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## Millennials, narcissism, and social networking: What narcissists do on social networking sites and why

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### ABSTRACT

The rise in levels of narcissism among Millennials together with the increased usage of social networking sites (SNSs) raises the question of whether there is a connection between the two. The current study examined the link between narcissism and both SNS activities and motivation for SNSs activities. Results indicated that narcissism did not relate to the amount of time spent on SNS, frequency of status updates, posting picture of others, or checking up on SNS friends. However, narcissism predicted reasons why Millennials use SNSs, such as having as many SNS friends as possible, wanting their SNS friends to know what they were doing, believing their SNS friends were interested in what they are doing, and having their SNS profiles project a positive image. Findings suggest that Millennials' general usage of SNSs is a sign of the times. While narcissists in the Millennial generation do not appear to use SNSs more often than non-narcissists, their reasons for doing so are different.

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### 1. Introduction

Recent research supports the often-made assertion that the Millennial generation, those in college from the early 2000s to late 2010s, are more narcissistic than previous generations (Twenge, Konrath, Foster, Campbell, & Bushman, 2008a, 2008b). This increase in narcissism has occurred alongside the increased usage of social networking sites (SNSs) such as MySpace and Facebook, which have now amassed over 100 million users among them (Kwon & Wen, 2010). SNSs appear to be particularly popular among Millennials, with over 90% of college students having Facebook profiles (Ellison, Steinfield, & Lampe, 2007). The concern is that SNSs may reinforce, or even create, narcissistic tendencies because they offer a convenient outlet to display vanity, self-promote, and accumulate large numbers of superficial friendships (Buffardi & Campbell, 2008), all of which are characteristics of narcissism (American Psychiatric Association, 2000).

The rise in levels of narcissism among Millennials in combination with the increase in the usage of SNSs raises the question of whether there is a connection between narcissism and SNS usage. As such, the current study sought to determine if the SNS activities of Millennials are related to narcissism. We also went beyond SNS behaviors and examined self-reported reasons why Millennials en-

gage in certain SNS activities, what they hope to accomplish through these activities, and if these self-reported motives are related to narcissism.

#### 1.1. Narcissism

Subclinical narcissism is a personality trait that normal, healthy individuals possess to varying degrees, and numerous studies demonstrate the validity of narcissism as a normal personality trait (e.g., Emmons, 1987; Rhodewalt & Morf, 1995; Watson, Grisham, Trotter, & Biderman, 1984). Subclinical narcissism appears quite similar to its clinical counterpart, but exists to a lesser degree. Thus, like clinical narcissists, subclinical narcissists (referred to as "narcissists" from this point) hold an inflated view of themselves, believe they are special and unique, and expect special treatment from others while believing they owe little or nothing in return (American Psychiatric Association, 2000; Millon, 1996). Narcissists lack empathy and have few, if any, close relationships, yet they strongly desire social contact, as others serve as their primary source of admiration and attention. Because narcissists are unable to regulate their own self-esteem, they must rely on external sources for affirmation (Campbell, Rudich, & Sedikides, 2002; Morf & Rhodewalt, 2001). Thus, narcissists engage in a variety of strategies aimed to maintain their inflated egos, such as exhibitionism and attention-seeking behavior (Buss & Chiodo, 1991), and dominance and competitiveness in social situations (Emmons, 1984; Raskin & Terry, 1988).

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## 1.2. Social networking sites

SNSs are some of the most popular online websites, and their popularity is continuing to grow. A prime example of this growth is Facebook, which reported a 153% increase in unique visitors from 2007 to 2008 (comScore, 2008). The increased popularity of SNSs could be due, in part, to the fact that SNSs “allow users to become the producers and stars of their productions as they create their own profiles and observe those of others” (Pempek, Yermolayeva, & Calvert, 2009, p. 237). Indeed, users invite others to become their friends and can choose to become friends with other users as they please. SNS users can also be the “stars” of their profiles and let others know what they are doing and thinking by updating their status and/or posting pictures.

Previous research has primarily examined how broad individual differences such as demographic characteristics (Zhao, Grasmuck, & Martin, 2008), the Five-Factor Model (FFM) of personality (Correa, Hinsley, & Zuniga, 2010; Ross et al., 2009), self-esteem (Steinfeld, Ellison, & Lampe, 2008), and emotional intelligence (Dong, Urista, & Gundrum, 2008) contribute to the use of SNSs. These studies have found small to modest relationships with SNS usage. Thus, there remains a great deal of unanswered questions pertaining to the factors that influence SNS behaviors (Raacke & Bonds-Raacke, 2008; Ross et al., 2009).

One possible reason for these modest effect sizes could be that the constructs examined were too broad (e.g., FFM, general self-esteem) to predict specific SNS behaviors (Ross et al., 2009). As such, the current study examined a more specific characteristic, narcissism, and its relationship with certain SNS activities.

In addition to examining SNS behavior, we examined the relationship between narcissism and self-reported SNS motives to deepen our understanding of what Millennials are hoping to accomplish on SNSs. Previous research has examined various potential SNS uses and gratifications, such as identity formation (Valkenburg, Peter, & Schouten, 2006; Zhao et al., 2008), impression management (Kramer & Winter, 2008), building social capital (Ellison et al., 2007; Valenzuela, Park, & Kee, 2009), and entertainment (Park, Kee, & Venzuela, 2009; Pempek et al., 2009) but has had limited success in identifying why users engage in certain online behaviors. On the whole, these studies have not directly examined the relationships among specific personality characteristics, such as narcissism, and motivations for SNS behavior. The current study begins to address that void by examining how narcissism relates to the self-report reasons for Millennials' engagement in SNS behaviors.

## 1.3. Narcissism and social networking sites

Narcissists crave the attention and approval of others and seek out external sources of admiration and attention to help maintain their self-esteem (Campbell et al., 2002; Morf & Rhodewalt, 2001). SNSs provide an ideal outlet for narcissists to satisfy these needs as SNSs allow users to receive relational benefits from a large number of loose or “weak tie” connections (Ellison et al., 2007; Steinfeld et al., 2008; Valenzuela et al., 2009). These online relationships should appeal to narcissists, who are typically unable or unwilling to form deep or “strong tie” connections that require emotional investments, such as face-to-face relationships and friendships (Campbell, 1999; Campbell & Foster, 2002).

Additionally, one way by which narcissists maintain their inflated self-views is to show dominance and competitiveness in social situations (Emmons, 1984; Raskin & Terry, 1988). It would not be surprising to find that narcissists proudly claim high numbers of SNS friends as it will affirm their grandiosity and create a large online audience for their posts and tweets. Narcissists perhaps even see gaining more SNS friends than others as a form of competition.

These positions are supported by previous research that found narcissism predicted higher levels of social activity in online communities (Buffardi & Campbell, 2008).

**Hypothesis 1:** Narcissism will be positively related to the importance placed on having as many SNS friends as possible, but will not be related to a concern with making as many face-to-face friends as possible.

**Hypothesis 2:** Narcissism will be positively related to the reported number of SNS friends.

SNSs provide easy opportunities for narcissists to engage in the exhibitionism and attention-seeking behaviors that partly define this personality trait, and which help narcissists maintain their grandiose self-images (Buss & Chiodo, 1991). Additionally, given narcissists' proclivity to have an inflated view of themselves and to believe that they are unique and special (American Psychiatric Association, 2000; Millon, 1996), it is reasonable to assume that narcissists want their SNS friends to know what they are doing, believe that their SNS friends are truly interested in what they are doing, and will work to keep the focus of their profile on themselves by posting pictures that feature only themselves and not others.

**Hypothesis 3:** Narcissism will be positively related to Millennials' desire to want their SNS friends to know what they are doing.

**Hypothesis 4:** Narcissism will be positively related to Millennials' belief that their SNS friends are interested in what they are doing.

**Hypothesis 5:** Narcissism will be positively related to the frequency of SNS status updates.

**Hypothesis 6:** Narcissism will be positively related to the extent to which Millennials post pictures which only feature themselves, but negatively related to the extent to which they post pictures that feature others.

Narcissists tend to be self-focused and self-important (Carson, Butcher, & Coleman, 1988), and to believe that they deserve special treatment from others yet need to give little or nothing in return (Millon, 1996). Thus, it is reasonable to expect that narcissists will spend little time checking on their friends and instead spend the majority of their SNS time on self-focused activities (i.e., status updates and posting pictures of themselves).

**Hypothesis 7:** Narcissism will be negatively related to the amount of time spent reading status updates and looking at pictures posted by their friends.

Previous research has suggested that SNS users utilize their profiles to manage their social identity by presenting online selves that are appealing exaggerations of their true selves (Zhao et al., 2008). This idealized self-presentation is easily accomplished via SNSs as users have complete control of their profile content. Because narcissists possess grandiose self-views and tend toward vanity (Morf & Rhodewalt, 2001; Raskin & Terry, 1988), narcissists will likely believe that it is critical that their profile presents an extremely positive and attractive image to match their own inflated self-view. This view is supported by previous research that found narcissism to be positively related to posting more self-promoting content on SNSs (Buffardi & Campbell, 2008).

**Hypothesis 8:** Narcissism will be positively related to the importance that Millennials place on portraying a positive image of themselves through their SNS profile.

## 2. Methods

### 2.1. Participants and procedure

Participants were 374 undergraduate students recruited from departmental subject pools and classrooms. Participants received course credit for completing an online survey. Participants who fell outside of the Millennial generation age range were eliminated, resulting in a final sample of 361. The final sample had a mean age of 20.77 years,  $SD = 1.91$ , ranged from 18 to 33, was 53.6% male and 93.2% Caucasian.

### 2.2. Measures

#### 2.2.1. Narcissism

Participants completed the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). The NPI contains 40 paired statements; each pair includes a narcissistic and a non-narcissistic response. Respondents were asked to select the statement that best matched their own feelings and beliefs. Items included: “Modesty doesn’t become me” versus “I am essentially a modest person” and “I can usually talk my way out of anything” versus “I try to accept the consequences of my behavior.” Narcissistic responses were summed (ranging from 0 to 40), with higher scores indicating a more narcissistic personality. Cronbach’s alpha was .85.

#### 2.2.2. SNS usage

Three separate items assessed SNS usage. The first item asked participants if they were registered with any online SNSs (e.g., Twitter, Facebook, etc.). Three hundred fifty-two participants (97.5% of the final sample) indicated they were registered with at least one SNS and were asked follow-up questions, including two open-ended questions: (1) the number of SNSs to which they belong, and (2) the approximate number of minutes per day spent on SNSs.

#### 2.2.3. SNS friends

Two separate items assessed the importance of getting to know as many people as possible “online” and “face-to-face” (5-point scales, ranging from “not at all important” to “extremely important”). Participants were also asked an open-ended question, “How many SNS ‘friends’ do you have?”.

#### 2.2.4. Reasons for SNS use

Two sets of questions measured the stated reasons why participants update their status or post pictures. The first set consisted of two items assessing the extent to which participants believe others were interested in what they were doing: “Others are interested in what I’m doing” and “Others are concerned with what I’m doing” (5-point scales, ranging from “strongly disagree” to “strongly agree”). Cronbach’s alpha was .78.

The second set of items assessed the extent to which participants want others to know what they are doing: “I want everyone to know what I am doing” and “It is important to me that other people know what I am doing” (5-point scales, ranging from “strongly disagree” to “strongly agree”). Cronbach’s alpha was .90.

#### 2.2.5. Status updates

To assess the frequency of SNS status updates, participants responded to a single item: “How often do you update your status?” (10-point scale, ranging from “never” to “four or more times a day”).

#### 2.2.6. Picture posts

The extent to which posted pictures featured themselves versus others was assessed via agreement with two separate items: “I post a lot of pictures that are just of me” and “Most of the pictures I post are of my friends” (5-point scales, ranging from “strongly disagree” to “strongly agree”).

#### 2.2.7. Other-focused activities

The frequency in which participants engaged in SNS activities that were other-focused was assessed via two items: “How often do you read about what your friends are up to?” and “How often do you read what others have written on your wall or the comments they have made on your status and/or pictures?” (10-point scales, ranging from “never” to “four or more times a day”). Cronbach’s alpha was .85.

#### 2.2.8. SNS profile image

Four questions assessed the importance of the image a profile presents to others. Participants were asked the importance of: (1) their profile making them look attractive to others; (2) their profile making others want to invite them to be a friend; (3) other people being impressed with their profile; and (4) their profile making them look good to others. All utilized a 5-point scale, ranging from “not at all important” to “extremely important.” Cronbach’s alpha was .85.

## 3. Results

### 3.1. Descriptive statistics

Descriptive statistics and variable intercorrelations are presented in Table 1.

Since age and gender were correlated with several outcomes, we controlled for these variables when testing our hypotheses.

### 3.2. Regression analysis

Conducting a series of ordinary least squares (OLS) regressions with the same predictors for each outcome would violate the assumption of independent residuals and could produce biased estimates (e.g., Davidson & MacKinnon, 2004). Thus, hypotheses were tested using seemingly unrelated regressions (SURs; Zellner, 1962), which control for correlated residuals among multiple regression equations.

The distribution of time spent on SNSs, number of SNS friends, and importance of having online friends all had significant, positive skews. As such, a non-parametric bootstrap (Efron & Tibshirani, 1993) was employed that drew 2000 samples and derived the standard errors using a bias-corrected percentile method (Stine, 1989).

### 3.3. Test of hypotheses

The results of the SURs are presented in Table 2.

Narcissism had a significant, positive relationship with the reported importance of getting to know as many people online as possible and the number of SNS friends. Narcissism was not significantly related to getting to know as many people as possible face-to-face. Narcissism was positively related to the reported belief that participants’ SNS friends were interested in what they were doing and to the participants’ reported desire for their SNS friends to know what they were doing. Thus, Hypotheses 1, 2, 3, and 4 were supported.

Narcissism was not significantly related to the reported amount of time spent on SNSs, the frequency of status updates, or other-focused SNS activities. Thus, Hypotheses 5 and 7 were not supported.

**Table 1**  
Descriptive statistics and correlations.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Age	–														
Gender	.19	–													
Narcissism	.05	.20	–												
SNSs registered	.02	.03	.09	–											
SNS friends	–.11	–.07	.24	.03	–										
Minutes on SNSs	–.21	–.10	.06	.23	.13	–									
Status update frequency	–.15	–.13	.06	.22	.12	.44	–								
Picture posts: Just me	.06	.02	.14	.09	–.05	.10	.19	–							
Picture posts: Friends	–.01	–.19	–.07	–.05	.10	.11	.12	–.07	–						
Other-focused activities	–.17	–.13	–.04	.14	.18	.44	.49	.05	.15	–					
Having a lot of online friends	–.03	.05	.20	.08	.06	.08	.13	.21	–.07	–.02	–				
Having a lot face-to-face friends	–.05	–.10	.05	.00	–.04	.07	.04	.02	.18	–.04	.14	–			
Others are interested in what I am doing	.01	.02	.18	.10	.01	.16	.26	.24	.10	.13	.15	.14	–		
I want others to know what I am doing	–.04	.01	.14	.19	–.01	.18	.37	.30	.06	.22	.27	.07	.35	–	
Purpose of profile	–.03	.01	.22	.07	.02	.15	.21	.17	–.03	.15	.57	.24	.28	.38	–
Mean	20.77	1.53	17.40	1.02	607.23	62.87	5.70	2.16	3.18	7.48	1.36	2.76	3.14	2.20	2.02
Standard deviation	1.92	.50	6.76	.16	355.93	53.20	2.02	.91	.96	1.55	.76	1.22	.74	.89	.86

Gender is coded: female = 1, male = 2.

Correlations greater than .11 are significant at .05; correlations greater than .14 are significant at .01.

**Table 2**  
Seemingly Unrelated Regression Results.

Outcomes	Predictors				Pseudo-R <sup>2</sup>
	Age	Gender	Narcissism		
SNS friends	–19.87 (9.05) <sup>*</sup>	–73.28 (37.80)	13.67 (2.92) <sup>***</sup>		.08 <sup>***</sup>
Minutes on SNS	–5.45 (1.40) <sup>***</sup>	–8.67 (5.57)	.67 (.43)		.05 <sup>***</sup>
Status update frequency	–.14 (.05) <sup>*</sup>	–.48 (.22) <sup>†</sup>	.03 (.02)		.04 <sup>**</sup>
Picture posts: just me	.03 (.02)	–.03 (.10)	.02 (.01) <sup>†</sup>		.02 <sup>†</sup>
Picture posts: friends	.01 (.03)	–.37 (.10) <sup>***</sup>	.00 (.01)		.04 <sup>**</sup>
Other-focused activities	–.12 (.05) <sup>**</sup>	–.31 (.17)	.00 (.01)		.04 <sup>**</sup>
Having a lot of online friends	–.02 (.02)	.03 (.08)	.02 (.01) <sup>***</sup>		.04 <sup>*</sup>
Having a lot of face-to-face friends	–.02 (.03)	–.26 (.13)	.01 (.01)		.02
Others are interested in what I am doing	–.02 (.03)	–.03 (.09)	.02 (.01) <sup>***</sup>		.03 <sup>**</sup>
I want others to know what I am doing	–.02 (.03)	–.03 (.09)	.02 (.01) <sup>**</sup>		.02 <sup>†</sup>
Purpose of profile	–.01 (.03)	–.04 (.09)	.03 (.01) <sup>***</sup>		.05 <sup>***</sup>

Unstandardized coefficients of the seeming unrelated regressions are presented with the bias-corrected bootstrap standard errors presented in parentheses.

Gender is coded: female = 1, male = 2.

<sup>\*</sup>  $p < .05$ .<sup>\*\*</sup>  $p < .01$ .<sup>\*\*\*</sup>  $p < .001$ .

Hypothesis 6 was partially supported as narcissism was positively related to posting pictures that featured only themselves, but not with posting pictures of their friends.

Hypothesis 8 was supported as narcissism was positively related to the reported importance of the SNS profile projecting a positive image to others.

#### 4. Discussion

The simultaneous rise of narcissism and SNS usage in the Millennial generation raises the question: is there a relationship between the two? While we are not proposing that everyone who uses SNSs is a narcissist, the medium appears to provide the narcissistic individual an ideal opportunity to display vanity, self-promote, manipulate his/her public-image, and gain approval and attention.

Surprisingly, we found that narcissism was not a strong predictor of the reported amount of time spent on SNSs or frequency of status updates. This suggests that Millennials' SNS usage is not solely about attention-seeking or maintaining self-esteem (a common stereotype for "Generation Me;" e.g., Kelley, 2009), but is also a means of staying connected and communication. While pre-

vious generations accomplished this via letter, telephone, or email, the Millennials may simply prefer to connect and communicate via SNSs. Thus, this may not be a sign of pathology, but a product of the times.

Narcissism was also not strongly related to the types of SNS activities in which Millennials report to engage. Narcissism was only related to posting self-focused pictures and was unrelated to posting pictures of friends and engagement in other-focused activities. One plausible explanation for these non-significant results is that narcissists may selectively post pictures of others whom they perceive to be of high status or otherwise desirable. Since narcissists believe their status increases when they are associated with other special or high-status people, posting pictures of desirable friends may give narcissists a means of bolstering their egos. Although we know that Millennials spend a great deal of time posting pictures and are quick to remove or untag photos they find unflattering (Pempek et al., 2009), future research should examine the role narcissism plays in these types of behaviors (e.g., photo choice, the perceived characteristics of those on whom they focus their online attention, and their motivation for doing so).

While narcissism was not strongly related to self-reported SNS behavior, it was related to the reported reasons why Millennials update their status and the image they hope to project through their SNS profile. Narcissism was found to be positively related to Millennials' reported belief that others are interested in what they are doing and the desire for others to know what they are doing. Given that narcissists are self-focused and believe that they are unique and special, these findings were not surprising. It was also not surprising that narcissism was positively related to the importance of the image an SNS profile presents. This finding is consistent with previous research that found narcissism to be related to the inclusion of more self-promoting SNS content (Buffardi & Campbell, 2008) and consistent with narcissists' use of strategies, such as exhibitionism and attention-seeking, to maintain their egos (Buss & Chiodo, 1991). The online environment allows narcissists to effectively manage their image by controlling the information and activities that are displayed. This control allows narcissists to hide their inadequacies and, thus, bolster their self-esteem.

Finally, while narcissism was positively related to the self-reported number of SNS friends and the desire to amass a large number of SNS friends, it was not related to wanting to make face-to-face friends. Narcissists are usually unable or unwilling to form connections that require emotional investments, such as face-to-face friendships, but still desire the social admiration and attention that a large number of friendships can offer. Thus, narcissists are more socially active on SNSs (Buffardi & Campbell, 2008) and work to amass a large number of SNS friends. The SNS friend count can then serve as a tangible way for a narcissist to demonstrate popularity and importance, and is an easy way to compare his or her "popularity" with others.

Although the current study took an important step in examining the SNS behaviors and motives of narcissists, there were several limitations that should be addressed by future studies. First, the current study used a self-report methodology to assess reports of SNS behavior and the motivation behind SNS activities. Given that the accuracy of self-reports depends upon an individual's ability to introspect, future research should look to replicate the study's finding using other assessment methodologies to measure SNS behaviors and motives.

Second, causation cannot be inferred given the utilization of a correlational design. Future studies should employ experimental methods to help control for potential extraneous variables and more robustly examine the possible causal relationship between narcissism and SNS activities.

The use of single-item criterion measures is another potential limitation of the current study. While many of the study's correlations were significant, they were not particularly strong. While this might indicate narcissism is not an especially strong predictor of SNS activities and motives, it is possible that these correlations were attenuated due to their focus on very specific behaviors. Future research might find more robust correlations between narcissism and SNS variables if composite criterion variables are utilized that focus on engagement in a variety of SNS behaviors over a specific time period.

Although narcissism accounted for some of the variance in self-reported motivation, further research is needed to fully understand what characteristics of Millennials are driving the social networking phenomenon. On this note, one potential way to further explore narcissism and the social networking phenomenon would be to utilize clinical samples diagnosed with Narcissistic Personality Disorder. Although this would likely be a small population, this sample may present a more intense and/or different pattern of behavior.

Finally, our sample was gender balanced, but had a lack of racial diversity. Additionally, our study focused only on the Millennial

generation. Future research should examine if results hold for all racial/ethnic groups and other generational groups.

Despite these limitations, we believe the current study contributes to the understanding of SNS usage among the Millennial generation. While there are many reasons that this generation displays such high usage of these sites, increasing levels of narcissism appear to be one contributing factor, and may help to explain some of the motivation behind SNS usage.

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