This article was downloaded by:[The University of Iowa] On: 28 April 2008 Access Details: [subscription number 785026720] Publisher: Routledge Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article maybe used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.



Personality Judgment at Zero Acquaintance: Agreement, Assumed Similarity, and Implicit Simplicity

ANDREW BEER¹ AND DAVID WATSON²

¹Department of Psychology, University of South Carolina Upstate ²Department of Psychology, University of Iowa

Previously unacquainted participants (N = 218) were assessed in small-group sessions in which they rated themselves and each other on (a) the Big Five (e.g., Costa & McCrae, 1992) and (b) an instrument assessing various traits not traditionally measured in the Big Five taxonomy as well as sociopolitical attitudes. Replicating earlier research, we obtained a significant self–stranger correlation on Extraversion; in addition, we found significant agreement on ratings of thriftiness, athleticism, traditionalism, conservatism, and attractiveness. Assumed similarity correlations were substantial for Neuroticism, Agreeableness, and Conscientiousness; furthermore, consistent with previous findings, there was a strong inverse relation between agreement and assumed similarity across the assessed characteristics. Finally, the correlations between Neuroticism, Openness, Agreeableness, and Conscientiousness were significantly greater in the strangers' ratings than in the self-ratings, indicating that these peer judgments are less complex. We also compared our Big Five findings with those from previous samples of varying acquaintanceship; these analyses indicated that the strangers' ratings were characterized by lower levels of self–other agreement (for all traits except Extraversion) and somewhat higher levels of assumed similarity (for ratings of Neuroticism and Agreeableness).

Good psychosocial functioning in society requires an ability to make judgments about the general tendencies of people about whom one has little information. For this reason, it is important to be able to understand how people make such judgments and in what contexts they can trust these judgments. Social behavior can be determined, in part, by perceptions-whether accurate or faulty-of the nature of individuals with whom people interact. At a job interview, a hiring decision can be made based on the interviewer's perception of the applicant's personality: Is he or she a conscientious individual? Does he or she tend to get along with others? There are also less formal occasions that call for people to make and rely on judgments of a target individual's nature such as choosing a mechanic or choosing an individual from whom to ask directions. The myriad situations influenced by personality perception warrant serious inquiry into the processes that underlie it.

Beyond the everyday utility of personality perception, we aim in this work to address other issues germane to personality assessment and to general research practice in social judgment. Fundamental to the study of personality is the validity of any personality judgment. Although self-judgment often has served as the gold standard for personality assessment, there certainly is value in exploring the validity of other modes of measurement. Hence, there has been interest in integrating more peer reports (as both predictors and criteria) in the study of general personality judgment (e.g., Funder, 2002; Letzring, Wells, & Funder, 2006). To fully integrate peer judgments into personality research, however, one must have an appreciable understanding of the content and process of these judgments. For example, which peers and which ratings should one trust in a specific assessment situation? For which traits are peer judgments more appropriate than self-judgments? More fundamentally, how can researchers achieve optimal assessments of personality using ratings from different sources? We examine implications for future research as well as insights on daily functioning by looking at three basic phenomena related to personality perception: accuracy, assumed similarity, and implicit personality theories.

ACCURACY IN PERSON PERCEPTION

Perhaps the best way to begin understanding personality perceptions of strangers is to examine how people perceive personality in those with whom they are well acquainted. How accurate are individuals in judging the personality of close others? Accuracy research has been conducted since the early 20th century; indeed, its origins are tied to the origins of trait theory (for a review, see Funder, 1995). If a trait exists, other than in the mind of its possessor, then it should be observable to close others. An extensive body of evidence supports this notion, and it is now clear that one can expect moderate to strong correlations between a well-acquainted individual's rating of a target individual and that target individual's self-rating (e.g., Harkness, Tellegen, & Waller, 1995). These correlations are particularly strong among couples who have been married for a long time (see Watson, Hubbard, & Wiese, 2000).

The path to a valid trait inference has no shortage of obstacles, however. Funder's (1995) Realistic Accuracy Model (RAM) attempts to meld social and personality psychology viewpoints into an overarching theory of person perception. For any trait to be rated with accuracy in another individual, several conditions must be met. First, the specific behavior of the target must be relevant to the underlying trait dimension that one is trying to assess. Second, this behavior must available for observation. Third, the judge must detect this behavior or cue; that is, it must be noticed and attended to. Finally, the perceiver must properly utilize the cue. Once a relevant behavior or attribute has been observed and attended to, it is then the task of the observer to

Received May 30, 2006; Revised July 11, 2007.

Address correspondence to Andrew Beer, Department of Psychology, University of South Carolina Upstate, 221 Smith, Spartanburg, SC 29303; Email: abeer@uscupstate.edu

determine the relation between this behavior or attribute and the personality of the target. The first two conditions are traditional concerns of personality psychologists, the latter two of social psychologists. Failure in any of these domains will lead to some inaccuracy in personality judgment.

The fact that agreement correlations differ across types of relationships between perceivers and targets implies that accuracy can vary based on acquaintanceship (e.g., Watson et al., 2000). In general, there is support for an acquaintanceship effect (Funder & Colvin, 1988; Letzring et al., 2006; Norman & Goldberg, 1966; Watson et al., 2000). That is, as people get to know each other, they become better judges of each other's personality. This would follow directly from RAM in that wellacquainted individuals have had more opportunities to display, detect, and interpret trait-relevant cues. Norman and Goldberg (1966) found that well-acquainted individuals are indeed better judges of each other's personality than are strangers, but they also found a surprising level of accuracy in the latter judgments. The self-peer agreement correlations among strangers were highest for Extraversion (r = .38) but also were significant for Conscientiousness (r = .34) and Culture (r = .32). It is important to note, moreover, that this moderate self-peer correlation among strangers on Extraversion is a robust finding that since has been replicated by other investigators (Albright, Kenny, & Malloy, 1988; Borkenau & Liebler, 1992; Watson, 1989).

Person Perception at Zero Acquaintance

Norman and Goldberg's (1966) finding and these subsequent replications sparked a literature aimed at finding the sources of validity for personality judgment at zero acquaintance. Researchers have examined numerous possible mediators of the effect including but not limited to physical attractiveness (e.g., Albright et al., 1988), nonverbal behavior (e.g., Gangestad, Simpson, DiGeronimo, & Biek, 1992), vocal attractiveness (Miyake & Zuckerman, 1993), and stereotypes (Blair, Judd, Sadler, & Jenkins, 2002). Borkenau and Liebler (1992) conducted what was perhaps the most comprehensive study in this area. Borkenau and Liebler collected short samples of behavior (which involved reading a weather report) from 100 participants and then had four separate groups of judges (six per group) rate all 100 targets on the Big Five personality dimensions. One group saw only a still photo (taken from the video segment) of the target, one group heard only the audio portion of the segment, one group only watched the video (without audio), and a final

group saw the full video segment with sound. Borkenau and Liebler found that Extraversion, Agreeableness, and Conscientiousness are more easily rated by strangers than other traits and that even a photograph was enough to yield moderate agreement correlations on these traits.

It also is clear that some traits are more easily observable than others (Funder & Colvin, 1988; Funder & Dobroth, 1987; Norman & Goldberg, 1966). As mentioned previously, traits such as Extraversion, which have clearer behavioral manifestations, can be detected quite readily even among strangers, with self–other agreement correlations reaching .40 in some cases (Borkenau & Liebler, 1992; Funder & Dobroth, 1987; Kenrick & Stringfield, 1980; McCrae, 1982). Other traits, such as Neuroticism, which have a more internal, subjective quality about them, show almost zero agreement among strangers.

The trait visibility effect can be detected among acquainted individuals, but the effect is strongest among strangers. As acquaintanceship increases, agreement correlations tend to cluster closer together. For example, in previous work, Watson (1989) found that the difference between the agreement correlations for Neuroticism and Extraversion was .42 among strangers, .11 among friendship dyads, .04 among dating couples, and only .02 among married couples (Watson et al., 2000; data from these last three samples are reported in Table 1). The most valid personality judgments will occur when a well-acquainted judge rates a target on a highly visible trait, which is a relatively infrequent occurrence.

Although sources of validity in personality judgments have received much attention in the literature, validity only represents a portion of the personality perception process—What about the variance unaccounted for by accurate personality perception? There are, of course, many factors influencing any particular judgment of personality in another individual, with only one class being valid observable cues of the target's personality. In situations involving unacquainted individuals, judgments often cannot be validly made from such a paucity of personality relevant data. How, therefore, are these judgments formulated? This is a very broad question, but we focus on two possible shortcuts that individuals may utilize in the absence of valid cues.

Assumed Similarity

Often, when trait information is not readily available, individuals operate on the assumption that others are similar to themselves. *Assumed similarity* refers to the tendency to perceive others as similar to the self. The phenomenon was originally

Sample	Friendship		Dating		Married	
	Self–Other Agreement	Assumed Similarity	Self–Other Agreement	Assumed Similarity	Self–Other Agreement	Assumed Similarity
Neuroticism	.37**	.13**	.41**	.19**	.59**	.20*
Extraversion	.48**	.08	.45**	.27**	.61**	.18*
Openness	.44**	.23**	.55**	.50**	.58**	.18*
Agreeableness	.34**	.28**	.39**	.18**	.53**	.18*
Conscientiousness	.39**	.17**	.53**	.11	.49**	.11

TABLE 1.—Self-other agreement and assumed similarity correlations from previous samples.

Note. Ns = 558 (friendship dyads), 272 (dating couples), and 148 (married couples). Adapted from "Self-other agreement in personality and affectivity: The role of acquaintanceship, trait visibility, and assumed similarity," by D. Watson, B. Hubbard, & D. Wiese, 2000, *Journal of Personality and Social Psychology*, 78, pp. 551, 553. Copyright 2000 by American Psychological Association.

p < .05. p < .01.

discussed by Cronbach (1955) as a potential source of spurious accuracy in personality perception. Cronbach argued that individuals tend to interact socially with others who have characteristics in common with them; consequently, a seemingly accurate judgment of a close other could be obtained simply by providing self-relevant information. This argument, of course, requires the assumption that "birds of a feather flock together." Although this is true for some types of variables (i.e., race, socioeconomic status, attitudes, intelligence), it is not characteristic of personality. In fact, there is little evidence of personality similarity in friendship pairs, dating couples, and married couples (Eysenck, 1990; Funder, Kolar, & Blackman, 1995; Watson et al., 2000, 2004). Therefore, assumed similarity no longer is considered to be a major source of spurious accuracy in this area.

Nevertheless, it has attracted increasing attention from researchers in its own right. The phenomenon has had many names, each suggesting a somewhat different theory about its etiology. Assumed similarity is perhaps the most prominent label in the literature (e.g., Watson et al., 2000; Funder et al., 1995; Kenny & Acitelli, 2001), and it seems to suggest that this is a conscious process, a rating strategy per se, or even an example of inductive reasoning. Perceived similarity (e.g., Hoch, 1987) seems to suggest the same basic properties. Projection (e.g., Newman, Duff, & Baumeister, 1997) traditionally applies to situations involving undesired characteristics that are attributed to others rather than to oneself. Some have taken to referring to this phenomenon as the *self-based heuristic* (Ready, Clark, Watson, & Westerhouse, 2000), implying that it results from an unconscious rating strategy: That is, when little trait relevant information is available, one automatically "fills in the gaps" with the most convenient and accessible information, namely, that which relates to the self.

Although the mechanisms underlying social projection continue to be debated, its existence has been firmly established. In general, people will display a greater level of assumed similarity in personality judgments when the traits being rated are less visible. Thus, assumed similarity effects tend to be strongest for trait affectivity and related traits such as Neuroticism, which are less visible than dimensions such as Extraversion (Watson et al., 2000).

To date, however, very few studies have closely examined the role of limited acquaintanceship in determining levels of assumed similarity. In general, assumed similarity correlations are inversely related to agreement correlations (Watson et al., 2000), so one might expect assumed similarity to increase at lower levels of acquaintanceship. Accordingly, a basic goal of this study was to examine levels of assumed similarity in strangers' ratings. Because agreement and assumed similarity tend toward an inverse relation, and agreement tends to be higher in well-acquainted samples than in unacquainted samples, we posit that levels of assumed similarity will be elevated among unacquainted individuals as compared to well-acquainted individuals, as this would represent the reasonable employment of a heuristic in the absence of valid cues.

Implicit Personality Theories

Another shortcut that individuals might employ is the use of implicit personality theories (for a review, see Schneider, 1973). In particular, people may have a priori notions about how traits correlate and thus can use information about one trait to fill in gaps in information about another. In addition, people may have preexisting beliefs about how traits are related to observable physical phenomena (such as physical attractiveness); the physical attractiveness halo effect (i.e., "Beautiful people are good people"; Eagly, Ashmore, Makhijani, & Longo, 1991) is an example of an implicit personality theory that encompasses both of these components. People do not need to rely on implicit personality theories when they have specific, trait-relevant information at their disposal, but they may fall back on these theories when they do not.

Implicit personality theories represent a way to simplify the social world, and thus one might expect a simpler trait structure in ratings of unknown others than in self-ratings or ratings of close others. In this regard, it now is well established that the Big Five are systematically interrelated and, therefore, define superordinate factors at an even higher level of abstraction (see Digman, 1997; Markon, Krueger, & Watson, 2005). Digman (1997) presented extensive evidence suggesting that the Big Five define two superordinate factors: Alpha (consisting of Agreeableness and Conscientiousness vs. Neuroticism) and Beta (consisting of Extraversion and Openness). It is possible that this higher order structure might be more readily apparent in the ratings of a stranger than in self-ratings or ratings of close others. Even if the factor structure is similar, the magnitude of the correlations may vary substantially between self-ratings and those of strangers. Indeed, in the absence of trait-relevant information, one would anticipate stronger correlations among the Big Five in strangers' ratings than in other types of data, as judges struggle to form personality impressions based on limited information.

Implicit personality theories can be employed in different ways when rating a stranger. The perceiver could use a proxy, such as anticipated liking or physical attractiveness, and base all judgments of personality traits on this estimate. For instance, the individual may have a schema for each separate trait and its relation to physical attractiveness. It is also possible that the perceiver has a simpler implicit personality structure, and he or she uses physical attractiveness or perceived liking to make one supertrait judgment (e.g., the implicit theory may involve how Digman's, 1997, Alpha dimension is related to physical attractiveness).

THIS STUDY

In this study, we aimed to explicate the relation between accuracy, assumed similarity, and the structure of personality ratings among unacquainted individuals. This study adds to the literature in several ways. First, it provides an opportunity to examine social projection in personality judgments among strangers. Typically, assumed similarity has been given serious consideration only in acquainted samples; this study therefore affords the opportunity to make comparisons between projection in personality judgments made about strangers and the already well-established literature concerning social projection of attitudes and opinions in better acquainted individuals (e.g., false consensus effects). Second, our design affords a within-sample comparison of trait structures for the self versus unknown others. Finally, to establish the pervasiveness of these effects, we have included a broader range of variables than many previous stranger rating studies. In addition to measures of the Big Five personality traits, we have included items that assess several different attitude domains as well as aspects of personality not well tapped by traditional Big Five instruments. Little work in this area has examined constructs outside the realm of these supertraits (for exceptions, however, see Funder et al., 1995; Letzring et al., 2006); we therefore explore whether these additional variables will show patterns similar to those of other, more widely examined constructs.

We predicted that self-other agreement correlations would be lower in strangers as compared with better-acquainted individuals. On the basis of previous evidence (Albright et al., 1988; Borkenau & Liebler, 1992; Watson, 1989), however, we expected to find a significant self-stranger agreement correlation for Extraversion. Conversely, we predicted that assumed similarity correlations would be higher in strangers' ratings as compared with those of better acquainted individuals. We make both of these predictions based on the idea that information is driving these effects. Judges are more accurate with more or better information; furthermore, if assumed similarity is indeed a heuristic, then greater access to information should lead to lower assumed similarity correlations.

Of course, there are other possibilities regarding assumed similarity. Some data (Kenny & Kashy, 1994) demonstrate a trend opposite of the predicted effect: Greater acquaintanceship leads to greater assumed similarity. Table 1 provides benchmark data from three samples based on well-acquainted peers (taken from Watson et al., 2000) to help anchor these directional predictions.¹ Finally, we predicted that the intercorrelations among peer-rated traits would be stronger than those observed among self-rated traits in our data, again operating on the assumption that with less available information, judges would rely on more simplistic strategies for perceiving personality.

METHOD

Participants

METHO

Participants consisted of 218 (48 male and 170 female) undergraduates from an introductory psychology course at the University of Iowa. Individuals participated in partial fulfillment of a course research requirement.

Measures

To assess personality, we used an abbreviated Big Five instrument designed particularly for instances in which individuals may be asked to make multiple ratings (Saucier, 1994). This 40-item instrument was developed from Goldberg's (1992) 100-item inventory and consists of adjectives that tap Emotional Stability or Neuroticism (e.g., *moody, jealous, temperamental*), Intellect (e.g., *creative, imaginative, philosophical*), Extraversion (e.g., *talkative, bold, energetic*), Conscientiousness (e.g., *organized, efficient, systematic*), and Agreeableness (e.g., *sympathetic, warm, kind*). The participants respond using a 5-point rating scale ranging from 1 (*very uncharacteristic of me*) to 5 (*very characteristic of me*) for each adjective. The mini-marker factors (40-item set) correlated between .92 and .96 with the corresponding factors derived from the full markers (100-item set); coefficient alphas for the scales ranged from .78 to .83 and from .76 to .85 for self and liked-other ratings, respectively (Saucier, 1994). Coefficient alpha for the scales in this sample ranged from .72 to .87 for self-ratings.

In the peer-rating version of the mini-markers, a blank was provided at the top of the page for the participant to indicate, using the assigned participant number and letter, which fellow participant they were rating on that page. The instructions were modified slightly, asking the participant to "please indicate the extent to which you feel this word characterizes the individual you have indicated in the space above." The participants responded using a 5-point rating scale ranging from 1 (*very uncharacteristic of him/her*) to 5 (*very characteristic of him/her*) for each adjective. Coefficient alpha for the scales ranged from .70 to .92 in the mean peer ratings.

The Descriptive Choices Questionnaire (DCQ; Watson & Haig, 2005) was designed for use in studies of assortative mating and mate preference (see Watson & Haig, 2005). The full DCQ consists of 30 items that assess an assortment of personality traits and attitudes ranging from conservatism–liberalism to thriftiness to spiritual orientation. Each item consists of two adjectives representing opposite poles of the dimension; they are labeled (A) and (B). There is a common stem: "I would describe myself as, ..." and the participant responds using a 7-point scale (with 1 = completely like A, 2 = mostly like A, 3 = slightly like A, 4 = equally like A and B, 5 = slightly like B, 6 = mostly like B, and 7 = completely like B).

In this study, we used an abbreviated 15-item version of the instrument that focused primarily on the attitudinal variables to reduce redundancy with the primary personality measure. Some items represent trait or trait-like concepts or tendencies (Extravagant vs. Thrifty, Optimistic vs. Pessimistic, Trusting vs. Skeptical, Generous vs. Stingy, Prefers novelty vs. Prefers familiarity), other items assess cognitive or physical attributes (Athletic vs. Non-athletic, Intelligent vs. Unintelligent, Physically attractive vs. Unattractive), and several items measure sociopolitical attitudes (Conservative vs. Liberal, Traditional vs. Nontraditional, Patriotic vs. Not concerned with patriotism, Morally strict vs. Not so strict, Religious vs. Non-religious, Spiritually oriented vs. Not very spiritual, Politically aware vs. Not very concerned with political/social issues).

The peer-rating form of this questionnaire also had a space provided for the target's participant number and letter. The stem question was modified to read "How do you rate the individual indicated above on the following dimensions?" The response scale was identical to the self-rated version of the questionnaire.

Procedure

Participants were brought to the laboratory in groups of 3 to 5. They were asked specifically not to sign up with anyone with whom they were acquainted, and they were also asked at the beginning of the session if they had previous contact with any of the others in the experimental group. Finally, participants were asked not to speak to other participants in an effort to preserve a negligible level of acquaintanceship. To further ensure

¹We must acknowledge, however, that these comparisons are complicated by the fact that we used a different Big Five measure than those employed in Watson et al. (2000); specifically, these participants were assessed using the NEO Five-Factor Inventory (Costa & McCrae, 1992) for the married and dating samples and the Big Five Inventory (John, Donahue, & Kentle, 1991) for the friendship sample. Mooradian and Nezlek (1996) compared the NEO to Saucier's (1994) "mini-markers" and found the scales to be similar but not identical. Disattenuated convergent correlations between the two sets of scales were all stronger than .70.

Participants first completed a battery of self-report questionnaires including a demographic questionnaire, the 40-item personality inventory, and the abridged DCQ. After the individuals completed the questionnaires, the experimenter distributed the other-rating packets. The participants then proceeded to rate every other member of the group using the 40-item personality instrument and the DCQ. On completion, the participants responded to two confidence items, one that asked them to rate, using a 7-point scale, how confident they were that their ratings of others were accurate and a second that asked them to rate how confident they were that others' ratings of them were accurate. There were 53 total groups (12 groups of 3, 23 groups of 4, and 18 groups of 5); the average number of peer raters per target was 3.11.

RESULTS

Descriptive Statistics

Before turning to our main analyses, we began by exploring more basic aspects of our data. Table 2 provides the means and standard deviations for each of the Big Five and the 15 DCQ items.² Among the Big Five, the mean self-rating exceeded the mean peer rating³ (grouped within targets) for each trait (*ts* ranged from 2.68 to 9.89; all were significant at p < .01, twotailed). The largest differences were observed on Agreeableness (d = .90) and Intellect (d = .60). These differences likely are indicative of greater self-rater confidence, which would be manifested in a tendency to use the ends of the rating scale more frequently.

In contrast, the DCQ items show a stronger trend toward socially desirable responding, with people generally seeing themselves as more intelligent, attractive, and athletic—and as less pessimistic, skeptical, and stingy—than their peers. In addition, the self-raters saw themselves as more liberal and more patriotic—and as lower in novelty seeking and as less politically aware—than the other members of their group. Finally, as opposed to the Big Five, some of the DCQ variables show no difference (Religiousness, Spirituality, Thriftiness, Traditionalism, and Moral Strictness) between the two sets of ratings.

It also is noteworthy that the standard deviations were greater among the self-ratings for all 20 variables. This again suggests

TABLE 2.—Descriptive statistics.

	Se	Self		Peer	
Scale	М	SD	М	SD	d
Personality ^a					
Neuroticism	21.13	4.90	20.07	2.59	.27**
Extraversion	27.97	6.24	26.35	4.72	.27**
Intellect	28.89	4.52	26.62	2.90	.60**
Agreeableness	34.49	3.93	31.21	3.36	.90**
Conscientiousness	30.43	5.28	28.92	3.41	.34**
DCQ^b					
Liberalism	4.23	1.49	3.90	1.01	.26*
Religiosity	4.59	1.89	4.38	.88	.14
Athleticism	4.92	1.67	3.99	1.31	.62**
Intelligence	5.69	1.04	5.12	.78	.62**
Attractiveness	4.94	1.10	4.35	.98	.57**
Patriotism	4.76	1.60	4.36	.77	.32**
Spirituality	4.42	1.66	4.32	.84	.08
Thriftiness	3.93	1.19	4.07	.84	14
Pessimism	3.03	1.30	3.27	.79	22*
Political Awareness	3.68	1.54	4.29	.92	48**
Traditionalism	4.54	1.14	4.62	.88	08
Moral Strictness	4.18	1.45	4.29	.97	09
Stinginess	2.56	1.11	3.10	.72	58**
Skepticism	2.90	1.40	3.22	.80	28**
Novelty Seeking	3.45	1.08	3.66	.84	22*

Note. Peer column N = 218.

 ${}^{a}N = 215. {}^{b}N = 208.$

*Indicates t is significant at .05 level. **Indicates t is significant at .01 level.

that the self-raters were more confident in their ratings, which enabled them to use extreme ratings more freely.

The Big Five and the DCQ

Self-rating correlations. Next, to get a better sense of our data, it is important to examine relations between the Big Five and the DCQ items. Table 3 provides the correlations between the self-rated Big Five and self-rated DCQ items. It is note-worthy that these correlations tend to be low to moderate in magnitude, indicating that we were successful in eliminating the DCQ items that were most redundant with the Big Five. Indeed, only six correlations are as high as |.30|, and only two exceed |.40|. Among the Big Five, Conscientiousness shows the greatest relations with DCQ items, with 12 of the 15 correlations reaching significance. Among the DCQ, Optimism, Generosity, and Skepticism all correlated significantly with at least four of the Big Five. Across all variables, 40 of the 75 total correlations reached significance, and the mean correlation among self-ratings of the Big Five and DCQ was |.14|.

Strangers' rating correlations. Table 4 provides the correlations between the peer-rated Big Five and peer-rated DCQ items (grouped within targets). Among the Big Five, Extraversion, Agreeableness, and Conscientiousness all showed significant correlations with at least 12 of the 15 DCQ items. Among the DCQ items, Intelligence, Spirituality, Optimism, Political Awareness, Traditionalism, Moral Strictness, and Generosity all showed significant correlations with at least four of the Big Five. Overall, 54 of the 75 correlations reached significance, and the average peer-rated correlation between the Big Five and the DCQ was |.27|. In sharp contrast to the self-ratings, 36 correlations were |.30| and higher, and 16 coefficients were |.40| or greater (indeed, 8 were |.50| and greater). Generally

²We also included measures of 8 physical attributes in an attempt to determine which cues individuals might be utilizing in their judgments. Only 2 of the 40 self-rating correlations between these attributes and the Big Five exceeded 1.201, and only 1 of the peer-rating correlations was above 1.201. We found a few significant but low correlations; however, controlling for them in a lens-model analysis had a negligible effect on the Extraversion agreement correlation.

³For most analyses in this study, there are two ways to define a peer rating. The first, which we call *grouping within judges*, refers to the method of averaging each individual judge's ratings of the other group members to form a peer rating index (e.g., in the case of a four-person group, this would involve computing each person's mean ratings of the other three participants). The other, which we call *grouping within targets*, refers to the method of averaging the ratings of each target made by other group members (continuing the earlier example, this would involve averaging the scores that each person received from the other three participants). In most cases, these estimates will yield similar results, so we simply chose the method that made the most sense psychologically for each analysis.

TABLE 3.—Correlations between self-ratings on the Big Five and the DCQ.

Scale	Neuroticism	Extraversion	Intellect	Agreeableness	Conscientiousness
Liberalism	09	.09	.09	03	15*
Religiosity	11	.12	16^{*}	.22**	.19**
Athleticism	17*	.24**	02	.06	.10
Intelligence	02	.01	.20**	.01	.05
Attractiveness	20**	.08	.13	.02	.15*
Patriotism	12	.04	11	.21**	.24**
Spirituality	07	.13	.09	.15*	.14*
Thriftiness	.11	22**	.04	04	16*
Pessimism	.42**	21**	10	35**	27**
Political	18^{**}	01	.18**	.01	.19**
Awareness					
Traditionalism	.07	13	18^{**}	.14*	.19**
Moral	14*	07	07	.15*	.24**
Generosity	_ 30**	21**	00	37**	17*
Skenticism	50	.21	1/1*	.52	.17
Novelty	.54	10	12*	45	18
Seeking	22	.10	.15	.01	01

Note. N = 207. DCQ = Descriptive Choices Questionnaire. *p < .05. **p < .01.

speaking, these correlations are stronger in peer ratings than in self-ratings, which is consistent with our earlier suggestion that strangers' ratings may be characterized by stronger relations among the judged variables. Follow-up tests indicated that 19 of the 75 coefficients (25.3%) differed significantly (p < .05, two-tailed) across the two sets of ratings (1 for Neuroticism, 4 for Extraversion, 7 for Intellect, 4 for Agreeableness, and 3 for Conscientiousness).

Agreement

Aggregated data. The second column of Table 5 provides the agreement correlations for the Big Five traits. Accuracy was calculated by correlating each individual's self-rating with the average of the other group members' ratings of that individual (i.e., grouping within targets). Replicating the results of

TABLE 4.-Correlations between peer ratings on the Big Five and the DCQ.

Scale	Neuroticism	Extraversion	Intellect	Agreeableness	Conscientiousnes
Liberalism	.08	.25**	08	34**	48**
Religiosity	12	21**	.05	.33**	.44**
Athleticism	23**	.39**	21**	.08	10
Intelligence	27**	16*	.54**	.49**	.52**
Attractiveness	08	.34**	01	.14*	.12
Patriotism	21**	.05	.15*	.28**	.33**
Spirituality	13	14*	.31**	.36**	.40**
Thriftiness	12	32**	.31**	.08	.06
Pessimism	.33**	37**	.03	42**	25**
Political Awareness	29**	19**	.50**	.32**	.36**
Traditionalism	19**	26**	.11	.40**	.51**
Moral Strictness	1**	36**	.33**	.42**	.58**
Generosity	37**	05	.28**	.64**	.53**
Skepticism	.33**	08	08	55**	42**
Novelty Seeking	.12	.32**	.11	.33**	.32**

Note. N = 218. DCQ = Descriptive Choices Questionnaire

p < .05. p < .01.

TABLE 5.—Self-other agreement and assumed similarity correlations: Big Five.

Scale	Agreement	Assumed Similarity	
Neuroticism	01	.32*	
Extraversion	.37*	07	
Intellect	.07	.07	
Agreeableness	.11	.38*	
Conscientiousness	02	.25*	

Note. N = 215.

*p < .01.

previous studies, we found significant self-other agreement for Extraversion. It is noteworthy, moreover, that our agreement correlation for Extraversion (r = .37, p < .01) is very similar to that reported by Watson (1989; r = .41) in a comparable analysis of 250 strangers. None of the other agreement correlations were significant. In accordance with our hypothesis, each of the agreement correlations in Table 5 (our sample) was smaller in magnitude than any agreement correlation from Table 1 (i.e., from more well-acquainted samples). Follow-up tests revealed that for every trait except Extraversion, each of the three possible comparisons (i.e., the strangers' correlations vs. those from the friendship, dating, and married samples) yielded significant differences (across the 12 individual comparisons, z scores ranged from 3.01 to 6.64; all significant at p < .01, two-tailed). These results provide further support for the acquaintanceship effect, as strangers are considerably poorer judges of target personality than are more well-acquainted individuals. However, a stranger's ability to perceive Extraversion is not significantly different from a friend's (z = -1.67, p < .10, two-tailed) or a dating partner's (z = -1.04, ns). In these comparisons, only married couples could perceive Extraversion more accurately than a stranger (.61 vs. .37; z = 2.73, p < .01, two-tailed).

Table 6 provides the agreement correlations for the DCQ. The most noteworthy aspect of these data is that we found significant self-stranger agreement correlations for several characteristics beyond Extraversion. Overall, 5 of the 15 correlations were significant. Specifically, the average of stranger ratings showed significant agreement with the targets' self-ratings on Thriftiness (r = .31), Athleticism (r = .29), Traditionalism (r = .21), Conservatism (r = .17), and Attractiveness (r = .14). Interestingly, both Athleticism and Thriftiness also showed significant correlations with Extraversion in both the self-ratings and peer ratings. This raises the possibility that these other attributes can be inferred simply from one's correlated inference regarding Extraversion. However, when we computed partial correlations controlling for peer-rated Extraversion, the agreement correlations for these attributes dropped only slightly (the largest drop is seen in Athleticism, which fell from .29 to .22); it therefore appears that perceived Extraversion is not driving these effects. Moreover, the correlations all remained significant after controlling for peer-rated Extraversion.

Disaggregated data. One key difference between the correlations presented in Table 5 versus those presented in Table 1 concerns aggregation of peer judgments. Each of the Table 1 correlations represents a pairwise comparison between the self and a single peer judgment, whereas those in this study are a result of correlating one judgment with the average of three to five other judgments (M = 3.11 raters per target). This aggregation

TABLE 6.—Self-other agreement and assumed similarity correlations: DCQ.

Scale	Agreement	Assumed Similarity
Conservatism	.17*	01
Religiosity	03	.07
Athleticism	.29**	07
Intelligence	03	.17*
Attractiveness	.14*	.08
Patriotism	04	.26**
Spirituality	.06	.29**
Thriftiness	.31**	.03
Optimism	.06	.13
Political Awareness	.09	01
Traditionalism	.21**	.07
Moral Strictness	.08	.05
Generosity	.08	.31**
Skepticism	04	.19**
Novelty Seeking	.04	.08

Note. Accuracy N = 214. Assumed similarity N = 208. DCQ = Descriptive Choices Questionnaire.

generally can be expected to lead to a slight inflation of the correlations in this study. Thus, it is possible that our results might change significantly if we were to use only single judges to compute our correlations.

Accordingly, we disaggregated the data. We correlated an individual's self-rating with each peer rating separately. The original sample size was 215, and by arranging the data in this way, the sample size grows to 695 due to the fact that self-ratings are repeated in the data (note that although this approach technically violates the assumption of independent observations, this problem can be circumvented by adjusting the degrees of freedom to reflect the actual sample size of 215).

As previously noted, one would expect that the general effect of disaggregating the data is an attenuation of most correlations. In this particular case, however, there were only some subtle changes to our results when the data were analyzed in this fashion. First, the agreement correlation for Extraversion dropped from .37 to .29, which is still highly significant based on a sample size of 215. However, with the disaggregated data, the agreement correlation for Extraversion now was significantly lower in this sample than in any of the more well-acquainted samples shown in Table 1. Finally, it is important to note that all of the significant agreement correlations among the DCQ remained significant when the data were reanalyzed at the disaggregated level.

Assumed Similarity

Aggregated data. The second column of Table 5 provides the assumed similarity correlations for the Big Five traits. Assumed similarity was calculated by correlating an individual's self-rating with the average of his or her ratings of each of the other group members (i.e., grouping within judges). Assumed similarity was statistically significant and moderate in magnitude for Agreeableness (r = .38), Conscientiousness (r = .25), and Neuroticism (r = .32) and was near zero for Extraversion (r = -.07) and Intellect (r = .07).

We predicted that these estimates would be higher among strangers than among more well-acquainted individuals. The data partly support this prediction, but there were notable exceptions. First, Extraversion actually showed a reverse pattern. That is, more well-acquainted samples actually showed higher assumed similarity correlations than did the stranger sample (z = 3.78, p < .01 in the dating sample; z = 2.34, p < .05 in the married sample). This is not altogether surprising given that Extraversion shows better agreement in strangers relative to other traits. Taken together, these results indicate that strangers base their extraversion ratings on behavioral information (at least some of it veridical) and so do not need to use their own characteristics as an anchor.

Second, Openness/Intellect showed a pattern similar to Extraversion (z = 2.03, p < .05 in the friendship sample; z = 5.21, p < .01 in the dating sample). A possible explanation could center on the fact that Openness is the one trait among the Big Five that has shown substantial evidence of actual dyadic similarity (McCrae, 1996; Watson et al., 2000); in other words, there is some tendency for people to associate with others who resemble them in Openness. Consequently, it would make sense that well-acquainted participants would assume greater similarity because in this case, they could be at least partly correct in that assumption.

In contrast, the differences in assumed similarity estimates between strangers and the better acquainted samples for Agreeableness, Neuroticism, and Conscientiousness were all in the predicted direction, although only three of the nine possible differences reached significance (Neuroticism, stranger sample vs. friendship sample: z = 2.49, p < .05; Agreeableness, stranger sample vs. dating sample: z = 2.37, p < .05; Agreeableness, stranger stranger sample vs. married sample: z = 2.02, p < .05).

The third column of Table 6 provides the assumed similarity correlations for the DCQ. Of the 15 assumed similarity correlations, 5 were significant among the DCQ items, with the strongest effects observed for Patriotism (r = .26), Spirituality (r = .29), and Generosity (r = .31); significant effects also emerged for Intelligence (r = .17) and Skepticism (r = .19). Similar to the case of self–other agreement, DCQ items showing elevated levels of assumed similarity correlated more strongly with those Big Five traits that also displayed elevated levels of assumed similarity. Specifically, Patriotism, Spirituality, Generosity, and Skepticism all correlated significantly with Agree-ableness, Neuroticism, and Conscientiousness (see Tables 3 and 4).

Disaggregated data. We conducted parallel disaggregated analyses on the assumed similarity correlations. All three significant correlations among the Big Five (Neuroticism, Agreeableness, and Conscientiousness) remained significant after disaggregating the peer ratings (again, with an assumed sample size of 215). Also, whereas three of the nine possible comparisons among these traits with the Table 1 data differed significantly in the predicted direction using aggregated data, these differences were no longer significant when the data were disaggregated. In addition, two of the significant assumed similarity correlations (Intelligence, Skepticism) became nonsignificant when the data were analyzed in this way. Overall, although disaggregating the data had some subtle effects for both agreement and assumed similarity, the general conclusions were unaffected.

Self-Other Agreement and Assumed Similarity

With the exception of Intellect, every Big Five trait that yielded low levels of agreement showed elevated levels of assumed similarity. More generally, across the 20 variables

 $p^* < .05. p^* < .01.$

TABLE 7.—Intercorrelations among the Big Five in self-ratings and peer ratings.

Scale	Neuroticism	Extraversion	Intellect	Agreeableness	Conscientiousnes
Neuroticism		29**	32**	65**	49**
Extraversion	27**		.26**	.38**	.18*
Intellect	12	.21**		.48**	.40**
Agreeableness	32**	.21**	.04		.60**
Conscientiousness	26**	.17*	.08	.42**	

Note. N = 215. Self intercorrelations are below the diagonal.

p < .05. p < .01.

presented in Tables 5 and 6, no variable had both a significant agreement correlation and a significant assumed similarity correlation. In this regard, it is noteworthy that the correlation between the 20 accuracy and assumed similarity correlations in Tables 5 and 6 was strongly negative (r = -.61; p < .01, two-tailed). Thus, our data clearly demonstrate an inverse association between agreement and assumed similarity, which is consistent with the argument that the latter is used as a heuristic in the absence of sufficient trait-relevant information (Ready et al., 2000; Watson et al., 2000).

Intercorrelations Among the Big Five

Our final prediction was that the intercorrelations among the peer-rated traits would be significantly stronger than the parallel coefficients in the self-ratings. Table 7 presents the relevant results, displaying the intercorrelations among the self-rated and aggregated peer-rated (grouped within judges) Big Five traits. These results clearly support our prediction. In this regard, it is important to distinguish between Extraversion-a trait that can be judged with reasonable accuracy in strangers (see Table 5)– from the rest of the Big Five (which clearly cannot be inferred accurately). Given that Extraversion can be judged directly from relevant behavioral cues, one would not necessarily expect its correlations to be substantially elevated in the strangers' ratings. Consistent with this expectation, the magnitude of the four correlations involving Extraversion actually was only slightly higher in the peer ratings (mean r = |.28|) than in the selfratings (mean r = |.21|). Moreover, none of these correlations differed significantly across the two types of ratings (zs ranged from |.03|-|1.79|).

In marked contrast, the six correlations among the four remaining traits were substantially higher in the strangers' ratings (mean r = |.49|) than in the self-ratings (mean r = |.21|). Follow-up tests indicated that all six correlations differed significantly across the two sets of ratings: Neuroticism–Intellect (-.32 vs. -.12; z = 2.18, p < .05, two-tailed), Neuroticism–Agreeableness (-.65 vs. -.32; z = 4.78, p < .01, two-tailed), Intellect–Agreeableness (.48 vs. .04; z = 5.03, p < .01, two-tailed), Intellect–Conscientiousness (.40 vs. .08; z = 3.58, p < .01, two-tailed), Neuroticism–Conscientiousness (-.49 vs. -.26; z = 2.85, p < .01, two-tailed), and Agreeableness–Conscientiousness (.60 vs. .42; z = 2.62, p < .01, two-tailed).

To document this point further, we conducted separate principal factor analyses (using squared multiple correlations as the initial communality estimates) on the 40-item self-judgments and peer judgments, respectively. We found that the first factor accounted for substantially more variance in the peer judgments (eigenvalue = 10.50, representing 26.25% of the total variance) than it did in the self-judgments (eigenvalue = 6.59, represent-

ing 16.48% of the total variance). Taken together, these results strongly support our prediction that the correlations among the Big Five would be stronger in the strangers' ratings than in the self-ratings.

DISCUSSION

Mean-Level Differences

In previous work in this area, researchers typically have focused primarily on correlational results and have largely deemphasized possible mean-level differences between self-ratings and peer ratings (for notable exceptions, see Funder & Colvin, 1997; Kenny, 1994). We believe this general neglect is unfortunate, as mean level comparisons can provide valuable information about the processes underlying these two types of judgments. Our analyses of the Big Five revealed that the mean scores were significantly greater in the self-reports than in the peer reports across all five traits. These results cannot be simply attributed to a positivity bias on the part of self-raters, as they also reported greater levels of Neuroticism, a trait that obviously is socially undesirable. As suggested earlier, we believe this pattern reflects greater confidence in the self-ratings, which would be associated with a tendency to utilize the endpoints of a rating scale in descriptions; in the peer-ratings, in contrast, the judgments tended to hover around the midpoint, likely reflecting the greater uncertainty of judgment in this particular situation (which involved judging the characteristics of complete strangers). Noteworthy also is that all of the standard deviations were greater among the self-ratings than among the peer ratings (for both the Big Five and the DCO); this could again be due to greater rater confidence in the self-raters.

In contrast, a positivity bias would seem to be the most likely explanation for many of the mean-level differences we observed on the DCQ. As opposed to the Big Five, we did not observe a general tendency for the self-rating means to be consistently higher across the DCQ items. Rather, mean self-ratings were higher for Liberalism, Athleticism, Intelligence, Attractiveness, and Patriotism; whereas mean peer ratings were higher for Pessimism, Political Awareness, Stinginess, Skepticism, and Novelty Seeking. Clearly, attributes such as attractiveness and intelligence are much more desirable than stinginess or pessimism. consistent with the operation of a positive bias among the selfraters. Still, the situation is not quite as simple as that, as it is difficult to invoke a desirability-based model to explain our observed differences in Liberalism (which was higher in the selfratings), Skepticism, Political Awareness, and Novelty Seeking (which all were higher in the strangers' ratings). Further research is necessary to explicate the meaning of these mean-level differences.

Self-Other Agreement

One of the primary goals of our study was to reexamine the issue of self-other agreement in strangers' ratings. Replicating the results of previous research, we found that strangers showed considerably lower levels of self-other agreement in trait ratings as compared with well-acquainted individuals. Specifically, the strangers in our study produced weak and nonsignificant agreement correlations for Neuroticism, Openness, Agree-ableness, and Conscientiousness (*rs* ranged from only -.02 to .11; see Table 5); moreover, these agreement correlations were significantly lower than corresponding coefficients obtained in

well-acquainted samples. Our results therefore provide further compelling evidence of an acquaintanceship effect in trait ratings (Funder & Colvin, 1988; Watson et al., 2000).

The one exception to this pattern continues to be Extraversion, which yielded a moderately strong agreement correlation (r = .37) in our aggregated data. It is noteworthy, moreover, that our agreement correlation was highly similar to that reported by Watson (1989; r = .41) in an analysis of 250 strangers, using a different Big Five instrument. This finding further documents the existence of a trait visibility effect; among the Big Five, Extraversion clearly is the most visible, easily rated domain of personality.

Furthermore, our data significantly extend the existing literature in this area by demonstrating significant agreement correlations for five DCQ variables: Conservatism (r = .17), Athleticism (r = .29), Attractiveness (r = .14), Thriftiness (r = .31), and Traditionalism (r = .21). It is important to emphasize, moreover, that these associations all remained significant even after controlling for peer-rated Extraversion. Thus, these represent new and independent findings that do not simply reflect the well-replicated effect for Extraversion at zero acquaintance.

What mechanisms might account for these significant agreement correlations? It seems likely that strangers were able to use body-based visual cues from the targets (e.g., facial characteristics, weight, physical fitness) as a basis for their ratings of athleticism and attractiveness. In contrast, their ratings of conservatism, traditionalism, and thriftiness may reflect other types of observable cues such as neatness, grooming, and clothing choice.

Clearly, an important goal for subsequent research is to explicate the sources of this surprising accuracy in strangers' ratings. Regardless of the underlying mechanisms, our data clearly establish that strangers are able to discern a number of important individual differences dimensions beyond Extraversion with at least a moderate level of accuracy. These results underscore the importance of examining an expanded range of individual differences attributes in future research in this area. By investigating a broader range of constructs, one can clarify one's understanding of which characteristics can—and cannot—be accurately judged at zero acquaintance.

Assumed Similarity

Most previous zero-acquaintance studies have focused primarily (and justifiably) on self-other agreement. However, given that the target's self-rating does not predict most of the variance in personality perception at zero acquaintance, we turned our attention to other possible sources of these judgments. Specifically, we were interested in the aggregate form of assumed similarity. In other words, we examined how a judge's self-rating correlated with the average of their peer ratings on the same trait. As our aim was to identify a general psychological phenomenon that should be relatively consistent across targets particularly unknown targets—we felt that this approach, rather than a method that examined one-to-one judgments, made more sense in this instance (note, however, that we also conducted supplemental analyses in which we examined how self-ratings correlated with judgments of individual targets).

As predicted, assumed similarity was greater in traits that showed lower levels of agreement, suggesting that in the absence of valid trait-related cues, individuals will draw on information relevant to the self to make judgments of others. With regard to the Big Five, assumed similarity was highest for the traits comprising Digman's (1997) Alpha super factor (Agreeableness, Conscientiousness, and Neuroticism), dimensions that are less visible than Extraversion. In contrast, because strangers have access to valid trait-relevant information in judging Extraversion (the most visible Big Five trait), it makes sense that they would have less need for this self-based heuristic. Finally, the low employment of assumed similarity in the case of Intellect could be related to the fact that Openness/Intellect is the only domain in which we have any real evidence of actual dyadic similarity (e.g., McCrae, 1996; Watson et al., 2000): Thus, although it is reasonable to assume that people's friends and romantic partners resemble them in Openness (see Table 1), it makes less sense to make this same assumption when rating a stranger who simply happens to be participating in the same study session. Having said that, however, we again emphasize that these comparisons are complicated by the use of different Openness/Intellect measures across studies; thus, these findings need to be replicated using the same Big Five measures across samples with varying levels of acquaintanceship.

Our analyses of the DCQ generally revealed the same basic pattern. As with the Big Five, the DCQ items showing the strongest level of assumed similarity—Patriotism, Spirituality, Intelligence, Generosity, and Skepticism—all are low-visibility characteristics that yielded very low self–other agreement correlations (indeed, as shown in Table 6, the agreement correlations for these five items ranged from only –.04 to .08). More generally, no variable had both a significant agreement correlation and a significant assumed similarity correlation; furthermore, across our 20 assessed variables, agreement and assumed similarity correlations were strongly inversely related (r = -.61; p < .01, two-tailed). These data further support the argument that assumed similarity is a heuristic that is used by judges faced with a paucity of trait-relevant information (see also Ready et al., 2000; Watson et al., 2000).

This inverse association between agreement and assumed similarity was expected based on the prior literature in this area. Other aspects of our data, however, failed to support our hypotheses concerning assumed similarity. As discussed earlier, if individuals are truly using the self as an anchor or heuristic in the absence of valid trait information, then strangers' ratings should provide an ideal opportunity for observing the operation of this heuristic. We therefore predicted that assumed similarity correlations would be significantly higher in strangers' ratings than in judgments made by well-acquainted individuals. This hypothesis received only modest support, however: Across 15 possible comparisons, assumed similarity correlations were significantly greater in the strangers' ratings in only three cases (two involving Agreeableness, one involving Neuroticism) in the aggregated data; furthermore, even these few differences disappeared when the data were analyzed at the disaggregated level.

It is noteworthy, moreover, that the assumed similarity correlations in our zero-acquaintance sample generally were rather low: Only three of the 20 coefficients (those for Neuroticism, Agreeableness, and Generosity) exceeded .30, and none was as high was .40. In marked contrast, in their analyses of wellacquainted dyads, Watson et al. (2000) reported numerous assumed similarity correlations in the .40 to .55 range on measures of positive and negative affectivity. Even long-term married couples yielded several assumed similarity correlations of

PERSONALITY PERCEPTION

.40 and greater on these affectivity measures. Taken together, these results suggest that assumed similarity correlations are not strongly influenced by the level of acquaintanceship (e.g., strangers vs. friends vs. spouses) but vary more as a function of the rated characteristic (e.g., trait affectivity scales yield stronger assumed similarity than Big Five measures). Indeed, Kenny and Kashy (1994) found generally small effects on assumed similarity across varying levels of acquaintanceship and in the opposite direction to the one that our model would predict. This is an important topic that needs to be clarified in future research.

Implicit Simplicity

We also predicted that in the absence of substantial traitrelevant information, strangers might generate stronger correlations among the rated characteristics as they struggle to form coherent personality impressions. Put differently, strangers' ratings might reflect a somewhat simpler structure, as judges use the same underlying source (e.g., an implicit personality theory) to generate scores on multiple dimensions; we can tentatively label this process *implicit simplicity*.

This hypothesis was strongly confirmed. More specifically, the four correlations involving Extraversion—a trait for which strangers have access to valid trait information—did not differ appreciably between the self-ratings (mean r = |.28|) and the peer-ratings (mean r = |.28|). In marked contrast, however, the six correlations among the other four Big Five traits were significantly—and substantially—higher in the strangers' ratings (mean r = |.49|) than in the self-ratings (mean r = |.21|).

This is an interesting—and potentially important phenomenon that merits much closer scrutiny in the future. It would be interesting, for instance, to investigate whether these trait correlations vary systematically as a function of increasing acquaintanceship. That is, we may be able to observe increasing complexity in the structure defined by the intertrait correlations as acquaintanceship increases from strangers to casual acquaintances to friends to spouses. In addition, further work is necessary to determine whether this effect is driven by a real psychological process involving implicit theories about trait relations or if it is merely an artifact of personality judgment under uncertain conditions.

Limitations

We acknowledge several limitations of this research. First, although every attempt was made to ensure a similar laboratory experience for each group member, it is impossible to maintain complete experimental control in such a design. Thus, even though participants can be instructed not to talk with other participants, there is no way to prevent information from being transferred by other means (i.e., facial expression, body posture, activity level, etc.).

Second, this sample was composed entirely of undergraduates; although there is no reason to believe that person perception differs substantially among undergraduates than among the population in general, it nevertheless would be useful to examine these same variables in an adult community sample. In addition to this sampling concern, the overrepresentation of females in the population may reduce the generalizability of our findings. Furthermore, because the groups were of mixed genders, some of the analyses may have been confounded by stereotypic gender effects for which we cannot directly account. Third, the DCQ is composed of one-item markers. To solidify the findings from this instrument, it will be necessary in the future to examine these constructs using full-scale, psychometrically valid measures. In a related vein, the Big Five measures used in this study were not identical to those used in the previous studies with which we compared our results. Ideally, one would prefer to have identical measurement tools to make a valid comparison, but we felt that the constructs were similar enough in content (with the exception of Intellect vs. Openness) that the comparisons were generally informative.

Fourth, we simply used self-ratings as a gold standard for assessing judgmental accuracy in strangers. We believe this approach is justified by the fact that self-report likely is the closest approximation to the individual's "true" personality that it is feasible to measure in a simple group design of this type. Still, we acknowledge that it would be preferable to have additional information regarding the personality characteristics of the targets. For instance, in the future, a zero-acquaintance study such as this one could be improved by collecting parallel information from well-acquainted informants, which then could be compared/contrasted with the strangers' perceptions.

General Discussion and Future Directions

Taken together, the findings of this study help to clarify our understanding of personality judgments made at zero acquaintance. When rating the self, individuals are more confident and deliberative, and they are better able to judge different characteristics separately from one another. In contrast, when they are judging strangers, raters engage in a more heuristic process, collapsing these quasi-distinct characteristics into more easily comprehensible superdimensions. In addition, we obtained clear evidence that people use the self-based heuristic of assumed similarity when rating strangers on a wide range of characteristics, including the three Big Five traits—Neuroticism, Agreeableness, and Conscientiousness—comprising Digman's (1997) Alpha superfactor. Finally, our data reveal that strangers are able to judge a number of different characteristics with at least moderate accuracy, although the sources of this accuracy remain unclear.

These findings have important implications for personality perception and trait assessment. First and foremost, it is clear that we should use trait judgments from poorly acquainted judges with considerable caution, particularly in ratings of relatively low visibility traits. In the case of some trait judgments, such as Agreeableness, Neuroticism, and Conscientiousness, it is noteworthy that an unacquainted judge's peer rating actually is a better predictor of his or her own self-rating than it is of the target's self-rating. Extraversion clearly represents a notable exception to this general trend, however, and it is possible that strangers' ratings of Extraversion can be considered in concert with other peer judgments given that it is nearly as strong a predictor of a target's self-rated Extraversion as is a friend's, dating partner's, or spouse's rating of this trait.

Another implication for future study involves the extent to which trait judgments are related to each other. Although much of personality perception focuses on convergent correlations (e.g., peer-rated Neuroticism and self-rated Neuroticism), our data demonstrate that the discriminant correlations also warrant serious attention. For example, our data reveal that strangers do not clearly distinguish between Neuroticism and Agreeableness (r = -.65) or between Agreeableness and Conscientiousness (r = .60), raising significant concerns about the discriminant validity of these ratings. In most previous work in this area (see, e.g., Watson, 1989; Watson et al., 2000), these discriminant correlations go unreported, leaving the reader with the impression that each of these trait judgments is relatively independent of the others. In reality, it is quite possible that these individual ratings actually are more indicative of a nonspecific global evaluation than any trait-specific judgment. Thus, we strongly recommend that future researchers examine and report these discriminant correlations.

Much remains unresolved in the attempt to understand the general processes underlying personality perception. We believe that zero-acquaintance studies provide an important source of data to inform the understanding of these processes. Overall, we hope that our research renews interest in personality perception at zero acquaintance, as it is a rich area of study with many important unanswered questions.

ACKNOWLEDGMENTS

We thank Anna Nedtwig, Zachary Smith, and Daniel Eldrenkamp for their skillful and diligent assistance in collecting these data. Preparation of this manuscript was supported in part by a Ballard Seashore Dissertation Year Fellowship from the University of Iowa Graduate College to Andrew Beer.

REFERENCES

- Albright, L., Kenny, D. A., & Malloy, T. E. (1988). Consensus in personality judgments at zero acquaintance. *Journal of Personality & Social Psychology*, 55, 387–395.
- Blair, I. V., Judd, C. M., Sadler, M. S., & Jenkins, C. (2002). The role of Afrocentric features in person perception: Judging by features and categories. *Journal of Personality & Social Psychology*, 83, 5–25.
- Borkenau, P., & Liebler, A. (1992). Trait inferences: Sources of validity at zero acquaintance. *Journal of Personality and Social Psychology*, 62, 645–657.
- Costa, P. T., Jr., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, FL: Psychological Assessment Resources.
- Cronbach, L. J. (1955). Processes affecting scores on "understanding of others" and "assumed similarity." *Psychological Bulletin*, 52, 177–193.
- Digman, J. M. (1997). Higher-order factors of the Big Five. Journal of Personality and Social Psychology, 73, 1246–1256.
- Eagly, A. H., Ashmore, R. D., Makhijani, M. G., & Longo, L. C. (1991). What is beautiful is good, but . . . : A meta-analytic review of research on the physical attractiveness stereotype. *Psychological Bulletin*, 110, 109–128.
- Eysenck, H. J. (1990). Genetic and environmental contributions to individual differences: The three major dimensions of personality. *Journal of Personality*, 58, 245–261.
- Funder, D. C. (1995). On the accuracy of personality judgment: A realistic approach. *Psychological Review*, 102, 652–670.
- Funder, D. C. (2002). Personality psychology: Current status and issues for the future. *Journal of Research in Personality*, 36, 638–639.
- Funder, D. C., & Colvin, C. R. (1988). Friends and strangers: Acquaintanceship, agreement, and the accuracy of personality judgment. *Journal of Personality* & Social Psychology, 55, 149–158.
- Funder, D. C., & Colvin, C. R. (1997). Congruence of others' and self-judgments of personality. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp. 617–647). San Diego, CA: Academic.
- Funder, D. C., & Dobroth, K. M. (1987). Differences between traits: Properties associated with interjudge agreement. *Journal of Personality and Social Psychology*, 52, 409–418.
- Funder, D. C., Kolar, D. C., & Blackman, M. C. (1995). Agreement among judges of personality: Interpersonal relations, similarity, and acquaintanceship. *Journal of Personality & Social Psychology*, 69, 656–672.

- Gangestad, S. W., Simpson, J. A., DiGeronimo, K., & Biek, M. (1992). Differential accuracy in person perception across traits: Examination of a functional hypothesis. *Journal of Personality & Social Psychology*, 62, 688–698.
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4, 26–42.
- Harkness, A. R., Tellegen, A., & Waller, N. (1995). Differential convergence of self-report and informant data for Multidimensional Personality Questionnaire traits: Implications for the construct of negative emotionality. *Journal* of Personality Assessment, 64, 185–204.
- Hoch, S. J. (1987). Perceived consensus and predictive accuracy: The pros and cons of projection. *Journal of Personality and Social Psychology*, 53, 221–234.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory— Versions 4a and 54* (Tech. Rep.). Berkeley: University of California, Institute of Personality and Social Research.
- Kenny, D. A. (1994). Interpersonal perception. New York: Guilford.
- Kenny, D. A., & Acitelli, L. K. (2001). Accuracy and bias in the perception of the partner in a close relationship. *Journal of Personality & Social Psychology*, 80, 439–448.
- Kenny, D. A., & Kashy, D. A. (1994). Enhanced co-orientation in the perception of friends: A social relations analysis. *Journal of Personality and Social Psychology*, 67, 1024–1033.
- Kenrick, D. T., & Stringfield, D. O. (1980). Personality traits and the eye of the beholder: Crossing some traditional philosophic boundaries in the search for consistency in all of the people. *Psychological Review*, 87, 88–104.
- Letzring, T. D., Wells, S. M., & Funder, D. C. (2006). Information quantity and quality affect the realistic accuracy of personality judgment. *Journal of Personality and Social Psychology*, 91, 111–123.
- Markon, K. E., Krueger, R. F., & Watson, D. (2005). Delineating the structure of normal and abnormal personality: An integrative hierarchical approach. *Journal of Personality and Social Psychology*, 88, 139–157.
- McCrae, R. R. (1982). Consensual validation of personality traits: Evidence from self-reports and ratings. *Journal of Personality and Social Psychology*, 43, 293–303.
- McCrae, R. R. (1996). Social consequences of experiential openness. *Psychological Bulletin*, 120, 323–337.
- Miyake, K., & Zuckerman, M. (1993). Beyond personality impressions: Effects of physical and vocal attractiveness on false consensus, social comparison, affiliation, and assumed and perceived similarity. *Journal of Personality*, 61, 411–437.
- Mooradian, T. A., & Nezlek, J. B. (1996). Comparing the NEO–FFI and Saucier's Mini-Markers as measures of the Big Five. *Personality and Individual Differences*, 21, 213–215.
- Newman, L. S., Duff, K. J., & Baumeister, R. F. (1997). A new look at defensive projection: Thought suppression, accessibility, and biased person perception. *Journal of Personality & Social Psychology*, 72, 980–1001.
- Norman, W. T., & Goldberg, L. R. (1966). Raters, ratees, and randomness in personality structure. *Journal of Personality and Social Psychology*, 4, 681–691.
- Ready, R. E., Clark, L. A., Watson, D., & Westerhouse, K. (2000). Self- and peer-reported personality: Agreement, trait ratability, and the "self-based heuristic." *Journal of Research in Personality*, 34, 208–224.
- Saucier, G. (1994). Mini-markers: A brief version of Goldberg's unipolar Big-Five markers. *Journal of Personality Assessment*, 63, 506–516.
- Schneider, D. J. (1973). Implicit personality theory: A review. *Psychological Bulletin*, 79, 294–319.
- Watson, D. (1989). Strangers' ratings of the five robust personality factors: Evidence of a surprising convergence with self-report. *Journal of Personality* and Social Psychology, 57, 120–128.
- Watson, D., & Haig, M. J. (2005). The Descriptive Choices Questionnaire: A new assessment tool for studies of assortative mating. Unpublished manuscript, Department of Psychology, University of Iowa, Iowa City.
- Watson, D., Hubbard, B., & Wiese, D. (2000). Self-other agreement in personality and affectivity: The role of acquaintanceship, trait visibility, and assumed similarity. *Journal of Personality and Social Psychology*, 78, 546–558.
- Watson, D., Klohnen, E. C., Casillas, A., Nus Simms, E., Haig, J., & Berry, D. S. (2004). Match makers and deal breakers: Analyses of assortative mating in newlywed couples. *Journal of Personality*, 72, 1029–1068.