive behavior therapy also works wonder. In addition to these, efforts can also be made to educate all about how social networking is leading to the culture of "popularity" based on materialism and giving way to unreal standards of appearance. Parents and teachers can then begin moral education of children from an early age to help them realize that appearance is not everything as there other aspects of personality, intelligence, and good nature of a person, which should be used, judge a person.

References

1. _/selfie "selfie noun - Pronunciation - Oxford Advanced Learner's Dictionary at OxfordLearnersDictionaries.com" Check |url= value (help). oxfordlearnersdictionaries.com
2. "Selfie at Oscars breaks retweet record". BBC News. 3 March 2014. Retrieved 3 March 2014.
3. DeGeneres, Ellen (2 March 2014). "If only Bradley's arm was longer. Best photo ever. #oscars". Twitter. Retrieved 3 March 2014.

4. Narendra Modi selfie trends big on Twitter". times of india-economicstimes. 30 April 2014.
5. Sunayana Suresh (19 March 2014). "Has the 'usie' taken over the 'selfie'?". The Times of India. Retrieved 23 June 2014.
6. "Miles Klee (13 January 2014)'The only thing worse than 'group selfies' is what people are calling them". The Daily Dot . Retrieved 26 June 2014.
7. Alyson Shontell (13 January 2014). "Selfies Are Dead, It's All About The 'Usie' Now". Business Insider. Retrieved 23 June 2014.
8. "Justin Bieber and Selena Gomez Take An Usie Together". TMZ . Retrieved 23 June 2014.
9. Rebecca Savastio. "Selfies Cause Narcissism, Mental Illness, Addiction and Suicide?". Guardian Liberty Voice.
10. <http://www.dictionary.com/browse/narcissism>
11. "the psychosocial care of patients" <http://www.dictionary.com/browse/psychosocial>.
12. Cororve, Michelle; Gleaves, David (August 2001). "Body dysmorphic disorder: A review of conceptualizations, assessment, and treatment strategies". *Clinical Psychology Review*. 21 (6): 949–970. doi:10.1016/s0272-7358(00)00075-1.
13. Bjornsson AS; Didie ER; Phillips KA (2010). "Body dysmorphic disorder". *Dialogues Clin Neurosci*. 12 (2): 221–32. PMC 3181960 . PMID 20623926.
14. <http://www.urbandictionary.com/define.php?term=selfie-obsessed>.
15. Sorokowska, Agnieszka; Oleszkiewicz, Anna; Frackowiak, Tomasz; Pisanski, Katarzyna; Chmiel, Anna; Sorokowski, Piotr (2016). "Selfies and personality: Who posts self-portrait photographs?". *Personality and Individual Differences*. 90: 119–23. doi:10.1016/j.paid.2015.10.037.
16. extraversion
17. Kondoloy, Amanda (May 8, 2014). "ABC Greenlights 'Secrets & Lies', 'Selfie', 'Manhattan Love Story', 'Agent Carter', 'Forever', 'How to Get Away With Murder', 'Black-ish', 'American Crime', 'Galavant' & 'The Whispers'". TV by the Numbers. Retrieved May 24, 2015.
18. "HYPERLINK "http://time.com/selfies-cities-world-rankings/"The Definitive Ranking Of The Selfiest Cities in the WorldHYPERLINK "http://time.com/selfies-cities-world-rankings/"". TIME.com. Retrieved 2016-07-22.
19. "The Definitive Ranking Of The Selfiest Cities in the World". TIME.com. Retrieved 2016-07-22.
20. Correspondent, By Gilbert P. Felongco, (2014-07-04). "Student falls to death while taking 'selfie'". Retrieved 2016-07-22.
21. CNN, Naomi Ng, for. "Twitter declares 2014 year of the selfie". CNN. Retrieved 2016-07-22.
22. Senft TM, Baym NK. Selfies introduction~ What does the selfie say? Investigating a global phenomenon. *Int J Commun*. 2015;9:19.
23. Ende KH, Lewis DL, Kabaker SS. Body dysmorphic disorder. *Facial Plast Surg Clin North Am*. 2008;16:217–23, vii. [PubMed]
24. Elsa F. Ronningstam (2005). *Identifying and Understanding the Narcissistic Personality*. Oxford University Press. ISBN 978-0-19-803396-7.
25. Kela Ritu Nida, Rashi Saraswat, Bisma Amin Selfie: Enjoyment or Addiction? Journal of Medical Science and Clinical Research, IGM Publication January 2017;5(01):15836-40.
26. Saroshe S, Banseria R, Dixit S, Patidar A. Assessment of Selfie Syndrome among the Professional Students of a

- Cosmopolitan City of Central India: A Cross-sectional Study. *Int J Prevent Public Health Sci* 2016;2(2):1-4.
27. <http://www.investopedia.com/terms/b/bandwagon-effect.asp?lgl=rira-baseline-vertical>.