The Big Five, self-esteem, and narcissism as predictors of the topics people write about in Facebook status updates

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ABSTRACT

Status updates are one of the most popular features of Facebook, but few studies have examined the traits and motives that influence the topics that people choose to update about. In this study, 555 Facebook users completed measures of the Big Five, self-esteem, narcissism, motives for using Facebook, and frequency of updating about a range of topics. Results revealed that extraverts more frequently updated about their social activities and everyday life, which was motivated by their use of Facebook to communicate and connect with others. People high in openness were more likely to update about intellectual topics, consistent with their use of Facebook for sharing information. Participants who were low in self-esteem were more likely to update about romantic partners, whereas those who were high in conscientiousness were more likely to update about their children. Narcissists' use of Facebook for attention-seeking and validation explained their greater likelihood of updating about their accomplishments and their diet and exercise routine. Furthermore, narcissists' tendency to update about their accomplishments explained the greater number of likes and comments that they reported receiving to their updates.

1. Introduction

Why do some people write Facebook status updates that describe amusing personal anecdotes, whereas others write updates that declare love to a significant other, express political opinions, or recount the details of last night's dinner? Since the inception of Facebook in 2004, status updates have been one of its most preferred features (Ryan & Xenos, 2011). Status updates allow users to share their thoughts, feelings, and activities with friends, who have the opportunity to "like" and comment in return. In spite of the central role of status updates in Facebook use, few studies have examined the predictors of the topics that people choose to write about in their updates. The current study took a step in this direction by examining the personality traits associated with the frequency of updating about five broad topics identified through a factor analytic approach: social activities and everyday life, intellectual pursuits, accomplishments, diet/exercise, and significant relationships. We also examined whether these associations were mediated by some of the motives for using Facebook identified in the literature (e.g., Bazarova & Choi, 2014; Seidman, 2013): need for validation (i.e., seeking attention and acceptance), self-expression (i.e., disclosing personal opinions, stories, and

complaints), communication (i.e., corresponding and connecting), and sharing impersonal information (e.g., current events).

A secondary purpose of this study was to examine whether people who update more frequently about certain topics receive greater numbers of "likes" and comments to their updates. Those who do may experience the benefits of social inclusion, whereas those who do not might experience a lower sense of belonging, self-esteem, and meaningful existence (Tobin, Vanman, Verreynne, & Saeri, 2015). Our results may therefore shed light on the status update topics that put Facebook users at risk of online ostracism. Below we review literature on personality traits and motives that are often linked with Facebook use.

1.1. The Big Five

According to the "Big Five" model of personality, individuals vary in terms of extraversion, neuroticism, openness to experience, agreeableness, and conscientiousness (Costa & McCrae, 1992). People who are extraverted are gregarious, talkative, and cheerful. They tend to use Facebook as a tool to communicate and socialize (Seidman, 2013), as reflected in their more frequent use of Facebook (Gosling, Augustine, Vazire, Holtzmann, & Gaddis, 2011), greater number of Facebook friends (Amichai-Hamburger & Vinitzky, 2010), and preference for features of Facebook that allow for active social contribution, such as status updates (Ryan & Xenos, 2011). We therefore predicted that extraversion would

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be positively associated with updating about social activities, and that this association would be mediated by extraverts' use of Facebook for communication (*Hypothesis 1*).

Neuroticism is characterized by anxiety and sensitivity to threat. Neurotic individuals may use Facebook to seek the attention and social support that may be missing from their lives offline (Ross et al., 2009). Accordingly, neuroticism is positively associated with frequency of social media use (Correa, Hinsley, & de Zuniga, 2010), the use of Facebook for social purposes (Hughes, Rowe, Batey, & Lee, 2012), and engaging in emotional disclosure on Facebook, such as venting about personal dramas (Seidman, 2013). Their willingness to disclose about personal topics led us to predict that neuroticism would be positively associated with updating about close relationships (romantic partners and/or children), and that the selection of these topics would be motivated by their use of Facebook for validation and self-expression (*Hypothesis 2*).

People who are high in openness tend to be creative, intellectual, and curious. Openness is positively associated with frequency of social media use (Correa et al., 2010), and with using Facebook for finding and disseminating information, but not for socializing (Hughes et al., 2012). We therefore predicted that openness would be positively associated with updating about intellectual topics, and that this association would be mediated by the use of Facebook for sharing information (*Hypothesis 3*).

People who are high in agreeableness tend to be cooperative, helpful, and interpersonally successful. Agreeableness is positively associated with posting on Facebook to communicate and connect with others and negatively associated with posting to seek attention (Seidman, 2013) or to badmouth others (Stoughton, Thompson, & Meade, 2013). The interpersonal focus of agreeable people and their use of Facebook for communication may inspire more frequent updates about their social activities and significant relationships (*Hypothesis 4*).

Conscientiousness describes people who are organized, responsible, and hard-working. They tend to use Facebook less frequently than people who are lower in conscientiousness (Gosling et al., 2011), but when they do use it, conscientious individuals are diligent and discreet: they have more Facebook friends (Amichai-Hamburger & Vinitzky, 2010), they avoid badmouthing people (Stoughton et al., 2013), and they are less likely to post on Facebook to seek attention or acceptance (Seidman, 2013). Thus, we predicted that conscientiousness would be positively associated with updating about inoffensive, "safe" topics (i.e., social activities and everyday life), which would be mediated by the lower tendency of using Facebook for validation (*Hypothesis 5*).

1.2. Self-esteem

People with low self-esteem are more likely to see the advantages of self-disclosing on Facebook rather than in person, but because their status updates tend to express more negative and less positive affect, they tend to be perceived as less likeable (Forest & Wood, 2012). Furthermore, anxiously-attached individuals – who tend to have low self-esteem (Campbell & Marshall, 2011) – post more often about their romantic relationship to boost their self-worth and to refute others' impressions that their relationship is poor (Emery, Muise, Dix, & Le, 2014). We therefore hypothesized that self-esteem would be negatively associated with updating about a romantic partner, and that this association would be mediated by the use of Facebook for validation (*Hypothesis 6*).

1.3. Narcissism

Narcissistic individuals tend to be self-aggrandizing, vain, and exhibitionistic (Raskin & Terry, 1988). They seek attention and admiration by boasting about their accomplishments (Buss & Chiodo, 1991) and take particular care of their physical appearance (Vazire, Naumann, Rentfrow, & Gosling, 2008). This suggests that their status updates will more frequently reference their achievements and their diet and exercise routine (*Hypothesis 7*). Moreover, the choice of these topics may be motivated by the use of status updates to gain validation for inflated self-views, consistent with the positive association of narcissism with the frequency of updating one's status (Carpenter, 2012), posting more self-promoting content (Mehdizadeh, 2010), and seeking to attract admiring friends to one's Facebook profile (Davenport, Bergman, Bergman, & Fearrington, 2014).

1.4. Response to status updates

We examined whether people receive differential numbers of likes and comments to their updates depending on their personality traits and frequency of writing about various topics. People with lower self-esteem tend to receive fewer likes and comments because their status updates express more negative affect (Forest & Wood, 2012). We tested the possibility that they may also receive fewer likes and comments because they are more likely to update about their romantic partner (*Hypothesis 8*); indeed, people who write updates that are high in relationship disclosure are perceived as less likeable (Emery, Muise, Alpert, & Le, 2015). The associations of the Big Five traits, narcissism, and the other status update topics with the number of likes and comments received were examined on an exploratory basis to shed light on who may be at risk of receiving less social reward on Facebook, and whether it is because they express unpopular topics in their updates.

2. Method

2.1. Participants

Data was collected from 555 Facebook users currently residing in the United States (59% female; M_{age} = 30.90, SD_{age} = 9.19). Sixty-five percent of participants were currently involved in a romantic relationship, and 34% had at least one child. Fifty-seven percent checked Facebook on a daily basis, and spent an average of 107.95 min per day actively using it (SD = 121.41). Ninety percent of participants were recruited through Amazon's Mechanical Turk and paid $1.00 in compensation; the rest were recruited through web forums for online psychology studies, and received no compensation.

2.2. Materials and procedure

Participants completed an online survey consisting of demographic questions and the following measures. Cronbach's alpha coefficients are reported in Table 1.

2.2.1. Big Five personality traits
The 35-item Berkeley Personality Profile (Harary & Donahue, 1994) measures extroversion, neuroticism, openness, agreeableness, and conscientiousness with 7 items each (1 = *Strongly disagree*, 5 = *Strongly agree*).

2.2.2. Self-esteem
The 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965) measures self-esteem with items such as "I feel that I have a number of good qualities" (1 = *Strongly disagree*, 5 = *Strongly agree*).