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## Self-Disclosures on Facebook: The Two Faces of Narcissism

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### Abstract

*Individual personality traits are key factors that affect users' self-disclosure on SNS. We examined the relationship between an individual personality trait (i.e., narcissism) and three dimensions of self-disclosure behavior on Facebook (i.e., intention, level, and control of self-disclosure). A total of 261 Facebook users completed an online survey. The findings showed that more narcissistic individuals engage in deeper levels of self-disclosure and do so with greater intentionality than previous research indicated. More interestingly, narcissistic users simultaneously tend to control their expressions in public by concealing who they really are. Overall, these findings suggested that the self-disclosures on Facebook must not be investigated by a single dimension for better understanding of psychological dynamics of its users. In addition, the present research suggested that narcissism should not be regarded as a predictor which simply gives either a positive or negative influence on self-disclosing behaviors in SNS.*

*Keywords: Self-disclosure, Self-disclosure Control, Self-disclosure Intention, Self-disclosure Level, Facebook, Narcissism*

## 1. Introduction

As the world's largest social networking site with 1.59 billion daily active users [1], Facebook offers a venue where its users over the globe not only get connected one another [2, 3], but construct their identities through self-expression [4, 5]. A considerable amount of research has examined users' self-expression on Facebook. For example, Special and Li-Barber found that Facebook users who disclose more (vs. less) are more likely to satisfy with Facebook [6]. Hollenbaugh and Ferris focused on the depth, breadth, and amount of users' self-disclosure on Facebook, and investigated the effects of the antecedent variables (e.g., Big Five traits, social cohesion, and Facebook motives) [7]. Wang, Yan, Lin, and Cui explored self-disclosure intention by the effects of social and monetary rewards [8]. Even though not all terminologies have been standardized over the body of research, they still carry on the works of social psychology which posit sub-dimensions of self-disclosure [9, 10].

Among the other individual personality traits, which are key factors for explaining online self-disclosure, the literature of narcissism interestingly posits two inconsistent explanations on self-disclosure through SNS. While narcissistic Facebook users are more likely to engage in self-presenting activities on Facebook [11], they also regulate and control how they would look by inhibiting self-disclosure [12]. We, therefore, aimed to identify the influence

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of narcissism on self-disclosure through Facebook by three different aspects of self-disclosure: intention, level, and control. The findings of the research will contribute to our understanding of the complex influences of narcissism on self-disclosing behaviors on social networking sites.

## **2. Literature Review and Hypothesis Development**

### ***Self-Disclosure on Facebook***

Self-disclosure is defined as exposure of private and personal information to another person or to the public [13]. Altman and Taylor indicated that the concept of self-disclosure derives from social penetration theory [9], which suggests that interpersonal communication becomes deeper and more intimate as the relationship develops. The theory posits two dimensions of self-disclosure, breadth and depth, as crucial to developing intimate relationships. It takes that the extent of self-disclosure is determined by breadth and depth: breadth concerns the number of self-relevant areas individuals disclose (“how many”) whereas depth refers to the level of self-disclosure intimacy (“how much”) [9]. Wheelless, on the other hand, suggested that self-disclosure is a multi-dimensional concept with five broad dimensions: intention of self-disclosure, amount of self-disclosure (frequency and duration), valence of self-disclosure (positive or negative), honesty-accuracy of self-disclosure (whether self-disclosed information is accurate), and control of depth of self-disclosure (control of intimacy) [10].

The self-disclosure serves an important role in relationship initiation and maintenance [9, 14]. People share more and deeper self-relevant (as opposed to superficial) information with one another as the relationship grows more intimate, and it is followed by increases of both the breadth and depth of self-disclosure [9]. The SNSs, especially Facebook, provides a great venue where to initiate and deepen interpersonal relationships [15]. Facebook, as the world’s largest social networking site [1], offers a function of privacy setting which enables the users to take controls over the extent to disclose themselves when connected [16]. It implies that the online venue lends the users a differentiated strategy to determine the extent of disclosure. For instance, some users could either remove or add photos in their profiles, or others can grant access of their postings either to the public or only to their close friends. Among various aspects and dimensions, self-disclosure on Facebook is represented by intention, level, and control of self-disclosure in the present study. We do not include the other dimensions such as valence of self-disclosure or honesty-accuracy of self-disclosure because they are more closely related to self-disclosing contents than whether they disclose or not.

### ***2.1 Individual factors and Personality traits on Self-disclosure***

A number of researchers have investigated that the users’ self-disclosing behaviors on SNS are significantly influenced by individual factors and personality traits. Based on Big Five personality traits theory, Ross and his colleagues focused on neuroticism which lend the users to share more of personally-identifying information on Facebook [17]. Marshall, Lefringhausen and Ferenczi observed how SNS users disclose themselves by sorting out the traits and the themes of information they disclosed [18]. Extraverts were disclosed more of their social activities and everyday life motivated by their needs for interacting and being connected. Individuals high in openness posted about intellectual topics whereas conscientious users revealed more about their children. Lee, Ahn, and Kim found extravert and agreeable users tend to engage in more status updates and more clicks on “Like” and “Comment” as a part of self-resenting strategy through Facebook [11]. Notwithstanding the contributions of Big Five, the works were limited by broadness of the Five-Factor approach to capture the nuances associated with self-disclosure at Facebook [17, 19]. Thus, narrower personality traits were, instead, suggested to be investigated.

Given that the nature of Facebook is to be open and stay connected [7], shyness is one of the most frequently researched individual factors predicting self-disclosing behaviors [20]. Shyness is “an anxious preoccupation of the self in response to real or imagined social interaction” [21]. Since shy individuals are highly self-conscious especially when engaged in self-presentation, they tend to be sensitive regarding the evaluations of others and avoid disclosing self-relevant information [22, 23]. Sheldon showed that there was a negative correlation between shyness and the breadth and depth of self-disclosure on Facebook [24]. Unlike shyness, however, sociability is the innate motivation and need to be with others [25]. Sociable individuals tend to be conversational, interpersonally

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active, socially engaged in general communication behaviors, and most of all habituated to self-disclosure [7]. In addition, they are neither anxious nor fearful in building relationships with others, with no hesitation to open them to self-disclosure [20].

### 2.2.1 Narcissism

Narcissism refers to a personality trait of a grandiose and inflated self-concept [12]. Narcissistic trait has been frequently investigated and analyzed as a key factor and an antecedent of SNS usage [26-29]. Interestingly, however, prior research has shown somewhat inconsistent findings regarding self-disclosing behavior. Narcissists' tendencies toward exhibitionistic and attention-seeking behaviors make them more likely engage in Facebook activities that provide promising opportunities for online self-presentation [11]. Liu and Baumeister found a positive correlation between Facebook users' narcissism and indices of Facebook activities such as status updating, posting, and numbers of friends [30]. Posting pictures and status updates on Facebook, in particular, are proved to induce self-promoting effects among the users [12], and narcissistic users tend to post more self-promoting contents on Facebook [28]. Nevertheless, narcissism also has been explained that it rather regulates and modifies what they would look like by controlling and keeping a part of self from disclosure [12]. Narcissistic Facebook users gain complete power over self-presentation, and thereby control some part not to be revealed [12]. For instance, Facebook users can be selective about which information or photos to post so they can project enhanced sense of self [28]. Research has also shown that the anonymity of the Facebook environment facilitates such tendencies of identity construction [4].

The current research attempts to investigate the inconsistencies of narcissism that how narcissistic Facebook users engage in self-disclosure online in terms of intention, level, and control. Thus, the present study predicts that narcissism will be positively correlated with disclosure intentions regarding self-relevant information (H-a) and the level of self-disclosing behaviors (H-b). Considering that narcissists are more prone to self-promoting and self-enhancing than non-narcissists, the present study predicts that narcissism will be positively correlated with the control of general depth of their self-disclosure (H-c).

**Hypothesis:** Narcissism will be positively correlated with self-disclosure a) intention, b) level, and c) control.

To sum up, this study identifies a narrower personality trait as highly relevant to Facebook and self-disclosing behaviors: narcissism. More specifically, this study examined how narcissism influences on self-disclosure intentions, levels, and control of using Facebook.

## 3. Method

### 3.1. Sample and procedure

Data was collected through an online survey conducted by a major research company in the Republic of Korea. The respondents were all Facebook users, and a total sample of 261 participants completed the online survey. Out of 261, 137 were male (52.5%) and 124 were female (47.5%). The ages of participants ranged from 20 to 49 ( $SD = 8.40$ ), and the average age of the samples was 34. The participants have maintained their Facebook accounts for 35.5 months ( $SD = 20.36$ ) on average, and they had 96.3 friends ( $SD = 118.33$ ) in their profiles. 46.8% of the respondents reported to be current active users that they access their Facebook account more than once a day.

### 3.2. Measures

The online survey questionnaire consisted of single independent variable (i.e. narcissism) and three dependent variables (i.e. self-disclosure intention, level of self-disclosure, and control of self-disclosure), all of which were self-reported measures. Questions for general patterns of Facebook usage and demographic information were also collected.

To measure narcissism, the questionnaire utilized the Narcissistic Personality Inventory (NPI-13) [31]. The Self-Disclosure Scale developed by Wheelless was partially modified and used to measure users' self-disclosure on Facebook [32]. Specifically, scale items for self-disclosure control were modified from the items of self-disclosure intention. Self-disclosure intention was measured using five items (e.g., "I intend to disclose things about myself on Facebook."). To measure the level of self-disclosure, five items (e.g., "I usually disclose myself on Facebook just as who I am.") were used. Likewise, five items (e.g., "When I reveal myself on Facebook, I often consciously

control it.”) were used to measure the control of self-disclosure. All items were measured with a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree).

#### 4. Results

Means and standard deviations along with a correlation matrix are shown in Table 1. To test our hypothesis, correlations analyses between the variables of interest were conducted. As shown in Table 1, our analysis showed significant positive associations between narcissism and self-disclosure intention ( $r = 0.33, p < 0.01$ ), level ( $r = 0.42, p < 0.01$ ), and control ( $r = 0.15, p < 0.05$ ), thereby supporting H-a, H-b, and H-c respectively.

**Table 1. Correlations among the variables and descriptive statistics**

Measure	1	2	3	4	Mean	SD
1. Narcissism ( $\alpha=.88$ )	-	.35**	.41**	.13*	3.68	.79
2. Self-disclosure intention ( $\alpha=.93$ )		-	.79**	.08	3.79	1.27
3. Self-disclosure level ( $\alpha=.96$ )			-	.08	3.45	1.35
4. Self-disclosure control ( $\alpha=.96$ )				-	4.03	1.39

For further extension of our findings, a series of hierarchical regression analyses were performed to examine the relative effect of narcissism. The intention, level, and control of self-disclosure on Facebook were set as dependent variables, and single independent variable was tested. Gender and age were controlled by Block 1, and the level of narcissism entered in Block 2, as shown in Table 2. Their beta ( $\beta$ ) values and the significance levels were reported by Model 2 in Table 2. Model 2 explained the variance in the self-disclosing variables more effectively than Model 1. It explained 20% of the variance in self-disclosure intention, 23% of the variance in self-disclosure level, and 11% of the variance in self-disclosure control. All were significantly increased from Model 1. As a result, the narcissism overall helped predict self-disclosure on Facebook.

More specifically, it was found that narcissism ( $\beta = .35, p < .001$ ) as a significant predictor of self-disclosure intentions on Facebook. In other words, the more narcissistic the Facebook users are, the greater their intention to present themselves on Facebook they have. Regarding the self-disclosure level, we found that the narcissism ( $\beta = .41, p < .001$ ) cause people to engage in deeper and broader self-disclosure on their Facebook wall. That is, the more narcissistic the Facebook users are, the more actively they engage in self-presentation online. And finally, we found that the narcissism ( $\beta = .13, p < .01$ ) to be a significant predictor of self-disclosure control. Thus, it can be inferred that the narcissistic Facebook users tend to manage and control their self-presentations.

**Table 2. Hierarchical multiple regression analyses**

	Intention		Level		Control	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
<i>Control</i>						
Gender	-.03	-.02	-.04	-.03	.04	.04
Age	.19**	.18***	.20***	.19***	.02	.02
<i>Personality</i>						
Narcissism		.35***		.41***		.13*
$R^2$	.04	.16	.04	.21	.00	.02
Adjusted $R^2$	.03	.15	.03	.20	.00	.10
$F$	6.20**	20.65***	6.84**	28.41***	.28	2.12 <sup>a</sup>
$\Delta F$		47.79***		68.71***		5.79*
$\Delta R^2$		.12		.17		.02

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

<sup>a</sup>  $p < .10$  (marginally significant)

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## 5. Discussion and Conclusion

The results of the present study demonstrate that the narcissism helps better explain how much individuals intend to disclose themselves on Facebook and how much engage in self-disclosure. Most importantly, the study revealed the contrasting faces of narcissistic SNS users whether they either actively disclose or control their self-presentations in the use of a social networking site. Interestingly, narcissistic users tend not only to disclose themselves just as who they are, but to keep themselves who they are from unvarnished disclosures at the very same time.

The present research contributes to the literature of self-disclosure on SNS by expanding it to the control of disclosure beyond other existing dimensions such as self-disclosing intention and level. As reviewed, previous literatures have investigated intentions as well as depth and breadth of self-disclosure and self-presentation through the glasses of individual factors [6, 8]. However, it still has a lacuna in explaining how the SNS users ironically control, adjust, or repress their self-presentation inside the place of interpersonal relationships and disclosures. The current study successfully presents that personality traits or individual factors might have influenced on avoidance of active presentation through SNS while spectating other people's thoughts, appearances, and life experiences.

In addition, the present research also contributes to explaining the effect of narcissism on online self-disclosure by demonstrating intention, level, and control. While some of research have showed that narcissistic individuals engage in more self-disclosure [12, 29], other research insisted on the opposite way by denying that they do not fully presenting themselves [12]. Narcissism positively affects both intention and level of disclosure as a major individual factor predicting high frequency of self-disclosure [12, 28]. The narcissistic users, however, coincidentally seem to experience inner conflicts when it comes to sharing self-disclosing contents and manage them by its control or manipulation. Based on our results, narcissistic users have an apparent intention to disclose their selves on Facebook, but the disclosure can be regulated and moderated in certain ranges. Facebook research has shown that narcissistic users seek to disclose only desirable information by selecting attractive and self-promoting pictures [28]. It also accords with the fact that narcissists devote a great deal of effort to portraying themselves positively as special, successful, and important [33]. Thus, narcissists try to control their self-disclosure in order to portray themselves in the most positive light possible. Another possible explanation may lie on two faces of narcissism: Grandiosity-exhibitionism narcissism and vulnerability-sensitivity narcissism [34]. It is reported that the vulnerable narcissists have more behavioral intention to control private information on SNS [35]. The research found that vulnerable narcissists are less willing to provide certain kinds of information about self than grandiose narcissists. Thus, it could be applied to explain that the extent of disclosure control may vary by the user's narcissistic disposition.

This study presents a managerial implication that social networking sites including Facebook could enable the users to have more detailed settings for their disclosure including personal information, uploaded contents, or even the responses of other people on my postings. In fact, current Facebook environment might have offered narcissistic users a reasonable medium to control what they don't like to show. Facebook, including other social networking sites, can embrace those who are narcissistic and make even more feel comfortable when bridging and sharing, by adjusting the possible proportions between disclosing and controlling of users themselves.

Despite the research's contributions, limitations still exist. The variance of self-disclosing control is relatively low to precisely expect results' effectiveness. One potential explanation may be the relatively small sample size given the complicated psychological states. Measuring participant control by self-reported questionnaires along with in-depth research methods (e.g. focus-group interview) would give more power to this study in the future. Increasing the sample size would also help to effectively detect unconscious control as confirmed its tendencies by the current study. Moreover, the respondents of the research are dependent on the sample of South Korea. Considering that the tendency of self-presenting behaviors might be differed from the nationality as well as the culture, the results would be more widely applied if more samples from diverse locations were collected.

Overall, this study expands the existing literature by shedding light on the fact that not only shy SNS users but also narcissists experience control of disclosure on Facebook. Consequently, our findings indicate that SNS behaviors are explained by more complex psychological drives than by the individual personality traits as previously studied.

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