Brief Report

How extraverted is honey.bunny77@hotmail.de? Inferring personality from e-mail addresses

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Abstract

Computer mediated communication (CMC) plays a rapidly growing role in our social lives. Within this domain, e-mail addresses represent the thinnest slice of information that people receive from one another. Using 599 e-mail addresses of young adults, their self-reported personality scores and the personality judgments of 100 independent observers, it was shown that personality impressions based solely on e-mail addresses were consensually shared by observers. Moreover, these impressions contained some degree of validity. This was true for neuroticism, openness, agreeableness, conscientiousness, and narcissism but not for extraversion. Level of accuracy was explained using lens model analyses: Lay observers made broad use of perceivable e-mail address features in their personality judgments, features were slightly valid and observers were sensitive to subtle differences in validity between cues. Altogether, even the thinnest slice of CMC—the mere e-mail address—contains valid information about the personality of its owner.
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1. Introduction

"*Nomen est omen*"

Imagine receiving an e-mail from honey.bunny77@hotmail.de. What conclusions would you draw about the personality of the owner of this e-mail address? Perhaps, you would assume the owner to be a rather extraverted person. Would your judgment be correct?

In everyday life, judging others is a ubiquitous phenomenon. We infer personality traits of other individuals even from minimal information and tend to stick to our first impressions. The accuracy of interpersonal perceptions is therefore crucial for successful social interactions. Recent research has revealed that personality judgments at zero acquaintance show at least some validity. First impressions do not exclusively lie in the eye of the beholder, but are consensually shared by lay observers or acquaintances and are correlated with observable behaviors and other ecologically valid criteria. This has, for example, been shown to be true for

real life encounters (e.g. Levesque & Kenny, 1993), thin slices of videotaped behavior (e.g., Borkenau & Lie-bler, 1992), streams of thought (Holleran & Mehl, 2008) and stills (e.g., Borkenau & Liebler, 1992). Moreover, perceivers are able to accurately predict the personality of strangers on the basis of targets' offices and bed-rooms (Gosling, Ko, Mannarelli, & Morris, 2002) or their music preferences (Rentfrow & Gosling, 2006).

Nowadays, a rapidly growing proportion of our social interactions and perceptions occur via computer mediated communication (CMC). One of the most pervasive forms of CMC is presumably e-mail (Thurlow, Lengel, & Tomic, 2004). There is an increasing trend to exchange personal and task-oriented information via e-mail or other forms of text-based CMC—a communication domain with its own linguistic structure and social consequences (e.g. Baron, 1998). The accuracy of CMC-based personality impressions (e-perceptions), especially in the context of e-mail communication, is thus of growing importance for our social lives.

This study examined whether first impressions based solely on knowledge of an e-mail address show some degree of consensus and accuracy. To this end, we analyzed e-mail addresses as a medium for personality expressions and impressions: How personality manifests itself in e-mail addresses and how e-mail addresses influence the personality judgments of strangers.

2. Background and research questions

Previous studies on e-perceptions have concentrated on personality judgments based on personal websites (Marcus, Machilek, & Schütz, 2006; Vazire & Gosling, 2004) or on text-based personal communication (Mar-key & Wells, 2002; Rouse & Haas, 2003). Compared to these domains, mere e-mail addresses contain consid-erably less information—they are, so to speak, the thinnest slice of a person perceivable via CMC. Another research tradition examined personality stereotypes based on (non-Internet) names and nicknames (e.g., Lei-rer, Hamilton, & Carpenter, 1982; Mehrabian, 2001). These studies indicate that names have a powerful influ-ence on first impressions but did not analyze whether these impressions are correct. In the present study, we examined the consensuality and validity of thinnest slice e-perceptions for the Big Five (neuroticism, extraver-sion, openness, agreeableness, conscientiousness) and narcissism as personality traits that may express them-selves and impress others through e-mail addresses.

We first analyzed whether there is consensus in thinnest slice e-perceptions due to "shared stereotypes" and "shared meaning systems" (Kenny, 1994). Thus, we examined whether lay observers agreed in their person-ality judgments based on e-mail addresses (*Question 1: Consensus*)? While, however, accuracy implies consen-sus, consensus does not necessarily imply accuracy, since all perceivers might be wrong (Kenny, 1994). Thus, we analyzed whether first impressions based solely on e-mail addresses contain some degree of validity, that is: Were observer impressions accurate (*Question 2: Accuracy*)?

Besides answering the intriguing question as to whether others can be judged by their e-mail address, this study aimed to examine *how* accuracy of thinnest slice e-perceptions was or was not achieved. Models of inter-personal perception (e.g., Brunswik, 1956; Funder, 1995; Gosling et al., 2002; Kenny, 1994) assume that accu-rate stranger ratings are made when (a) perceivers make use of available cues (cue utilization), (b) available cues have some validity (cue validity) and (c) perceivers use these cues according to their respective validities (sensitivity).

In line with these theoretical concepts, we analyzed whether strangers use features of e-mail addresses in judging personality and what kind of cues they use for different types of judgment. That is, we examined the influence of e-mail address features on observer impressions (*Question 3a: Cue Utilization*). Moreover, we also examined whether a basis for accurate judgments exist: That is, to what extent features of e-mail addresses provide valid personality cues (*Question 3b: Cue Validity*). Finally, we investigated whether perceiv-ers are sensitive to the validity of cues, i.e., do judges use the appropriate features of e-mail addresses to the right extent in judging personality (*Question 3c: Sensitivity*)?

3. Method

In order to address the research questions, three independent data sources were collected: Personality scores of e-mail address occupants as accuracy criteria (target personality), visible features of e-mail addresses (cues) and lay personality judgments based on e-mail addresses (observer ratings).