Journal of Research in Personality 54 (2015) 51–60

Contents lists available at ScienceDirect

Journal of Research in Personality

journal homepage: www.elsevier.com/locate/jrp

Observer judgmental accuracy of personality: Benefits related to being a good (normative) judge ☆

Tera D. Letzring *

Department of Psychology, Idaho State University, United States

ARTICLE INFO

Article history:
Available online 16 May 2014

Keywords:
Accuracy of personality judgment
Social Accuracy Model
Big Five traits
Normative accuracy
Distinctive accuracy
Positive affect
Satisfaction with life
Interpersonal support
Interpersonal control

ABSTRACT

The current study tested the hypothesis that accuracy of personality judgment would be positively related to beneficial life outcomes. 189 participants observed targets across 5 dyadic interactions and made judgments of the 10 targets on the Big Five traits. Self and acquaintance ratings were used as the accuracy criteria. Normative accuracy for all traits was related to agreeableness, and normative accuracy for some traits was positively related to interpersonal control, interpersonal support, positive affect, and life satisfaction. Distinctive accuracy was not related to beneficial outcomes. These results imply that normative accuracy based on observation is associated with beneficial outcomes, whereas distinctive accuracy is not.

1. Introduction

Researchers have claimed that people are able to make better predictions of future behavior and better decisions about others when they judge personality more accurately (Funder, 1995; Letzring, 2008). Such predictions or decisions could include selecting friends, romantic partners, and employees. Researchers have also found that more accurate judges have better psychosocial functioning and general psychological adjustment (Beer & Watson, 2008; Human & Biesanz, 2011a). Additionally, a large amount of research has examined the accuracy of judging states, especially affective states, and supports the relationships of accuracy with favorable functioning and psychosocial variables (Hall, Andrzejewski, & Yopchick, 2009). Several studies have examined moderators of the good judge and found that judgmental ability is related to several beneficial personal variables, including overall adjustment, social skills, and agreeableness (Human & Biesanz, 2011a; Letzring, 2008). However, less research has explicitly examined the relationships between accuracy of judging personality traits and beneficial personal attributes that are likely to be outcomes of judgmental ability rather than causes of it, such as self-esteem, (lack of) loneliness, and satisfaction with life.

Making accurate judgments of personality or states may also be related to other favorable outcomes of a more interpersonal nature, such as stronger social support networks, greater feelings of interpersonal control, and more satisfying romantic relationships. Research on self-verification, or when someone else sees a person in a way that is consistent with how that person sees herself, speaks to some of these associations, as self-verification is one way of interpreting self-other agreement. High self-verification is associated with higher intimacy in romantic relationships and higher self-esteem and feelings of mastery (Burke & Stets, 1999; Katz & Joiner, 2002; Letzring & Noftle, 2010; Luo & Snider, 2009; Swann, De La Ronde, & Hixon, 1994). The positive outcomes in self-verification research are typically located in the target of judgment, whereas the current study focuses on the outcomes of the judge rather than the target. This focus is important for determining how judgmental ability is related to important relationship outcomes for the person making the judgments and for broadening our knowledge about the variables that predict successful relationships and interpersonal functioning.

This paper will first discuss implications of interpersonal and intrapersonal outcomes, provide a brief review of personality judgment research with a focus on the good judge moderator, discuss strategies for determining levels of accuracy and analyzing data in this area, and discuss the rationale and hypothesis of the current project.

Many factors have important implications for a person's overall level of functioning and psychological and physical health. Some of

☆ This research was supported by a grant from the WeLEAD project which was funded by NSF Grant # SBE-0620073, Idaho State University, Pocatello, ID.

* Address: Department of Psychology, Idaho State University, 921 S 8th Ave., Pocatello, ID 83209, United States. Fax: +1 208 282 4832.

E-mail address: letztera@isu.edu

http://dx.doi.org/10.1016/j.jrp.2014.05.001
0092-6566/

these factors include romantic relational satisfaction, relationship intimacy, perceptions of interpersonal/social support, the size and diversity of one's social network, feelings of interpersonal control, positive and negative affect, loneliness, and satisfaction with life. Given the high rate of divorce in the United States, romantic relational satisfaction is important for its contribution to stable marriages and families. Social intimacy is positively related to trust in a relationship and negatively related to loneliness (Miller & Lefcourt, 1982), and is also negatively related to emotional self-disclosure (Mahalik, Locke, Theodore, Cournoyer, & Lloyd, 2001). Social support is related to healthy eating and physical activity (Kelsey et al., 2000), lower levels of depression (Lam, Pacala, & Smith, 1997), and better health among people caring for a spouse with dementia (Monahan & Hooker, 1995). Social support and various aspects of one's social network are related to mortality (Litwin, 2007). A feeling of interpersonal control is an aspect of self-efficacy. Self-efficacy, or the belief that one has the ability to successfully perform a behavior or achieve a goal, is related to persistence at a task, performance, and the success of various outcomes, including drug abuse treatment (Bandura, 1977; Kadden & Litt, 2011). Examining how such factors are related to judgmental ability may shed additional light on the factors themselves and the benefits of judging others accurately.

Research on the accuracy of personality judgment examines various aspects of the judgment process and seeks to answer questions such as what types of people are more or less difficult to judge accurately (Colvin, 1993; Human & Biesanz, 2013; Human, Biesanz, Finseth, Pierce, & Le, 2014), how are the amount and type of available information related to accuracy (Blackman & Funder, 1998; Letzring & Human, in press; Letzring, Wells, & Funder, 2006), and how is the personality trait being judged related to accuracy (Funder & Dobroth, 1987)? An additional area of inquiry examines the personality traits and behaviors of the judge that are related to being able to judge others more accurately (Davis & Kraus, 1997; Kolar, 1996; Letzring, 2008; Taft, 1955). The findings from this final line of research provide some insights regarding benefits related to being a good judge of personality. Overwhelmingly, the characteristics associated with personality judgmental accuracy are positive. For example, researchers in the early 1900s found relationships between judgmental accuracy and personality characteristics such as independence, trustfulness, maturity, and social skills (Adams, 1927; Allport, 1937; Vernon, 1933). More recent research has found evidence that accurate judges are socially skilled, outgoing, empathic, agreeable, well-adjusted, emotionally stable, and open to experience (Davis & Kraus, 1997; Human & Biesanz, 2011a; Human & Biesanz, 2011b; Kolar, 1996; Letzring, 2008; Taft, 1955; Vogt & Colvin, 2003).

The goal of most research on the good judge of personality has been to identify characteristics related to accuracy, with the implied causal direction being from the personality characteristics to accuracy. For example, Human and Biesanz (2011a) used a measure of adjustment to predict accuracy based on 3-min unstructured interactions, and found that well-adjusted individuals achieved higher levels of normative accuracy for overall personality, but did not achieve higher levels of distinctive accuracy. Consistent with the findings from the personality judgment literature, there is also evidence that many beneficial characteristics are associated with empathic accuracy (Gleason, Jensen-Campbell, & Ickes, 2009; Ickes, 1993; Kilpatrick, Bissonnette, & Rusbult, 2002) and interpersonal sensitivity (Hall et al., 2009). Interpersonal sensitivity (IS) is a more general variable of judgment ability that includes judgments of affective states, other attributes such as status, and personality traits (Hall et al., 2009). A meta-analysis by Hall et al. (2009) summarized the psychosocial correlates of IS, and found that IS was positively related to several positive personality traits (such as extraversion and tolerance) and social competencies (such as nonverbal decoding ability and relationship quality), and negatively related to negative personality traits (such as neuroticism and shyness). However, only 9 of the 215 studies included in the review assessed judgments of personality. For this reason, it is important to look more specifically at how the ability to accurately judge personality is related to these kinds of broader characteristics and potential outcomes that have been less often examined in research focused on accuracy of judging personality traits. Most work has examined intrapersonal correlates because of the focus on causes of judgmental accuracy and it is important to also consider potential outcomes of judgmental accuracy and to examine the associations between judgmental accuracy and interpersonal variables, as the judgments are being made about other people and therefore are likely to impact relationship and other interpersonal variables. One of the main goals of research in Personality Psychology is to be able to predict future outcomes (Ozer & Benet-Martinez, 2006; Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007). The current analyses fulfill this goal by examining potential outcomes of judgmental accuracy, which allows for prediction of these outcomes from knowledge of a perceiver's judgmental ability.

A subset of personality judgments made in daily life are based on observations of other people interacting. For example, at a party one observes others interacting and decides whether to approach or avoid certain people, and while at work employees observe each other and decide who to collaborate with on a project or seek out for a social relationship. Decisions based on observing interactions may have important implications for enhancement and initiation of both professional and personal relationships. The purpose of the present study was to directly examine the links between the accuracy of judging personality traits following an observation of targets interacting with several beneficial intrapersonal and interpersonal variables. Evidence of the existence of these links supports the applied value of studying accuracy of personality judgment based on observations and sheds light on additional personality factors of the judge that are related to accuracy.

Complicating the study of personality judgment is the variety of ways that accuracy can be conceptualized and calculated. Most of the existing research on accuracy of personality judgment has used profile or item-level correlations to examine one component of accuracy at a time, including overall accuracy (Letzring, 2008) and a form of distinctive accuracy (Kolar, 1996). A handful of methods have been proposed for dealing with the problems inherent in profile correlations that allow researchers to examine more than one type of accuracy within a given study (see Biesanz, 2010 and Furr, 2008). These types of analyses, especially analyses based on Biesanz's (2010) Social Accuracy Model (SAM), are being used more frequently to decompose accuracy scores into more than one component. SAM allows for simultaneous examination of two aspects of accuracy, and is the analytic approach used in the current study. SAM estimates distinctive and normative accuracy and these types of accuracy "may be defined as the profile relationship between different assessments of the target and the perceiver's impressions" (Biesanz, 2010, p. 860), where the assessments include the realistic accuracy criteria and the normative or average ratings across a set of targets for each item on a personality assessment. SAM is preferable over correlational approaches to computing accuracy because it examines the unique contribution of each type of accuracy for explaining judges' ratings, accounts for measurement error in the analyses, and is a more efficient procedure (Biesanz, 2010).

Distinctive accuracy reflects the ability to accurately judge a "target's unique differentiating profile of traits" (Human & Biesanz, 2011a, p. 350). Normative accuracy reflects judging others in a way that is consistent with what the average person is like. The normative profile is highly favorable (Biesanz, 2010) because it is a

composite of self-ratings and acquaintance ratings, both of which tend to be quite favorable (Edwards, 1953; Leising, Erbs, & Fritz, 2010). Therefore, normative accuracy can also be interpreted as a measure of the favorability of judgments.

A related study by Wood, Harms, and Vazire (2010) found that people who describe themselves more favorably (especially as more agreeable and emotionally stable) also tend to judge others more favorably. This supports the existence of a positivity bias that applies to both self-ratings and ratings of others one knows fairly well (the participants were groups of friends, dormitory floor-mates, and fraternity or sorority members). With the strong favorability of the normative profile, it is likely that the normative accuracy of these judgments would have been high as well (although Woods et al. did not examine accuracy). The current study builds on this finding by examining whether this positivity bias also extends to strangers observed via video. As Woods and colleagues argue, behavior is importantly influenced by how one perceives others, and therefore increasing knowledge about how people with certain personality characteristics tend to perceive strangers could illuminate reasons for their behavior toward those same people.

Distinctive and normative accuracy can be assessed with a multilevel model in which judges' ratings of targets' personalities are predicted simultaneously by an accuracy criterion for personality that is specific to the target being judged and the average personality ratings of all targets, or of a larger set of targets similar to those used in the study. With this method, distinctive accuracy reflects the degree to which the judges' ratings are predicted by the accuracy criteria, while partialling out the average personality ratings; and normative accuracy reflects the degree to which the judges' rating are predicted by the average personality ratings, while partialling out the accuracy criteria (Biesanz, 2010). In the typical research study, judges are instructed to rate the personality of a target or set of targets, but are not given instructions to determine how the target is unique from or similar to the average person. These components are instead determined statistically.

Judgments are likely to be based on several factors, including stereotypes, projection of the judge's own personality onto the targets, and individuating information about the targets. The weights of each factor are influenced in part by how much information is available to the judge and to the judge's unique rating style. Applying accurate stereotypes will increase normative accuracy of judging an individual, and will even increase distinctive accuracy if the individual is consistent with the stereotype (Jussim, Cain, Crawford, Harber, & Cohen, 2009). Additionally, there is empirical evidence, based on correlations between random pairs of ratings, that people tend to be alike in terms of personality to at least a small degree (Biesanz, 2010; Blackman & Funder, 1998; Letzring, 2010). This similarity would give judges who know what people are like in general an advantage for distinctive accuracy, even when they are judging individuals.

Research has demonstrated important differences between these types of accuracy. For example, participants who were motivated to be accurate achieved higher levels of distinctive self-other agreement[1] but lower levels of normative self-other agreement, in comparison to participants who were not motivated to be accurate (Biesanz & Human, 2010), and the amount of available information about behaviors a person engaged in was positively related to distinctive accuracy but sometimes negatively related to normative accuracy (Letzring & Human, in press). The current analyses include both normative and distinctive accuracy in order to examine whether these types of accuracy have differential relationships with beneficial outcomes. It was hypothesized that both types of accuracy would be positively related to beneficial outcomes as it should be useful to have knowledge of basic human nature (which would lead to high normative accuracy) and to be able to determine how people are unique (which would lead to high distinctive accuracy).

The goal of the current project was to examine the relationships between important and beneficial life outcomes and judgmental accuracy. The current study goes beyond previous research by considering characteristics of judges as possible outcomes of judgmental accuracy, rather than as causes of accuracy (Human & Biesanz, 2011a; Letzring, 2008). This broadens the outcomes that are considered to also include interpersonal outcomes such as perceptions of social support and one's social network. The current study also builds on previous knowledge by specifically examining two types of accuracy and how these might be differentially related to beneficial outcomes. Most previous research that has examined attributes of the good judge has focused on a single component of accuracy (Letzring, 2008), although more recent work has considered the same components that are of interest in the current study (Human & Biesanz, 2011a). However, it is useful to replicate such findings to increase the confidence in the validity of those findings. Third, the current study is novel in that it focuses on judgments that are based on observations of strangers (as opposed to interactions with strangers or knowledge of previous acquaintances), which will help determine the generalizability of studies using judgments based on interaction vs. observation. Fourth, the current study examines individual traits of the Big Five factor structure rather than considering personality more broadly. This allows for a more nuanced understanding of how accuracy of judging particular traits is related to beneficial outcomes.

The current research advances the field's understanding of how both intrapersonal and interpersonal factors are related to two types of judgmental accuracy. It is hypothesized that judges who achieve higher levels of distinctive and normative accuracy will report higher levels of beneficial intrapersonal variables (self-esteem, positive affect, satisfaction with life), higher levels of beneficial interpersonal variables (interpersonal control, perceptions of interpersonal/social support, social intimacy, relational satisfaction, and social network diversity, size, and embededness), and lower levels of unfavorable variables (loneliness and negative affect). Both types of accuracy are predicted to be related to beneficial outcomes because normative accuracy may be especially important for initiating new relationships, while distinctive accuracy may be especially important for maintaining relationships. Future attempts to improve accuracy would have increased importance if there is a likelihood that increased accuracy would have several beneficial outcomes that include both intrapersonal and interpersonal attributes.

2. Method

2.1. Participants

Participants were 185 (114 female, 63 male, 8 unknown) students at Idaho State University who participated in exchange for credit in a psychology class. The average age of participants was 25.03 years (*SD* = 7.73, range = 17–51). Participants were primarily of Caucasian ethnicity (*n* = 149; 15 Hispanic, 6 Asian, and 15 other).

2.2. Measures

Several questionnaires were used to assess personality of the judges and targets, and to assess beneficial life outcomes.

[1] Self-other agreement is commonly used as an approximation of accuracy, but it is not necessarily the same thing as judging a person in a way that is consistent with what the person is really like (Letzring et al., 2006).

2.2.1. The International Personality Item Pool 300-item version of the NEO-PI facets (IPIP NEO-PI facets; International Personality Item Pool, n.d.)

Both self-report and other-report formats of this questionnaire were used. The facet scores based on the IPIP correlate with the facet sores based on the NEO-PI within the range of .60 (dutifulness facet of conscientiousness) and .81 (assertiveness facet of extraversion) and the alpha reliabilities of the facet scores based on the IPIP range from .71 (activity level facet of extraversion and dutifulness facet of conscientiousness) to .88 (anger and depression facets of neuroticism; International Personality Item Pool, n.d.).

2.2.2. The International Personality Item Pool 50-item version of the NEO-PI domains (IPIP NEO-PI domains; International Personality Item Pool, n.d.)

Again, both self-report and other-report formats of this questionnaire were used. The domain scores based on the IPIP correlate with the trait scores based on the NEO-PI within the range of .70 (agreeableness) and .82 (neuroticism) and the alpha reliabilities of the facet scores based on the IPIP range from .77 (agreeableness) to .86 (neuroticism and extraversion; International Personality Item Pool, n.d.). Reliabilities for self-ratings in the current data were calculated, and were adequate to high for all traits: extraversion $\alpha = .88$, agreeableness $\alpha = .81$, conscientiousness $\alpha = .85$, neuroticism $\alpha = .84$, openess $\alpha = .69$.

2.2.3. Interpersonal control (Paulhus, 1983)

This 10-item scale is part of a larger measure of Spheres of Control (SOC; Paulhus, 1983). The interpersonal control subscale assesses amount of perceived control when interacting with others and has demonstrated adequate internal reliability ($\alpha = .77$; Paulhus, 1983). Reliability was also adequate in the current study, $\alpha = .80$.

2.2.4. Interpersonal Support Evaluation List (ISEL; Cohen, Mermelstein, Kamarck, & Hoberman, 1985)

This 40-item measure assesses the "perceived availability of potential social resources" (Cohen et al., 1985, p. 75) and can be divided into four subscales. The tangible subscale measures "perceived availability of material aid," the appraisal subscale measures "perceived availability of someone to talk to about one's problems," the self-esteem subscale measures "perceived availability of a positive comparison when comparing one's self with others," and the belonging subscale measures "perceived availability of people one can do things with" (Cohen et al., 1985, p. 75). All subscales had adequate reliability: appraisal $\alpha = .84$, tangibility $\alpha = .85$, self-esteem $\alpha = .73$, belonging $\alpha = .84$. A total score can also be computed based on all 40 items, and this score was highly reliable, $\alpha = .94$.

2.2.5. UCLA loneliness scale (Russell, 1996)

This 20-item scale assesses how often people feel lonely. The scale has demonstrated adequate internal reliability ($\alpha = .89$–$.94$) and test–retest reliability over a 1-year period ($r = .73$). Reliability was also high in the current study, $\alpha = .94$.

2.2.6. Miller Social Intimacy Scale (MSIS; Miller & Lefcourt, 1982)

This 17-item scale assesses one's relationship with one's closest friend. Six items assess relationship intimacy ("How often do you show him/her affection?" and "How often are you able to understand his/her feelings?") and 11 items assess relationship intensity ("How much do you like to spend time alone with him/her?" and "How satisfying is your relationship with him/her?"). The scale has demonstrated adequate internal reliability (α's = .86 and .91), test–retest reliability ($r = .96$ for 2 months and $r = .84$ for 1 month, both p's < .001). Reliability was also high in the current study, $\alpha = .92$.

2.2.7. Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988)

This well-known 20-item measure assesses the degree to which people experience positive affect (PA) and negative affect (NA). The general instructions (participants rated how they feel "in general, that is, on average," Watson et al., 1988, p. 1065) were used in the current study in order to assess the trait-like aspect of emotional experience. Both scales have demonstrated adequate internal reliability (PA $\alpha = .88$, NA $\alpha = .87$) and test–retest reliability over an 8-week period (PA $r = .68$, NA $r = .71$). Reliability was also adequate in the current study, PA $\alpha = .87$, NA $\alpha = .89$.

2.2.8. Relational Interaction Satisfaction Scale

Buunk's Relational Interaction Satisfaction Scale (Buunk's RS; Buunk, 1982) assesses the frequency of positive or satisfying interactions. This 8-item measure asks participants to indicate their level of agreement with items such as "I feel happy when I am with my partner" and "My partner irritates me." The scale has been found to have high reliability (Cronbach's $\alpha = .88$; Buunk, 1982). In the current study, the reliability was good, $\alpha = .86$.

2.2.9. Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985)

This 5-item scale assesses how satisfied people are with their lives. The scale has demonstrated adequate internal reliability ($\alpha = .87$) and test–retest reliability over a 2-month period ($r = .82$; Deiner et al., 1985). Reliability was also high in the current study, $\alpha = .99$.

2.2.10. Social Network Index (SNI; Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997)

The SNI is a 23-item scale that assess social ties to various groups, including spouse, parents, friends, coworkers, and group members. Network diversity assesses the number of groups with which one has regular contact (at least once every 2 weeks), and can range from 0 to 12. Network size assesses the number of people with whom one has regular contact. Network embededness assesses the number of groups with which one has at least four regular contacts, and can range from 0 to 8.

2.3. Stimulus materials and personality assessment of targets

Five videotaped dyadic interactions from a previous study (see Letzring & Human, in press) were semi-randomly[2] selected to be used as the stimulus materials for the current project. There were 10 targets in total, consisting of six females and four males. The videos were of two research participants who were seated next to each other and facing the video camera so that both participants were in the field of view. Participants were instructed to talk about either their thoughts and feelings or typical behaviors (depending on the experimental condition)[3] in a variety of situations (e.g., when with friends, when making a difficult decision). They were able to work through the topics at their own pace, but were told they should interact for 25–30 min. The second 4 min of the interactions were shown to participants in the current study because at this point the conversation should have been more natural than at the beginning of the interaction.

The realistic accuracy criteria for each target was composed of self-ratings and acquaintance ratings. The targets' personalities

[2] The selection was only semi-random because the author pre-determined to select interactions with good video quality, about an equal number of female and male targets, and interactions from three of the four experimental conditions from the project in which the videos were created.

[3] The experimental manipulation was part of another study and is not consequential in the current analyses.

were assessed with the IPIP NEO-PI facet scales (IPIP NEO-PI facets; International Personality Item Pool, n.d.). Ratings were made by the targets' themselves and by two people who were nominated by the target and knew them well from everyday life. Ratings from the two acquaintances were first averaged, and then this average was averaged with the self-rating, to form the realistic accuracy criteria. Using this composite rating to assess accuracy is advantageous to using only a single rating (such as a self-report) because the composite rating is more likely to reflect what the target is actually like than is any single rating (Funder, 1995; Funder, 1999; Letzring et al., 2006).

2.4. Personality judgment task

Judges watched five 4-min videotaped interactions and, following each interaction, rated the personality of both targets using the other-report format of the 50-item version of the IPIP NEO-PI domains scale (International Personality Item Pool, n.d.). Items were presented on the screen one at a time and both targets from an interaction were rated at the same time on each item. Still pictures of the targets were displayed during the judgment task to ensure that ratings were made of the correct target. This task was similar to judgments that occur in the real world, as one often observes several people at a time and forms impressions of multiple targets simultaneously. All judges observed and rated the same 10 targets, but videos were shown in a counterbalanced order to minimize possible order effects.

2.5. Assessment of personality traits and beneficial life outcomes

After the personality judgment task, judges completed several self-report questionnaires. First, the 50-item self-report IPIP NEO-PI domains scale was used to assess the Big Five traits of the judges. Next, judges completed a series of measures that assessed beneficial life outcomes: Buunk's RS, the ISEL, the SNI, the MSIS, the scale of Interpersonal Control, the PANAS, the UCLA Loneliness Scale, and the SWLS. Participants also provided information about their current relationship status and long-term contact information.

2.6. Analyses

Items from the 300-item IPIP NEO-PI measure (that was used by targets and acquaintances) and the 50-item IPIP NEO-PI measure (that was used by judges) were compared to determine identical items on both measures, which resulted in 35 total items (5 for extraversion, 6 for agreeableness, 6 for conscientiousness, 10 for neuroticism, and 8 for openness). These items were used to determine accuracy.

The data were analyzed using the Social Accuracy Model to enable an examination of normative and distinctive accuracy within the same model (SAM; see Biesanz, 2010 for a detailed explanation of the model). The data used for the analyses were at the item level, which allows for an examination of separate traits because there are multiple items per trait. In the basic model, judges' ratings of the personality of the 10 targets was simultaneously predicted by the accuracy criteria for each target and the average rating of all targets from the data set from which the targets were selected ($N = 233$; see Biesanz & Human, 2010). The normative profile was subtracted from the accuracy criteria, and this difference was then mean-centered. The normative profile was also mean-centered. Both of these steps aid in interpretation of the results. SAM then analyzes the following regression equation:

$$Y_{ijk} = \beta_{0ij} + \beta_{1ij}TCrit_{jk} + \beta_{2ij}Mean_k + \varepsilon_{ijk} \quad (1.1)$$

$$\begin{aligned} \beta_{0ij} &= \beta_{00} + \beta_{01}Mod_j + u_{0j} \\ \beta_{1ij} &= \beta_{10} + \beta_{11}Mod_j + u_{1j} \\ \beta_{2ij} &= \beta_{20} + \beta_{21}Mod_j + u_{2j} \end{aligned} \quad (1.2)$$

In this model, Y_{ijk} corresponds to judge i's rating of a target j on item k. $TCrit_{jk}$ corresponds to target j's personality accuracy criterion on item k, and $Mean_k$ corresponds to the mean accuracy criteria across all targets for item k. The intercept is represented by β_{0ij}. The regression coefficient for the distinctive accuracy unstandardized slope is β_{1ij}. β_{2ij} is the regression coefficient for the normative accuracy unstandardized slope, or the relationship between the accuracy score for item k predicting each judge i's rating of the same item k. The results of this model include random and fixed effects. This paper reports the unstandardized coefficient estimates of the fixed effects for distinctive accuracy and normative accuracy. Degrees of freedom are equal to the number of perceivers minus the number of fixed effects minus one. A significant result indicates that a significant level of accuracy was achieved. Exact p-values were calculated with an online Student t-distribution calculator (easycalculation.com).

Additional variables can be entered into the model as moderators in order to test whether accuracy is related to these variables. The relationships with beneficial outcomes were tested in this way. The outcome variables were standardized before being entered into the equation, which aids interpretation of the results because all moderators are on the same scale. In addition to the results obtained in the basic model, the results of the models with moderators also include unstandardized coefficient estimates for the interactions of the moderator variable with distinctive and normative accuracy. A significant result for an interaction indicates the moderator variable is significantly related to accuracy. Positive coefficients indicate that judges who score higher on the moderator also achieve higher levels of accuracy, and a one standard deviation change in the moderator variable[4] would predict that level of change in the accuracy score. So, a coefficient of .13 means that a one unit increase in the outcome variable is associated with a .13 increase in accuracy.

Analyses were run for overall personality (by using all 35 identical items of the 50-item and 300-item version of the IPIP) and for each of the Big Five traits separately (by using only the identical items of the IPIP that assessed each trait). This resulted in 120 effects for each type of accuracy ((all traits combined + 5 specific traits) × 20 outcome variables), which may raise concerns about the familywise error rate. Sherman and Funder (2009) describe a re-sampling procedure that can be used to determine the number of correlations that could be expected due to chance, and found that this number was very close to the nominally expected number that is based on 5% of the total number of effects examined. In the current study, such a resampling procedure is prohibitive given that first the resampling would need to be done and then the multilevel models would need to be run, at least 1000 times. However, it is simple to determine the nominally expected number of significant results, which is 6 per type of accuracy (5% of 120). Significant results beyond this number would increase confidence that the pattern of results is important and not due to error.

3. Results

3.1. Descriptive statistics

Descriptive statistics for all outcome variables can be found in Table 1.

[4] This change is in standard deviation units because the moderators were standardized before being analyzed.

Table 1
Descriptive statistics.

	N	Mean	*SD*	Minimum	Maximum
Interpersonal control	185	49.30	10.63	12.00	70.00
ISEL appraisal	184	3.35	.54	1.70	4.00
ISEL tangible	185	3.51	.46	1.40	4.00
Self-esteem (ISEL)	183	3.09	.41	1.90	4.00
ISEL belonging	185	3.30	.51	1.60	4.00
ISEL total score	184	3.31	.41	1.70	3.98
Loneliness	151	40.32	10.11	20.00	71.00
Social intimacy	182	134.79	27.12	17.00	170.00
Positive affect	184	37.17	6.47	15.00	50.00
Negative affect	184	20.44	7.18	10.00	50.00
Relational satisfaction	123	32.59	5.88	11.00	40.00
Satisfaction with life	150	21.97	7.06	5.00	35.00
Soc. network diversity	185	6.90	1.89	1.00	12.00
Soc. network size	185	24.33	12.52	3.00	81.00
Soc. network embededness	185	3.01	1.69	0.00	8.00
Extraversion	185	3.47	.80	1.10	5.00
Agreeableness	185	3.86	.61	1.80	5.00
Conscientiousness	185	3.62	.67	1.80	5.00
Neuroticism	185	2.47	.71	1.00	4.20
Openness	184	3.64	.58	2.20	5.00

Note: ISEL = Interpersonal Support Evaluation List, soc. network = social network.

3.2. Accuracy of personality judgments

Judges achieved significant levels of normative accuracy for all traits combined ($b = .59$, $p < .001$), extraversion ($b = .62$, $p = .02$), agreeableness ($b = .73$, $p < .001$), conscientiousness ($b = .80$, $p < .001$), neuroticism ($b = .67$, $p < .001$), and openness to experience ($b = .36$, $p = .006$). Judges also achieved significant levels of distinctive accuracy for all traits combined ($b = .14$, $p = .005$) and extraversion ($b = .21$, $p = .02$).[5] Standard deviations for normative accuracy range from .34 to .49 and are higher than standard deviations for distinctive accuracy (range = .07–.19). The standard deviations suggest a higher likelihood of significant moderators of normative accuracy, as there is more variability in the scores to be accounted for.[6] See Table 2.

The coefficient for normative accuracy for openness ($b = .36$) was relatively low compared to the coefficients for the other traits ($b = .59$–$.80$). One possible explanation for this difference could be smaller variability in the average items scores that were used in the computation for normative accuracy. If there is less variability among the items used to assess normative accuracy, then there will be a reduced likelihood that the items will be good predictors of the judges' rating. This possibility was checked by computing the standard deviations for the item averages that were used for each trait. The standard deviation for openness ($SD = .70$) was within the range of standard deviations for the other traits (SD's = .67–.74) and therefore this is not a viable reason for this difference.

3.3. Relations of beneficial outcomes with normative accuracy

For the set of 90 effects (6 traits × 15 outcome variables), 44 were statistically significant at $p < .05$ (see Table 3). This is almost 10 times the number that would be nominally expected to be significant by chance alone. Therefore, this set of results is highly unlikely to be due to chance.

[5] Degrees of freedom for accuracy scores = 185 perceivers − 3 fixed effects − 1 = 181.

[6] Significance tests of the standard deviations are not included because it is possible to have a non-significant amount of variance and to have significant moderation.

Table 2
Distinctive and normative accuracy of judgments.

	Distinctive accuracy			Normative accuracy		
	b	*Z*	*SD*	*b*	*Z*	*SD*
All traits	.14**	2.86	.07	.59***	4.59	.35
Extraversion	.21*	2.42	.19	.62*	2.41	.47
Agreeableness	−.00	.02	.14	.73***	6.33	.48
Conscientiousness	−.03	.29	.11	.80***	4.84	.49
Neuroticism	.13	1.92	.10	.67***	4.66	.47
Openness	.12	1.39	.09	.36**	2.78	.34

Note: $df = 181$.
*** $p < .001$.
** $p < .01$.
* $p < .05$.

For judgments of all traits combined, normative accuracy was significantly related to 10 of the 15 variables assessed, and was most strongly related to satisfaction with life ($b = .11$, $p < .001$), positive affect ($b = .09$, $p < .001$), tangibility of perceived interpersonal support ($b = .09$, $p < .001$), and overall perceived interpersonal support ($b = .09$, $p = .001$).[7] For judgments of extraversion, normative accuracy was significantly related to nine variables, and most strongly related to satisfaction with life ($b = .13$, $p = .002$), tangibility of perceived interpersonal support ($b = .13$, $p = .001$), and overall perceived interpersonal support ($b = .12$, $p = .003$). For judgments of agreeableness, normative accuracy was significantly related to five variables, and most strongly related to tangibility of perceived interpersonal support ($b = .09$, $p = .02$), overall perceived interpersonal support ($b = .09$, $p = .02$), and satisfaction with life ($b = .09$, $p = .04$). For judgments of conscientiousness, normative accuracy was significantly related to nine variables, and most strongly related to satisfaction with life ($b = .17$, $p < .001$), positive affect ($b = .14$, $p < .001$), a sense of belonging ($b = .13$, $p = .002$), and overall perceived interpersonal support ($b = .13$, $p = .001$). For judgments of neuroticism, normative accuracy was significantly related to nine variables, and most strongly related to satisfaction with life ($b = .15$, $p < .001$), positive affect ($b = .14$, $p < .001$), tangibility of perceived interpersonal support ($b = .13$, $p = .0005$), overall interpersonal support ($b = .13$, $p < .001$), and relational satisfaction ($b = .13$, $p = .005$). For judgments of openness, normative accuracy was only significantly related to social network size ($b = .07$, $p = .009$) and social network embededness ($b = .07$, $p = .02$).

3.4. Relations of beneficial outcomes with distinctive accuracy

Distinctive accuracy only had two significant relations: for conscientiousness with negative affect ($b = .04$, $p = .003$), and neuroticism with self-esteem ($b = .02$, $p = .04$). This is fewer significant effects than would be nominally expected, and therefore beneficial outcomes are likely to be unrelated to distinctive accuracy based on observations of interactions.

3.5. Relations of the Big Five traits with normative and distinctive accuracy

For completeness of explanation, the Big Five traits ratings of judges were also examined as moderators of normative and distinctive accuracy (see bottom of Table 3). Consistent with the findings for beneficial outcomes, the Big Five traits were unrelated to distinctive accuracy. However, some of the Big Five traits were related to normative accuracy. The most consistent moderator of normative accuracy was agreeableness in that it was a significant

[7] Degrees of freedom for moderation analyses = 185 perceivers − 6 fixed effects − 1 = 178.

Table 3
Personality variables as moderators of distinctive and normative accuracy.

	All traits		Extraversion		Agreeable		Conscientious		Neuroticism		Openness	
	Dist	Norm	Dist	Norm	Dist	Norm	Dist	Norm	Dist	Norm	Dist	Norm
Interpersonal control	−.00	.05*	−.01	.11**	−.00	.02	−.01	.11**	−.00	.06	−.00	.05
ISEL appraisal	−.00	.06*	−.02	.11**	−.00	.06	−.00	.09*	−.00	.09*	−.00	.01
ISEL tangible	−.00	.09***	−.02	.13**	−.01	.09*	−.00	.12**	.00	.13***	.01	.04
Self-esteem (ISEL)	.01	.07*	.00	.05	.01	.06	.01	.10*	.02 *	.11**	−.00	.02
ISEL belonging	−.00	.08**	−.02	.10**	−.01	.08*	−.01	.13**	.00	.11**	−.00	.02
Interpersonal support total	−.00	.09***	−.02	.12**	−.01	.09*	−.00	.13**	.01	.13***	−.00	.02
Loneliness	.00	−.06*	.02	−.08	−.00	−.06	.01	−.11*	−.00	−.10*	−.00	.02
Social intimacy	.00	.05	−.04*	.10*	.02	.07	.02	.05	−.01	.05	.00	.02
Positive affect	−.00	.09***	−.01	.11**	−.01	.08*	.00	.14***	.00	.14***	.00	.04
Negative affect	.01	−.03	.00	−.02	.00	−.04	.04**	−.05	.01	−.05	.01	−.01
Relational satisfaction	.00	.06	.03	.04	.00	.06	−.02	.06	.02	.13**	−.01	−.03
Satisfaction with life	−.00	.11***	−.03	.13**	.02	.09*	−.01	.17***	−.00	.15***	−.00	.05
Soc. network diversity	.01	.03	.00	.06	.02	−.00	.01	.07	.00	−.00	−.00	.05
Soc. network size	−.00	.05	−.01	.08*	−.00	.03	.00	.06	−.00	.03	−.00	.07**
Soc. network embededness	.00	.06*	−.01	.07	.01	.04	−.00	.07	.00	.05	−.00	.07*
Extraversion	.00	.03	−.02	.10*	.01	−.00	−.01	.06	−.00	.04	.01	.01
Agreeableness	.01	.13***	.01	.18***	.01	.22***	−.00	.15***	.01	.12***	−.01	.08**
Conscientiousness	.00	.04	−.01	.05	−.01	.05	.01	.10**	.01	.04	−.01	.01
Neuroticism	.01	−.07*	−.00	−.07	.00	−.06	.01	−.08	.00	−.10**	.01	−.04
Openness	.01	.02	.02	.06	.01	.01	.02	−.01	−.00	−.02	.02	.10***

Note: df = 178. Dist = distinctive accuracy, Norm = normative accuracy, ISEL = Interpersonal Support Evaluation List, soc. network = social network.
A coefficient of .13 means that a one unit increase in the outcome variable is associated with a .13 increase in accuracy.
*** $p < .001$.
** $p < .01$.
* $p < .05$.

moderator for judgments of all traits: all traits combined ($b = .13$, $p < .001$), extraversion ($b = .18$, $p < .001$), agreeableness ($b = .22$, $p < .001$), conscientiousness ($b = .15$, $p < .001$), neuroticism ($b = .12$, $p < .001$), and openness ($b = .08$, $p = .003$). This is consistent with previous findings that agreeable people rate others more favorably across several dimensions (Graziano & Tobin, 2002; Wood et al., 2010).

Additionally, each trait significantly moderated the normative accuracy of judgments of the same trait. Higher self-ratings on extraversion, agreeableness, conscientiousness, and openness were associated with higher normative accuracy for judgments of the same trait: extraversion ($b = .10$, $p = .01$), agreeableness ($b = .22$, $p < .001$), conscientiousness ($b = .10$, $p = .008$), and openness ($b = .10$, $p < .001$); whereas neuroticism was associated with lower normative accuracy for neuroticism ($b = -.10$, $p = .004$). Another way to interpret this pattern is that people who described themselves more favorably (as more extraverted, agreeable, conscientious, and open, and as less neurotic), also tended to judge others in a more favorable way on that same trait. This did not necessarily extend to judging others more normatively or favorably on other traits, and therefore is more consistent with assumed similarity effects than with a general favorability bias.

4. Discussion

Consistent with the hypothesis, several beneficial outcomes were related to the ability to judge others in a way that is consistent with what the average person is like, or with normative accuracy. In all cases of relationships that reached statistical significance, judges who achieved higher normative accuracy reported higher levels of beneficial outcomes. More specifically, judges who achieved higher normative accuracy for overall personality, extraversion, and conscientiousness reported higher levels of interpersonal control, interpersonal support, positive affect, and satisfaction with life. Additionally, judges who achieved higher normative accuracy for neuroticism and agreeableness reported higher levels of interpersonal support, positive affect, and satisfaction with life. However, judges who achieved higher levels of normative accuracy did not consistently report higher levels of social intimacy, romantic relational satisfaction, or social network diversity, size, or embededness; or lower levels of loneliness and negative affect. Contrary to the hypothesis, judges who achieved higher levels of distinctive accuracy did not report higher levels of beneficial outcomes. Additionally, exploratory analyses revealed that judges who achieved higher levels of normative accuracy for all traits described themselves as more agreeable, and normative accuracy for individual traits was predicted by self-ratings of that same trait.

4.1. Implications

Based on the current findings, the relationship between accuracy and beneficial outcomes depends on the type of accuracy that is achieved, with normative accuracy being fairly strongly related to these outcomes and distinctive accuracy being unrelated. This pattern of relationships is likely to be due at least in part to the type of information that was available about the targets and the exposure the judges had to the targets. All judgments were based on observations of interactions between pairs of targets with whom the judge was not acquainted, or put more simply, on first impressions. Therefore, the connection between normative accuracy and beneficial outcomes may be specific to the context, which is important to be aware of for both methodology (using ratings of strangers vs. acquaintances) and correctly stating the generalizability of findings.

Increasing our knowledge about how judgments based on observations of interactions are related to characteristics of the judge is likely to be helpful for predicting whether people will approach strangers and how they are likely to behave toward them if they do. The observation context is certainly consequential in daily life, as people often form initial impressions of others based on watching them interact, and this impression may influence whether they decide to approach a person or initiate an interaction or relationship with a person. In this specific case, the ability to see people in a normative fashion that is highly favorable may increase the number of relationships the judge pursues, which could lead to

increased perceptions of interpersonal support, positive affect, and life satisfaction. However, normative accuracy may not be related to beneficial outcomes that are more dependent on continued relationship, including relational satisfaction, loneliness, and social network variables. In the case of longer or more intimate relationships, such as romantic relationships, friendships, and working relationships, distinctive accuracy is likely to be related to beneficial outcomes. This is an important question for future research.

Another possible explanation for this pattern of findings is that the normative profile is generally positive in nature (Edwards, 1953; Human & Biesanz, 2011a), and judges who see others positively are likely to be more optimistic and possess other positive attributes (Kapikiran, 2012), and are also likely to see themselves in a positive way (Wood et al., 2010). Therefore, the results of this study may reflect an overall positive perception that includes seeing others positively and seeing the self positively. This perceptual positivity seems to have more influence on normative accuracy because the normative profile is highly favorable, and less influence on distinctive accuracy, because perceiving others favorably will not necessarily increase distinctive accuracy. This interpretation is consistent with the finding that judges who described themselves as highly agreeable achieved higher normative accuracy for all traits. Most previous research has examined this relationship with the assumption that judges' levels of agreeableness are driving the perceptions, but the causal direction could be reversed such that perceiving others in a normative or favorable way causes people to develop a higher level of agreeableness. It is also possible that this relationship is reciprocal, such that being agreeable leads to more positive perceptions of others, which in turn reinforces a person's level of agreeableness – which is consistent with Bandura's concept of reciprocal determinism (Bandura, 1978). Evidence that is contrary to these results being driven primarily by a general positivity bias is that the other Big Five traits did not moderate judgments of all traits but only of that same trait.

Furthermore, even if the positive perception of others is based on a bias to see the world – including the personalities of one's self and others – in a positive way, this has important implications for personality, well-being, and behavior. Several personality theories, models, and constructs emphasize the importance of how individuals perceive their worlds, including Social Learning Theory (Bandura, 2006), entity and incremental lay theories (Molden & Dweck, 2006; Rattan & Dweck, 2010), the Traits as Social Sensitivities model (Marshall & Brown, 2006), and Self-Determination Theory (Ryan & Deci, 2008). If the perceptions of others are based largely on a favorability bias, this is important to know in order to increase the predictability of how people will judge others' personalities and how these judgments will influence behavior.

Another implication of this pattern of results is that judges with more normative trait profiles themselves are likely to judge others in a normative manner, which is consistent with findings that support the impact of assumed similarity/projection bias/the self-based heuristic on judgments of others (Cronbach, 1955; Ready, Clark, Watson, & Westerhouse, 2000; Srivastava, Guglielmo, & Beer, 2010).

The relationships between normative accuracy and beneficial outcomes also seem to depend on the trait being judged. Normative accuracy for judging all Big Five traits had many significant relations with outcomes, but when looking at specific traits it becomes clear that these effects were largely driven by accuracy for judging extraversion, conscientiousness, and neuroticism. This pattern of findings highlights the importance of looking at accuracy at the trait level, which could lead to theorizing about why accuracy for judging some traits may be more consequential than accuracy for judging other traits. For example, perhaps decisions to initiate relationships are based more on judgments of extraversion, conscientiousness, and neuroticism than on judgments of agreeableness and openness.

4.2. Limitations and future directions

One limitation of this current work is that it is correlational and therefore it is not possible to establish causal direction. For example, it cannot be determined if achieving higher normative accuracy causes one to perceive more interpersonal support or whether perceiving more interpersonal support causes one to have higher normative accuracy. In order to assess causal direction, either interpersonal support or normative accuracy would have to be manipulated, and this would be difficult, and perhaps even impossible, to do. A longitudinal study may begin to address questions about causal direction, but even then causality would not be certain. At this point, we have to focus on examining relationships and learning what we can about the associations between beneficial characteristics and the accuracy of personality judgment. If future research is able to find a way to improve accuracy, it would then be interesting to assess whether these kinds of beneficial outcomes increase in line with increases in accuracy. This would be one way to begin establishing causal direction.

Future research could also examine distinctive accuracy in a different way to determine if it is related to beneficial outcomes that were not included in the current study. Participants in the current study, and in most research of this type, are simply asked to rate the personality of a target or targets, but are not given more specific instructions about considering how the target is different from or similar to the average person. Perhaps judgments would be different if judges were asked to think about personality in this way, and therefore accuracy based on the more specific instructions may be moderated by different factors. It is also possible that more specific outcomes, such as the efficacy of specific decisions or the outcomes of specific relationships, would show relations with distinctive accuracy since it pertains to the ability to judge how others are unique and therefore is likely to predict unique decisions and behaviors rather than more general ones. It is especially important for future research to examine distinctive accuracy within the context of on-going relationships, as the relations between both type of accuracy and beneficial outcomes may vary as a function of the type of relationship and the type of information about the target to which the judge has access.

A final limitation of this study is that all information about the judges is based on self-reports. Therefore it is possible that the current results were inflated due to shared method variance, with the implication that the relationships between beneficial outcomes and normative accuracy are due to people rating both themselves and others in a favorable way. And given that the normative profile is highly favorable, it is difficult to disentangle the influence of knowledge of the normative profile from a tendency to rate others favorably. However, it is useful to know that a general positivity bias could affect both how people perceive themselves and how they perceive others because this would allow self-ratings to be used to predict the favorability of judgments of others, and those judgments are likely to influence behavior toward and decisions concerning others (Wood et al., 2010). Given that the targets were strangers to the judges, this would be a valuable finding in itself as it extends previous findings of positivity of self-ratings as predictors of ratings of acquaintances (Wood et al., 2010) to also include ratings of strangers. In the future, it would be informative to assess the judges using reports from acquaintances or other objective measures of life outcomes, to achieve a fuller understanding of beneficial outcomes and how these are related to accuracy. It would also be informative to have the judges rate the average person to obtain a measure of favorability of perceptions of a generalized other. These data were not collected in the current study as it

was expected that beneficial outcomes would be related to both distinctive and normative accuracy and therefore there was not an a priori reason to assess perceptions of a generalized other.

4.3. Conclusion

Judging others based on an observation in a way that is consistent with the average person is more directly linked to beneficial outcomes than being able to distinguish how observed targets are unique. Such a finding suggests that knowing what others are like in general is more strongly related to positive outcome variables of judges than is the ability to determine how people are unique. And because the average personality profile is positive, the findings suggest that first impressions of others that are largely positive are related to both interpersonal and intrapersonal benefits.

Acknowledgments

I would like to thank Judy Hall and Lauren Human for feedback on earlier drafts of this paper, and Jeremy Biesanz for help with data analysis.

Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.jrp.2014.05.001.

References

Adams, H. F. (1927). The good judge of personality. *Journal of Abnormal and Social Psychology, 22*, 172–181.

Allport, G. W. (1937). *The ability to judge people. Personality: A psychological interpretation (pp. 499–522)*. New York: Holt.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191–215.

Bandura, A. (1978). The self system in reciprocal determinism. *American Psychologist, 33*, 344–358.

Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science, 1*, 164–180.

Beer, A., & Watson, D. (2008). Personality judgment at zero acquaintance: Agreement, assumed similarity, and implicit simplicity. *Journal of Personality Assessment, 90*, 250–260.

Biesanz, J. C. (2010). The Social Accuracy Model of interpersonal perception: Assessing individual differences in perceptive and expressive accuracy. *Multivariate Behavioral Research, 45*, 853–885.

Biesanz, J. C., & Human, L. J. (2010). The cost of forming more accurate impressions: Accuracy-motivated perceivers see the personality of others more distinctively but less normatively than perceivers without an explicit goal. *Psychological Science, 21*, 589–594.

Blackman, M. C., & Funder, D. C. (1998). The effect of information on consensus and accuracy in personality judgment. *Journal of Experimental Social Psychology, 34*, 164–181.

Burke, P. J., & Stets, J. E. (1999). Trust and commitment through self-verification. *Social Psychology Quarterly, 62*, 347–360.

Buunk, B. (1982). Strategies of jealousy: Styles of coping with extramarital involvement of the spouse. *Family Relations, 31*, 13–18.

Cohen, S., Doyle, W. J., Skoner, D. P., Rabin, B. S., & Gwaltney, J. M. Jr., (1997). Social ties and susceptibility to the common cold. *Journal of the American Medical Association, 277*, 1940–1944.

Cohen, S., Mermelstein, R., Kamarck, T., & Hoberman, H. M. (1985). Measuring the functional components of social support. In I. G. Sarason & B. R. Sarason (Eds.), *Social support: Theory, research, and applications* (pp. 73–94).

Colvin, C. R. (1993). "Judgable" people: Personality, behavior, and competing explanations. *Journal of Personality and Social Psychology, 64*, 861–873.

Cronbach, L. J. (1955). Processes affecting scores on "understanding of others" and "assumed similarity,". *Psychological Bulletin, 52*, 177–193.

Davis, M. H., & Kraus, L. A. (1997). Personality and empathic accuracy. In W. Ickes (Ed.), *Empathic accuracy* (pp. 144–168). New York: Guilford Press.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71–75.

easycalculation.com. (n.d.). Retrieved <http://easycalculation.com/statistics/p-value-t-test.php>.

Edwards, A. L. (1953). The relationship between the judged desirability of a trait and the probability that the trait will be endorsed. *The Journal of Applied Psychology, 37*, 90–93.

Funder, D. C. (1995). On the accuracy of personality judgment: A realistic approach. *Psychological Review, 102*, 652–670.

Funder, D. C. (1999). *Personality judgment: A realistic approach to person perception*. San Diego, CA: Academic Press.

Funder, D. C., & Dobroth, K. M. (1987). Differences between traits: Properties associated with interjudge agreement. *Journal of Personality and Social Psychology, 52*, 409–418.

Furr, R. M. (2008). A framework for profile similarity: Integrating similarity, normativeness, and distinctiveness. *Journal of Personality, 76*, 1267–1316.

Gleason, K. A., Jensen-Campbell, L. A., & Ickes, W. (2009). The role of empathic accuracy in adolescents' peer relations and adjustment. *Personality and Social Psychology Bulletin, 35*, 997–1011.

Graziano, W. G., & Tobin, R. M. (2002). Agreeableness: Dimension of personality or social desirability artifact? *Journal of Personality, 70*, 695–727.

Hall, J. A., Andrzejewski, S. A., & Yopchick, J. E. (2009). Psychosocial correlates of interpersonal sensitivity: A meta-analysis. *Journal of Nonverbal Behavior, 33*, 149–180.

Human, L. J., & Biesanz, J. C. (2011a). Through the looking glass clearly: Accuracy and assumed similarity in well-adjusted individuals' first impressions. *Journal of Personality and Social Psychology, 100*, 349–364.

Human, L. J., & Biesanz, J. C. (2011b). Target adjustment and self-other agreement: Utilizing trait observability to disentangle judgeability and self-knowledge. *Journal of Personality and Social Psychology, 101*, 202–216.

Human, L. J., & Biesanz, J. C. (2013). Targeting the good target: An integrative review of the characteristics and consequences of being accurately perceived. *Personality and Social Psychology Review, 17*, 248–272.

Human, L. J., Biesanz, J. C., Finseth, S. M., Pierce, B., & Le, M. (2014). To thine own self be true: Psychological adjustment promotes judgability via personality–behavior congruence. *Journal of Personality and Social Psychology, 106*, 286–303.

Ickes, W. (1993). Empathic accuracy. *Journal of Personality, 61*, 587–610.

Jussim, L., Cain, T. R., Crawford, J. T., Harber, K., & Cohen, F. (2009). The unbearable accuracy of stereotypes. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 199–227). New York, NY: Psychology Press.

Kadden, R. M., & Litt, M. D. (2011). The role of self-efficacy in the treatment of substance use disorders. *Addictive Behaviors, 36*, 1120–1126. http://dx.doi.org/10.1016/j.addbeh.2011.07.032.

Kapikiran, N. A. (2012). Positive and negative affectivity as mediator and moderator of the relationship between optimism and life satisfaction in Turkish university students. *Social Indicators Research, 106*, 333–345.

Katz, J., & Joiner, T. E. Jr., (2002). Being known, intimate, and valued: Global self-verification and dyadic adjustment in couples and roommates. *Journal of Personality, 70*, 33–58.

Kelsey, K. S., Campbell, M. K., Tessaro, I., Benedict, S., Belton, L., Fernandez, L. M., et al. (2000). Social support and health behaviors among blue-collar women workers. *American Journal of Health Behavior, 24*, 434–443.

Kilpatrick, S. D., Bissonnette, V. L., & Rusbult, C. E. (2002). Empathic accuracy and accommodative behavior among newly married couples. *Personal Relationships, 9*, 369–393.

Kolar, D. (1996). *Individual differences in the ability to accurately judge the personality characteristics of others*. (Unpublished doctoral dissertation). Riverside, CA: University of California, Riverside.

Lam, R. E., Pacala, J. T., & Smith, S. L. (1997). Factors related to depressive symptoms in an elderly Chinese American sample. *Clinical Gerontologist, 17*, 57–70.

Leising, D., Erbs, J., & Fritz, U. (2010). The letter of recommendation effect in informant ratings of personality. *Journal of Personality and Social Psychology, 98*, 668–682. http://dx.doi.org/10.1037/a0018771.

Letzring, T. D. (2008). The good judge of personality: Characteristics, behaviors, and observer accuracy. *Journal of Research in Personality, 42*, 914–932.

Letzring, T. D. (2010). The effects of judge-target gender and ethnicity similarity on the accuracy of personality judgments. *Social Psychology, 41*, 42–51. http://dx.doi.org/10.1027/1864-9335/a000007.

Letzring, T. D., Human, L. J. (in press). An examination of information quality as a moderator of accurate personality judgment. Journal of Personality. http://dx.doi.org/10.111/jopy.12075.

Letzring, T. D., & Noftle, E. E. (2010). Predicting relationship quality from self-verification of broad personality traits among romantic couples. *Journal of Research in Personality, 44*, 353–362.

Letzring, T. D., Wells, S. M., & Funder, D. C. (2006). Quantity and quality of available information affect the realistic accuracy of personality judgment. *Journal of Personality and Social Psychology, 91*, 111–123.

Litwin, H. (2007). What really matters in the social network-mortality association? A multivariate examination among older Jewish–Israelis. *European Journal of Aging, 4*, 71–82.

Luo, S., & Snider, A. G. (2009). Accuracy and biases in Newlyeds' perceptions of each other: Not mutually exclusive but mutually beneficial. *Psychological Science, 20*, 1332–1339.

Mahalik, J. R., Locke, B. D., Theodore, H., Cournoyer, R. J., & Lloyd, B. F. (2001). A cross-national and cross-sectional comparison of men's gender role conflict and its relationship to social intimacy and self-esteem. *Sex Roles, 45*, 1–14.

Marshall, M. A., & Brown, J. D. (2006). Trait aggressiveness and situational provocation: A test of the Traits as Social Sensitivities (TASS) model. *Personality and Social Psychology Bulletin, 32*, 1100–1113. http://dx.doi.org/10.1177/0146167206288488.

Miller, R. S., & Lefcourt, H. M. (1982). The assessment of social intimacy. *Journal of Personality Assessment, 46*, 514–518.

Molden, D. C., & Dweck, C. S. (2006). Finding "meaning" in psychology: A lay theories approach to self-regulation, social perception, and social development. *American Psychologist, 61*, 192–203. http://dx.doi.org/10.1037/0003-066X.61.3.192.

Monahan, D. J., & Hooker, K. (1995). Health of spouse caregivers of dementia patients: The role of personality and social support. *Social Work, 40*, 305–314.

Ozer, D. J., & Benet-Martinez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology, 57*, 401–421. http://dx.doi.org/10.1146/annurev.psych.57.102904.190127.

Paulhus, D. (1983). Sphere-specific measures of perceived control. *Journal of Personality and Social Psychology, 44*, 1253–1265.

Rattan, A., & Dweck, C. S. (2010). Who confronts prejudice? The role of implicit theories in the motivation to confront prejudice. *Psychological Science, 21*, 952–959. http://dx.doi.org/10.1177/0956797610374740.

Ready, R. E., Clark, L. A., Watson, D., & Westerhouse, K. (2000). Self and peer-related personality: Agreement, trait ratability, and the "self-based heuristic". *Journal of Research in Personality, 34*, 208–224.

Roberts, B. W., Kuncel, N. R., Shiner, R., Caspi, A., & Goldberg, L. R. (2007). The power of personality: The comparative validity of personality traits, socioeconomic status, and cognitive ability for predicting important life outcomes. *Perspectives on Psychological Science, 2*, 313–345.

Russell, D. (1996). UCLA loneliness scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment, 66*, 20–40.

Ryan, R. M., & Deci, E. L. (2008). Self-determination theory and the role of basic psychological needs in personality and the organization of behavior. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 654–678). New York, NY: The Guilford Press.

Sherman, R. A., & Funder, D. C. (2009). Evaluating correlations in studies of personality and behavior: Beyond the number of significant findings to be expected by chance. *Journal of Research in Personality, 43*, 1053–1063. http://dx.doi.org/10.1016/j.jrp.2009.05.010.

Srivastava, S., Guglielmo, S., & Beer, J. S. (2010). Perceiving others' personalities: Examining the dimensionality, assumed similarity to the self, and stability of perceiver effects. *Journal of Personality and Social Psychology, 98*, 520–534.

Swann, W. B., Jr., De La Ronde, C., & Hixon, J. G. (1994). Authenticity and positivity strivings in marriage and courtship. *Journal of Personality and Social Psychology, 66*, 857–869.

Taft, R. (1955). The ability to judge people. *Psychological Bulletin, 52*, 1–23.

Vernon, P. E. (1933). Some characteristics of the good judge of personality. *Journal of Social Psychology, 4*, 42–57.

Vogt, D. S., & Colvin, C. R. (2003). Interpersonal orientation and the accuracy of personality judgments. *Journal of Personality, 35*, 238–246.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063–1070.

Wood, D., Harms, P., & Vazire, S. (2010). Perceiver effects as projective tests: What your perceptions of others say about you. *Journal of Personality and Social Psychology, 99*, 174–190.