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# The Relationship Between Narcissism Attachment Styles and the Response to Social Media

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The Relationship Between Narcissism, Attachment Styles,  
and the Response to Social Media

By  
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Submitted in partial fulfillment  
of the requirements for  
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### Abstract

Previous research suggests that narcissism is correlated with higher social media use and that self-esteem motivates this use. Additionally, research suggests that individuals with anxious or avoidant attachment styles have “self object” needs that are fulfilled through interactions with others. In the current research, we examined the correlation between narcissism and social media use, as well as the correlation between attachment style and social media use. Participants were given questionnaires to measure narcissism, attachment style, social media use, and self-esteem. Participants were also assigned to one of three feedback conditions, positive, neutral, or negative, on a social media site. Results indicated that participants with anxious, avoidant or insecure attachment style reported significantly lower levels of self-esteem in response to neutral and negative feedback than did participants without avoidant, anxious, or secure attachment styles. The research therefore provides evidence that attachment style may predict self-esteem levels in response to social media feedback.

## The Relationship Between Narcissism, Attachment Styles, and the Response to Social Media

Often when individuals check their Facebook profiles and do not receive likes or comments on new profile pictures or statuses, they proceed to delete these new posts. They may say they don't care that no one liked their posts, but to some degree it often bothers them that no one liked their posts. Today, many have become self centered when it comes to social media sites, and have used these sites to receive positive feedback similar to what they feel about themselves. Often times, social media users exhibit narcissistic tendencies and characteristics as social media sites encourage narcissistic behavior. Social media users all have some type of attachment style, either secure, anxious, or avoidant. Each type of person reacts to others around them in a different way such that secure individuals have healthy relationships with others, anxious individuals worry about their relationships, and avoidant individuals distant themselves from others (Firestone, 2013). Psychologist Heinz Kohut developed a theory on attachment style and narcissism (Erez et al., 2005). He believed that as children grow up, they use their parents as models as to who to become. Those who display a secure attachment style are thought to have been raised by supportive parents who gave their child the attention and acknowledgement that was craved by the child. Those who display avoidant and anxious attachment styles are thought to have been raised by parents who did not support their children or pay as much attention to them as the child craved. Kohut believed narcissism to be a healthy part of development, and as a child develops he has a caregiver who becomes a "self object" and provides him with the attention and praise they feel they deserve. Children who have a supportive "self object" develop a secure attachment style and have a healthy level of narcissistic tendencies later in life. Children who do not have avoidant or anxious attachment style are more likely to show unhealthy narcissistic tendencies later on. Kohut also believed that individuals with avoidant or anxious

attachment styles would turn to therapists as “self objects” as they never had the “self object” that they needed growing up. These individuals look to therapists to support them and give them the attention they feel they deserve.

Additionally, social media influences self esteem of social media users in response to “likes” or comments given, or lack thereof, by their followers. Individuals have turned to social media sites to boost self-esteem, but these individuals are also prone to a decrease in self-esteem depending on the responses they receive to their personal sites and pages (Krizan and Bushman, 2010) With so many social media users constantly online, different user personalities surface and impact social media use.

Prior research has been conducted to test these concepts. Banai et al. (2005) have completed research on Kohut’s theory to test the association with “self object” need and attachment style. In one study, the participants were Israeli undergraduates ranging from 19 to 41 years old. Participants were placed in groups with 15-20 participants. Participants were asked to complete the SONI, a scale based closely on Kohut’s writings and conceptualization of self object needs, and rate each item to the extent it was self-descriptive. The results revealed that the SONI scale has good psychometric properties, acceptable internal consistency, and reliability. This suggests that this scale is a strong source to use when looking for validity in Kohut’s theory in following studies. The second study involved 96 Israeli undergraduate participants. They were asked to complete the 38-item SONI questionnaire. They then completed three self-report scales, which included the Experiences in Close Relationships Scale, the Rejection Sensitivity Questionnaire, and the Fear of Intimacy Scale (Banai et al., 2005). They then completed a 32-item Marlowe-Crowne Social Desirability scale. The last scale they completed was a 29-item Interpersonal Orientation Scale (Banai et al., 2005).. Results of the

second study supported Kohut's proposal that deficits in "self object" provisions are related to problems in interpersonal functioning. The need for "self objects" were assessed by creating a scale with items that fit Kohut's conceptualization of "self object" needs, such as mirroring, idealization, and twinship. The need for "self objects" was significantly associated with anxious attachment style and with worries about rejection. The need for "self objects" amongst those with avoidant attachment style was significantly associated with avoiding intimacy out of fear. This suggests that people with anxious attachment style often cling to others to provide security and relief from distress, and people with avoidant attachment style adopt this defensive strategy to protect themselves from the frustration of "self object" needs and the recurrence of painful events.

Building on this research, Lopez et al. (2013) analyzed whether particular "self object" needs and self-esteem related experiences differentially predicted participants' scores on anxious and avoidant attachment styles. Participants were 142 undergraduate students from a Southwestern urban university. Participants were scheduled to participate in one of several small group survey sessions. They were presented with a packet containing five different surveys. The presentation of the surveys in the packet was randomly distributed. The five surveys consisted of the SONI, the Instability of Self-Esteem scale, the Psychological Entitlement Scale, the Self-Compassion Scale, and the ECR scale (Lopez et al., 2013). Independent and parallel regressions of SONI and the self-esteem-related scales were conducted to reveal correlations and predictors between "self object" needs and attachment styles. The results revealed that distinct configurations of "self object" needs and self-esteem related experiences predicted anxious and avoidant attachment styles. Greater "self object" need was seen more consistently in participants with avoidant attachment style than anxious attachment style. This suggests that less mature "self

object” needs increase fears of abandonment and rejection, as these are the fears of those with anxious and avoidant attachment styles.

Social media use has also been helpful in assessing attachment style amongst Facebook users. Oldmeadow et al. (2012) examined Facebook use from the perspective of adult attachment theory and exploring the relationships with anxious and avoidant attachment styles. Participants were 617 individuals who were either psychology students, recruited through social network sites, or recruited on MTurk. Participants were asked to complete an online questionnaire which included the 36-item ECR scale (Oldmeadow et al., 2012) measuring the two major dimensions of attachment, the 90-item standard Social Skills Inventory, and a range of questions asking about participants’ usage and experience with Facebook. The results showed that individuals with a high anxious anxiety were more likely to spend more time on Facebook and use it when they were feeling negative emotions. This suggests that how individuals experience and use Facebook may have a direct relationship with their personal style of attachment.

A study assessing the relationship between narcissism and personal reactions to success was conducted by Rhodewalt and Morf (1998). This study assessed if narcissism had an effect on reported moods and self esteem after success and failure of the participant. In study one, participants were 114 undergraduates from the University of Utah. Participants’ narcissism (high or low) was assessed using the NPI (Rhodewalt and Morf, 1998) before the experiment began. Participants were run individually by the experimenter who did not know their level of narcissism. Participants were asked to report self-complexity using the Linville procedure, self-esteem using a 16-item TSBI, participate in an IQ task, and complete the State Trait Personality Inventory to assess mood (Rhodewalt and Morf, 1998). The results of study one showed that narcissists are more emotionally reactive to self-relevant feedback than are less narcissistic

individuals. High rated narcissists tended to assume greater ability after succeeding, as well as responding with more anger after failure than did non-narcissists. In study two, there were one hundred and twenty seven participants who were undergraduates from the University of Utah. The procedure was exactly the same as the first study except participants were asked to fill out a self-esteem scale (RSES) instead of the STPI (Rhodewalt and Morf, 1998). Results revealed similar findings to study one in that narcissistic participants displayed more extreme emotional responses to success and failure than did non-narcissistic. These findings suggest that narcissists take personal gains and losses more personally than do non-narcissists, and they appear to display an emotional response that is organized around a positive but fragile sense of self-worth.

Using an experimental approach aided in looking at the relationship between narcissism and self esteem. Gentile et al. (2012) conducted research that analyzed if social networking websites influence narcissism and self-esteem. In experiment one, participants were seventy-nine undergraduates from San Diego State University. Participants were randomly assigned to either a MySpace condition or a control condition. Those in the MySpace condition were to make edits to their MySpace page for 15 minutes and then complete a questionnaire about their MySpace page. They were then asked to respond to three questions about their MySpace using a 5-point Likert scale, and then answer two open-ended questions about their MySpace page. The participants in the control condition looked at a Google Map for 15 minutes and were to trace their route to the building in which the experiment was taking place. They were then given a questionnaire to answer questions about their route, and given three questions to answer about their route using a 5-point Likert Scale. They were then asked to respond with answers to two open ended-questions about the route they drew. All participants completed a 40-item forced choice variation of the NPI (Gentile et al., 2012). The results revealed that those who spent time editing their MySpace

page had higher reported levels of narcissism than did those in the control group. In the second experiment, participants were seventy-two undergraduates from San Diego state University. Participants were randomly assigned to a Facebook condition or a control condition. Participants in the Facebook condition made edits to their page for 15 minutes and then completed a questionnaire about their page. They also responded to three questions about their Facebook page using a 5-point Likert scale. They were then asked to write answers to two open-ended questions about their Facebook page. Participants in the control group did exactly what the participants in experiment one did. Participants also completed the 40-item forced choice version of the NPI and the 10-item Rosenberg Self-Esteem scale (Gentile et al., 2012). The results revealed that participants who spent time editing their Facebook pages did not report significantly higher levels of narcissism, but did report higher levels of self-esteem. This suggests that when individuals have the chance for greater self-expression and self-promotion, they display greater narcissistic tendencies and self-esteem.

To contribute to the research on the relationship between narcissism and self-esteem, Krizan and Bushman (2010) analyzed if narcissists were affected more by social comparisons than those with healthy self-esteem. Participants were 190 college students. Participants were asked to take two minutes to think about their relationship with four individuals that they compared themselves to in some way. They were asked to write down anything that was thought about during the time of the comparison, as well as their relation to their target and other relevant information about the target to the participant. Participants then indicated their reactions of the comparison for each target. They then used a 7-point scale to rate their feelings towards the person and how they felt about themselves. They then compared themselves with the individual across the 10 items from the self-Attributes Questionnaire by marking a 7-point scale. Finally,

participants reported demographic information and completed the NPI and Rosenberg's Self-Esteem Scale (Krizan and Bushman, 2010). The results revealed that the positive reactions that narcissists have to social comparisons with others is mediated by self-esteem. Narcissists also did not see themselves as "worse off" than the comparison individuals. This suggests that self-esteem accounts for narcissists' well being. Additionally, narcissists' interest in superiority may be reflective of their need to achieve status and recognition from others.

Interested about the relationship between self-esteem and Facebook, Clerkin et al. (2013) analyzed if reassurance seeking via Facebook negatively impacted self-esteem. Participants were 319 undergraduate students from the Southeast. Participants completed two online questionnaires composed of multiple questionnaires. One of the questionnaires was a Facebook reassurance seeking scale which was a 5-item questionnaire created to assess online reassurance seeking conducted via Facebook. The second questionnaire was a Depressive interpersonal relationship inventory-reassurance seeking subscale which is a four-item measure of reassurance seeking. The third questionnaire is the interpersonal needs questionnaire which is a 25-item self-report questionnaire that measures current beliefs about the extent to which the respondent feels connected to others and how much they feel they are a burden to people in their lives. The fourth questionnaire is the Rosenberg self-esteem scale, and the last questionnaire is the state self-esteem scale which assesses academic ability and confidence. The results of the responses reveal that reassurance seeking via Facebook does predicts decreases in self-esteem which in turn increases one's feelings of not belonging or being a burden to others. This suggests that Facebook and social networks are less about how often people are using these sites, but instead, how people are using these sites, such as reassurance seeking.

While Facebook users may be narcissistic, it is important to understand what aspects of

social media encourage narcissistic behaviors. Buffardi and Campbell (2008) analyzed how narcissism is manifested on a social networking web site. Participants were 129 undergraduate Facebook page owners ranging from age 18 to 23 years old. Participants were asked to complete demographic information and the NPI (Narcissistic Personality Inventory) (Buffardi and Campbell, 2008). They were then asked to allow permission for the researcher to look at their saved Facebook profile page on a computer provided in the lab. Objective criteria, such as the number of friends they had, the number of wall-posts, the number of groups they were part of, and the number of lines of text in the About Me section, was extracted from the Facebook profiles. The results revealed that higher scores on the NPI were related to higher quantities of interaction, such as the number of wallposts, friends, groups, and lines of text in the About Me section, on Facebook. Additionally, owners with high narcissism scores posted slightly more self-promoting quotes than owners with low narcissism scores. Owners with higher NPI scores were seen as physically more attractive by rater participants who consented to rating the Facebook's of the original participants, and more self-promoting in their main photograph than those with low NPI scores. This suggests that narcissists use social media sites to show off their perceived attractiveness to others, as well as show others how great they believe themselves to be.

Mehdizadeh (2010) contributed to the research on narcissism in regards to social media by also researching self-esteem in social media users. The study analyzed how narcissism and self-esteem are manifested on the social media website Facebook. Participants were one hundred Facebook owners who gave permissions for their Facebook pages to be coded. Participants were given a four-part questionnaire, which consisted of a demographic questionnaire portion, a Facebook activity questionnaire, the Rosenberg Self-Esteem Scale, and the NPI-16 (Mehdizadeh,

2010). Participants' Facebooks were then coded by the researcher on 5 different levels, including the About Me section, the Main Photo, the first 20 pictures on the View Photos of Me section, the Notes section, and the Status Updates section, which assessed self promotion. The results revealed that there was a significant positive correlation for higher NPI-16 scores, the number of times Facebook was checked per day, and the time spent on Facebook per session. Additionally, significant positive correlations were found between the scores on the NPI-16 and the Main Photo, View Photos, Status Updates, and Notes. This suggests that Facebook acts as a positive regulator of narcissistic esteem as Facebook users can receive public feedback on self-promoting posts. This feedback often reinforces the narcissists' view of themselves and encourages them to continue posting self-promoting posts.

The decision to choose a profile picture is often an indication of narcissistic tendencies of social network users. Kapidzic (2013) explored the relationship between narcissism and motivations for Facebook profile picture selection. Participants were 288 students from a large Midwestern university. Participants were given an online survey consisting of 90 items. The survey included the NPI-16, a motivation attractiveness questionnaire using a five-point Likert scale, a motivation personality questionnaire using a five-point Likert scale, a motivational social ties questionnaire using a five-point Likert scale, and the Rosenberg Self-Esteem Scale (Kapidzic, 2013). The results revealed that narcissism was a predictor for physical and personal motivations, such as presenting the best possible images of themselves and receiving positive feedback from others on these images, on Facebook. This suggests that narcissistic individuals are highly motivated to display their positive traits on social networking sites as they need constant external affirmation.

In many cases, personality influences narcissistic tendencies and Facebook use. Research

conducted Ryan and Xenos (2011) explored how personality influences Facebook usage or non-usage. Participants were 1,024 self-selected Australian Internet users. Participants were required to complete an online questionnaire consisting of 124 questions. Participants were asked to answer five non-identifying demographic questions about themselves, the Big Five Inventory, The Narcissistic Personality Inventory, The Revised Cheek and Buss Shyness Scale, the Social and Emotional Loneliness Scale for adults, and a Facebook usage questionnaire (Ryan and Xenos, 2011). The results of the responses revealed that Facebook users are more likely to be extraverted and narcissistic, but they also have stronger feeling of family loneliness. This suggests that Facebook and social media networks gratify a narcissist's need to engage in self-promoting and superficial behavior. This provides them with a sense of belonging on social media sites, and further encourages self-promoting behaviors on Facebook.

Self-presentation on Facebook can give many indications about users' narcissist qualities. Ong et al. (2011) analyzed the relationship of narcissism and extraversion on adolescents' self-presentation in four Facebook profile features (profile picture, status updates, social network size, photo count). Participants were two hundred and seventy five adolescents who were randomly selected from two government secondary schools in Singapore. Students completed provided questionnaires online answering the 12-item Narcissistic Personality Questionnaire for Children-Revised, the 12-item Extraversion subscale of the NEO Five-Factor Inventory, and answering questions about their Facebook use (Ong et al., 2011). The results revealed that narcissists were more likely to rate their Facebook profile picture as more physically attractive, more fashionable, more glamorous, and "cooler" than their less narcissistic peers did. This suggests that narcissists' use social media sites to select attractive photos of themselves to affirm their own personal positive illusions of their physical appearance.

There are a variety of ways in which research has been conducted regarding the types of individuals using social media sites, and how attachment style influences social media use. In order to explore the multiple aspects to social media users, research will be conducted on narcissism in regards to social media use, attachment style in regards to social media use, and self esteem in response to attachment style and social media use. First, we hypothesized that narcissists would have higher social media use than non-narcissists. Prior research has shown that narcissists are more likely to have greater interactions of Facebook than non-narcissists. We are interested if narcissists are using more social media sites and using these sites for longer periods of time than non-narcissists. Second, we hypothesized that individuals with secure attachment styles used social media sites less than individuals with anxious or avoidant attachment styles did. Prior research has shown that individuals with avoidant and anxious attachment styles have “self object” needs in their lives (Banai et al., 2005). We are interested if individuals with anxious and avoidant attachment styles are now turning to social media as a “self-object” instead of turning to an in-person human being. We are interested if this “self-object” need fulfillment is met through social media sites and if these individuals use social media more because of this. Last, we hypothesized that individuals receiving negative or neutral feedback on a profile picture would have lower self-esteem if they had anxious, avoidant, or insecure attachment style. Prior research has shown that reassurance seeking on Facebook results in a decrease in self-esteem (Clerkin et al., 2013). We are interested if this decrease in self-esteem is seen more so in individuals with anxious, avoidant, or insecure attachment style. Those with secure attachment style should be confident in themselves and their relationships with others that their self-esteem should not be as greatly affected as those with avoidant, anxious, or insecure attachment style, as they are insecure with themselves and their relationships with

others. This suggests that those with avoidant, anxious, or insecure attachment style will have lower self-esteem when they feel that their followers are less than supportive.

## **Methods**

### **Participants**

235 individuals, both men and women, who were members of the online website MTurk, were given the opportunity to partake in the online survey. They were all compensated a dollar for participating.

### **Procedure**

The participants were presented the survey when they logged onto their MTurk account. From here, they were provided directions stating that they would be compensated for their time, and that they could leave the survey at any point in time. Participants first completed the Raskin and Terry Narcissistic Personality Inventory (1988) Scale. Participants were then directed to go onto the next page. Participants were then given three questions asking about their social media use. The first question asked was “How many social media sources/sites do you use?”, the second question asked was “approximately how many hours do you use social media sites per week?”, and the last question asked was “On a typical day, how many posts/comments do you make to social media sites?”. Once participants freely answered those three questions, they were directed to the next page. On the next page, participants were asked to complete the Brennan, Clark, and Shaver Experience in Close Relationships Inventory (1998) Scale. The 7-point scale ranged from 1=*Disagree Strongly* to 7=*Agree Strongly*. Once participants had completed the 36 questions, they were directed to move onto the next page. Participants were then randomly

assigned to one of three conditions. In the first condition, the positive feedback condition, participants were presented with a scenario in which they were asked to imagine they had posted a picture of themselves that they thought highly of themselves in, to a social media site and received positive feedback from others such as “This is such a great picture!” or “Looking good!”. The second condition, the no-feedback condition, presented the participants with a scenario in which they were asked to imagine that they had posted a picture of themselves that they thought highly of themselves in, to a social media site and received no feedback from others. The last condition, the negative feedback condition, presented the participants with a scenario in which they were asked to imagine they had posted a picture of themselves, that they thought highly of themselves in, to a social media site and received negative feedback from others such as “Why would you post this picture of yourself?” or “I’ve seen better pictures of you”. Participants then proceeded to the next section in which they were to respond the Rosenberg Self-Esteem (1965) Scale. The questions assessed self esteem and were on a 4-point scale from *strongly agree* to *strongly disagree*. Once participants had completed the 10 questions, they were directed to move onto the next page. Participants were then asked to complete Mayer Mood Inductions for Four Specific Moods (1995) Scale on a 4-point scale from *Definitely would not feel* to *Definitely Would Feel* how much each of the 16 descriptive words listed described them. Using the same scale, participants were then asked what their overall mood would be, on a 5-point scale from *Very Unpleasant* to *Very Pleasant*, after the earlier condition presented to them. Once participants had answered this, they were directed to move onto the last section. Participants were debriefed, explained the purpose of the survey, and credited for participation.

## Results

Before running a 2x3 factorial analysis, the necessary items in the self esteem and attachment style questionnaires were recoded. Self-esteem scores were submitted to a 2 (narcissism: high, low) x 3 (feedback: positive, negative, neutral) analysis of variance (ANOVA). There was a main effect of feedback condition  $F(2, 235) = 22.95, p < .001$ , such that Post-hoc Tukey tests revealed that positive feedback produced higher self esteem ( $M = 34.52\%$ ) than did no feedback ( $M = 29.70\%$ ), or negative feedback ( $M = 27.79\%$ ). There was no main effect of narcissism  $F(1, 235) = 2.56, p > .11$ , such that Post-hoc Tukey tests revealed that self esteem did not significantly differ between low narcissism ( $M = 31.33\%$ ) and high narcissism ( $M = 30.01\%$ ). There was also no interaction between narcissism and condition  $F(2, 161.37) = 2.00, p > .14$ .

Self-esteem scores were submitted to a 2 (anxious attachment style: high, low) x 3 (feedback: positive, negative, neutral) analysis of variance (ANOVA). These effects were qualified by a marginal anxious attachment style x feedback condition interaction  $F(2, 235) = 28.67, p < .001$ , such that Post-hoc Tukey tests revealed that positive feedback produced higher self-esteem ( $M = 34.46\%$ ) than did no feedback ( $M = 29.76\%$ ) or negative feedback ( $M = 27.65\%$ ).

To decompose the interaction, we first examined if the effect of anxious attachment style on self-esteem differed as a function of feedback (Figure 1.) In all three feedback conditions, the effect of anxious attachment style on self-esteem was significant  $t(76) = 3.10, p < .003$ ,  $t(86) = 5.00, p < .000$ ,  $t(73) = 4.70, p < .000$ . Next, we examined if the effect of condition on self-esteem differed as a function of anxious attachment style. Among both low and high-anxiety

participants, the effect of condition on self-esteem was significant  $F(2,117) = 8.54, p < .000$ ,  $F(2,118) = 20.91, p < .000$ .

Self-esteem were submitted to a 2 (avoidant attachment style: high and low) x 3 (feedback: positive, neutral, negative) analysis of variance (ANOVA). These effects were qualified by avoidant attachment style x feedback condition interaction  $F(2, 235) = 25.44, p < .001$ , such that Post-hoc Tukey tests revealed that positive feedback produced higher self-esteem (  $M = 34.45\%$  ) than did no feedback (  $M = 29.55\%$  ) or negative feedback (  $M = 27.90\%$  ).

To decompose the interaction, we first examined if the effect of avoidant attachment style on self-esteem differed as a function of feedback (Figure 2.). In neutral and negative feedback conditions, the effect of avoidant attachment style on self-esteem was significant  $t(786) = 4.13, p < .000$ ,  $t(73) = 4.08, p < .000$ . Next, we examined if the effect of condition on self-esteem differed as a function of avoidant attachment style. Among both low and high- anxiety participants, the effect of condition on self-esteem was significant  $F(2, 118) = 3.72, p < .03$ ,  $F(2,117) = 28.15, p < .000$ .

Self-esteem was submitted to a 2 (secure attachment style: high and low) x 3 (feedback: positive, neutral, negative) analysis of variance (ANOVA). These effects were qualified by secure attachment style x feedback condition interaction  $F(2,235) = 26.58, p < .001$ , such that Post-hoc Tukey tests revealed that positive feedback produced higher self-esteem (  $M = 34.46\%$  ) than did no feedback (  $M = 29.56\%$  ) or negative feedback (  $M = 27.65\%$  ).

To decompose the interaction, we first examined if the effect of secure attachment style differed as a function of feedback (Figure 3.) In the neutral and negative feedback conditions, the effect of secure secure attachment style on self-esteem was significant  $t(86) = 3.67, p < .000$ ,  $t(73) = 4.06, p < .000$ . Next, we examined if the effect of condition on self-esteem differed as a

function of secure attachment style. Among both low and high-secure participants, the effect of condition on self-esteem was significant  $F(2, 115) = 24.36, p < .000$ ,  $F(2, 120) = 5.18, p < .007$ .

Next, a correlational analysis was conducted. There was a positive relation between hours spent on social media sites and the number of sites participants were users of,  $r = .66, p = .000$ , such that participants who spent more time on social media sites were associated with a greater number of social media site use. There was also a positive relation between posts made to social media sites and the number of sites participants were users of,  $r = .03, p = .000$ , such that participants who made more posts to social media sites were associated with a greater number of social media site use. There was no relation between narcissism and hours spent on social media sites,  $r = .03, p = .66$ . There was also no relation between secure attachment style and hours spent on social media sites,  $r = .01, p = .86$  (Figure 4.)

## **Discussion**

Narcissists may not use social media sites more so than do non-narcissists, but the attachment style of these individuals may affect their self-esteem through social media interactions. The current research assessed if attachment style and narcissism would predict individuals' self-esteem in response to social media.

Previous research has studied the narcissist qualities of social media users. A study conducted had participants assigned to either a control condition or a MySpace condition. Those in the MySpace condition had higher reported levels of narcissism than those in the control group (Gentile et. al., 2012). Additionally, research has been done to study if individuals with avoidant and anxious attachment style have "self-object" needs. Participants with avoidant and anxious attachment styles both have "self-object" needs such that those with anxious attachment

style cling to others to provide much needed security, and those with avoidant attachment style have “self-object” needs in order to protect themselves from the recurrence of painful events (Banai et al., 2005). Finally, research has been done to study the effect of social media on self-esteem. Individuals who seek reassurance on Facebook have lower self-esteem than those who do not seek reassurance through Facebook (Clerkin et al., 2013).

The current research first investigated if social media use would be predicted by narcissistic qualities, and if social media would elicit different responses from individuals based on their attachment style and narcissistic personalities. First, I hypothesized that narcissists would have higher social media use than non-narcissists. Results indicated that narcissists did not have any higher of a social media use than non-narcissists.

Next, I hypothesized that individuals with secure attachment style used social media sites less than individuals with anxious or avoidant attachment style did. The results did not support my hypothesis. Results indicated that individuals with secure attachment style did not use social media sites any less than did individuals with anxious or avoidant attachment style.

Next, we hypothesized that narcissistic individuals would report lower levels of self-esteem in neutral and negative feedback conditions. Results indicated that narcissists had no significant difference in self-esteem amongst conditions than did non-narcissists.

Finally, we hypothesized that individuals receiving negative or neutral feedback would have lower self-esteem if they had an anxious, avoidant, or insecure attachment style. The results supported our hypothesis. Results indicated that individuals with anxious, avoidant, and secure attachment style had lower self-esteem in all three conditions.

## **Implications**

My research suggests that attachment style has an effect on an individuals' self-esteem in

response to social media. Individuals with anxious, avoidant, or insecure attachment style are more personally affected by others' opinions and responses, and have lower self-esteem than those without an anxious attachment style. This may be useful knowledge for social media users such that if they are prone to low levels of self-esteem that they can be aware that their social media interactions may be aiding in their lowered self-esteem. Knowing that social media interactions can aid in the decrease of self-esteem amongst those with anxious, avoidant, or insecure attachment styles may help these individuals find alternative healthier ways to stay in touch with others without negatively affecting their self-esteem. Additionally, these individuals may be able to redirect their "self-object" needs. These individuals may be looking at other social media users as "self-objects" but be ultimately harming their self-esteem by choosing this route to fulfill "self-object" needs. These individuals may be able to take this knowledge and find more meaningful and healthy ways to fulfill their "self-object" need by seeking out therapists or in person interactions, thus finding their self-esteem to not be as low as it was before.

### **Limitations**

A potential limitation within this research is the type of participant who participated in this study. All participants were members of MTurk, which itself is an online data collection site. Individuals using MTurk may be higher social media users in general or may use websites more frequently than the average person. This may skew the results of media use, as these individuals may have higher internet use overall than an average individual. If participants were individuals from both the MTurk site, as well as individuals who took part in the study in person, then we would have a more representative collection of participants. This would allow the data collection to better reflect the general population, instead of participants who may be more likely to use social media. While the primary findings support one of my hypotheses, there was no effect

found between narcissism and decreased self-esteem. Perhaps using representative data may show an effect between narcissism and decreased self-esteem. Outside of MTurk, participants could be gathered from malls, grocery stores, or from the streets of cities and towns across America. Individuals could be approached and asked if they wouldn't mind partaking in a study. They could fill out the questionnaires at their location, in person, and be assigned a condition at random. This data would allow for individuals of all ages and all walks of life to provide data and would be less likely to skew the social media use data. I would expect to find the effect between narcissism and lowered self-esteem, as well as a correlation between narcissism and higher social media use.

A second limitation might be the type of experiment conducted in my research. Participants were asked to imagine that they posted a picture to a social media site and to imagine they received a certain type of feedback to this picture. Narcissistic participants may have found this to be unrealistic and difficult to imagine. When participants were asked to answer the questionnaire about self-esteem following their particular condition, their responses may not have been as accurate as they could have been if they did not fully put themselves into the situation. Narcissistic participants may have specific triggers that spark their narcissistic tendencies. They may need realistic interactions with others to feel great about themselves and display narcissistic behaviors. My experiment may not have been enough to spark their narcissistic tendencies to show that narcissism had an effect of self-esteem. To make for more reliable data, a more realistic experiment could be used. Participants could be asked to post a picture of themselves that they really like to a social media site provided by myself. Then they could receive real positive, negative, or no feedback from other social media users at that moment. This may allow for participants to respond to the self-esteem questionnaire more

accurately and provide more accurate data depicting the relationship between social media feedback and narcissism. Participants would not have to imagine a scenario, but instead would be able to live it and experience their condition first hand. Experiencing praise, no recognition, or negativity from others instead of simply reading about this happening may correspond to more realistic responses.

Finally, another limitation of my research was not recording the gender or age of the participants who completed the survey. When participants entered onto my MTurk survey, they were able to do so without recording their age or gender. While I did not find an effect of narcissism on self-esteem, perhaps an effect would have been seen if the data was separated by age or by gender. I believe that younger individuals may have shown this effect more than older individuals, as younger individuals are often more focused on themselves than others as they are growing up. I also believe that women may have shown this effect more so than men, as women are highly sexualized and beautified in society today and women tend to look for responses to their appearances more so than men. This might create an effect if they are more susceptible to having lowered self-esteem to negative or neutral feedback. An experiment with the option to report gender and age would help get rid of this limitation and potentially reveal new correlations or effects.

### **Directions for Future Research**

An approach for future research would be using participants from places other than online. The participants in my study were all MTurk members. Participants were only able to respond to my study online. Using participants from other sources than just the Internet may provide data that is more representative of the population. While my hypothesis on attachment style and self-esteem was shown with the participants collected from MTurk, the effect would be able to be

better applied to the general population if the data was more representative of the general population. My results may be representative of individuals who are more likely to use the internet, instead of being representative of any individual with anxious, avoidant, or insecure attachment style. A similar study would be conducted, but participants would be contacted from other places other than MTurk. Participants could be approached in grocery stores, in malls, or on the streets of towns across America. They would be asked to complete the study for compensation and their data would be collected along with MTurk participants. This would allow us to collect data that is more representative, thus finding meaningful results that could be applied to the general population.

Another approach for future research would be to assess data collected from different countries. My research only collected data from participants in the United States. While my results may be representative of Americans, it may not be representative of all individuals around the world. Societies differ in the extent to which they are individualistic or collectivistic. These societal differences could provide different results to my survey. The same study would be available to not only MTurk users in America, but to other countries around the world. I would ensure that both individualist and collectivist countries would have the survey available to them. I would then compare data and analyze if collectivist societies presented different data than individualist societies. We would expect individualist societies to show similar results to what I found, as these societies are home to individuals who are more independently motivated and encouraged in their day to day life. This suggests that these individuals would be impacted more by neutral or negative responses, than would those from collectivist societies, as these individuals are motivated for the betterment of others and less focused on themselves. I believe that individuals from individualist countries are more focused on themselves than receiving

neutral or negative feedback would harm their self-esteem than those from collectivist countries who feel as a part of a group greater than themselves.

Adding to this, I believe that this research should be expanded to include countries with less social media prevalence than in the U.S. My data may be reflective of a society that is used to high social media use and this data may not be representative of all countries. The same study would be conducted, but would be available in countries with little social media use amongst its citizens, along with it being available to MTurk users in the U.S. We would expect that individuals from a country with little social media use would not be as impacted by neutral or negative responses from a social media site. These individuals would not be as familiar with social media sites and would be less likely to experience a lowered self-esteem because of this. Perhaps in person feedback about their appearance would lower their self-esteem, as this is a familiar interaction, but social media interactions are not.

The last way we could globally look at this data is to look at ages across the world. My research does not have participant information about age, but we would expect younger participants to show greater narcissistic tendencies as they are maturing and still growing up. The same study would be conducted, but it would be available for more countries than only the United States. We would expect that younger participants from around the globe would show a greater effect of lowered self-esteem to neutral and negative feedback if they are narcissistic. No matter where in the world adolescents and young adults are, they are all growing up maturing with age. As young adults, these individuals have a natural tendency to be self-centered. Having data from around the world will allow the results to be better applied to all people and not just those in the United States.

Another approach for future research is to focus on the type of social media source

presented in the survey. My research told participants that they were using a social media site, but did not specify which one. Participants may have imagined this social media site being a specific site and responded to the feedback they received according to what social media site they were imagining. The same study would be conducted, except participants would be randomly assigned to either a Facebook or Instagram condition. This would ensure that participants were imagining themselves on one of the two of these instead of being told they were simply on a social media site. My research did not support the hypothesis that participants who were narcissists would experience a decrease in self-esteem when presented with neutral or negative feedback. We would expect those in the Instagram condition to show the effect that narcissists would experience lowered self esteem after being exposed to neutral or negative feedback. Instagram is a social media site specifically to post pictures, whereas Facebook is a social media site that provides space for posts and social connections to be made with other Facebook users. Participants who imagined they were on Instagram would understand that this site is about getting likes and comments on pictures posted. If narcissistic individuals did not receive the expectations they had in mind, then I believe they would be more likely to show effects of decreased self-esteem in response to neutral or negative feedback. This is useful for social media users to be aware of as they use these two sites. They may realize that they are exhibiting greater narcissistic qualities when using Instagram than Facebook and that their self esteem is directly affected because of this. The creators of Instagram may be able to take this knowledge and develop their site in such a way that doesn't negatively affect self-esteem in its users the way it currently does. This may increase the amount of users it brings to the site, as individuals will be able to use Instagram and experience less lowered self-esteem when using the site.

Lastly, an approach for future research would be the types of people providing feedback in the three conditions. The participants were asked to imagine that other social media users were providing feedback. The participants were not told who these users were in relation to them. Participants, most likely, imaged these users as being friends or family, as these are most commonly the types of people who have access to provide feedback on social media sites. Individuals with “self-object” needs turn to those closest to them to provide this security. Assessing feedback differences would reveal what about social media interactions are affecting participants. A similar study would be conducted, but in addition to the three conditions, there would also be two conditions in which the feedback was being provided by either friends and family or by strangers. I would be able to assess if the type of relationship the participant has with the individual providing feedback influenced reported self-esteem. We would expect there to be a difference in reported self-esteem amongst family and friends feedback, as opposed to stranger feedback, as those with “self-object” needs are most affected by those closest to them. There is a good chance that individuals with avoidant and anxious attachment style would report lower levels of self-esteem for neutral and negative conditions when their friends and family provided feedback, than when strangers provided feedback. This is useful for social media users to be aware of, as they could be more aware that their self-esteem could take a hit if their family and friends on social media sites were not reassuring of their personal image in the way the individuals believed they should be. Individuals with avoidant or anxious attachment styles would then be able to seek out social media sites in which the audience consisted more of strangers than of friends and family in order to limit the decrease they experienced to their self-esteem.

## **Conclusion**

There is a great deal of research done on social media, self-esteem, and narcissism. My research assessed if there was a relationship between narcissism and reported lower self-esteem in response to neutral or negative feedback on social media sites. Additionally, I wanted to research if there was a relationship between anxious or avoidant attachment style and reported lower self-esteem in response to neutral or negative feedback on social media sites. Our research provided results that revealed that individuals with anxious, avoidant, and insecure attachment styles reported lower self-esteem in neutral and negative feedback conditions on social media sites. Additionally, I found a correlation between the number of hours spent on social media sites and the amount of posts made to social media sites. Our findings suggest that individuals with anxious, avoidant, or insecure attachment styles are more prone to being negatively emotionally affected by others on social media sites, as they seem to take no response or negative responses more personally than those with a secure attachment style. Our findings also suggest that individuals with anxious and avoidant attachment style may have “self-object” needs that when not fulfilled in the way needed, results in lower self-esteem.

## Appendix

Figure 1.

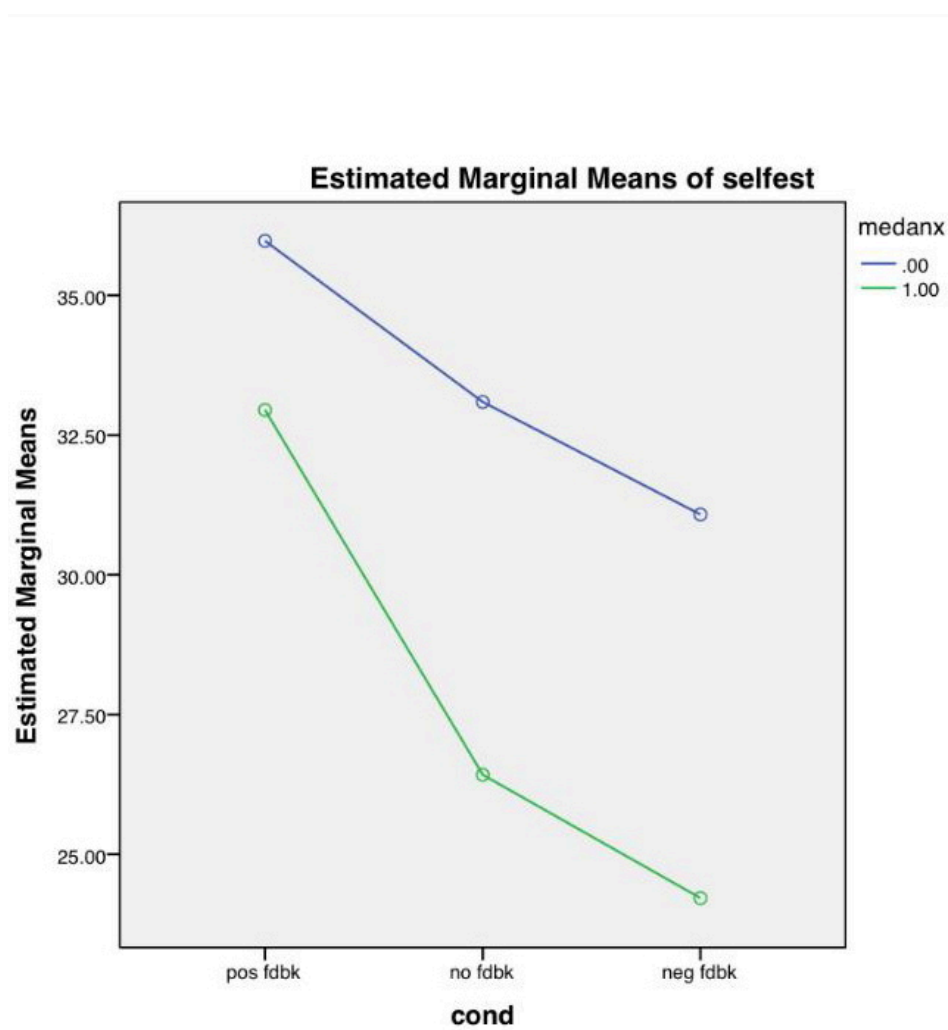


Figure 2.

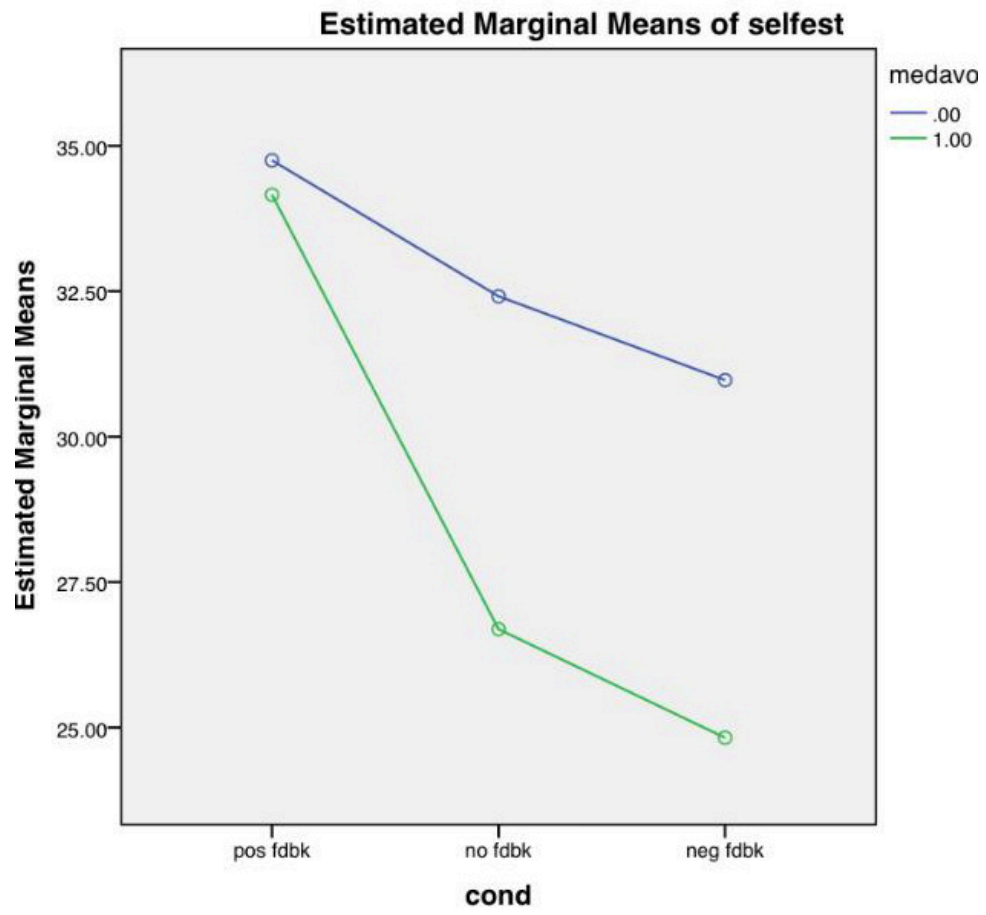


Figure 3.

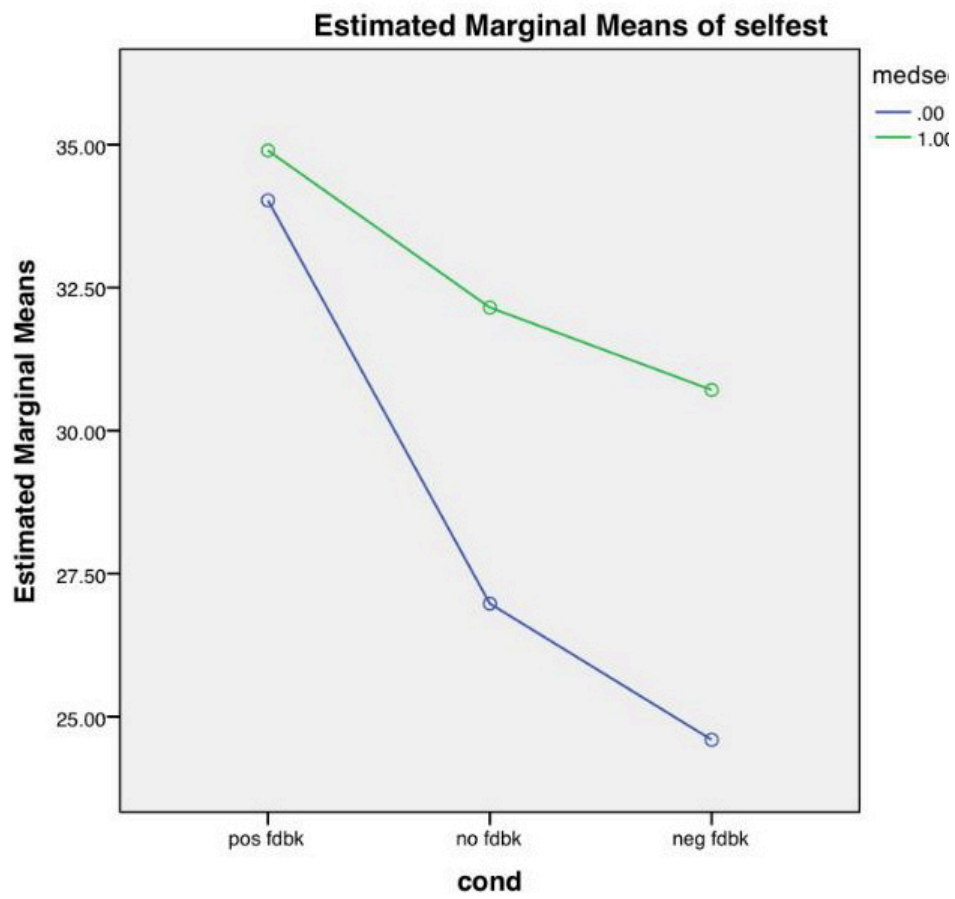


Figure 4.

		narc	att_avo	att_anx	att_sec	sites	hours	posts
narc	Pearson Correlation	1	-.027	.033	-.024	-.098	.029	.027
	Sig. (2-tailed)		.682	.609	.709	.130	.659	.675
	N	241	241	241	241	241	241	241
att_avo	Pearson Correlation	-.027	1	.522**	-.746**	-.065	-.003	-.002
	Sig. (2-tailed)	.682		.000	.000	.311	.965	.974
	N	241	241	241	241	241	241	241
att_anx	Pearson Correlation	.033	.522**	1	-.348**	-.047	.100	.104
	Sig. (2-tailed)	.609	.000		.000	.463	.121	.107
	N	241	241	241	241	241	241	241
att_sec	Pearson Correlation	-.024	-.746**	-.348**	1	-.004	.012	.009
	Sig. (2-tailed)	.709	.000	.000		.945	.855	.884
	N	241	241	241	241	241	241	241
sites	Pearson Correlation	-.098	-.065	-.047	-.004	1	.352**	.342**
	Sig. (2-tailed)	.130	.311	.463	.945		.000	.000
	N	241	241	241	241	241	241	241
hours	Pearson Correlation	.029	-.003	.100	.012	.352**	1	.995**
	Sig. (2-tailed)	.659	.965	.121	.855	.000		.000
	N	241	241	241	241	241	241	241
posts	Pearson Correlation	.027	-.002	.104	.009	.342**	.995**	1
	Sig. (2-tailed)	.675	.974	.107	.884	.000	.000	
	N	241	241	241	241	241	241	241

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