

# Facebook Profiles Reflect Actual Personality, Not Self-Idealization

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More than 700 million people worldwide now have profiles on on-line social networking sites (OSNs), such as MySpace and Facebook (ComScore, 2008); OSNs have become integrated into the milieu of modern-day social interactions and are widely used as a primary medium for communication and networking (boyd & Ellison, 2007; Valkenburg & Peter, 2009). Despite the increasing integration of OSN activity into everyday life, however, there has been no research on the most fundamental question about OSN profiles: Do they convey accurate impressions of profile owners?

A widely held assumption, supported by content analyses, suggests that OSN profiles are used to create and communicate idealized selves (Manago, Graham, Greenfield, & Salimkhan, 2008). According to this *idealized virtual-identity hypothesis*, profile owners display idealized characteristics that do not reflect their actual personalities. Thus, personality impressions based on OSN profiles should reflect profile owners' ideal-self views rather than what the owners are actually like.

A contrasting view holds that OSNs may constitute an extended social context in which to express one's actual personality characteristics, thus fostering accurate interpersonal perceptions. OSNs integrate various sources of personal information that mirror those found in personal environments, private thoughts, facial images, and social behavior, all of which are known to contain valid information about personality (Ambady & Skowronski, 2008; Funder, 1999; Hall & Bernieri, 2001; Kenny, 1994; Vazire & Gosling, 2004). Moreover, creating idealized identities should be hard to accomplish because (a) OSN profiles include information about one's reputation that is difficult to control (e.g., wall posts) and (b) friends provide accountability and subtle feedback on one's profile. Accordingly, the extended real-life hypothesis predicts that people use OSNs to communicate their real personality. If this supposition is true, lay observers should be able to accurately infer the personality characteristics of OSN profile owners. In the present study, we tested the two competing hypotheses.

# **Method**

## **Participants**

Participants were 236 OSN users (ages 17–22 years) from the most popular OSNs in the United States (Facebook; N=133, 52 male, 81 female) and Germany (StudiVZ, SchuelerVZ; N=103, 17 male, 86 female). In the United States, participants were recruited from the University of Texas campus, where flyers and candy were used to find volunteers for a laboratory-based study of personality judgment. Participants were compensated with a combination of money and course credit. In Germany, participants were recruited through advertisements for an on-line study on personality measurement. As compensation, they received individual feedback on their personality scores.

To ensure that participants did not alter their OSN profiles, we saved their profiles before the subject of OSNs was raised. Scores on all measures were normally distributed.

# Measures

**Accuracy criteria.** Accuracy criteria (i.e., indices of what profile owners were actually like) were created by aggregating across multiple personality reports, each of which measured the Big Five personality dimensions (John, Naumann, & Soto, 2008). In the U.S. sample, profile owners' self-reports and reports from four well-acquainted friends were obtained using the Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003). In the German sample, self-reports on the short form of the Big Five Inventory (BFI-10; Rammstedt & John, 2007) and the NEO Five-Factor Inventory (Costa & McCrae, 1992) were combined.

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**Ideal-self ratings.** We measured ideal-self perceptions by rephrasing the TIPI and the BFI-10 rating instructions: Participants were asked to "describe yourself as you ideally would like to be."

**Observer ratings.** Observer ratings (how profile owners were perceived) were obtained from 9 (U.S. sample) and 10 (German sample) undergraduate research assistants, who perused each OSN profile without time restrictions and then rated their impressions of the profile owners using an observer-report form of the TIPI (U.S. sample) or BFI-10 (German sample). Each observer rated only profiles of participants from his or her own country. Observer agreement (consensus) was calculated within each sample using intraclass correlations (ICCs) for both single, ICC(2,1), and aggregate, ICC(2,k), ratings. Consensus was then averaged across samples using Fisher's r-to-z transformation (see Table 1, column 1).

# **Analyses**

In each sample, we determined accuracy by correlating the aggregated observer ratings with the accuracy criterion. To gauge the effect of self-idealization, we computed partial correlations between profile owners' ideal-self ratings and aggregated observer ratings, controlling for the accuracy criterion; this procedure removed the reality component from ideal-self

ratings to leave a pure measure of self-idealization. To determine whether results were consistent across samples, we computed a dummy-coded variable, "U.S. versus German sample," and ran general linear models, including all interactive effects. No significant interactions emerged. Thus, to obtain the most robust estimates of the effect sizes, we first *z*-standardized all data within each sample, then combined the samples, and then ran the analyses again. To provide an estimate of accuracy and self-idealization effects for a single observer (not inflated by aggregation), we also calculated the effects separately for each observer and then averaged across observers using Fisher's *r*-to-z transformation (Hall & Bernieri, 2001). Significance testing was done by means of one-sample *t* tests, using observer as the unit of analysis.

#### **Results and Discussion**

Our results were consistent with the extended real-life hypothesis and contrary to the idealized virtual-identity hypothesis. Observer accuracy was found, but there was no evidence of self-idealization (see Table 1), and ideal-self ratings did not predict observer impressions above and beyond actual personality. In contrast, even when controlling for ideal-self ratings, the effect of actual personality on OSN impressions remained significant for nearly all analyses. Accuracy was strongest for extraversion (paralleling results from face-to-face encounters)

Table 1. Consensus, Accuracy, and Self-Idealization: Agreement Among Observer Ratings Elicited
by Facebook Profiles and Correlations With Actual Personality and the Ideal Self

Observer rating	ICC (consensus)	Actual personality		Ideal self	
		r (accuracy)	r partial	r	r <sub>partial</sub> (self-idealization)
Extraversion					
Average observer	.8I***	.39***	.32***	.13	.01
Single observer	.31***	.25***	.21***	.08*	.00
Agreeableness					
Average observer	.59***	.22**	.20*	.16	.08
Single observer	.13***	.11**	.11**	.08*	.04
Conscientiousness					
Average observer	.77***	.27**	.26**	.05	02
Single observer	.27***	.17***	.16***	.03	01
Neuroticism					
Average observer	.48***	.13	.13	.12	.11
Single observer	.09***	.06	.06*	.04	.04
Openness					
Average observer	.72***	.41***	.37***	.24**	.11
Single observer	.23***	.24***	.21***	.14***	.06

Note: Consensus among observers was calculated using the intraclass correlation (ICC). Accuracy was determined by correlating observer ratings with the criterion measure of actual personality. The effect of self-idealization was determined by the partial correlation between the ideal-self ratings of the profile owners and observer ratings, controlling for the criterion measure of actual personality. In addition, the table shows simple correlations between the ideal-self ratings of the profile owners and observer ratings, as well as partial correlations between the criterion measure of actual personality and observer ratings, controlling for ideal-self ratings. In the case of single-observer scores, means of the correlations for single observers are presented. \* $p_{\rm reo} > .95.$ \*\*\* $p_{\rm reo} > .99.$ \*\*\*\* $p_{\rm reo} > .999.$ \*\*\*\* $p_{\rm reo} > .999.$ \*\*\*\*\* $p_{\rm reo} > .999.$ \*\*\*\*\* $p_{\rm reo} > .999.$ \*\*\*\*

374 Back et al.

and openness (similar to research on personal environments). Accuracy was lowest for neuroticism, which is consistent with previous research showing that neuroticism is difficult to detect in all zero-acquaintance contexts (Funder, 1999; Kenny, 1994). These results suggest that people are not using their OSN profiles to promote an idealized virtual identity. Instead, OSNs might be an efficient medium for expressing and communicating real personality, which may help explain their popularity.

Our findings represent a first look at the accuracy of people's self-portrayals on OSNs. To clarify the processes and moderating factors involved, future research should investigate (a) older users and other OSNs, (b) other personality traits, (c) other forms of impression management, (d) the role of specific profile components (e.g., photos, preferences), and (e) individual differences among targets (e.g., self-monitoring) and observers (e.g., OSN experience).

### **Declaration of Conflicting Interests**

The authors declared that they had no conflicts of interests with respect to their authorship and/or the publication of this article.

#### Note

1. As expected, accuracy criteria and ideal-self ratings were moderately correlated, mean r = .28 (neuroticism: r = .08; extraversion: r = .36; openness: r = .33; agreeableness: r = .22; conscientiousness: r = .26).

#### References

- Ambady, N., & Skowronski, J. (Eds.). (2008). First impressions. New York: Guilford.
- boyd, d.m., & Ellison, N.B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13, 210–230.

ComScore. (2008). Social networking explodes worldwide as sites increase their focus on cultural relevance. Retrieved August 12, 2008, from http://www.comscore.com/press/release.asp?press=2396

- Costa, P.T., Jr., & McCrae, R.R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, FL: Psychological Assessment Resources.
- Funder, D.C. (1999). Personality judgment: A realistic approach to person perception. San Diego, CA: Academic Press.
- Gosling, S.D., Rentfrow, P.J., & Swann, W.B., Jr. (2003). A very brief measure of the Big Five personality domains. *Journal of Research in Personality*, 37, 504–528.
- Hall, J.A., & Bernieri, F.J. (Eds.). (2001). *Interpersonal sensitivity: Theory and measurement*. New York: Erlbaum.
- John, O.P., Naumann, L.P., & Soto, C.J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O.P. John, R.W. Robins, & L.A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114–158). New York: Guilford.
- Kenny, D.A. (1994). Interpersonal perception: A social relations analysis. New York: Guilford.
- Manago, A.M., Graham, M.B., Greenfield, P.M., & Salimkhan, G. (2008). Self-presentation and gender on MySpace. *Journal of Applied Developmental Psychology*, 29, 446–458.
- Rammstedt, B., & John, O.P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, 41, 203–212.
- Valkenburg, P.M., & Peter, J. (2009). Social consequences of the Internet for adolescents: A decade of research. *Current Directions* in *Psychological Science*, 18, 1–5.
- Vazire, S., & Gosling, S.D. (2004). E-perceptions: Personality impressions based on personal websites. *Journal of Personality* and Social Psychology, 87, 123–132.