Facebook profiles reflect actual personality not self-idealization

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More than 700 million people worldwide now have profiles on Online Social Networking sites (OSNs), such as MySpace and Facebook (Comscore, 2009). OSNs have become seamlessly 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 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.

In contrast, OSNs may constitute an extended social context in which to express one's actual personality characteristics, fostering accurate interpersonal perception. 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; Kenny, 1994; Hall & Bernieri, 2001; Vazire & Gosling, 2004). Moreover, creating idealized identities should be hard to accomplish because (a) OSN profiles include reputational information that is difficult to control (e.g., wall posts), and (b) friends provide accountability and subtle feedback on one another's profiles. Accordingly, the *extended real life hypothesis* predicts that people use OSNs to communicate their real personality.

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Consequently, lay observers should be able to accurately infer the personality characteristics of OSN profile owners. Here we test the two competing hypotheses.

Method

OSN Profiles

Profiles of 236 OSN users (17-22 years old) from the most popular OSNs in the US (Facebook; N=133, 81 female) and Germany (StudiVZ, SchuelerVZ; N=103, 86 female) served as stimuli. Participants were recruited from the University of Texas campus with flyers and candy for participation in a laboratory-based study of personality judgment (U.S. sample) and with Germany wide advertisement for participation in an online study on personality measurement (German sample). To ensure that participants did not alter their OSN profiles, the profiles were saved before mentioning OSNs to the participants. All participant measures were normally distributed.

Accuracy Criteria

Accuracy criteria (i.e., indices of what profile owners were actually like) were created by aggregating across multiple personality reports, each measuring the Big Five personality dimensions (John, Naumann, & Soto, 2008). In the US 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. *Ideal-Self Ratings*

To measure ideal-self perceptions the TIPI and the BFI-10 rating instructions were rephrased, with participants asked to "describe yourself as you ideally would like to be".

Observer Ratings

Observer ratings (how profile owners were seen) were obtained from nine (US sample) and ten (German sample) undergraduate research assistants. They perused each OSN profile without time restrictions and then rated their impressions of the profile owners using an observer-report form of the TIPI (US sample) and BFI-10 (German sample). Observer agreement (consensus) was calculated within each sample both for single and aggregate ratings using intraclass correlations ICC(2,1) and ICC(2,*k*), respectively. Consensus was then averaged across samples using Fisher's *r*-to-*z* formula (see Table 1, first column).

Analyses

In each sample, accuracy was determined by correlating the aggregated observer ratings with the accuracy criterion. The effect of self-idealization was determined by computing 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.¹ To determine whether results were consistent across samples, we computed a dummy-coded variable "US versus German Sample" and ran GLMs including all interactive effects. No significant interactions emerged. Thus, to obtain the most robust estimates of the effect sizes, we *z*-standardized all data within each sample, combined samples and reran the analyses. To provide an estimate of accuracy and self-idealization effects for a single observer (not inflated by aggregation) the effects were also calculated separately for each observer and averaged across observers using Fisher's *r*-to-*z* formula (Hall & Bernieri,

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2001). Significance testing was done by means of one-sample *t*-tests using observer as the unit of analysis.

Results and Discussion

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 selfidealization (see Table 1). 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 virtually all analyses. Accuracy was strongest for Extraversion (paralleling results from face-to-face encounters) and Openness (similar to research on personal environments). Accuracy was lower for Neuroticism, 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, a finding that may help explain their popularity.

Our findings represent a first look at the accuracy of people's self-portrayals on OSNs. To better understand 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).

Footnote

¹As 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).

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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 ratings		Actual personality		Ideal self	
	Consensus	r Accuracy	<i>r_{partial}</i>	r	r _{partial} Self-Idealization
Agreeableness average observer single observer	.59*** (.13***)	.22** (.11**)	.20* (.11**)	.16 (.08*)	.08 (.04)
Conscientiousness average observer single observer	.77*** (.27***)	.27** (.17***)	.26** (.16***)	.05 (.03)	02 (01)
Neuroticism average observer single observer	.48*** (.09***)	.13 (.06)	.13 (.06*)	.12 (.04)	.11 (.04)
Openness average observer single observer	.72*** (.23***)	.41*** (.24***)	.37*** (.21***)	.24** (.14***)	.11 (.06)

Consensus was calculated using the intraclass correlation (ICC, Column 1). *Accuracy* (Column 2) was determined by correlating observer ratings with the criterion measure of actual personality. The effect of *self-idealization* (Column 5) 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. Additionally, simple correlations are shown between the ideal-self ratings of the profile owners and observer ratings (Column 2) as well as partial correlations between the criterion measure of actual personality and observer ratings, controlling for ideal-self ratings (Column 3). Results for aggregated observer ratings are shown outside the parentheses and mean results for single observers are shown in parentheses.

 $p_{rep} > .95, **p_{rep} > .99, ***p_{rep} > .999$