New evidence shows self-esteem moderates the relationship between narcissism and selfies

Evita March[a,*], Tayla McBean[b]

[a] Federation University, School of Health Science and Psychology, 100 Clyde Road, Berwick, VIC 3806, Australia
[b] Federation University, School of Health Science and Psychology, University Drive, Mt Helen, VIC 3350, Australia

ABSTRACT

Recent statistics show that millions of 'selfies' (defined as a self-portrait taken with a hand-held smart phone or camera) are posted on social media every day, and research has shown trait narcissism as a stable positive predictor of this behaviour. However, results regarding subtypes of narcissism and self-esteem as predictors are limited and inconsistent. As such, the current study sought to extend this research by exploring the utility of subtypes of narcissism, individual self-esteem, and interactions between narcissism and self-esteem in predicting posting selfies. Two hundred and fifty-seven participants (22% men and 78% women) completed an online questionnaire including the 40-item Narcissistic Personality Inventory (NPI-40), the Rosenberg Self-Esteem Scale, and a measure of selfie posting frequency. Results showed that higher levels of grandiose-exhibitionism narcissism and lower levels of self-esteem were associated with posting more selfies. Importantly, self-esteem was found to moderate the relationship between grandiose-exhibitionism narcissism and posting selfies. Specifically, the relationship between grandiose narcissism and posting selfies on social media was only significant when self-esteem was low or average. Results of the current study significantly contribute towards understanding the association between selfies and narcissism, showing that self-esteem may play a more fundamental role than previously thought.

1. Introduction

This popularity of social media has prompted empirical research to explore predictors of behaviour on this platform, such as personality traits (Ong et al., 2011) and disorders (Rosen, Whaling, Rab, Carrier, & Cheever, 2013). Recently, research has explored trait narcissism in relation to the increase of self-portrait style photos ('selfies') being posted on social media (Fox & Rooney, 2015; Halpern, Valenzuela, & Katz, 2016; Weiser, 2015). The term selfie, a contemporary Internet phenomenon, is defined as a self-portrait taken with a hand-held smart phone or camera (Bruno, Gabriele, Tasso, & Bertamini, 2014). Estimates show that, on average, 93 million selfies are taken worldwide each day (Hines, 2016). Further, almost 1000 selfies are posted to the social media network of Instagram every ten seconds (Cohen, 2016). Predictors of selfie 'behaviour' warrants investigation due to the mass popularity of selfies and corresponding possible pathology, including reports where individuals have attempted suicide due to being unsatisfied with their selfie quality (Senft & Baym, 2015). To add to the growing body of literature on selfie behaviour, the current study sought to further explore the predictors of gender, subtypes of narcissism, and

self-esteem. In particular, the current study considered, for the first time, possible interactions between subtypes of narcissism and an individual's self-esteem. In line with suggestions of Etgar and Amichai-Hamburger (2017), distinction is made between selfie taking and selfie posting, and the current study explores the behaviour of selfie posting.

1.1. Predictors of posting selfies on social media

1.1.1. Gender and selfies

Compared to men, women tend to engage in more self-promotional behaviours online (Carpenter, 2012). Interestingly, men have been found to engage in more written self-promotional behaviours online (e.g., in 'about me' sections), whereas women engage in more visual self-promotional behaviours online (e.g., 'profile pictures'; Buffardi & Campbell, 2008). Regarding selfie behaviour, research has shown that compared to men, women both take and post more selfies on social media (Dihr, Pallesen, Torsheim, & Andreassen, 2016; Weiser, 2015). Compared to men, women post twice as many selfies on social media, and are more likely to post selfies of all types (e.g., own selfies, selfies with a romantic partner, etcetera; Sorokowski et al., 2015).

1.1.2. Narcissism and selfies

Narcissism, characterised by a highly inflated, grandiose, and positive but unrealistic self-concept (Konrath, 2008), is strongly related to online self-presentation and promotion (Buffardi & Campbell, 2008; DeWall, Buffardi, Bonser, & Campbell, 2011; Lee, Ahn, & Kim, 2014; Wang, Jackson, Zhang, & Su, 2012). Trait narcissism has been particularly popular to explore in relation to selfie behaviour, with consistent positive relations between trait narcissism and posting selfies (Sung, Lee, Kim, & Choi, 2016; Weiser, 2015). Interestingly, Fox and Rooney (2015) propose a circular relationship to exist between selfies and narcissism, where higher levels of narcissism is related to an increase in selfie behaviour, and an increase in selfie behaviour subsequently raises levels of narcissism. Although the positive relationship between trait narcissism and selfie posting has been shown to be reliable, researchers suggest it is actually the exhibitionism subcomponent of narcissism that predicts online self-promotion (Moon, Lee, Lee, Choi, & Sung, 2016).

1.1.3. Subtypes of narcissism and selfies

In addition to overall trait narcissism, subtypes of narcissism and self-promotional behaviour have been explored. In particular, the three subtype narcissism model proposed by Ackerman et al. (2011) has been explored, which includes the subtypes of Leadership/Authority (LA; self-perceived ability, social potency, self-awareness), Grandiose Exhibitionism (GE; self-absorption, vanity, exhibitionistic tendencies), and Entitlement/Exploitativeness (EE; a sense a deserving respect, willingness to manipulate and take advantage of others). Of these subtypes, positive relationships have been found between GE narcissism and online self-promotional behaviours (Carpenter, 2012), negative relationships have been found between LA narcissism and online self-promotional behaviours, and no relationship has been found between EE narcissism and online self-promotional behaviours (Moon et al., 2016).

In 2015, Wesier explored these subtypes specifically in relation to posting selfie on social media. Weiser (2015) recruited 1204 participants (65% female) to complete the NPI-40 and answer questions regarding selfie posting frequency, and results indicated that total narcissism, LA and GE narcissism significantly predicted selfie posting frequency. The study also explored associations between gender and selfie posting frequency independently and in interaction with narcissism, showing that women, compared to men, posted selfies more frequently (Weiser, 2015). Compared to the research exploring total trait narcissism and selfie behaviour, research exploring the subtypes of narcissism is significantly limited. Thus, the first aim of the study was to provide further evidence for subtypes of narcissism predicting selfie behaviour. As results regarding narcissistic subtypes and selfie behaviour is limited, and a significant body of research has linked total narcissism to selfie behaviour, it was predicted that all subtypes would predict posting more selfies online.

1.2. Self-esteem and selfies

In addition to being correlated with narcissism (Donnellan, Trzesniewski, Robins, Moffitt, & Caspi, 2005), self-esteem has previously been investigated in relation to self-promotion online. In a sample of 100 (50% women) Facebook® users, a negative relationship has been shown between self-esteem and self-promotion in a sample (Mehdizadeh, 2010). Specifically, lower individual self-esteem is associated with higher self-promotion in a user's main profile picture (e.g., striking a pose, enhancing the picture with software; Mehdizadeh, 2010). Further, individuals with lower self-esteem are more likely to 'untag' themselves in unflattering pictures online (Tazghini & Siedlecki, 2013).

Research that has explicitly explored the relationship between self-esteem and selfie behaviour has found mixed results. Qualitative analyses indicate that self-esteem plays an integral role in understanding selfie behaviour, with women posting selfies in an effort to enhance their self-esteem (Pounders, Kowalczyk, & Stowers, 2016). Meanwhile, other studies have reported no significant relation between individual self-esteem and selfies posted on social media (Barry, Doucette, Loflin, Rivera-Hudson, & Herrington, 2017; Sorokowski et al., 2016). Research has also shown gender differences in the relationship between self-esteem and posting selfies on social media, with a positive correlation significant only for men (Sorokowski et al., 2016). Due to this inconsistency in results of research exploring self-esteem and posting, the second aim of the study was to further explore self-esteem in relation to selfie posting. Specifically, if individual self-esteem could predict selfie posting beyond that of the subtypes of trait narcissism.

1.3. Interaction between narcissism and self-esteem

Posting selfies on social media has commonly been interpreted as a sign of individual narcissism (Barry, Reiter, Anderson, Schoessler, & Sidoti, 2017; Musil, Preglej, Ropert, Klasinc, & Babič, 2017), with empirical research documenting that individuals who post selfies are more likely to be perceived by others as narcissistic (Krämer et al., 2017). However, given the potential to for self-esteem to moderate associations between narcissism and potential maladaptive behaviours (Barry, Frick, & Killan, 2010), we sought to test the assumption of selfie posting as a sign of narcissism. Although previous research has highlighted possible interactions between narcissism and self-esteem in relation to selfie behaviour (e.g., Barry, Reiter, et al., 2017), these interactions are yet to be explored. Further, research has shown significant interactions between self-esteem and subtypes of narcissism (e.g., grandiosity and vulnerability; Di Pierro, Mattavelli, & Gallucci, 2016). Thus, the third aim of the current study was to explore potential interaction between individual self-esteem and subtypes of narcissism, and the utility of these interactions to predict posting selfies.

1.4. Aims and hypotheses

In sum, the aim of the current study was to explore the utility of subtypes of narcissism (LA, GE, and EE), individual self-esteem, and interactions of the narcissism subtypes and self-esteem in predicting posting selfies. It was predicted that the narcissistic subtypes of LA, GE, and EE would individually explain significant variance when predicting posting selfies. In addition to the variance explained the narcissism subtypes, it was predicted that individual self-esteem would explain significant variance when predicting posting selfies. Finally, interactions between all narcissism subtypes and self-esteem were examined for potential moderation. To reduce potential confounds, gender and age will be included as control variables.

2. Method

2.1. Participants and procedure

Initially, 257 participants accessed the online questionnaire, but 30 participants (8.5%) did not complete all measures. Thus, the total sample was comprised of 227 participants, with 176 (78%) women and 50 (22%) men. The ages ranged from 18 to 73 years ($M = 30.76$, $SD = 11.01$). All of the participants indicated they were active on at least one social media platform (e.g., Facebook®, Instagram, Snapchat), and 81% were currently employed.

Participants were recruited from two Australian University campuses and the wider community. An advertisement for the study was posted on social media (e.g., Facebook and Instagram), which provided potential participants with a link to complete the voluntary, anonymous questionnaire. The questionnaire was accessible from an online provider (SurveyMonkey), and participants were told the questionnaire would take approximately 20 min to complete. Upon completion, participants were thanked and data were downloaded for analyses.