Posing personality: Is it possible to enact the Big Five traits in photographs?

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ABSTRACT

Person perception research has focused on the accuracy of observers receiving truthful target information; however, in real life people may often wish to manage the impression that they convey. We investigated whether people can "pose personality" in photographs. Sixty target participants posed each in 10 photographs in which they sought to express the high and low poles of the Big Five traits by means of physical appearances. Observers ($N = 401$) rated targets' personality and likability from each photograph. The results showed that targets successfully posed as Extravert and, to lesser extent, as Introvert, Neurotic, Non-Conscientious, and Open, and that targets could not convey impressions of high and low Agreeableness.

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1. Introduction

Over the last century, photography has evolved from a professional exercise into a commonplace activity accessible to everyone. Despite becoming a part of everyday life, photographs have simultaneously maintained their position as the recorder of many of the more exceptional moments or milestones of life. We have our wedding portraits, school yearbooks, family albums, driver's licenses, and passports, to name just a few. Most recently, the huge popularity of online social networks and online dating services has made it highly likely that one will encounter photographs of a potential romantic partner, friend, or an employee before meeting face to face with this person. Thus, photographs are today more important than ever, providing us with both a rich source of information about others, as well as a means to convey information about ourselves to others. But how accurate is information about others that is based on photographs? And, from another perspective, what kind of images do we wish to convey to others via photographs, and to what extent are we successful in creating such images?

To our knowledge, no previous research has investigated the extent to which specific personality impressions can be deliberately created and conveyed by means of photographs. Previous research on impression management has mostly focused on behavior in real or mock job interviews and on the favorability of the impressions created (e.g. Gilmore & Ferris, 1989; Schlenker & Weigold, 1992; Stevens & Kristof, 1995). Such studies have provided important information about the ways people attempt to create a positive

impression in an interview setting, and about the success of such attempts (for a meta-analysis, see Barrick, Shaffer, & DeGrassi, 2009). However, this research is silent on the question of how well people are able to control more specific aspects of their public image beyond general favorability. Research asking people to explicitly convey a certain kind of image (e.g. sociable) has, with the exception of faking studies using self-report questionnaire scores as dependent variables (Konstabel, Aavik, & Allik, 2006; Lönnqvist, Verkasalo, & Bezmenova, 2007), been practically nonexistent (for a recent exception regarding the enactment of emotions, see Hall, Gunnery, & Andrzejevski, 2011). Thus, it is somewhat unclear what people do in order to appear, say, sociable, or open-minded, and how well they are able to fulfill these types of impression management goals. Most relevant to the present research, it is unclear whether personality impressions based on photographs are susceptible to impression management attempts.

Recent advances in personality perception research may shed some light on the above presented questions. This research has established that personality and behavioral outcomes can be somewhat accurately assessed on the basis of very little information of the target (Ambady & Rosenthal, 1992; Borkenau & Liebler, 1992; Borkenau, Mauer, Riemann, Spinath, & Angleitner, 2004; Carney, Colvin, & Hall, 2007). Most pertinent to the present study, several personality traits and behavioral outcomes can be correctly judged even on the basis of a mere photograph of a target (e.g. Borkenau, Brecke, Möttig, & Paelaecke, 2009; Naumann, Vazire, Rentfrow, & Gosling, 2009; Rule & Ambady, 2011; Vazire, Naumann, Rentfrow, & Gosling, 2008). Furthermore, person perception studies have identified several appearance-related and behavioral cues that are correlated with both actual personality traits and with observer-ratings of the same traits (e.g. Back, Schmukle, & Egloff,

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2010; Borkenau & Liebler, 1992; Naumann et al., 2009). These results suggest that people's naïve theories regarding the links between personality and behavior, and also between personality and appearances, may be to some extent correct. If so, people could be expected to be able to utilize this knowledge in order to create and convey personality impressions on demand. On the other hand, the correlational results obtained in the above mentioned studies do not prove that observers are aware of the links between cues and personality – the cues may be applied implicitly, without conscious deduction from, say, smiling to high Extraversion. Furthermore, even if observers are aware of such links, they are not necessarily able to use this knowledge to efficiently present themselves in the wanted manner.

Questions related to accuracy, self-other agreement, and cue validity and utilization in person perception have been amply studied (Back, Schmukle, & Egloff, 2011; Borkenau & Liebler, 1992; Borkenau et al., 2004; Letzring, Wells, & Funder, 2006; Mehl, Gosling, & Pennebaker, 2006; Naumann et al., 2009). Because of the interest in accuracy and visible manifestations of personality, most of this research has been conducted with stimulus material in which targets express themselves in natural and spontaneous ways. The focus of such research has thereby been on the perspective of the observer; e.g., under what conditions are observers accurate judges of personality, and what type of cues do they utilize as basis of their personality judgments? However, as noted above, in real life people may often have the explicit or implicit goal to convey a particular public image – an image that may or may not correspond with their actual personalities. Therefore, an important next step in person perception research is to incorporate the perspective of the target; i.e., to study person perception in settings in which targets purposefully attempt to present themselves in certain ways. This is the goal of the present research.

In the present study, we examine the enactment of the Big Five traits in photographs. Each of the Big Five traits can be conceived of as a bipolar continuum, and we ask our target participants to enact each of the 10 poles of the five traits. We have two research questions in this study. First, are targets successful in their attempts to enact the Big Five in photographs? Second, for which traits and to what extent are they successful? Targets are expected to be somewhat successful for all traits. Although previous person perception research has not decisively proven that people are aware of the links between appearances and personality, other research lines have shown that people are able to adapt their behavior smoothly and even automatically to environmental demands (e.g. Chartrand & Bargh, 1999). Such abilities could be expected to generalize to the enactment of personality traits. It is also expected that targets are more successful in enacting Extraversion than in enacting other traits. Several studies have shown that Extraversion is the easiest trait to judge (Borkenau et al., 2004; Carney et al., 2007; Connelly & Ones, 2010), the most visible trait (e.g. Borkenau et al., 2009), and the trait for which observers use the largest amount of valid cues (Borkenau & Liebler, 1992; Naumann et al., 2009). Thus, it is plausible that this trait is also easiest to enact.

2. Method

2.1. Target participants and procedure

Target participants (N = 60) were recruited via e-mail invitations sent to University of Helsinki student mailing lists. Thirty women and 30 men who replied to the invitation were asked to complete an online personality questionnaire and to recruit "two persons who knew them well" to complete the same online questionnaire in an informant-report format. After completion of the questionnaires, these 60 target participants were invited to individual photograph sessions.

Upon arrival to the photograph session, target participants were greeted by a male researcher (second author) who led them to a studio. Targets were asked to stand in front of a white backdrop that was identical for all targets and conditions. First, targets posed freely for a half-body photograph (cut from waist up). This condition is hereafter referred to as the Neutral condition. Targets were then instructed to enact, one at a time, all 10 poles of the Big Five traits. Similar half-body photographs were taken in each of the10 posing condition. Targets were not allowed to add, change or remove clothing, hairbands, or decorative items, to remove or add make-up, or to groom their hair between conditions. The instructions for each trait pole were of the form "try to appear as a person whose personality is...." followed by a two-adjective description of the trait pole. The adjectives were adapted from the Finnish version (Lönnqvist, Verkasalo, & Leikas, 2008) of the Ten Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003). The adjectives were anxious, distressed for the Neurotic condition; stable, calm for the Stable condition; extraverted, enthusiastic for the Extravert condition; reserved, quiet for the Introvert condition; intellectually curious, daydreamer for the Open condition; conventional, does not like change for the low-Openness condition; empathic, warm for the Agreeable condition; critical, quarrelsome for the Disagreeable condition; dependable, self-disciplined for the Conscientious condition; and unorganized, careless for the Non-Conscientious condition. Each instruction was visible to the targets throughout the corresponding posing condition. Targets did not receive any other advice for posing. The order of the posing conditions was as listed above (the order was the same for all targets).

Targets were, on average, 27.0 years old (SD = 5.48, range 19–39), and all were Caucasian. As an incentive to participate, targets received one complementary film ticket (value 9 €) and portrait photographs. In addition, targets were given two film tickets to give as compensation to the two informants who had provided peer-ratings of personality.

2.2. Target personality

Self- and peer-reports of personality for the personality criterion were gathered using the Short Five personality questionnaire (Konstabel, Lönnqvist, Walkowitz, Konstabel, & Verkasalo, 2012). This 60-item measure was designed to measure the five factors and 30 facets of the Five-Factor-Model (Costa & McCrae, 1992). Each facet is measured by both a positively and negatively keyed item (adding up to twelve items per personality factor), and each item is responded to on a scale from −3 (The description is completely wrong) to 3 (The description is completely right). Sample items include: "I am often nervous, fearful, and anxious, and I worry that something might go wrong" for the Anxiety facet of Emotional Stability, and "I do not like to associate with people much; I am considered a rather cold and distant person" (reversed) for the Warmth facet of Extraversion.

The internal consistency of target personality ratings was assessed with Cronbach's alphas. The alpha reliabilities of the self-ratings were .84, .91, .76, .76, and .87, for Extraversion (E), Emotional Stability (ES), Openness (O), Agreeableness (A), and Conscientiousness (C), respectively. After averaging the two sets of peer-ratings, the alpha reliabilities of the peer-ratings were .83, .91, .86, .81, and .90, for E, ES, O, A, and C, respectively. Pearson's correlation coefficients between self-ratings and averaged peer-ratings were r = .74, .61, .50, .47, .55, for E, ES, O, A, and C, respectively. Self-ratings and averaged peer-ratings were averaged to form criteria scores of targets' personality characteristics.

For comparison purposes, targets also rated their Big Five personality traits with the same five single items that were used to ob-