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## Narcissism and body-esteem: Distinct motivations for selfie posting behavior among adolescents

## Abstract

The purpose of this study was to explore the relationship among the number of selfie posting behavior, narcissism and body esteem. A sample of this study comprised of 400 adolescents (men=200, women=200) taken from 5 colleges of Lahore city. The sample was selected through purposive sampling and the age range of the sample was 17-20 years (M = 17.74, SD =.76). Selfie posting behavior scale, Narcissistic personality inventory, and body-esteem scale were used to collect data. Results showed that the number of selfies posted on the internet (per week) had positive significant relationship between narcissism, and body esteem. Environment enhancement, social competition, mood modification, attention seeking behavior, self-confidence, and subjective conformity were motives to post selfies. Findings also described that there was significant difference between gender and these variables. Women were much more likely to post selfies as compared to men. Furthermore, selfie posting women had more narcissism and more score on body esteem scale. Suggestions for further research and implications were also discussed.

Keywords: Selfie posted behavior, Narcissism, body esteem

## **INTRODUCTION**

Over the last few years, the trend of taking one's own pictures using smart phones has increased enormously. Taking one's own photograph is called selfie (Oxford Dictionaries, 2015). Charoensukmongkol (2016) defined selfie as a picture taken by one's self usually with a webcam or smartphone and shared on social media. Dhir, Pallesen, Torsheim, and Andreassen (2016) found that females take and post more selfies. Furthermore, adults are more involved in taking and posting selfies. Lee and Sung (2016) state that selfie sharing differentiates itself from other kinds of self-

### Ambreen Anjum

Assistant Professor, The Islamia University of Bahawalpur E-mail: <u>aambreenaanjum@gmail.com</u> **Rubab Kazmi** Lecturer, Lahore College for Women University, Lahore promotion on social sites. Individuals portray the self in a broader manner, showing in the picture both personality traits and physical characteristics. In other words, selfies look naturally to have the maximum element of self-propagation and selfpresentation (Weiser, 2015). Selfie-posting behavior has obtained attention in recent years but, very few published studies have examined the psychological factors of selfie posting behavior (Sung, Lee, Kim, & Choi, 2016). According to Charoensukmongkol (2016), loneliness, attention seeking, and self-centered behavior have a strong relationship with selfie posting behavior. Thus we need to examine the psychological antecedents of taking and posting selfies to comprehend the underlying mechanism. This theoretical rationale was the motivation for investigating personality traits known to impact self promotion. Narcissism and body-esteem are important in this context (Gosling, Augustine, Vazire, Holtzman, & Gaddis, 2011).

Mehdizadeh (2010) defined narcissism as a pervasive pattern of grandiosity, a hyperbolic sense of self-importance and need for admiration of individuals who have an unrealistic positive view about their physical appearance. Glover, Miller, Lynam, Grego, and Widiger, (2012) add that narcissists are not very warm in their interpersonal relationships. They want to gain the attention of others and for this they use social media to promote themselves. In this way they gain others' admiration and attention to preserve their fragile image. Several researchers (e.g. Buffardi & Campbell, 2008) have found relation between selfie posting behavior and narcissism. Barry, Doucette, Loflin, Rivera-Hudson, and Herrington (2017) also state that people who score higher on narcissist traits post more pictures on social sites.

Body esteem means how an "individual perceives" one's own physical or outer appearance. Schilder (1950) defined body esteem as a picture of one's own body that one forms in their mind. Body esteem has two components: perception of the body appearance, and emotional response to that perception. Social comparison theory explains that people compare and evaluate themselves based on the characteristics of other people around them, comparing their physical appearance with others and social networking sites provide ample opportunity for this. Low level of body esteem occurs when there is a discrepancy between perceived body appearance and an ideal body image. Individuals who have low body image are more likely to suffer mental and physical problems e.g. anorexia and bulimia nervosa (Molloy, & Herzberger 1998). Individuals gain satisfaction when they post their selfies in different attractive poses. Mc Lean, Paxton, Weitheim and Master (2015) observed that there is a correlation between selfie posting and body esteem, particularly in young girls. Studies also discuss positive correlation between body esteem and narcissism. The selfie differentiates itself from other ways of self-promotion since individuals extend their self-image in a comprehensive manner by showing their physical appearance and personality style in their portrait (Lee & Sung, 2016). They edit the colour and

contrast and change the background of the picture. Mostly, selfies seem to consist of the maximum self propagation and ostentation (Campbell, Rudich, & Sedikides, 2002; Weiser, 2015). Keeping in view the high frequency of selfie posting behaviors, appealing matter is to recognize the psychological impetus underlying this phenomenon. Indeed, selfie-posting is not a uni-dimensional issue and several motives exist to post selfies simultaneously (Etgar & Amichai-Hamburger, 2017). These wide ranges of motivations behind selfie-posting activity may relate to various personality characteristics. So according to literature psychological motives of selfie posting behavior could be regarded more vital determinants of this behavior as compared to one's personality traits because they provide strong roots for one's behavior as compared to one's characteristics. McCain et al. (2016) said that social prettiness is the primary motive of selfie posting. Sung, Lee, Kim, and Choi (2016) described four motives for selfie posting: communication (e.g., to built relationships), attention-seeking (e.g., subjective conformity and drive for affirmation), entertainment (e.g., mood modification and escape boredom) and archiving (e.g., document special events). Lee and Sung (2016) add that people also post selfies to compete socially (e.g. to get likes) to gain self-confidence and to think and feel more optimistic about oneself.

# **Objectives of the study**

- To explore the motivations behind selfie posting behavior.
- To assess the relationship among narcissism, selfie posting behavior and body esteem.
- To find out gender differences in selfie posting behavior
- To compare narcissistic traits among selfie taking men and women.
- To compare body esteem between selfie taking men and women.

# **RESEARCH METHODOLOGY**

Cross-sectional survey design was employed to assess the relationship between narcissistic personality features, body-esteem and selfie taking behavior. A sample of this study comprised of 400 adolescents (men=200, women=200) taken from 5 colleges of Lahore city. The sample was selected through purposive sampling with the age range of sample was 17-20 years (M =17.74, SD =.76). Only those adolescents were included in this study who used smart phones and were clicking selfies on regular basis (3 to 5 per day).

# **Demographic information sheet**

To collect the demographic information of the participants a form was prepared by the researchers including age, education etc.

# **Selfie Posting Questionnaire**

Selfie taking behavior scale developed by Balakrishnan and Griffiths (2018) was employed to assess the selfie taking behavior of students. This scale consists of two parts. Part 1 describes the number of selfie posting and the second part the motivation to post selfies. Six motives are described in the selfie posting scale: social competition, Environment enhancement, attention seeking, self-confidence, mood modification, subjective conformity. The items were scored on a scale of 1-5 with strongly agree being 5 to strongly disagree being1. Alpha coefficients of selfie posting questionnaire acquired on present data was .83.

# Narcissistic personality inventory

To assess narcissism, the 16 item narcissistic personality inventory **developed by** Ames, Rose, and Anderson, (2006) was used. Participants were instructed to read each pair of statements and mark the one that best describes beliefs about themselves. One of the statements reveals narcissistic trait (coded as 1) or non narcissistic (coded as 0). The items of NPI-16 were summed together where the higher score indicated a higher level of narcissism. Sample items are; "It makes me uncomfortable to be the centre of attention" versus "I really like to be the centre of attention." Alpha coefficients acquired in the present study were .87.

# **Body Esteem Scale**

The Body esteem scale (Franzoi & Shields, 1984) assesses satisfaction and dissatisfaction of body figure. The BES consists of 35 items. Participants were instructed to score their opinions on a 5 point Likert scale (1 = strong negative feelings and 5= strong positive feelings). All scores were summed to get the total score. The greater the BES total score, higher the body esteems. Sample items are feelings about body scent, skin conditions and appearance of eyes etc. Alpha coefficients for BES acquired in this study were .85.

# Procedure

After acquiring administrative approval from the authorities of selected institutions, researcher contacted students individually. Participants were included after their written consent. Researcher briefed about purposes of the study and written guidelines to complete the given questionnaire. All Participants were guaranteed that the provided information would be used only for research purposes, and would not be used elsewhere.

### **RESULTS & DISCUSSION**

#### Table 1

Relationship between selfie posting, selfie posting motivations, narcissism and body esteem (N=400)

Variables	1	2	3	4	5	6	7	8
Selfie post fr	80**	93**	69**	89**	90**	89**	52**	21**
Environment	-	83**	30**	52**	61**	58**	32**	12**
Social- com	-	-	66**	80**	73**	71**	42**	17**
Attention-s	-	-	-	84**	54**	54**	36**	17**
Mood-modi	-	-	-	-	81**	80**	50**	22**
Confidence	-	-	-	-	-	95**	57**	21**
Conformity	-	-	-	-	-	-	56**	22**
Narcissism	-	-	-	-		-	-	36**
Body esteem	-	-	-	-	-		-	-

*Note.* Selfie post fr = selfie post frequency, Environment =Environment enactment, socialcom=social competition, attention-s=attention seeking, mood-modi=mood modification, conformity= social conformity

\*\**p* < .01

### Table 2

Comparison between men (n = 200) and women (n = 200) on the selfie motivation scale (N = 400)

	Gender	•								
Scale	Men		Womer	1				95% C	Ι	Cohe n's
	М	SD	М	SD	Т	df	р	LL	UL	D
Environment -	11.93	5.08	13.97	5.53	- 3.85	398	.000	-3.08	-1.00	0.38
Social-comp	11.07	4.02	12.68	4.35	- 3.83	398	.000	-2.43	78	0.37
Attention-s	8.41	2.64	8.96	2.44	- 2.15	398	.032	-1.05	08	0.21
Mood-modi	8.55	2.95	9.81	3.00	- 4.20	398	.000	-1.84	66	0.005
Confidence	9.23	4.00	11.46	4.75	- 5.74	398	.000	-2.99	-1.46	0.50
Social-Conf	9.13	4.10	11.43	3.77	- 5.75	398	.000	-3.04	-1.49	0.58

*Note*. Environment =Environment enactment, social-comp=social competition, attention-s=attention seeking, mood-modi=mood modification, social-conf= social conformity

The table shows that women scored high on environment enactment, social competition, mood modification and social conformity motivation. Attention seeking motive is the only motive with equal score of both men and women.

### Table 3

Comparison between men (n =200) and women (n =200) on the selfie posting frequency (N = 400)

	Gender									
Scale	Men		Womer	1		95% CI	Cohen 's			
	M	SD	М	SD	Т	Df	Р	LL	UL	D
Selfie	58.37	19.23	68.33	19.85	-5.09	398	.000	-13.80	-6.11	0.50

Table 3 shows that women post more selfies as compared to men.

### Table 4

Comparison between selfie posting men (n = 200) and women (n = 200) on the narcissistic personality scale (N = 400)

	Gender									
Scale	Men		Women	l				95% CI		Cohen
										's
	M	SD	M	SD	Т	Df	Р	LL	UL	D
						-				
narcis	6.93	3.11	10.52	3.02	-11.69	398	.000	-4.19	-2.98	1.17
sii										

Findings show in above table 4 that selfie posting women scored higher on narcissistic personality measure as compared to selfie posting men.

### Table 5

Comparison between selfie posting men (n = 200) and women (n = 200) on the body esteem scale (N = 400)

	Gender									
Scale	Men		Women	l				95% CI	Cohen	
										's
	M	SD	M	SD	Т	Df	Р	LL	UL	D
Body-	37.30	5.11	55.94	3.22	-	398	.000	-19.48	-17.79	4.36
e					43.58					

*Note*. Body-e= body esteem

Results show in above table 5 that selfie posting women scored higher on body esteem scale as compared to selfie posting men.

## Table 6

Comparison between men (n = 200) and women (n = 200) on the Narcissistic traits (N = 400)

	Gender	•								
Scale	Men		Womer	1		95% CI		Cohe n's		
	М	SD	М	SD	Т	df	Р	LL	UL	D
Cent-atten	10.87	5.07	13.82	5.03	- 3.05	398	.000	-2.07	-1.00	0.39
Spec-person	12.07	4.02	10.68	4.35	- 2.73	398	.000	-1.43	78	0.47
Story-lik	7.31	2.64	7.96	2.43	15	398	.032	-1.25	07	0.01
Respect-due	9.55	2.95	7.81	3.00	- 4.10	398	.000	-1.84	56	0.06
Authority	11.13	3.00	9.46	4.65	- 5.74	398	.000	-2.99	-1.46	0.60
Capable	11.23	2.30	9.26	4.65	- 5.65	398	.000	-2.19	-1.16	0.60

*Note*. Cent-atten=Center of attention, Spec-person=Special-person, Authority= Authority over people, Capable= More capable than others,

The given table shows that women scored high on attention seeking narcissistic trait and men score high on taking respect from others and authority traits. Both men and women want that people like their story.

In the present study we hypothesized that narcissism and body-esteem positively correlate with selfie posting behavior. Previous researches found significant positive relationship between overall self esteem and narcissism. But the phenomenon of body-esteem is neglected in the previous studies. So, the first aim of this study was to assess the relation of narcissism with selfie posting behavior among adolescents in relation to body esteem. The results of the present study revealed significant positive relationship between narcissism and selfie posting behavior. Posting selfies is considered a trend or fashion and is not unusual and dysfunctional. But, when the number of selfie posting exceeds it becomes a narcissistic trait. These findings are in line with previous researches (i.e. Carpenter, 2012; Siibak, 2009). Narcissism is a vital predictor to posting selfies on social networking sites. It seems logical because the purpose is to seek attention and admiration of others (Holtzman & Strube, 2010). Wickle's (2015) study stated that 73 percent of the participants described that they post and check comments on their photos several times a day. According to Carpenter (2012) and Campbell and Foster (2007) individuals who possess narcissistic traits they also concentrate solely on what benefits them. They like to post selfies because they have control of creating their ideal pictures. Besides this there are other reasons for exploring posting of selfies i.e. for recreational purpose or just an activity in spare time.

In this study we hypothesized that women would score higher on selfie-posting frequencies as compared to men. The findings of the present study confirm our hypothesis. Our findings are in accord with previous findings of Klein (2013). In our culture these findings are in support of the factor that women are more enthusiastic to seek the attention of others. Our results are against the findings already found by Sorokowski et al. (2015). According to them the link between the behavior of selfie-posting and narcissism is weaker for women than men, who also post selfies. The reasons behind this may be power striving or leadership factors. Selfie posting women also scored higher on the narcissistic trait of seeking attention, whereas men scored high on the narcissistic trait of seeking authority, power and capability.

Another aim of this study was to assess the relationship of body-esteem with selfie posting behaviors. The findings of the present study show significant positive relationship between selfie posting and body esteem. Our results are in line with the previous findings of Amazue (2014) and Singh and Tripathi (2017). Although, some evidence, like that of Fox & Rooney (2015) found that posting more selfies is related with a boost in self-objectification in men. Individuals who evaluate their body as being attractive, post more selfies and wait for spectators' comments and likes to enhance their contentment. Concern about body looks has increased because of the trend of selfie posting. According to Jones, Vigfusdottir, & Lee, women are more concerned about their body (Jones, Vigfusdottir, & Lee (2004) since their ideals consist of unrealistic views about body appearance as thin figure for women and muscular torsos for men (Barlett, Vowels & Saucier, 2008). Such pressure is causing great concern for health and researchers like Lee & Sung (2016) have observed eating disorders in such people. Selfie posting women also scored high on body esteem scale. This means that women are overly concerned about their body as compared to men. Similarly Jeffreys (2014) and Alzahrani (2016) state that women are more conscious about their physical presence. To investigate the effect in self-presentation strategies, the present study examines these strategies in the fashionable form of selfpromotion, i.e. selfies.

Another purpose in conducting this study is to assess the motives that work behind selfie posting frequency. These motives suggest that the higher the selfie posting motivations, the greater is the frequency of photos posted. Both men and women post selfies but the motives are different and vary according to their culture. Our findings showed that women post selfies to be the center of attention and men to show their authority. These findings, however, are inconsistent with those of Ames, Rose, and Anderson (2006) whose results show that people post selfies to make events memorable, to get more likes of spectators, to modify their mood, to enhance self-confidence when viewers admire and give approval; to get subjective conformity, and most importantly to gain the concentration of others by posting edited selfies.

Another important motive of taking and posting selfies might be for recreational purposes and as a normative social activity. This motive may also be considered as social or peer pressure (Gabriel, 2014). People think that if they do not post selfies their peers will consider them old-fashioned. In conclusion, we may say that people post their photos because they want to gain the attention of others.

## **Limitations and Recommendations**

In the present study, data was collected only from one city and a small number of participants. To generalize results, data would have to be collected from other cities also and from a larger number of participants. Furthermore, research participants should be taken not only of all age groups but those working in diverse spheres of life.

## **Implications of the study**

The present study proposed an alternative perspective regarding the relationship between narcissism and body-esteem. Our study analyses that this relationship is not always positive and the distinction between the two constructs is clear. The present study adds valuable information regarding motives of selfie posting since, in fact Selfie posting is not "an empty activity", it has strong psychological and social motives. There is also a scarcity of research in literature regarding differentiation of narcissistic traits between men and women. Thus, the present study would be a valuable addition in literature. This study will also be helpful for clinicians in their dealing this variety of behavior. This study provides insight for clinicians that they should not only account explicit self-evaluations but also implicit selfviews when treating people who show grandiose narcissistic traits.

### REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Process, 50(2), 171-211.
- Alzahrani, F. (2016). Communication difference between men and women in social media. *International Journal of Scientific & Engineering Research*, 7(4), 981-982.
- Amazue, L. O. (2014). The Contributions of media, body image concerns and locality to the perceived self-esteem of female Nigerian adolescents. *Gender & Behavior*, 12(3), 6113-6124.
- Ames, D. R., Rose, P., & Anderson, P. (2006). The NPI-16 as a short measure of narcissism. *Journal of Research in Personality*, 40, 440-450.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British Journal of Social Psychology*, 40(4), 471-499. doi: 10.1348/014466601164939.
- Balakrishnan, J., & Griffiths, M. D. (2018). An exploratory study of selfitis and the development of the selfitis behavior scale. *International Journal of Mental Health Addiction, 16*, 722–736.
- Barlett, C. P., Vowels, C. L., & Saucier, D. A. (2008). Meta-analyses of the effects of media images on men's body-image concerns. *Journal of Social and Clinical Psychology*, 27, 279–310. http://dx.doi.org/10.1521/jscp.2008.27.3.279.
- Barry, C. T., Doucette, H., Loflin, D. C., Rivera-Hudson, N., & Herrington, L. L. (2017). Let me take a selfie: associations between self-photography, narcissism, and self-esteem. *Psychology of Popular Media Culture*, 6(1), 48– 60.
- Bleske-Rechek, A., Remiker, M. W., & Baker, J. P. (2008). Narcissistic men and women think they are so hot-but they are not. *Personality & Individual Differences*, 45(5), 420–424.
- Borges, A. (2011). The effects of digitally enhanced photos on product evaluation and young girls' self esteem. *Research Applications & Marketing*, *26*(4), 5-21.

- 119
- Buffardi, L. E., & Campbell, W. K. (2008). Narcissism and social networking Websites. *Personality & Social Psychology Bulletin*, 34(10), 1303–1314.
- Campbell, W. K., & Foster, J. D. (2007). The narcissistic self: background, an extended agency model, and ongoing controversies. *Personality and Social Psychology Bulletin*, 29(4), 348–367.
- 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.
- Carpenter, C. J. (2012). Narcissism on face book: self-promotional and anti-social behavior. *Personality and Individual Differences, 52(4),* 482-486, doi:10.1016/j.paid.2011.11.011.
- Chae, J. (2017). Virtual makeover: Selfie-taking and social media use increase selfieediting frequency through social comparison. *Computers in Human Behavior*. 66, 370-376. doi: 10.1016/j.chb.2016.10.007.
- Charoensukmongkol, P. (2016). Exploring personal characteristics associated with selfie-liking. Cyber psychology: *Journal of Psychosocial Research on Cyberspace*, 10 (2), 210-217.
- Dhir A., Pallesen, S., Torsheim, T., Andreassen, C. (2016). Do age and gender differences exist in selfie-related behaviors? *Computer and Human Behavior*, 63, 549–555.
- Etgar, S., & Amichai-Hamburger, Y. (2017). Not all selfies took alike: Distinct selfie motivations are related to different personality characteristics. *Frontiers in Psychology*, 8(42), 1–10.
- Fox, J., & Rooney, M. C. (2015). The dark triad and trait self-objectification as predictors of men's use and self-presentation behaviors on social networking sites. *Personality & Individual Differences*, 76, 161–165.
- Franzoi, S. L., Shields, S. A. (1984). Body esteem scale: multidimensional structure and sex differences in a college Population. *Journal of personality assessment*, 48(2), 173-178.
- Gabriel, F. (2014). Sexting, selfies and self-harm: Young people, social media and the performance of self-development. *Media International Australia*, *151*(2), 104-112. http://journals.sagepub.com/doi/abs/10.1177/1329878x1415100114

- Glover, N., Miller, J. D., Lynam, D. R., Grego, C., & Widiger, T. A. (2012). The five factor narcissism inventory: A five-factor measure of narcissistic personality traits. *Journal of Personality Assessment*, 94(5), 500–512.
- Gosling, S. D., Augustine, A., Vazire, S., Holtzman, N., & Gaddis, S. (2011). Manifestations of personality in online social networks: Self-reported face book-related behaviors and observable profile information. *Cyber psychology, Behavior and Social Networking*, 14(9), 483–488.
- Holtzman, N. S., & Strube, M. J. (2010). Narcissism and attractiveness. *Journal of Research in Personality*, 44(1), 133–136.
- Jones, D. C., Vigfusdottir, T. H., & Lee, Y. (2004). Body image and the appearance culture among adolescent girls and boys: An examination of friend conversations, peer criticism, appearance magazines, and the internalization of appearance ideals. *Journal of Adolescent Research*, *19*(3), 323-339.
- Klein, M. K. (2013). Why don't I look like her? The impact of social media on female body image. *CMC Senior Thesis*.
- Jeffreys, S. (2014). *Beauty and misogyny: Harmful cultural practices in the West* (2nd edition). New York: Routledge.
- Lee, J. A., & Sung, Y. (2016). Hide-and-seek: Narcissism and "selfie"-related behavior. *Cyber psychology, Behavior, and Social Networking, 19*(5), 347–351.
- Mccain, J., Borg, Z., Rothenberg, A., Churillo, K., Weiler, P., & Campbell, W. K. (2016). Personality and selfies: Narcissism and the Dark Triad. *Computers in Human Behavior*, 64, 126–133.
- Mclean, S. A., Paxton, S. J., Wertheim, E. H., & Masters, J. (2015). Photo shopping the selfie: Self photo editing and photo investment are associated with body dissatisfaction in adolescent girls. *International Journal of Eating Disorders*, 48(8), 1132-1140.
- Mehdizadeh, S. (2010). Self-presentation: narcissism and self-esteem on face book. *Cyber psychology, Behavior, and Social Networking, 13*, 357-364.

- Molloy, B. L., & Herzberger, S. D. (1998). Body image and self-esteem: A comparison of African-American and Caucasian women. A Journal of Research, 38(8), 631-643.
- Oxford Online Dictionaries (2015). Selfie. Retrieved from<u>http://www</u>. oxforddictionaries.com/definition/english/selfie
- Schilder, P. (1950). *The image and appearance of the human body*. New York: International Press.
- Singh, S., & Tripati, K. M. (2016). Selfie: A New Obsession. Sex roles, 4(5), 29-40. SSRN: https://ssrn.com/abstract=2920945 or http://dx.doi.org/10.2139/ssrn.2920945
- Siibak, A. (2009). Constructing the self through the photo selection-visual impression management on social networking websites. Cyber psychology: *Journal of Psychosocial Research on Cyberspace*, *3*(*1*), 1-8.
- Sorokowski, P., Sorokowska, A., Frackowiak, T., Karwowski, M., Rusicka, I., Oleszkiewicz, A. (2015). Selfie posting behaviors are associated with narcissism among men. *Personality and Individual Differences*, 85, 123–127.
- Sung, Y., Lee, J. A., Kim, E., & Choi, S. M. (2016). Why we post selfies: Understanding motivations for posting pictures of one self. *Personality and Individual Differences*, 97, 260– 265. https://doi.org/10.1016/j.paid.2016.03.032
- Weiser, E. B. (2015). Narcissism and its facets as predictors of selfie-posting frequency. *Personality and Individual Differences*, 86, 477–481.
- Wickel, T. M. (2015). Narcissism and social networking sites: The act of taking selfies. *The Elton Journal of Undergraduate Research in Communications*, 6(1), 1-2.
- Gosling, S. D., Augustine, A., Vazire, S., Holtzman, N., & Gaddis, S. (2011). Manifestations of personality in online social networks: Self-reported facebook-related behaviors and observable profile information. Cyberpsychology, Behavior and Social Networking, 14(9), 483–488.
- Holtzman, N. S., & Strube, M. J. (2010). Narcissism and attractiveness. Journal of Research in Personality, 44(1), 133–136.

- Jones, D. C., Vigfusdottir, T. H., & Lee, Y. (2004). Body image and the appearance culture among adolescent girls and boys: An examination of friend conversations, peer criticism, appearance magazines, and the internalization of appearance ideals. Journal of Adolescent Research, 19(3), 323-339.
- Klein, M. K. (2013). Why don't I look like her? The impact of social media on female body image. *CMC Senior Thesis*.
- Jeffreys, S. (2014). Beauty and misogyny: Harmful cultural practices in the West (2nd edition). New York: Routledge.
- Lee, J. A., & Sung, Y. (2016). Hide-and-seek: Narcissism and "selfie"-related behavior. Cyberpsychology, Behavior, and Social Networking, 19(5), 347–351.
- Mccain, J., Borg, Z., Rothenberg, A., Churillo, K., Weiler, P., & Campbell, W. K. (2016). Personality and selfies: Narcissism and the Dark Triad. Computers in Human Behavior, 64, 126–133.
- Mclean, S. A., Paxton, S. J., Wertheim, E. H., & Masters, J. (2015). Photo shopping the selfie: Self photo editing and photo investment are associated with body dissatisfaction in adolescent girls. International Journal of Eating Disorders, 48(8), 1132-1140.
- Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on Facebook. Cyberpsychology, Behavior, and Social Networking, 13, 357-364.
- Molloy, B. L., & Herzberger, S. D. (1998). Body image and self-esteem: A comparison of African-American and Caucasian women. Sex Roles: A Journal of Research, 38(7-8), 631-643.
- Oxford Online Dictionaries (2015). (n.d.).Selfie. Retrieved fromhttp://www. oxforddictionaries.com/definition/english/selfie

Schilder, P. (1950). The image and appearance of the human body. New York: International Universities Press.

Schilder, P. (1950). The image and appearance of the human body. New York: International Universities Press.

- Singh, S., & Tripati, K. M. (2016). Selfie: A New Obsession. SSRN: https://ssrn.com/abstract=2920945 or http://dx.doi.org/10.2139/ssrn.2920945
- Siibak, A. (2009). Constructing the self through the photo selection-visual impression management on social networking websites. Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 3(1), 1.
- Sorokowski, P., Sorokowska, A., Frackowiak, T., Karwowski, M., Rusicka, I., Oleszkiewicz, A.(2015). Selfie posting behaviors are associated with narcissism among men. Personality and Individual Differences, 85, 123–127.
- Sung, Y., Lee, J. A., Kim, E., & Choi, S. M. (2016). Why we post selfies: Understanding motivations for posting pictures of one self. Personality and Individual Differences, 97, 260–
- 265. https://doi.org/10.1016/j.paid.2016.03.032
- Weiser, E. B. (2015). Narcissism and its facets as predictors of selfie-posting frequency. Personality and Individual Differences, 86, 477–481.
- Wickel, T. M. (2015). Narcissism and social networking sites: The act of taking selfies. The Elton Journal of Undergraduate Research in Communications, 6(1), 1-2.