

Facebook and Personality: What Is The Connection?

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Introduction



Social networking sites (SNSs) are Internet-based communities that individuals use to make a public or partially-public profile, communicate to other members, and review their connections to other members. One well-known SNS is Facebook, which was created in February 2004 by Harvard student Mark Zuckerberg. The website's statistics estimate that there are more than 400 million active users; half of whom log on to the site daily. Once logged on, members can engage in numerous activities, including viewing Walls where posts to and from other members are made, uploading or browsing through photos, and using applications to play games. This study's objective is to investigate the personality variables that are associated with such Facebook use.

Personality Variables
Extraversion (Big Five Inventory)
Neuroticism (Big Five Inventory)
Openness (Big Five Inventory)
Agreeableness (Big Five Inventory)
Conscientiousness (Big Five Inventory)
Self Esteem (Rosenberg)
Narcissism (Phares & Erksine)
Loneliness (UCLA Revised Version 2)
Social Self Efficacy
Social Anxiety (Mini-Social Phobia Inventory)

Facebook Variables
Time spent on Facebook (Ross' ' Facebook Intensity Scale)
Number of Facebook friends
Profile picture style
Number of posted photos
Privacy settings
Use of Facebook applications
Number of people responded to and from
Number of networks/causes joined
Frequency of updating Profile picture

Hypotheses

Personality Variable	Association
Extraversion	Number of Facebook friends Number of Photos Amount of information allowed to be viewed by others
Self Esteem	Number of Facebook friends
Loneliness	Low number of Facebook friends
Narcissism	Model/posed profile picture Use of Photoshop to alter photos
Social anxiety	Low number of Facebook friends
Social Self Efficacy	Increasing number of Facebook friends

Methods

139 undergraduate students from the University of the Fraser Valley (105 female, 34 male) took part in the survey. They were recruited through the psychology departmental experimental pool. Ages ranged from 17 to 43 years old (M=20.1, SD=3.9). 19 participants indicated that they were of non-Caucasian ethnicity. 105 participants lived with parents; the rest either lived alone, with friend(s), or with partner/spouse. Students were given additional course credits for their participation. Participants completed a 129 item survey comprising questions regarding Facebook use, personality characteristics, and demographic information.

Results

Facebook Variable	Mean	Standard Deviation
Number of Facebook Friends	392	1.45
Posted Photos	300.91	366.19
Number of People Responded To	23.97	54.12
Number of People Responded To Them	29.27	67.13
Number of Networks	3.52	5.80
Number of Wall Posts from others	34.65	4.83

By including "Time spent daily" to Ross et al's Facebook Intensity Scale (2009), the Cronbach's alpha increased from 0.878 to 0.881. There were correlations found between various personality variables and number of Facebook friends. However, the correlation between Social Anxiety and number of Facebook friends ceases to be significant when controlling for other friends and friends/acquaintances.

Personality Variable	Correlation between each Personality Variable & Number of Facebook friends	Partial Correlation between each Personality Variable & Number of Facebook friends
Self Esteem	.254*	.238*
Extraversion	.390*	.345*
Loneliness	-.271*	-.227*
Social Anxiety	-.309*	-.136
Social Self Efficacy	.226*	.219*

* p< .01

Lastly, a multiple linear regression analysis was conducted to evaluate how well Loneliness, Social Anxiety, Self Esteem, Social Self Efficacy, and Extraversion can predict number of Facebook friends. The linear combination of personality scores was significantly related to number of Facebook friends, $F(5, 133)=5.546, p<.001$. The sample multiple correlation coefficient was .42, indicating that roughly 17% of the variance of number of Facebook friends can be accounted for by the linear combination of personality scores. The following are indices to indicate the relative strength of the individual predictors.

Predictor	Correlation between each predictor and number of Facebook Friends	Correlation between each predictor and number of Facebook friends controlling for all other predictors
Self Esteem	.251	.024
Extraversion	.390*	.246*
Loneliness	-.293	-.073
Social Anxiety	-.309	-.027
Social Self Efficacy	.226	.015

* p< .01

Conclusion

The present study measured a variety of general (Big Five) and specific (ie. Loneliness) personality variables along with patterns of Facebook use in a volunteer sample. Results indicate a significant positive association between Extraversion, Self Esteem, Social Self Efficacy, Loneliness, and number of Facebook friends that remained strong even when controlling for "real life" friends and acquaintances. Multiple regression analysis suggests that Extraversion is responsible for most of the correlation between personality and number of Facebook friends. These findings suggest that the nature and value of Facebook social capital differs from regular "real life" social relations. The present study was able to extend the findings of other studies that included only the Big Five scales by incorporating various other personality measures, assessing a wide range of Facebook activities, and increasing the Cronbach's alpha of the Facebook Intensity Scale. Given the proliferation of social media and its dynamic nature, further research replicating and extending these results is warranted.

References

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