Being popular in online social networks: How agentic, communal, and creativity traits relate to judgments of status and liking

Juliane M. Stopfer [a,*], Boris Egloff [b], Steffen Nestler [a], Mitja D. Back [a]

[a] Department of Psychology, University of Münster, Germany
[b] Department of Psychology, Johannes Gutenberg University Mainz, Germany

ABSTRACT

We investigated how personality affects both peer-perceived popularity (status) and sociometric popularity (liking) in online social networks (OSNs). Self-ratings of agentic (e.g., extraversion), communal (e.g., agreeableness), and creativity traits (e.g., openness) were collected from 103 OSN profile owners (targets). Unacquainted perceivers provided status and liking judgments based on either targets' full OSN profiles or profile pictures. Independent coders assessed behavioral cues (e.g., attractiveness) from targets' OSN profiles. Results showed that targets scoring high on agency were ascribed a high status (without necessarily being liked), whereas targets scoring high on creativity or communion were liked. Brunswikian lens model analyses revealed mediating behavioral cues. Analyses based on profile pictures suggested that the differentiated impact of personality on popularity is a fast process.

© 2013 Elsevier Inc. All rights reserved.

1. Introduction

Social connections are fundamental to survival (Wesselmann, Cardoso, Slater, & Williams, 2012). Research suggests that individuals' fitness and gene frequencies are changed through their social interaction partners' behaviors (social selection; Alexander, 2005; Nesse, 2007). At the beginning of any social contact stands a first impression of our counterpart. People spontaneously like certain individuals, whereas they just as easily may dislike others. In this paper, we aim to promote the understanding of the personality–popularity link at zero acquaintance, that is: who is popular, and who is not? Specifically, we differentiate between two faces of popularity judgments during first encounters: (a) whom an individual judges as being popular among others (peer-perceived popularity, i.e., status), and (b) whom an individual personally likes (sociometric popularity, i.e., liking). This distinction is important with regard to the consequences of our first impressions. Initiating contact with high-status individuals may be useful for gathering and distributing information as these people are well connected to others. Relationship initiation with people whom one personally likes may end up in a close friendship or a romantic partnership. Based on a fine-grained investigation of online social network (OSN) profiles, we examined (a) how targets' personality traits

influence first impressions of status and liking, (b) which concrete behaviors mediate the personality-status and personality-liking links, respectively, and (c) whether reduced information ("thin slices") produces similar personality–popularity links.

1.1. Two faces of popularity: status and liking

Etymologically, "popular" means "belonging to the people," "admired by the people," and "well liked" (Harper, 2012). This conjunction of being admired and well liked by others vividly demonstrates that "popularity" stands for a mixture of (a) peer-perceived popularity and (b) sociometric popularity (Cillessen & Rose, 2005). Peer-perceived popularity refers to high-status individuals who are well known and socially central, but are not necessarily well liked. Sociometric popularity refers to individuals who are genuinely well liked by their peers. To explore why some individuals are ascribed a high status and some individuals are spontaneously liked, it is central to focus on interindividual differences among targets.

1.2. The influence of personality: Who is popular?

Agency and communion are two general dimensions in personality expression and impression formation (Abele & Wojciszke, 2007) that are also reflected in the Five-Factor Model and the interpersonal circumplex (McCrae & Costa, 1989) as well as the values circumplex (Frimer, Walker, Lee, Riches, & Dunlop, 2012). Agency

("getting ahead") refers to self-assertion and subsumes attributes such as individualistic, instrumental, dominant, and reflecting self-interest. Communion ("getting along") refers to interpersonal involvement and includes characteristics such as expressive, agreeable, warm, morally relevant, and reflecting the interests of others. Prior research suggests a positive impact of agency (Anderson, John, Keltner, & Kring, 2001; Back, Schmukle, & Egloff, 2010, 2011; Küfner, Nestler, & Back, 2013) and communion (Küfner et al., 2013; Wortman & Wood, 2011) on diverse measures of popularity.

Agency and communion cover relevant personality aspects when it comes to direct social contact with a strong influence of nonverbal behaviors and interactional style. However, in social contexts in which the expression of personal content is accentuated (e.g., online communication via email or OSNs), traits related to creativity (e.g., openness) seem to play an important additional role (Back, Stopfer, et al., 2010; Küfner, Back, Nestler, & Egloff, 2010; Rentfrow & Gosling, 2006; Vazire & Gosling, 2004),[1] although their impact on popularity has not yet been directly investigated. It is an open empirical question how these three domains of personality—agency, communion, and creativity—relate differentially to two distinct aspects of popularity: status and liking.

1.3. Behavioral mediators—A lens model approach

Why are some people more popular than others? The Brunswikian lens model (Brunswik, 1956; see Nestler & Back, in press, for a comprehensive overview of the lens model and its applications in personality research) provides a useful framework for understanding the effect of personality on attraction at first sight (Back, Schmukle, et al., 2010; Back et al., 2011). According to the lens model, perceivers, on the one hand, base their impressions of a given target on directly observable behavioral cues (e.g., attractiveness of the individual). Those behavioral cues are, on the other hand, influenced by a target's personality (e.g., extraverted targets more strongly express attractiveness-related cues). Behavioral cues that cause popularity might be differentially influenced by targets' agentic (e.g., self-assured and self-promotional behavior, stylish dress; Buffardi & Campbell, 2008; Vazire, Naumann, Rentfrow, & Gosling, 2008), communal (e.g., friendly and helpful behavior; Berry & Hansen, 2000; Mehl, Gosling, & Pennebaker, 2006), and creativity traits (e.g., diverse and original behavioral residues, creative expression of interests; Gosling, Ko, Mannarelli, & Morris, 2002), thereby explaining how personality affects a person's status and liking, respectively.

1.4. Thinning the slices

Do small snippets of information suffice to reveal the personality–popularity link? Evaluative impressions of others can form quickly and on the basis of minimal information (Ambady, Bernieri,

& Richeson, 2000). In the context of personality judgments at zero acquaintance, it has been shown that thin slices of behavior (shortened presentation time or reduced number of qualitatively different kinds of information) can be sufficient for enabling a person to form impressions that show some degree of accuracy (Borkenau, Mauer, Riemann, Spinath, & Angleitner, 2004). For instance, personality judgments that are to some degree accurate can be made on the basis of individuals' faces (Holtzman, 2011; Penton-Voak, Pound, Little, & Perrett, 2006), even after participants viewed them for only 50 ms (Borkenau, Brecke, Möttig, & Paelecke, 2009). The effect of reduced information on the personality-status and personality-liking links, respectively, has not yet been investigated.

2. The present research

The objective of the present study was to investigate the personality–popularity link in OSNs. Specifically, two faces of popularity judgments at zero acquaintance were explored: (a) who is ascribed a high status (peer-perceived popularity), and (b) who is personally liked (sociometric popularity). First, we examined how targets' personality traits influence popularity judgments. Second, we specified how target behaviors mediate the personality–popularity links. And third, we reduced the amount of information and explored the effects on the personality–popularity links.

OSNs, the fastest growing medium for communication and networking of our time, are an ideal setting for studying these first impression processes: (a) Judgments of status and liking play an essential role in OSNs (Weisbuch, Ivcevic, & Ambady, 2009; Zywica & Danowski, 2008), (b) OSNs allow for the direct observation of numerous social behaviors and other personally relevant cues (Gosling, Augustine, Vazire, Holtzman, & Gaddis, 2011), and (c) OSN information can be systematically reduced ("thinning the slices") by presenting only specific parts of OSN profiles (e.g., profile pictures).

3. Method

3.1. Participants

3.1.1. Targets

One hundred three individuals (86 female, 17 male) with an average age of 18.17 years (SD = 0.51) were recruited using Germany-wide advertisements for a study on personality measurement. Targets explicitly agreed to let us use their OSN profiles for research purposes. As compensation for participating in the study, targets received individual feedback on their personality scores.

3.1.2. Perceivers and thin-slice perceivers

Five males and five females (*perceivers*) with a mean age of 24.20 years (SD = 3.36) provided popularity ratings based on targets' full OSN profiles. Six males and six females (*thin-slice perceivers*) with a mean age of 22.90 years (SD = 2.68) provided popularity ratings based on targets' OSN profile pictures. All perceivers were students or alumni from different subjects. They reported being considerably experienced in using OSNs.

3.1.3. Stimulus material[2]

Targets' individual profiles from a large German OSN (StudiVZ/SchülerVZ; highly similar to Facebook) were used. Full OSN profiles and OSN profile pictures were stored on separate disks. A number of OSN cues were assessed by trained observers. We chose cues

---

[1] Findings show no clear classification of openness to higher order traits. There is evidence that (a) extraversion and openness show a positive correlation (Goldberg, 1993; McCrae & Costa, 1989) and (b) the five factors can be organized into two superfactors: Personal Growth (E, O) and Socialization (A, C, ES; Digman, 1997). It thus may seem plausible to construe openness as an agentic trait. Research by Abele, Uchronski, Suitner, and Wojciszke (2008), however, has shown that openness-related adjectives are not reliably considered as agentic. When asking participants from five countries to rate the presented items' content (agentic or communal), the adjective "creative" yielded higher ratings on the agency scale as compared to the communion scale (although differences were small, especially in the German and the US samples), but the adjective "broadminded" yielded remarkably higher ratings on the communion scale as compared to the agency scale (except for the Polish sample). In contrast, the adjectives "assertive" and "altruistic" were categorized as clearly agentic and clearly communal, respectively. Therefore, openness may neither be strongly related to agency nor to communion but may instead comprise a separate entity worth to be considered when studying interpersonal perception.

[2] The set of target profiles was gathered in a previous project (Back, Stopfer, et al., 2010). The analyses of the present article, however, do not overlap with those of the previous project.