

An Examination of the Correlation Between Accuracy of the “Big Five” and Perceptions of Friendship Closeness in College Students

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Abstract

The purpose of the present study was to examine the accuracy of a close friend's rating compared each participant's own self-reported scores on the Big Five Inventory (extraversion, conscientiousness, neuroticism, openness, and agreeableness). It was expected that there would be high self-other agreement on all Big Five personality dimensions. Also, it was expected that there would be significant relationships between perceived closeness between two people, as rated by a close friend of each participant and their accuracy in judging their friend's more salient personality traits (extraversion, conscientiousness), easily noticed traits (neuroticism), and inwardly experienced traits (openness to experience and agreeableness). One hundred and forty-eight community college students enrolled in psychology courses completed an online questionnaire consisting of the Big Five Inventory and questions measuring closeness felt to a friend. A correlational analysis was used to compare participants' self-reported Big Five scores to their chosen friend's reports of the participant. Results showed high self-other agreement for all dimensions (*extraversion*, $r(146) = .57, p < .01$; *agreeableness*, $r(146) = .43, p < .01$; *conscientiousness*, $r(146) = .40, p < .01$; *neuroticism*, $r(146) = .50, p < .01$) except openness ($r(146) = .17, p = ns$). Results further revealed that perceived closeness was related to self-other personality scores for all but one personality trait. The age range (18-24 years) among participants limits the study's generalizability. Further research could investigate whether family members or close friends are more accurate assessors of an individual's personality traits.

Keywords: Big Five traits, personality judgements, friendship, friendship closeness

In assessing personality, some traits are more easily detectable than others. For example, one study found that participants who rated themselves on extroversion had friends who accurately assessed them on that dimension (Funder, 1995). However, other traits, such as neuroticism, were not as accurately rated by the participant's friend

(Funder & Dobroth, 1987). Along these lines, Passini and Norman (1966) performed a study involving college freshmen, asking new roommates to assess one another's personality minutes after a first meeting, and then compared those assessments to the individuals' own self-reported personality scores. Results showed that accuracy on

the self-other reports were highest for the notably outward traits—extraversion and conscientiousness, respectively. Perhaps most difficult to assess is neuroticism, for it is almost completely internally experienced. A study performed by Norman and Goldberg (1966) between Peace Corps trainees and seniors assessed the seniors' ability to accurately match the trainees' scores on self-reported personality. This study concluded that agreeableness and neuroticism were the least accurately rated traits. These results suggest that some traits can be more easily detected by other individuals, while other traits require more information to be judged accurately by others.

Some personality traits (e.g., openness to experience, agreeableness, and neuroticism) are more individual-centered, meaning they may not show within a first-impression conversation (Funder & Dobroth, 1987); on the other hand, Funder (1995) concludes that other traits may be more obvious (e.g., extraversion and conscientiousness). Extraversion is assessed by observing the individual's tendency to share information about themselves with others, which is likely to happen immediately after he or she is introduced to someone else (Letzring, 2008). Similarly, conscientiousness is also an outward trait, demonstrated by the careful choice of words or thoughtfulness shown in conversation (Watson, 1989). It is likely that one must have several previous experiences with others to detect openness to experience, an inward trait (Bernieri, et al., 1994). Moreover, there needs to be at least a minimum amount of closeness between the two people, as the observer must know what his or her friend has already experienced and what experiences are new to him or her (John & Robins, 1993). Traits such as agreeableness are shown by one's tendency to go along with others and avoiding the feeling of conflict or a contradicting opinion. Borkenau & Liebler (1992) assert that perhaps for this trait to be judged accurately by others, additional interpersonal time and experiences are needed

One may wonder if the accuracy of a friend's scores on an individual's personality is correlated to the closeness that they feel toward that person. That is, the closer one feels to another, does accuracy in judging another's personality increase? Interestingly, Funder & Colvin (1988) found that with having assigned partners, those in which the pairs did not know one another well, the accuracy was lower than that of pairs who were well-known friends.

In the present study, self-other agreement on Big Five Inventory personality traits was examined. The specific traits included extraversion, agreeableness, openness, conscientiousness, and neuroticism, as well as closeness as rated by friendship pairs. Several hypotheses were posed: 1) ratings by a participant's friend on all Big Five Inventory traits would correlate with the participant's self-reported scores on the same trait. Second, it was expected that closeness scores would correlate with participant-friend difference scores on each Big Five trait. In other words, as closeness scores increased, a decrease was expected in self-to-other difference scores on each of the Big Five Inventory personality trait, thereby suggesting that people are better at estimating personality traits of people with whom they feel close.

Method and Procedure

Participants

One hundred forty-eight participants who were taking psychology courses at a southern California community college volunteered to participate for course credit. Eight participants were omitted due to familial relationships between the chosen friend and the participant, and four participants were omitted because they were under the age of eighteen. The average age of participants was 21.31 years. One hundred and one females and 47 males participated.

Measures

Participants provided demographic information such as age and sex. Extraversion, agreeableness, conscientiousness, openness, and neuroticism were measured using the Big Five Inventory

(John & Srivastava, 1999). Participants were asked to read each of the 44 characteristics (e.g., talkative, forgiving, reliable, curious, tense, etc.) and then rate the extent of their agreement that the characteristic applied to them using a 7-point scales (1 = *strongly disagree*; 7 = *strongly agree*). Each of the participants' chosen friends then rated the respective participant using the same Big Five Inventory scales; however, rather than rating themselves, friends rated the participant on the degree to which they agreed each of the characteristics applied to their friend (i.e., the participant).

Accuracy in personality judgements was assessed by subtracting each participant's friend's ratings on each dimension from the participant's own ratings; scores close to zero were considered perfectly accurate. These ratings of participant's own personality traits and those of the participant by the participant's friend were key to the study as they provided concrete information about the perceived personality of an individual by another person.

Participants' friends were asked to rate the level of closeness they felt with the participant using six different questions (e.g., the extent to which they felt close, loved, appreciated, trusted, supported, encouraged) rated on a 7-point scales (1 = *strongly disagree*; 7 = *strongly agree*). Closeness ratings provided a way to gauge the experience that one individual, the friend, may have had with the participant, thus providing information about the legitimacy of the friend's ratings of the respective participant's personality.

Design and Procedure

The present study used a correlational design to examine accuracy of personality trait judgements between the participant and the participant's respective friend. Participants were greeted in their college classrooms, given a description of the study, and shown instructions for accessing the online survey link through the SONA system. (SONA is an online survey system used by schools to assess participants and accurately pro-

vide credit for their respective classes.) Participants were told that their individual identity would remain anonymous at all times—that is, their names would not be linked to their responses in any way. According to the ethical guidelines established by the American Psychological Association (2017), all participants read and signed consent forms before beginning the research questionnaire. Participants were fully debriefed after finishing the questionnaire. Participants then completed the questionnaire. Participants' friends completed the questionnaire, and the closeness rating items.

Results

Self-Other Agreement

Participants' friends who reported high levels of extraversion in their participant were accurate when comparing the scores to their participant's own self-reported high levels of extraversion, $r(146) = .57, p < .01$. This was also found for ratings on agreeableness, $r(146) = .43, p < .01$; conscientiousness, $r(146) = .40, p < .01$; and neuroticism, $r(146) = .50, p < .01$. However, there was no correlation between participants and friends' ratings on openness, $r(146) = .17, p = ns$. See Table 1 for means and standard deviations for all primary variables.

Accuracy in Personality Assessments and Perceptions of Closeness

As expected, closeness scores inversely correlated with self-other accuracy scores on the Big Five Inventory scales. Extraversion was negatively, but not significantly correlated with closeness, $r(146) = -.17, p < .05$. For other personality dimensions, the greater the friends' perceived closeness, the greater correlation with agreeableness, $r(146) = -.41, p < .01$; conscientiousness, $r(146) = -.34, p < .01$; and openness, $r(146) = -.34, p < .01$. However, there was no relationship between closeness and neuroticism.

Table 1*Means and Standard Deviation on All Primary Variables*

Participants' Self-Ratings	Mean	Standard Deviation
Extraversion	4.25	1.16
Agreeableness	5.10	0.73
Conscientiousness	4.64	0.82
Openness	4.78	0.83
Neuroticism	4.15	1.08
Friends' Ratings		
Ratings of Participants' Extraversion	4.61	1.12
Ratings of Participants' Agreeableness	5.38	0.97
Ratings of Participants' Conscientiousness	5.07	0.98
Ratings of Participants' Openness	4.85	0.82
Rating of Participants' Neuroticism	3.73	1.07
Friend's Rating of Closeness	6.27	0.84

Discussion

The purpose of the present study was to examine the relationship between closeness of friendship and self-friend agreement on personality trait rating. The hypothesis that there would be a relationship between the participant's ratings and the participant's friend's ratings of extraversion, agreeableness, conscientiousness was supported but not for the trait of openness. Results showed that the participant's friend's rating and the participant's own self-reported corresponded well on extraversion, agreeableness, conscientiousness, and neuroticism, but not openness. This may be due to the fact that openness is an almost completely internal trait, in which another person may not be able to detect an individual experiencing something new. The willingness to experience something new is what defines openness, and this seems to be difficult to detect from the outside. Further research could explore observability of openness between two individuals. Extraversion and neuroticism have previously been reported to be the two most-easily detected traits, which is also what was concluded in the present study.

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The hypothesis that there would be a relationship between the Big Five Inventory self-friend accuracy scores and closeness scores was partially supported. Closeness correlated with extraversion, agreeableness, conscientiousness, and openness, but not neuroticism.

The results of this study follow closely with past research. Extraversion is characterized by how outward a person is. Studies have found that extraversion is the most easily detected trait (Funder & Dobroth, 1987). In our study, extraversion had the highest correlation between the participant's self-report and the participant's friend's rating. Another study involving first impressions amongst college freshmen also concluded that extraversion was the most accurately rated trait (Passini & Norman, 1966). Borkenau and Liebler (1992) assessed traits such as agreeableness are shown by one's tendency to go along with others avoiding the feeling of conflict or a contradicting opinion. Perhaps the ability to judge agreement in others requires additional time and experiences with the other individual. This aligns with the present study, in that we found the closer the participant and the friend were as rated by the friend, the higher the rating of agreeableness by the friend. Accuracy on agreeableness requires closeness between the two individuals, which probably is why the closer the pair was rated by the friend, the higher the friend's rating on agreeableness. All traits were accurately rated except for openness, which is an inward trait and therefore making it more difficult to accurately assess. Close friends also seem more likely to see their friends positively.

The present study was not without limitations. This study only assessed those in a relatively young age group (e.g., 18 - 24). Next, only a small area was assessed, a single community college in southern California. Finally, there is a lack of recent general research on the Big Five Inventory. Articles relevant to the present study are mostly over 20 years old, which could reflect outdated trends in former results.

This leaves room for future research, perhaps by examining older generations' ability assess another individual's personality. Furthermore, determining whether family members or close friends are better assessors of their participants could be explored. Studies could be done with a wider variety of ages, or perhaps strictly with middle-aged to older individuals to assess whether accurate personality judgements stay consistent across all ages.

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