



# Facebook Intensity, Friendship Contingent Self-Esteem, and Personality Relationships in College Students

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## Abstract

College students (N=200) completed measures of Facebook use, friendship contingent self-esteem, and personality. A significant positive relationship between Facebook intensity and friendship contingent self-esteem was found, but no significant relationships between Facebook use and personality were discovered. Implications for how and why college students use social networking media are discussed.

## Introduction

Social networking sites, such as Facebook and MySpace, have grown in popularity in recent years and provide an exciting new area of study in the field of psychology.

Facebook provides individuals with easy access to view information about their friends, coworkers, and even complete strangers (Muisse, Christofides, & Desmarais, 2009). Facebook has over 500 million active users and every month over 700 billion minutes are spent on Facebook (Facebook, 2011). Among college students specifically, 96% have a Facebook account (OnlineEducation.net, 2011).

Past research has found relationships between Facebook use and extraverted personality (Correa, Hinsley, & du Zuniga, 2010), narcissism (Buffardi & Campbell, 2008; Mehdizadeh, 2010), and other personality traits (Back et al., 2010; Ross et al., 2009).

For the current study, we were specifically interested in the relationship between Facebook use and individual difference variables including personality, and how self-esteem is based on the quality of friendships. A newly developed friendship contingent self-esteem measure (Cambron, Acitelli, & Steinberg, 2010) provides a means for assessing the importance of relationships to beliefs about the self. The quality of friendships and how this quality affects self-esteem may be related to the frequency and intensity by which individuals engage in social networking. Individuals who value their friendships and see these friendships as important dimensions of themselves may engage in increased social networking behaviors to provide additional means for keeping track of friends and sharing personal activities.

## Current Study Hypotheses

We predicted a positive relationship between Facebook use and friendship contingent self-esteem. We also predicted positive relationships between Facebook use and narcissism and extraversion, consistent with previous research.

## Method

### Participants

Undergraduates (N=200) from public universities in Ohio and South Carolina participated in the current study for course research credit. The majority of the student participants were from Coastal Carolina University (77.5%) and 22.5% were from The Ohio State University. Sixty-five percent of the participants were women and 35% were men. Participant ages ranged from 18 to 40 (M=19.98, SD=5.45). The majority of participants were Caucasian (80%), while 14% were African American, 2.5% Hispanic, .5% Asian, 2.5% Native American, and .5% indicated "other". The class rank of the participants consisted of 40% freshman, 35.5% sophomores, 13.5% juniors, 8.5% seniors, and 2.5% of the participants indicated "other".

### Materials & Procedure

Participants completed a series of previously developed surveys in random order. The Facebook Intensity Scale (FIS; Ellison, Steinfield, & Lampe, 2007) has eight questions designed to measure active engagement and emotional connection with Facebook. Two additional Facebook Usage scales (Ellison, Steinfield, & Lampe, 2007) were used to measure how people used Facebook to meet new people (On to Offline; 1 item) and connect with existing offline contacts (Off to Online; 5 items). Participants answered each question on a five point Likert scale with 1=strongly disagree and 5=strongly agree.

The Friendship Contingent Self-Esteem Scale (FCSES; Cambron, Acitelli, & Steinberg, 2010) is an eight question scale which measures the importance of relationships to beliefs about the self. The questions are answered on a five point Likert scale ranging from 1=very little like me to 5=very much like me.

The Narcissistic Personality Inventory 16 (NPI-16; Ames, Rose, & Anderson, 2006) is a 16-item questionnaire which measures narcissism. Participants read pairs of statements and then selected the statement that best described their feelings and beliefs about themselves.

The Ten-Item Personality Inventory (TIPI; Rentfrow, Gosling, & Swann, 2003) is a 10-item questionnaire. The participant rates how much they agree with each statement on a seven point Likert scale. The scale ranges from 1=disagree strongly to 7=agree strongly for each of the Big Five dimensions of personality: extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience.

Demographic questions included age, gender, race, major, and year in school.

## Results

Descriptive statistics for Facebook usage are presented in **Table 1**. Measures were scored and correlated with each other. Facebook intensity was positively correlated with friendship contingent self-esteem,  $r(198)=.21, p=.003$ . Interestingly, Facebook intensity was not correlated with narcissism,  $r(198)=.06, p=.32$ , or the other measures of personality, all  $r<.10$ , except conscientiousness, which was marginally significant,  $r(198)=-.13, p=.06$ . Facebook intensity was negatively correlated with participant age,  $r(198)=-.16, p=.02$ . Narcissism was positively correlated with total number of Facebook friends reported,  $r(198)=.25, p<.001$ . Correlations are presented in **Table 2** and **Table 3**.

Table 1. Descriptive Statistics for Facebook Usage.

Questions (free response)	M	(SD)
1) About how many total Facebook friends do you have?	346.73	(35.24)
2) In the past week, on average, how many minutes per day have you spent on Facebook?	73.02	(14.73)

Table 2. Facebook Intensity, Narcissism, Friendship Contingent Self-Esteem, and Personality Correlations.

	FB_INTENSITY	NARCISSISM	FCSES
EXTRAVERSION	Pearson Correlation Sig. (2-tailed)	.047 .510	.047 .300
AGREEABLENESS	Pearson Correlation Sig. (2-tailed)	-.096 .175	.094 .142
CONSCIOUSNESS	Pearson Correlation Sig. (2-tailed)	-.132 .062	-.053 .598
EMOTIONAL STABILITY	Pearson Correlation Sig. (2-tailed)	-.056 .429	-.079 .295
OPENNESS TO EXPERIENCE	Pearson Correlation Sig. (2-tailed)	.000 .996	-.018 .867
AGE	Pearson Correlation Sig. (2-tailed)	-.164* .020	-.197** .005

Note. \*\* Correlation is significant at the 0.01 level (2-tailed).  
\* Correlation is significant at the 0.05 level (2-tailed).

Table 3. Facebook Intensity, Narcissism, Friendship Contingent Self-Esteem, and Facebook Measure Correlations.

	FB_INTENSITY	NARCISSISM	FCSES
NARCISSISM	Pearson Correlation Sig. (2-tailed)	.065 .362	.1 .023
FCSES	Pearson Correlation Sig. (2-tailed)	.212** .003	-.161* .023
FB_OFF to ONLINE	Pearson Correlation Sig. (2-tailed)	.538** .000	.068 .053
FB_ON to OFFLINE	Pearson Correlation Sig. (2-tailed)	.309** .000	.208** .775
MIN/DAY on FB	Pearson Correlation Sig. (2-tailed)	.552** .000	.093 .672
FB FRIENDS	Pearson Correlation Sig. (2-tailed)	.393** .000	.247** .897

Note. \*\* Correlation is significant at the 0.01 level (2-tailed).  
\* Correlation is significant at the 0.05 level (2-tailed).

## Discussion

As predicted, Facebook intensity was positively related to friendship contingent self-esteem. Individuals who consider friends and friend relationships important to their esteem are more actively engaged and emotionally connected using Facebook.

Personality dimension measures were not significantly related to Facebook intensity overall. However, there was a marginally significant negative correlation between conscientiousness and Facebook intensity. Interestingly, older individuals used Facebook less in the current sample.

While Facebook intensity was not related to narcissism, more narcissistic individuals did report having more Facebook friends. More narcissistic people also reported using Facebook to meet new friends online. In addition, friendship contingent self-esteem was negatively correlated with narcissism. Narcissistic individuals do not appear to derive their self-esteem from quality of friend relationships, but the quantity of friends appears to be important to them.

Limitations include self-report measures and social desirability influences. Overall, the results of this study have broad implications for understanding individuals who use social networking sites and how their online behaviors are related to friendship contingent self-esteem.

## Selected References

Cambron, M., Acitelli, L., & Steinberg, L. (2010). When friends make you blue: The role of friendship contingent self-esteem in predicting self-esteem and depressive symptoms. *Personality & Social Psychology Bulletin*, 36(3), 384-397.

Ellison, N. B., Steinfield, C., & Lampe C. (2007). The benefits of facebook "friends": Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12(4), 1143-1168.

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