

**ORIGINAL ARTICLE:
NARCISSISTIC TENDENCIES, PSYCHOLOGICAL NEED
SATISFACTION AND SELFIE-TAKING BEHAVIOR IN YOUTH**

SAFA NAWAZ, FATIMA ASGHAR, SUMAIRA AYUB
DEPARTMENT OF APPLIED PSYCHOLOGY, UNIVERSITY OF MANAGEMENT AND
TECHNOLOGY, LAHORE

CORRESPONDENCE: **SUMAIRA AYUB**, sumaira.ayub@umt.edu.pk; cell no. +92 332
4193286

Submitted: 13 July 2024

Accepted: 14 June 2025

ABSTRACT

OBJECTIVE

To explore the relationship between narcissistic tendencies, psychological need satisfaction and selfie-taking behavior in youth.

STUDY DESIGN

Correlational cross-sectional, study

PLACE AND DURATION OF STUDY

The study was conducted at UMT Lahore from March 2023 to February 2024.

METHOD

The sample comprised of 200 youth with age range of 18 to 30 years ($M=21.99$, $SD=2.25$) including 79 men and 121 women. The data was collected from eight different universities of Lahore by employing convenience sampling technique. A self-constructed demographic information sheet, Narcissistic tendencies Inventory Scale (NPI-16), Basic Need Satisfaction in General Scale and Selfies Behaviour Scale were used for the assessments.

RESULTS

The result indicated the positive relationship between narcissistic tendencies and selfie-taking behavior and negative relationship was found between psychological need satisfaction and selfie-taking behavior. Furthermore, no relationship was found between narcissistic tendencies and psychological need satisfaction. The result showed that narcissistic tendencies positively predicted the selfie-taking behavior, however psychological need satisfaction did not predict it. The results also showed men scored higher on narcissism and selfie-taking behavior.

CONCLUSION

The present study helped us know how selfie-taking behaviors are related to narcissistic tendencies in young educated sample.

KEYWORDS

Narcissistic tendencies, Psychological Need Satisfaction, Selfie-Taking Behavior, Youth.

INTRODUCTION

Selfie taking behavior is one of the most predominant forms of self-presentation, it is a mean to choose how individuals opt to manifest themselves to others to represent who they are or who they would like to be. It can also be used as an impression management strategy to try and influence how people perceive other individuals. Additionally, the comments that one receives from peers after sharing selfies on social media might help to reinforce one's self-concept.¹ According to Oxford Dictionary, 'selfie' is a "picture that a person clicks of self, usually with the help of a smart cellphone and share it on social media sites"². Generally, about 49% individuals claimed clicking selfie at least once a week.³ Typically, they post selfies to social media platforms such as Facebook and Instagram and share those images with their surrounding networks of friends. Despite the fact that selfies promote self-disclosure, unhealthy personality tendencies are linked to such behaviour.⁴ The prevalence of selfie-taking was 28.7% in students who were likely to be extroverts and those with low self-esteem.⁵ The frequent status updates and photo sharing for self-promotion is associated with narcissistic traits.⁶ Individuals involved in selfie-taking behavior and Narcissistic traits use social networking sites to maintain positive and magnificent self as they want to get positive remarks from others.⁷ Frequent exposure to online selfies correlates with reduced life satisfaction and self-esteem due to fear of missing out (FOMO).⁸

Selfie taking behavior is associated with autonomy, competence and relatedness.⁹ Personalities with higher narcissistic trends have a greater need to get other people's attention and acceptance. These needs encourage people to meet their psychological demands which might affect their selfie-taking behavior. Considering the previously mentioned information, the following are the research hypotheses of the study:

1. Narcissistic tendencies will positively and psychological need satisfaction will negatively relate to selfie taking behaviour in youth.
2. Narcissistic tendencies will positively and psychological need satisfaction will negatively predict the selfie taking behaviour in youth.
3. There will be gender differences in terms of narcissistic tendencies, psychological need satisfaction and selfie taking behaviour in youth.

METHOD

Procedure

The Institutional Review Board at the University of Management and Technology, Lahore's School of Professional Psychology was consulted in order to obtain ethical permission. The research was conducted between June 2023 and April 2024. For this study, youth were sampled with permission from the authors of the scales used for narcissistic tendencies, psychological need satisfaction and selfie-taking behavior. Data collection permission was also obtained from the respective universities. Informed consent was secured from participants ensuring confidentiality and the right to withdraw. Data were collected from various universities in Lahore via online surveys. Out of 228 contacted participants, 200 volunteered, yielding a 76% response rate. The data were entered and analyzed using SPSS.

Participants

The sample size comprised of 200 young people age ranged from 18 to 30 years ($M=21.99$, $SD=2.25$) were selected from various universities in Lahore; data were collected from different public and private sector universities in Lahore. The students were accessed by convenient sampling strategy. The study excluded participants having any physical disability and individuals who don't have access to smart-phones.

Instruments

Following are the measure used in present study:

Narcissistic Personality Inventory Scale (NPI-16)¹⁰ was used for measuring the level of narcissism in youth. It is comprised of 16 items. Each item has two statements: one narcissistic and other non-narcissistic, respondent has to choose between these two. Each item is scored based on the statement chosen (0 = *non-narcissistic*, 1 = *narcissistic*). A high score indicates high narcissism and a low score indicates low narcissism. The scale has an alpha reliability of .75.

Basic need satisfaction in general scale (BNSG-S)¹¹ was used to measure the need for satisfaction in general in one's life. It has 21 items with three subscales. Items are scored on a 7-point rating scale ranging from 1 = *not at all true*, to 7 = *very true*. A higher score shows high need satisfaction and a lower score shows low need satisfaction. This scale has an alpha reliability of .70.

The Selfitis Behaviour Scale (SBS)¹² was used to assess selfie taking behaviour in youth. It consisted of 20 items with six subscales. It has a 5-point likert scale (5= *strongly agree*, 4= *agree*, 3= *neither agree or disagree*, 2= *disagree*, 1= *strongly disagree*). A high score indicated greater selfitis behaviour while a low score indicated lower selfitis behaviour. This scale has an alpha reliability of .87.

RESULTS

SPSS 26.0 was used for data analysis. Data screening was performed to eliminate outliers and missing values. Reliability analyses were conducted for all scales and sub-scales (Table 1). Pearson correlation analysis was used to examine the relationships between narcissistic tendencies, psychological need satisfaction and selfie-taking behavior in youth (Table 2). Multiple linear regression predicted selfie-taking behavior based on narcissistic tendencies and psychological need satisfaction (Table 3). Independent sample t-tests were conducted to identify gender differences in study variables (Tables 4).

The psychometric properties of all the scales and subscales are discussed in Table 1.

Table 1

Psychometric Properties of Scales and Sub-scales

Scale	k	M	SD	Range	Cronbach's α
Narcissistic Personality Inventory	16	4.98	2.86	0 – 12	.64
Basic Psychological Need Satisfaction in General Scale	21	92.09	13.03	60 – 125	.66
Autonomy	7	30.00	5.72	10 – 44	.39
Competence	6	26.88	4.82	14 – 39	.29
Relatedness	8	35.22	6.62	17 – 55	.50
Selfitis Behaviour Scale	20	57.88	15.82	20 – 100	.94
Environmental enhancement	4	13.22	3.34	4 – 20	.73
Social competition	4	10.67	3.71	4 – 20	.78
Attention seeking	3	8.34	2.81	3 – 15	.72
Mood modification	3	8.53	2.95	3 – 15	.83
Self-confidence	3	9.35	2.70	3 – 15	.70
Subjective conformity	3	7.79	2.93	3 – 15	.79

The results of Table 1 showed descriptive data as well as the scales and sub-scales reliabilities. The Narcissistic personality inventory showed a reliability of .64 and Basic Psychological Need Satisfaction in the General Scale reported .66 reliability. Further the Selfitis Behaviour Scale showed .94 reliability. Therefore, there was a sufficient reliability in each scale to perform all the analyses.

Table 2

Descriptive Statistics and Correlation of Study Variables

* $p < .05$. ** $p < .01$. *** $p < .001$

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Frequencies of selfies		.23**	.12	-.14	-.12	-.07	-.12	.23**	.08	.21**	.21**	.25**	.23**	.23**
2. No of social account			.12	-.09	-.15*	-.07	-.01	.51**	.44**	.47**	.41**	.47**	.39**	.44**
3. Narcissistic Tendencies				-.05	.02	-.04	-.08	.25**	.12	.32**	.28**	.21**	.04	.29**
4. Psychological Need Satisfaction					.76**	.73**	.78**	-.16*	-.09	-.14	-.09	-.12	-.21**	-.16*
5. Autonomy						.42**	.33**	-.14	-.10	-.13	-.12	-.11	-.15*	-.19
6. Competence							.34**	-.09	-.04	-.05	-.09	-.01	-.18**	-.17*
7. Relatedness								-.12	-.07	-.13	-.02	-.13	-.15*	-.11
8. Selfie-taking Behavior									.85**	.89**	.85**	.87**	.81**	.86**
9. Environmental enhancement										.66**	.67**	.71**	.67**	.64**
10. Social competition											.76**	.70**	.64**	.75**
11. Attention seeking												.66**	.58**	.71**
12. Mood modification													.71**	.72**
13. Self-confidence														.63**
14. Subjective conformity														

Table 2 revealed that narcissistic tendency was positively and psychological need satisfaction was negatively related to selfie-taking behavior in youth. Further, no relationship was found between narcissistic tendencies and psychological need satisfaction in youth. The findings also showed that narcissistic tendencies positively correlated with 3 sub scales of selfie taking behavior namely attention seeking, mood satisfaction and subjective conformity, whereas psychological need satisfaction negatively correlated with self-confidence and subjective conformity subscales of selfie-taking behavior. Similar trends were observed across the sub-scales of psychological need satisfaction and selfie taking behavior. Additionally, the frequency of selfies and the number of social accounts were observed as positively related to selfie-taking behavior sub-scales, and negatively to psychological need satisfaction sub-scales.

Table 3
Multiple Linear Regression Analysis Predicting Selfie-taking Behavior in Youth

Predictor	B	95% CI for B		SE B	β
		LL	UL		
Constant	44.75*	28.19	61.31	8.39	
Gender ^a	1.17	-2.86	5.19	2.04	.04
Family system ^b	2.01	-2.24	6.27	2.16	.06
Frequencies of selfie	.09	-.04	.21	.07	.09
No. of social account	6.78**	5.03	8.53	.87	.49**
Narcissistic Tendencies	.89**	.19	1.59	.36	.16**
Psychological need satisfaction	-.07	-.22	.08	.08	-.06
R ²			.32		
F (6, 182)			14.31		

^a1 = male, 2 = female. ^b1 = nuclear, 2 = joint. CI= Confidence Interval, LL= Lower Limit, UL= Upper Limit
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3 showed that overall variance explained by the model was 32% with $F(6, 182) = 14.31$, $p < .001$. The results demonstrated that narcissistic tendencies positively predicted

the selfie taking behavior ($\beta = .16, p < .01$) and no of social media accounts ($\beta = .49, p < .01$). However, Psychological Need Satisfaction did not predict the selfie taking behavior in youth.

Table 4

Results of Independent Sample t test Determine Gender Difference in Selfie Taking Behaviour in Youth

Variable	Men (n = 79)		Women (n = 121)		t (198)	p	Cohen's d
	M	SD	M	SD			
Narcissistic Tendencies	5.84	3.05	4.41	2.59	3.54	.00	.51
Psychological Need Satisfaction	92.05	12.41	92.12	13.48	-.04	.97	-
Autonomy	30.57	5.69	29.63	5.72	1.14	.27	-
Competence	26.85	4.79	26.90	4.87	-.08	.94	-
Relatedness	34.63	6.20	35.59	6.89	-1.00	.32	-
Selfie Taking Behaviour	58.20	19.26	57.67	13.18	.22	.83	-
Environment enhancement	12.65	4.18	13.59	2.60	-1.79	.02	.27
Social competition	11.23	4.24	10.29	3.28	1.65	.10	-
Attention seeking	8.62	3.22	8.16	2.51	1.08	.28	-
Mood modification	8.41	3.34	8.60	2.68	-.44	.66	-
Self confidence	9.11	3.13	9.49	2.38	-.92	.36	-
Subjective conformity	8.19	3.31	7.53	2.63	1.49	.14	-

* $p < .05$. ** $p < .01$.

The results of Table 4 showed significant gender differences in narcissistic tendencies in youth indicating men have higher narcissistic tendencies. ($M = 5.84, SD = 3.05$) than women ($M = 4.41, SD = 2.59$). Furthermore, environmental enhancement was found higher in women ($M = 13.59, SD = 2.60$) than men ($M = 12.65, SD = 4.18$). However, the results also indicated that there were found no gender differences in psychological need satisfaction and selfie-taking behavior in youth.

DISCUSSION

Results revealed a positive correlation between narcissistic personalities and selfie-taking behavior and a negative correlation between psychological need satisfaction and selfie-taking behavior. The sub-scales measuring attention-seeking, mood satisfaction and perceived conformity also showed positive correlations with narcissistic tendencies. Men scored higher on both narcissistic personality traits and selfie-taking behavior compared with women.

These findings align with several previous studies. Sorokowski et al.¹³ found that individuals with higher narcissistic scores were more likely to post selfies. Bhachech et al.¹⁴ observed that men scored higher on narcissism and selfie-taking for memory preservation, specific occasions and social media posting. Similarly, Arpaci et al.¹⁵ reported higher narcissism in Turkish male students, with stronger correlations between narcissism, attitudes, intentions and behaviors. Puthiyakath et al.¹⁶ noted that Indian men scored higher on narcissism and selfie-taking, attributing these tendencies to environmental enhancement and social competition.

Contrasting results were reported by Lal and Singh¹⁷, who found that women scored higher on narcissism, selfie-taking behavior and body image. Zafar et al.¹⁸ showed a positive correlation between narcissism and selfie-taking behavior in females, while self-esteem was

negatively related to selfie-taking behavior in males. Barry et al.¹⁹ and Simpson et al.²⁰ also found that women scored higher on narcissism and selfie-posting. Giordano et al.²¹ concluded that problematic smartphone usage mediated the relationship between narcissism and selfie taking for both genders, but females scored higher on selfie-taking behavior when considering problematic smartphone use.

Other studies have found no significant gender differences. Sukhdeep et al.²² reported that higher narcissism was associated with more selfie-taking and posting on social media among Sikh students, with no gender differences. Dutta et al.²³ found that gender differences were not statistically significant regarding body image, selfies and narcissistic tendencies among Mumbai's urban school-going population. Asgher et al.²⁴ observed no significant gender differences in narcissism among Instagram users from Lahore.

CONCLUSION

The present study concluded that narcissistic tendencies positively and psychological need satisfaction negatively correlated with selfie-taking behavior in youth. Further no relationship was found between narcissistic tendencies and psychological need satisfaction in youth. The results also demonstrated that narcissistic tendencies positively predicted the selfie-taking behavior, however psychological need satisfaction did not predict it. Furthermore, narcissistic tendencies were higher in men when compared with women.

LIMITATIONS AND FUTURE RECOMMENDATIONS

The study was conducted only on youth, for further studies it is suggested to include other age groups i.e., adolescents, middle adults and older adults. The present sample was drawn solely from universities in Lahore. For future studies, it is suggested to add people from other cities and educational levels.

IMPLICATIONS

The present study will be helpful to examine that how selfie-taking behaviors and narcissistic personalities will affect the youth, and also to stress upon why it is becoming necessary to satisfy their psychological needs. Further based on the findings, the educators, mental health specialists and legislators can create focused interventions and assistance networks to encourage more positive self-representation and online interaction. Additionally, this study may help to develop digital literacy initiatives that promote responsible online conduct and improve the well-being of young people in the digital era.

CONFLICT OF INTEREST

None

FUNDING

None

DISCLOSURE

The present study is part of a bachelor's thesis. This research was presented at 1st International Psychology Conference, May 29-31, 2024, Forman Christian College University Lahore.

ACKNOWLEDGEMENTS

We acknowledge all the authors of the scales, participants of the study as well as the universities for allowing us access to the participants.

DATA AVAILABILITY STATEMENT

The datasets of this study are not publicly accessible for ethical reasons but can be obtained from corresponding author [S.A.] upon reasonable request.

REFERENCES

1. Yusof H, Munir MF, Zolkaply Z. Young Adults' Behaviour and Motivations toward Selfie-Posting. International journal of advanced scientific research and management. 2021;6(6):13. <https://doi.org/10.36282/ijasrm/6.6.2021.1815>
2. Balakrishnan J, Griffiths MD. An exploratory study of "Selfitis" and the development of the selfitis Behavior scale. International Journal of Mental Health and Addiction. 2017 Nov 29;16(3):722–36. <https://doi.org/10.1007/s11469-017-9844-x>
3. Barry CT, Doucette H, Loflin DC, Rivera-Hudson N, Herrington LL. "Let me take a selfie": Associations between self-photography, narcissism, and self-esteem. Psychology of popular media culture. 2017 Jan;6(1):48. <https://doi.org/10.1037/ppm0000089>
4. Weiser EB. Me: Narcissism and its facets as predictors of selfie-posting frequency. Personality and individual differences. 2015 Nov 1;86:477-81. <https://doi.org/10.1016/j.paid.2015.07.007>
5. Pawar K, Verma N, Somaiya M, Kedare J, Mehta F, Tyagi A, et al. Selfie-taking behavior: Personality factors, self-esteem, and interpersonal closeness in college-going students in a Metropolitan City. Indian Journal of Social Psychiatry (Online)/Indian Journal of Social Psychiatry. 2020 Jan 1;36(3):230. https://doi.org/10.4103/ijsp.ijsp_31_19
6. Carpenter CJ. Narcissism on Facebook: Self-promotional and anti-social behavior. Personality and individual differences. 2012 Mar 1;52(4):482-6. <https://doi.org/10.1016/j.paid.2011.11.011>
7. Morf CC, Torchetti L, Schürch E. Narcissism from the perspective of the dynamic self-regulatory processing model. The handbook of narcissism and narcissistic personality disorder: Theoretical approaches, empirical findings, and treatments. 2011 Jul 20:56-70. <https://doi.org/10.1002/9781118093108.ch6>

8. Wang R, Yang F, Haigh MM. Let me take a selfie: Exploring the psychological effects of posting and viewing selfies and groupies on social media. *Telematics and Informatics*. 2017 Jul 1;34(4):274–83. <https://doi.org/10.1016/j.tele.2016.07.004>
9. Deci EL, Ryan RM. The “What” and “Why” of goal pursuits: human needs and the Self-Determination of behavior. *Psychological Inquiry*. 2000 Oct 1;11(4):227–68. https://doi.org/10.1207/S15327965PLI1104_01
10. Ames DR, Rose P, Anderson CP. The NPI-16 as a short measure of narcissism. *Journal of Research in Personality*. 2006 Aug 1;40(4):440–50. <https://doi.org/10.1016/j.jrp.2005.03.002>
11. La Guardia JG, Ryan RM, Couchman CE, Deci EL. Within-person variation in security of attachment: a self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of personality and social psychology*. 2000 Sep;79(3):367.
12. Balakrishnan J, Griffiths MD. An exploratory study of “selfitis” and the development of the Selfitis Behavior Scale. *International journal of mental health and addiction*. 2018 Jun;16(3):722–36. <https://doi.org/10.1007/s11469-017-9844-x>
13. Sorokowski P, Sorokowska A, Oleszkiewicz A, Frackowiak T, Huk A, Pisanski K. Selfie posting behaviors are associated with narcissism among men. *Personality and Individual Differences*. 2015 Oct 1;85:123–7. <https://doi.org/10.1016/j.paid.2015.05.004>
14. Bhachech JT. Selfie and narcissism in young adults. *Jurnal Tazkiya/Tazkiya Journal of Psychology/Tazkiya*. 2021 Oct 30;9(2):153–63. <https://doi.org/10.15408/tazkiya.v9i2.21558>
15. Arpacı I, Tak P, Shekhawat H. The moderating role of exhibitionism in the relationship between psychological needs and selfie-posting behavior. *Current Psychology*. 2021 Apr 13;42(5):3610–6. <https://doi.org/10.1007/s12144-021-01732-5>
16. Puthiyakath HH, R NA, Angel S, Goswami MP. Selfie Syndrome: A study of selfitis and Narcissism among young adults. *Journal of Creative Communications/Journal of Creative Communications*. 2024 Feb 18; <https://doi.org/10.1177/09732586231223603>
17. Lal R, Singh J. Selfitis Behavior, Narcissism and Body Image among Youth : A study. *ResearchGate*. 2022 Nov 9; https://www.researchgate.net/publication/373688759_Selfitis_Behavior_Narcissism_and_Body_Image_Among_Youth_A_Study
18. Malik NI, Zafar J, Saleemi A. Narcissism and self-esteem as predictors of selfitis among youth. *Rawal Medical Journal*. 2020 May 9;45(2):331–3. https://www.researchgate.net/profile/Najma-Malik/publication/341271607_Narcissism_and_Self-esteem_as_predictors_of_Selfitis/links/5eb6e12f92851cd50da3bce7/Narcissism-and-Self-esteem-as-predictors-of-Selfitis.pdf
19. Barry CT, Loflin DC, Doucette H. Adolescent self-compassion: Associations with narcissism, self-esteem, aggression, and internalizing symptoms in at-risk males. *Personality and Individual Differences*. 2015 Apr 1;77:118–23. <https://doi.org/10.1016/j.paid.2014.12.036>
20. Shane-Simpson C, Schwartz AM, Abi-Habib R, Tohme P, Obeid R. I love my selfie! An investigation of overt and covert narcissism to understand selfie-posting behaviors

- within three geographic communities. Computers in Human Behavior. 2020 Mar 1;104:106158. <https://doi.org/10.1016/j.chb.2019.106158>
21. Giordano C, Salerno L, Pavia L, Cavani P, Lo Coco G, Tosto C, et al. Magic Mirror on the Wall: Selfie-Related behavior as mediator of the relationship between narcissism and problematic smartphone use. PubMed. 2019 Oct 1;16(5-6):197-205. <https://doi.org/10.36131/clinicalpsych2019050602>
22. Kura S, Maheshwari S K Dr, Presha Dr. Narcissistic Personality and Selfie Taking Behavior among College Students. International Journal of medical and health research. 2018 May 3;56-60. https://www.researchgate.net/publication/326032982_Narcissistic_Personality_and_Selfie_Taking_Behavior_among_College_Students
23. Dutta E, Sharma P, Dikshit R, Shah N, Sonavane S, Bharati A, et al. Attitudes toward selfie taking in school-going adolescents: an exploratory study. Indian Journal of Psychological Medicine. 2016 May 1;38(3):242-5. <https://doi.org/10.4103/0253-7176.183094>
24. Asgher S Dr, Gohar I, Latif F Dr. Binge watching on internet television networks: Effects on youth. Pakistan Languages and Humanities Review. 2022 Dec 30;6(IV). [https://doi.org/10.47205/plhr.2022\(6-IV\)13](https://doi.org/10.47205/plhr.2022(6-IV)13)

AUTHOR(S) CONTRIBUTION/UNDERTAKING FORM

The undertaking statement of the contribution of each author duly signed by all the authors has been inserted as followed.

Sr. No	Authors	Affiliation	Contribution	Signature
1	Safa Nawaz	University of Management and Technology, Lahore	Conceptualization, Investigation, Data Curation, Formal Analysis, Writing - Original draft	
2.	Fatima Asghar	University of Management and Technology, Lahore	Conceptualization, Investigation, Data Curation, Writing - Original draft	
3	Sumaira Ayub	Lecturer, University of Management and Technology, Lahore	Methodology, Writing, Reviewing & Editing, Supervision	

