Predicting Personality and Behavior: A Boundary on the Acquaintanceship Effect

Article *in* Journal of Personality and Social Psychology · July 1991

DOI: 10.1037//0022-3514.60.6.884 · Source: PubMed

2 authors:

Randy Colvin
Northeastern University
40 PUBLICATIONS **4,055** CITATIONS

SEE PROFILE

David Funder
University of California, Riverside
157 PUBLICATIONS **12,285** CITATIONS

SEE PROFILE

Journal of Personality and Social Psychology
1991, Vol. 60, No. 6, 884-894

0022-3514/91/$3.00

Predicting Personality and Behavior: A Boundary on the Acquaintanceship Effect

C. Randall Colvin and David C. Funder
University of California, Riverside

Recent research has shown that interjudge agreement in personality ratings increases with acquaintanceship. The present study sought to replicate and extend this finding by investigating the relation between acquaintanceship and behavioral prediction. A total of 138 undergraduate targets were videotaped while interacting with an opposite-sex partner in 3 situations. The targets also completed 5 personality measures. Results indicated that acquaintances' judgments predicted personality scores much better than did strangers' judgments, but acquaintances' and strangers' judgments did equally well at predicting behavior. Implications for research on the accuracy of personality judgments are discussed.

As acquaintances observe and interact with each other over time and across situations, they often feel they have acquired a valid basis for judging each other's personalities. Many psychologists, however, are not so comfortable with the lay assumption of accuracy (Funder, in press) and have severe doubts about the validity of human judgment (Ross, 1977). They point out that there is no perfect criterion for evaluating the accuracy of personality judgment. This observation raises the question of how one might examine empirically the relationship between acquaintanceship and judgmental accuracy.

Cronbach and Meehl (1955), writing some years ago about the construct validity of psychological tests, suggested that people can become convinced that a test validly measures a construct by its pattern of relationships with a number of, always imperfect, criteria—in their words, by establishing a "nomological network." The premise of our research is that the accuracy of personality judgments can be ascertained in a similar manner (Funder, 1987). The validation of personality judgments is similar to the process of establishing construct validity for psychological tests because exactly the same considerations underlie both. A critical task for studying accuracy, as for establishing construct validity, is to select the best possible criteria while being cognizant of their unique limitations.

Interjudge Agreement

The most frequently used criterion for accurate personality judgment has been interjudge agreement. A number of studies have documented that such agreement increases with acquaintanceship (Cloyd, 1977; Funder & Colvin, 1988; Jackson, Neill, & Bevan, 1973; Norman & Goldberg, 1966; Paunonen, 1989; Taft, 1966). Funder and Colvin, and Paunonen then argued that it was reasonable to conclude that accuracy also increases with acquaintanceship.

However, though agreement may be closely related to accuracy, it is not the same thing (Funder & Colvin, 1988). The relationship is unidirectional: Accuracy requires that two judges agree, but agreement between judges is not sufficient for accuracy, it is only necessary—two judges can agree and both be wrong. This suggests that there might be processes that enhance agreement independently of accuracy.

The implicit theories of personality that judges adhere to might lead to some degree of agreement without accuracy (Bruner & Tagiuri, 1954; Schneider, Hastorf, & Ellsworth, 1979). These theories allow judges to extrapolate a large number of personality descriptors from minimal observation of people by their beliefs about "what goes with what" (e.g., correlation between traits). Judges tend to agree on "what goes with what" (e.g., Rosenberg & Sedlak, 1972), but this sort of agreement might be inaccurate. As Schneider et al. (1979) suggested, "Perhaps there is no correspondence between our theories of personality and the actual relationship of traits among individuals in the population" (p. 161). However, studies over the past 15 years have shown that judgments of personality can predict behavior with considerable validity (e.g., D. J. Bem & Funder, 1978; Gormly, 1984; Moskowitz & Schwarz, 1982), a finding that seriously undermines the implicit theories hypothesis.

It might be that people are sufficiently sensitive to the cues that serve as indicators of category membership that the use of stereotypes frequently results in accurate judgments of personality (Jackson, 1982; Jackson, Chan, & Stricker, 1979; Medin, 1989). Jackson (1982) argued that stereotypes are an essential component of accurate judgment and, contrary to Cronbach's analysis (Cronbach, 1955; Gage & Cronbach, 1955), should not be treated as an artifact (Cook, 1984). In support of Jackson's claims, a number of studies have now demonstrated that strangers' personality ratings typically correlate positively, often significantly, with targets' self-ratings (Albright, Kenny, &

This research was supported by National Institute of Mental Health Grants MH40808 and MH42427 to David C. Funder. A preliminary report of this research was presented by David C. Funder at the Third Annual Nags Head Personality Conference, Nags Head, North Carolina, in May 1990.

We are grateful to four anonymous reviewers for their comments on an earlier draft of this article.

Correspondence concerning this article should be addressed to C. Randall Colvin or David C. Funder, Department of Psychology, University of California, Riverside, California 92521.

Malloy, 1988; Funder & Colvin, 1988; Watson, 1989). The limited amount of interaction between these strangers and targets suggests that strangers invoked a stereotype to describe their targets and that the stereotype had some degree of validity, at least to the degree that targets used real versus stereotypical information to describe themselves.[1]

Another possibility is that acquaintances might be told or overhear a person's own opinions about what he or she is like and come to share those opinions independently of anything they have actually seen the person do (McClelland, 1972). However, this hypothesis assumes that acquaintances attend closely to and believe what others say about themselves while ignoring their actual behavior. Research by Amabile and Kabat (1982) demonstrates that this is unlikely: When verbal self-presentations contradict behavior, lay judges base their judgments of personality on what they have seen rather than on what they have heard (Funder, 1980).

Still, there is no escaping the fact that evidence for a relationship between acquaintanceship and accuracy has been based solely on the criterion of interjudge agreement. The logic behind construct validation mandates that other criteria be incorporated if one is to gain confidence in the acquaintanceship–accuracy relationship. Another criterion for the accuracy of personality judgment is behavioral prediction. This second criterion is the focus of our study.

Behavioral Prediction

People often use judgments of personality to predict one another's behavior (Schneider et al., 1979). If the judgments yield valid predictions, as they often do (Funder, 1987; Funder & Colvin, 1991), then the judgments must be accurate in some sense. However, behavioral prediction has seldom been used as a criterion for accuracy research, perhaps because it is so costly, both in time and money, to conduct research that measures behavior directly. But it may be worth the cost. Studies such as those conducted by Murray (1938), Block (J. H. Block & Block, 1980), and McKinnon (1962) have yielded a disproportionately large amount of information on such topics as personality structure, personality development, and creativity.

Behavioral prediction, like interjudge agreement, is an imperfect indicator of accuracy but for rather contrary reasons. Whereas agreement does not necessarily imply accuracy, a lack of predictive validity does not necessarily imply faulty judgment. Rather, a lack of predictive validity could be due to any of the following: (a) an incorrect trait–behavior pairing on the part of the experimenter, (b) the behavior not being measured in a valid or reliable manner, (c) the situation being sufficiently powerful to suppress individual differences in behavior (Snyder & Ickes, 1985), or (d) the judgment being inaccurate (Funder & Colvin, 1988). Only (d) is relevant to the accuracy issue, but it is often difficult to disentangle from (a) through (c) when studies are conceptually or methodologically limited.

It is surprising that we have been unable to find a single study that has investigated the influence of acquaintanceship on behavioral prediction. If such a study were to be conducted, what expectations might one have? Results from interjudge agreement studies would suggest a simple linear relationship; that is, greater acquaintanceship will lead to judgments that allow better behavioral prediction. However, the matter may be more complex than this. It is first necessary to ask, "What *kind* of behavioral prediction?" because there are two alternatives.

The first kind of behavioral prediction occurs when a judgment is used to predict the general trend of a target person's behavior over a variety of situations; this is tantamount to asking for a prediction or a description of the person's personality. The relation between acquaintanceship and this kind of behavioral prediction seems fairly straightforward. A judge who observes a target person in a number of situations makes attributions about the target's behaviors and receives feedback about the attributions from the target. Acquaintances of the target should provide better predictions than a judge who has observed the target in few situations and received minimal feedback about the validity of his or her attributions. In short, judgments by acquaintances should allow better predictions (i.e., be more valid), compared with strangers' judgments, when used to predict the general trend of targets' behavior over time and across situations (i.e., their personalities).

The second kind of behavioral prediction occurs when judges are asked to predict how a target will behave in a specific situation. For a prediction task of this sort, it is not clear who will provide higher predictive validities. On the one hand, an acquaintance who predicts a target's behavior on the basis of observation over numerous situations, but without directly observing the target's behavior in the specific situation, might have an advantage because of the vast amount of information he or she possesses. Because this information is of a relatively global nature, it might allow an acquaintance to accurately predict a target's behavior in a number of different situations, even situations that the acquaintance has never experienced with the target. Even if an acquaintance has not observed the target in the exact situation, a close acquaintance probably has observed the target in one or more psychologically similar situations that might provide useful information for situation-specific prediction.

On the other hand, a stranger who predicts a target's behavior on the basis of observing him or her only in a highly similar situation (i.e., nearly identical on both physical and psychological dimensions) might have the advantage. A highly similar situation, by definition, should result in similar behavior by a target (D. J. Bem & Funder, 1978). If a stranger makes a prediction that closely corresponds to the target's observed behaviors, his or her predictions of the target's behavior could be quite accurate.

Within social psychology, the attitude–behavior consistency literature has made a distinction between specific attitudes that best predict particular behaviors and general attitudes that best predict behavior aggregates (Ajzen & Fishbein, 1977; Heberlein & Black, 1976; Weigel, Vernon, & Tognacci, 1974). This suggests, by analogy, that strangers, compared with acquaintances, might provide the more accurate situation-specific behavioral predictions. The analogy is imperfect, however, because spe-

[1] We do not claim or believe that all stereotypes are accurate. Racial and gender stereotypes seem particularly error prone. Perhaps a difference between stereotypes that are accurate and racial and gender stereotypes that are inaccurate is in the motivation that lies behind these beliefs.

cific and general attitudes are different in type, whereas strangers and acquaintances represent a difference in amount of available information.

Communication engineers faced a related issue when they encountered the "bandwidth-fidelity" dilemma many years ago (Cronbach & Gleser, 1965; Shannon & Weaver, 1949). It was found that a single message could be transmitted repeatedly (i.e., narrowband transmission) over a telegraph wire, ensuring almost error-free quality, or, alternatively, many simultaneous messages (i.e., wideband transmission) could be transmitted at a relatively higher error rate, ensuring greater throughput. In other words, a specific message could be transmitted relatively error-free, but the total information throughput would be minimized. In contrast, a variety of messages could be transmitted with some degree of error, but the information throughput would be maximized.

The bandwidth-fidelity distinction, when applied to behavioral prediction, suggests two hypotheses. First, strangers' most valid predictions will be about targets' behaviors in specific situations. In communication theory terms, this hypothesis suggests that narrowband information (i.e., behavioral observation within a specific situation) is best used to make narrowband predictions (i.e., behavior in a specific situation). Second, acquaintances' most valid predictions will be about targets' personalities. This hypothesis suggests that wideband information (i.e., behavioral observation over many situations) is best used to make wideband predictions (i.e., personality). Unfortunately, communications theory does not provide any strong hypotheses about the relative efficacy of wideband versus narrowband information in making narrowband predictions, although it does suggest that even a small amount of highly relevant narrowband information might allow accurate predictions.

In this study, a stranger, after observing a target for only 5 min, rendered judgments that were used to predict the target's behavior in a future, but highly similar, situation. These judgments also were used to predict several self-report measures of the target's personality. In addition, a close acquaintance based judgments solely on his or her acquaintanceship with the target in daily life. The empirical question is, Whose judgments will yield better predictions of behavior and of personality?

Summary

The criterion problem in accuracy research can be remedied when, through the logic of construct validation, multiple criteria are used and found to converge and diverge in conceptually meaningful ways. A number of important empirical relations have emerged through the use of one criterion: interjudge agreement. To gain confidence in these relationships, similar results must be found with different criteria. In the current study, we hope to conceptually replicate and extend the acquaintanceship–accuracy (e.g., Funder & Colvin, 1988; Paunonen, 1989) relation by using behavioral prediction as our criterion for accuracy. We ask two questions of our data for which we have only one prediction, as follows: (a) Will acquaintances or strangers provide better predictions of targets' behavior over a variety of situations (i.e., personality)? This question seems straightforward; acquaintances who have observed targets behave in numerous situations should provide better predictions than strangers who, by definition, have not observed the targets in many situations. (b) Who will provide better predictions of targets' situation-specific behavior—close acquaintances who have relatively general knowledge of the targets' personalities, or strangers who have observed the targets in a highly similar situation? For this question, we are without a clear prediction and therefore seek from the data a preliminary answer.

Method

Subjects

In three different situations, 69 male undergraduates and 69 female undergraduates were videotaped; they also provided personality descriptions about themselves by using a variety of measures. Peers were recruited by subjects to provide descriptions of the subjects' personalities. Overall, 128 subjects were described by two peers and 10 subjects were described by a single peer. In addition, each peer watched a videotape of a subject he or she did not know and described that subject's personality as well. All subjects and peers were paid for their participation. Across the analyses to be reported, the number of subjects varies slightly because of incomplete data. For the sake of clarity and consistency, subjects are referred to in this article as *targets,* peers who provide personality descriptions of known targets are termed *acquaintances,* and when these same peers provide descriptions of unknown targets, they are termed *strangers.*

Procedure

Target data. Targets were separately recruited in opposite-sex pairs for a study on "how people perceive each other." Those who had previously met their partner were excused and rescheduled for another time. As soon as the second target appeared and it was verified that they had not met each other previously, the male experimenter showed the targets into a small room equipped with a couch and a highly visible video camera and videocassette recorder. He invited the targets to sit on the couch, aimed the camera at them, activated the videocassette recorder, and left, saying "You can talk about whatever you'd like; I'll be back in about 5 minutes." Typically, a "getting-acquainted" conversation then ensued, in which targets exchanged names and home towns and discussed such topics as classes, athletics, and campus housing. The experimenter waited in an adjacent room and did not observe the targets' behavior in this situation. After about 5 min, the experimenter returned, turned off the video equipment, and informed the targets that Session 1 was over.

Approximately 4 weeks later, targets were contacted and scheduled to participate in another videotaped interaction with a different opposite-sex partner. When both targets arrived, the experimenter proceeded exactly as in the first session. A few minutes after Session 2 was completed, the experimenter handed each subject a clipboard and said:

> The next thing I do is hand each of you a pad of paper because some people like to be able to take some notes during the next part of the experiment. That is because the next part calls for the two of you to have a little debate. Specifically, the topic we have people debate is the use of capital punishment, because most people can come up with at least some arguments on both sides of that issue. I'll just flip a coin and have [name of subject] call it. If it comes up what you call, you will be in favor of capital punishment and if it doesn't then you will be against it. [The experimenter then flipped the coin.] Okay, the debate will last about another five minutes. I'll

> just give you a short minute to collect your thoughts and then we'll start [Session 3].

After a brief pause, the experimenter said "begin," activated the video recorder, and left the room. He returned 5 min later and turned off the equipment. Analyses of the consistency of the subjects' behavior across these three laboratory situations were reported by Funder and Colvin (1991).

After a short break, the targets were escorted into another room where they completed the following four personality measures: the Bem Sex-Role Inventory (S. L. Bem, 1974), Self-Monitoring Scale (Snyder, 1979), Hogan Empathy Scale (Hogan, 1969), and Attributional Complexity Scale (Fletcher, Danilovica, Fernandez, Peterson, & Reeder, 1986). A couple of weeks later, the targets returned for a group session in which they took the Profile of Nonverbal Sensitivity test (PONS; Rosenthal, Hall, DiMatteo, Rogers, & Archer, 1979). The PONS is a 45-min film that requires individuals to decide which of two written alternatives, for each of 220 brief scenarios, better describes the emotional state portrayed by the subject in the film.

Acquaintance ratings. Targets were asked at the end of Session 1 to recruit the two people in the immediate vicinity who knew them best to participate in the study. On the average, these acquaintances had known the targets for 18.5 months ($SD = 18.95$). Fifty-six percent of the acquaintances described themselves as being primarily a friend of the target, 33% as a roommate, 8% as a boyfriend/girlfriend, and 3% as other (e.g., sibling). All acquaintances were assured (truthfully) that their descriptions would not be made available to the targets whom they described.

The acquaintances described the targets' personalities by using the California Q-Set (CQ set; J. Block, 1961/1978), as slightly modified by D. J. Bem and Funder (1978) for use with nonprofessionals. The CQ set consists of 100 descriptive statements about personality, each printed on a separate card. The judge's task is to sort the items into a forced, approximately normal, nine-category distribution that ranges from 1 (*not at all characteristic*) to 9 (*highly characteristic*) of the person judged. Analyses of interjudge agreement in the use of this instrument in this sample of subjects, both among peers' judgments and between peers' judgments and subjects' own self-judgments, have been reported in articles by Funder and Dobroth (1987) and Funder and Colvin (1988).

Stranger ratings. After acquaintances completed Q sorts on known targets, their next task was to describe someone known to them only through a 5-min videotaped interaction; in effect, for this task, acquaintances became strangers. The experimenter selected a videotape made of a different target from a Session 1 interaction. The experimenter chose this tape at random, taking care only to ensure that (a) it portrayed an individual of the same sex as the person the acquaintance had come to the lab to describe and (b) a total of no more than two acquaintances viewed each tape. The experimenter showed the stranger a few seconds of the tape and asked whether he or she had ever seen the target before. If not, the stranger viewed the rest of the tape. If the stranger did know the person, another tape was selected. After the tape finished, the stranger was asked to use the Q sort to describe the individual he or she had watched. The experimenter said that he knew the task was difficult but the stranger should do "the best you can."

Note that the judgments rendered at both levels of acquaintanceship were of the same targets and were provided by the same judges (barring a few cases of incomplete data). Each judge provided two judgments: one of someone he or she knew well and one of someone he or she had viewed only once by videotape. Each target was also judged in two ways: by individuals who knew him or her well and by individuals who had viewed him or her only a single time. This experimental design cleanly separates the acquaintanceship variable from other characteristics of targets and judges.

Behavioral coding. The final task for our data collection procedure was to code the videotaped behaviors of our targets. The focus of behavioral coding schemes can range from molecular behaviors (e.g., arm raises, eye blinks) to molar behaviors (e.g., exhibits social skills, behaves in a cheerful manner). We ultimately coded our targets' behaviors at a molar level because, at this level, psychological meaning is inherent in each of the behaviors (Cairns & Green, 1979). For example, if we say that a target "exhibits social skills," we have made a psychologically relevant statement about the target, whereas if we say that the target exhibited 10 arm raises in 5 min, a large number of plausible hypotheses exist to account for this particular behavior. However, it should be noted that the value of one coding scheme versus another is largely determined by the goals of the researcher (Bakeman & Gottman, 1986).

The coding scheme that we used consisted of a 62-item Q-sort deck (J. Block, 1961/1978), which we refer to as the BQ (for Behavioral Q sort). The BQ items were each written to describe categories of directly observable but psychologically meaningful behavior. Forty-one items describe behaviors directly relevant to characteristics included in the personality CQ set (J. Block, 1961/1978). For example, one item in the personality Q set reads, "has social poise," whereas the corresponding BQ item reads, "exhibits social skills." Another item in the personality Q set reads, "is cheerful," whereas the corresponding BQ item reads, "behaves in a cheerful manner."

Each of our coders watched the 5-min videotape that he or she was to code a minimum of two times and was told to watch the videotape as many times as necessary to feel confident in his or her behavioral description. The coders then arranged the cards of the BQ deck into a forced, quasi-normal distribution ranging from 1 (*not at all or negatively characteristic of the behavior of the person in question*) to 9 (*highly characteristic of the person's behavior*). Coders were instructed to use the BQ items to describe only behaviors they had witnessed on the videotape and to avoid, so far as was possible, "playing psychologist" or making inferences about subjects' general behavioral dispositions. Overall, each 5-min interaction was coded by an average of six coders. The aggregate (Spearman-Brown) reliabilities of the BQ items were as high as .82, with a median reliability of .64 (for further information on the reliabilities and item properties of all 62 BQ items, see Funder & Colvin, 1991).

Results

Personality Prediction

We expected that judgments by acquaintances, as compared with strangers, would yield better predictions of targets' personalities because of the acquaintances' greater number of experiences with and observations of the targets. However, before tests of the acquaintanceship effect are conducted, we should note that previous research has found that the five personality measures and their subscales used in this study are moderately intercorrelated (Funder & Harris, 1986). Therefore, we conducted a principal-components analysis followed by an orthogonal rotation on these measures. Four factors with eigenvalues greater than one were retained that accounted for 60% of the variance. The factors and the personality measures from which they were derived are listed in Table 1.

In our first analysis, we correlated acquaintances' and strangers' Q-sort ratings with targets' self-descriptions on a number of personality measures. The number of Q-sort items that significantly predicted (at $p < .05$) targets' self-descriptions are shown in the middle columns of Table 1. By this rather crude "box score" test, it can be seen that acquaintance judgments provided more significant predictions on 9 of 11 person-

ality measures and on 3 of 4 personality factors. Furthermore, according to the test for correlated proportions (Guilford & Fruchter, 1978; McNemar, 1947), acquaintances' judgments, compared with strangers' judgments, yielded more significant correlations on 7 of 11 personality measures and on 2 of 4 personality factors.

However, even if acquaintances' judgments provide more significant predictions than strangers' judgments, *more* may not mean *better* because of the possible interrelations among Q-sort items. A more elegant test would be to show that acquaintances' composite personality assessment (i.e., all personality Q-sort items combined), compared with strangers', predicts targets' self-descriptions to a higher degree. We did this by first using factor scores for the "Big Five" factors of personality, sometimes called Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness[2] (Digman & Inouye, 1986; Fiske, 1949; McCrae & Costa, 1985; McCrae, Costa, & Busch, 1986; Norman, 1963). We then conducted a standard multiple regression analysis separately for acquaintances and strangers, with the five-factor scores serving as predictors and targets' self-descriptions serving as criteria. The multiple correlation for each of these analyses is shown in the rightmost columns of Table 1. Similar to what the previous analysis suggests, acquaintances' judgments did much better than did strangers' judgments at predicting targets' personalities. Acquaintances' judgments provided better predictions on 10 of 11 personality measures and 3 of 4 personality factors, and the significance test for dependent correlations (a very conservative test) revealed that for two measures, acquaintances had multiple correlations that were significantly greater than strangers' (see Table 1). In the next set of analyses, we demonstrate whether that advantage holds when acquaintances' judgments are used to make specific behavioral predictions.

Behavioral Prediction

Earlier, we argued that it could go either way; that is, the unique information available to acquaintances and strangers might allow either of them to provide the better prediction of targets' behavior. Recall that acquaintances' judgments were based on the observation of targets behaving in numerous naturally occurring situations, whereas strangers' judgments were based on their observation of targets in a single 5-min interaction (Session 1) that was highly similar to the ones in which their judgments would be used to predict targets' behavior. The analyses that follow attempt to answer the question of whether *vast but general* or *specific but limited* information is superior for behavioral prediction.

It will be recalled that 41 CQ items (personality California Q sort) had analogues in the BQ set (Behavioral Q sort). In our first analysis, we computed correlations between the 41 CQ and BQ items,[3] separately for acquaintances and strangers. The resulting 41 behavioral prediction estimates were then compared between acquaintances and strangers. A paired-comparison t test revealed no mean difference between acquaintances (mean $r = .18$)[4] and strangers (mean $r = .16$) in the ability to predict targets' behavior, $t(40) = 0.90$, $p = .37$. In addition, the behavioral predictions for acquaintances and strangers correlated $r(40) = .62$. In sum, these results suggest that, at least for 41 of the 62 behaviors coded, personality judgments by acquaintances and strangers yielded behavioral predictions that had very similar degrees of validity, in both relative and absolute terms.

We felt it necessary to obtain similar results while using all 62 behaviors, but such a large number of behaviors can prove unwieldy. Therefore, we conducted a principal-components analysis, followed by an orthogonal rotation, of the 62 BQ items.[5] As seen in Table 2, four factors were retained that accounted for 51% of the variance. We opted for the four-factor solution for the following two reasons: (a) Additional factors lead to only small increments in variance (five-factor solution accounted for 56% of the variance), and (b) the four-factor solution was easily interpretable, whereas other solutions were not.

These four factors, representing targets' behavior, were then correlated with all 100 Q-sort (CQ set) ratings by acquaintances and strangers. Shown in the middle of Table 3 are the number of Q-sort items that significantly predicted targets' behavior. Judgments by acquaintances yielded more significant predictions for two behavioral domains, whereas judgments by strangers yielded more significant predictions for the other two behavioral domains. However, according to the test for correlated proportions, the number of correlations was significantly different only for the factor of Domineeringness, with acquaintances yielding more significant correlations than strangers.

As before, the more elegant test is to compare the predictive validity of acquaintances' composite personality assessment (i.e., all personality Q-sort items combined) with that for the strangers. Once again, in a standard multiple regression, we used the five factors as predictor variables and each of the four behavioral variables as criteria. The multiple correlations, computed separately for acquaintances and strangers, are shown in the rightmost portion of Table 3. It is clear from Table 3 that the validity of acquaintances' and strangers' judgments did not differ significantly in relation to their ability to predict targets' behavior; the significance test for dependent correlations verifies this observation, as none of the acquaintance–stranger correlations are significantly different from one another.

Item-Level Analyses

The focus of the analyses thus far has been to show how acquaintances' and strangers' descriptions of personality (i.e., Q-sort five-factor composite) differentially predict targets' self-rated personality and coded behavior. These analyses are uninformative about the specific factors that acquaintances and

---

[2] We are grateful to Robert R. McCrae for these factor loadings.

[3] All of our analyses were initially done separately for Sessions 2 and 3. In all cases, the results were nearly identical. For ease of presentation, we have aggregated the data from the two sessions in this report.

[4] The Fisher r-to-z transformation was used throughout this article for the computation of averaged correlations.

[5] We also conducted a principal-factor analysis followed by an oblique rotation. The factor structure and loadings were essentially the same as the principal-components analysis with an orthogonal rotation.

Table 1
Summary of Acquaintance and Stranger Q-Sort Ratings in Predicting Subjects' Self-Rated Personality

Personality measure	No. of significant Q-sort items		Q-sort five-factor multiple *R*	
	Acquaintances	Strangers	Acquaintances	Strangers
Surgency	35	25	.55**	.39*
SM Extraversion[a,b]	34	9	.51**	.28
Empathy Self-Confidence[a]	35	23	.55**	.41**
BSRI Masculinity	25	14	.44**	.25
SM Acting Ability	13	6	.25	.13
Sensitivity[a]	25	4	.42**	.20
Empathy Sensitivity[a]	26	7	.35*	.22
BSRI Femininity[a,b]	22	4	.45**	.24
PONS[a]	7	1	.17	.08
Anxious Manipulativeness	7	16	.26	.31
SM Other-Directedness	5	11	.24	.20
Empathy Even-Temperedness (R)	13	19	.25	.26
Simplistic Nonconformity[a]	12	2	.23	.22
Empathy Nonconformity[a]	10	3	.28	.21
Attributional Complexity[a] (R)	7	1	.24	.18
Average multiple *R*			.35	.23

Note. *ns* vary from 88 to 138. Measures in boldface are factors derived from the measures directly below them. The factors are not included in the calculation of average multiple correlations. SM = Self-Monitoring Scale; BSRI = Bem Sex-Role Inventory; PONS = Profile of Nonverbal Sensitivity test. (R) = reverse scored.
[a] The number of significant correlations is significantly different between acquaintances and strangers at $p < .05$.
[b] Difference between acquaintance and stranger multiple correlations is significant at $p < .05$.
* $p < .05$. ** $p < .01$.

strangers use to predict target measures. To help clarify the results reported in Tables 1 and 3, we correlated the five individual Q-sort factors, separately for acquaintances and strangers, with the four target personality factors and four target behavioral factors (see Table 4).

The correlations make sense and are intuitive. For instance, the personality factor of Surgency was best predicted by the Q-sort factor of Extraversion, the behavioral factor of Serious Intelligence was predicted by the Q-sort factors of Openness (for acquaintances and strangers) and Agreeableness (negatively for acquaintances), and so forth.

The general pattern of results is similar for acquaintances and strangers, with one exception. For the target personality factor of Anxious Manipulativeness (e.g., "When I am uncertain how to act, I look to others for cues," "I often try to get my own way," "I may deceive people by being friendly when I really dislike them"), the acquaintances' ratings of Neuroticism and Unconscientiousness positively predicted the factor, whereas strangers' ratings of Stability (opposite pole of Neuroticism), Extraversion, Agreeableness, and Conscientiousness all positively predicted the factor. One tentative explanation for these results is that the anxious manipulativeness behaviors may be problematic for close relationships, thereby accounting for the negative factors of Neuroticism and Unconscientiousness. However, these same behaviors might be advantageous for people when they are first getting to know another person, hence the positive correlations with Stability, Extraversion, Agreeableness, and Conscientiousness.

Discussion

Boundaries on the Acquaintanceship Effect

The purpose of this study was to replicate and extend previous findings on the effect of acquaintanceship on the accuracy of personality judgments. Other studies (e.g., Funder & Colvin, 1988; Paunonen, 1989) have demonstrated that the relationship of acquaintanceship to interjudge agreement is positive and robust. But no studies, until this research, have shown how acquaintanceship is related to behavioral prediction.

Our first major finding was that judgments provided by acquaintances, compared with strangers, yielded better predictions of targets' personalities (i.e., behavioral patterns that transcend specific situations, as measured by conventional personality inventories). This is an intuitively sensible result because acquaintances, in general, are likely to have had experience observing and testing hunches about their targets across a wide range of situations, in contrast with the limited experience that strangers had with their targets.

Our second major finding was that judgments by acquaintances and by strangers yielded predictions of targets' situation-specific behavior that were about equally valid. This finding was not intuitive at all; in fact, in the introduction we claimed that either acquaintances or strangers might provide better predictions because of advantages of each of their unique sources of information. It is interesting that acquaintances (with greater knowledge of targets' personalities) and strangers (by observing

Table 2
Behavioral Q-Sort Factor Loadings

Behavioral item	Nervous Withdrawal	Domineeringness	Serious Intelligence	Heterosexuality
37. Behaves in a fearful or timid manner	.92			
14. Exhibits an awkward interpersonal style	.90			
22. Expresses insecurity or sensitivity	.88			
9. Is reserved and unexpressive	.87			
61. Shows lack of interest in the interaction	.84			
16. High enthusiasm and high energy level	−.82			
8. Exhibits social skills	−.79			
21. Is talkative (in this situation)	−.79			
38. Is expressive in face, voice or gestures	−.79			
41. Keeps partner at a distance	.79			
23. Shows physical signs of tension or anxiety	.71			
7. Appears to be relaxed and comfortable	−.68			
48. Expresses self-pity or feelings of victimization	.68			
43. Seems genuinely to enjoy interaction with partner	−.66			
27. Seeks reassurance from partner	.65			
3. Volunteers unusually little information about self	.64			
57. Speaks in a loud voice	−.59			
54. Speaks fluently and expresses ideas well	−.57			
50. Behaves in a cheerful manner	−.56			
40. Expresses guilt (about anything)	.51			
62. Speaks quickly	−.49			
12. Physically animated; moves around a great deal	−.48			
30. Seeks advice from partner (low = partner seeks)	.44			
39. Expresses interest in fantasy and daydreams	.29			
45. Shows interest in conventional ways of judging people	.28			
36. Is unusual or unconventional in appearance	.28			
4. Seems genuinely interested in what partner has to say		−.81		
13. Seems to genuinely like the partner		−.79		
18. Talks at rather than with partner (e.g., monologue)		.73		
32. Acts in an irritable fashion		.69		
28. Exhibits condescending behavior		.68		
35. Expresses hostility		.67		
29. Partner seems to like him or her		−.64		
5. Tries to control the interaction		.57		
20. Expresses skepticism or cynicism		.56		
25. Expresses sympathy toward partner		−.55		
6. Dominates the interaction		.54		
33. Expresses warmth		−.54		
19. Expresses agreement unusually frequently		−.53		
15. Interrupts partner (low = partner interrupts)		.51		
1. Expresses awareness of being on camera/in experiment		.44		
60. Engages in constant eye contact with partner		−.40		
34. Tries to sabotage or obstruct experiment or partner		.36		
55. Brags		.34		
59. Makes physical contact with partner		−.33		
24. Exhibits high degree of intelligence			.84	
42. Shows genuine interest in intellectual matters			.83	
10. Laughs frequently (whether "genuine" or "nervous")			−.63	
11. Smiles frequently			−.55	
51. Discusses philosophical issues with interest			.55	
46. Displays ambition			.55	
17. Discusses unusually large number of topics			.47	
44. Says or does interesting things (from partner's point of view)			.42	
26. Initiates humor			−.42	
58. Demonstrates interest in topics related to power			.33	
56. Demonstrates interest in competition			.17	
31. Appears to regard self physically attractive				.62
47. Seems to view interaction as sexual encounter				.57
52. Behaves in a masculine/feminine style or manner				.53
2. "Interviews" partner (e.g., asks series of questions)				.52
49. Seems interested in partner as member of opposite sex				.45
53. Offers advice to partner				.33

Note. $n = 139$. The four factors account for 51% of the variance.

Table 3
Summary of Acquaintance and Stranger Q-Sort Ratings in Predicting Subjects' Behavior

Factor	No. of significant Q-sort items		Q-sort five-factor multiple *R*	
	Acquaintances	Strangers	Acquaintances	Strangers
Nervous Withdrawal	19	26	.43**	.44**
Domineeringness[a]	28	17	.43**	.29*
Serious Intelligence	27	23	.40**	.43**
Heterosexuality	15	18	.29*	.42**
Average multiple *R*			.39	.40

[a] The number of significant correlations is significantly different between acquaintances and strangers at $p < .05$.
* $p < .05$. ** $p < .01$.

targets behave in a single, highly similar situation) provided judgments that attained almost equal predictive validity. It appears that similar predictive outcomes can be obtained even when the amount of behavioral information varies considerably.

These two findings are important because they serve as a stepping-stone from research-based information to actual knowledge. As argued by Brinberg and McGrath (1985), knowledge is gained only after the scope and limits of a phenomenon are established. The scope of the acquaintanceship effect is fairly large, and the effect is robust: In several studies, it has now been demonstrated that highly acquainted individuals often provide better descriptions and predictions about targets' personalities than do strangers who provide similar descriptions and predictions about targets' personalities.

But the more important aspect of this study is that a limit or boundary condition has been observed, which suggests when the advantage of acquaintanceship will dissipate. Specifically, when acquaintances have broad experience with targets but have not observed them in a specific situation, and when strangers' only experience with targets is in a highly similar situation, the effect of acquaintanceship will be trivial: Acquaintances' and strangers' judgments will do equally well in predicting their target's behavior in that situation. It is interesting that the mean correlations in Table 3, when compared with those in Table 1, do not suggest that acquaintances' ability to predict

Table 4
Targets' Self-Reported Personality and Coded Behavior Correlated With Acquaintances' and Strangers' Five-Factor Q-Sort Rating

Target measure	Five-factor rating				
	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
			Acquaintances		
Personality					
Surgency	.04	.42***	−.02	−.18	−.19*
Sensitivity	.01	.06	−.09	.33***	.20*
Anxious Manipulativeness	.19*	−.02	.05	.06	−.17
Simplistic Nonconformity	.00	.22*	.10	−.06	−.11
Behavior					
Nervous Withdrawal	.10	−.34***	.11	−.12	−.11
Domineeringness	.17*	−.05	.27***	−.36***	−.23**
Serious Intelligence	−.04	−.11	.24**	−.25**	.10
Heterosexuality	−.13	−.06	.04	−.16	.07
			Strangers		
Personality					
Surgency	−.09	.31**	−.06	.11	−.13
Sensitivity	.06	−.02	−.07	−.08	.01
Anxious Manipulativeness	−.27**	.19*	−.01	.20*	.19*
Simplistic Nonconformity	.00	.06	−.06	.12	−.13
Behavior					
Nervous Withdrawal	.18*	−.41***	−.02	−.04	.04
Domineeringness	.14	−.12	.04	−.26**	−.16
Serious Intelligence	−.03	−.20*	.25**	−.04	.17*
Heterosexuality	−.29***	.04	.08	−.02	.22**

Note. *n*s range from 93 to 137.
* $p < .05$. ** $p < .01$. *** $p < .001$.

behavior diminishes for specific situations but rather suggest that strangers' ability to predict behavior is greatly enhanced, to the level of close friends and acquaintances, if they have had some experience with the target in a similar situation (see Watson, 1989, for a related finding).

A conclusive test of this explanation for the observed boundary condition will depend on the development of a technology for assessing the similarity between two situations. This has, of course, been a long-standing issue for personality psychology. Recently, we have offered a method for assessing situational similarity (Funder & Colvin, 1991). This can be accomplished by assessing a large number of individual behaviors in a variety of situations and then determining how the *average* target behavior differs from one situation to another. Two situations that manifest similar average patterns of behavior are viewed as psychologically similar, whereas two situations that manifest dissimilar average patterns of behavior are viewed as psychologically dissimilar.

With this method of assessing situational similarity in mind, we can offer a new hypothesis. We would expect that when strangers are asked to predict the behavior of a target, the validity of the predictions will be positively related to the similarity between the situation in which the stranger has observed the target and the situation in which the stranger's judgment is used to predict the target's behavior. In the case of our study, our two situations were similar compared with the range of situations that exist in daily life (see Funder & Colvin, 1991), which probably accounts for why the predictive validity of strangers' judgments is comparable with that of acquaintances. In future studies that use more diverse situations, we would expect strangers' predictive validity to shrink as situations become more dissimilar to the one in which strangers initially observed their targets. In contrast, we would expect that the predictive validity of acquaintances' judgments would stay relatively constant (i.e., similar to those observed in this study) as their wideband information about targets allows for relatively accurate predictions in a variety of situations.

Conceptualizing Acquaintanceship

We have attempted to make the case that increased acquaintanceship will lead to better predictions of personality and, under some circumstances, better predictions of behavior. Unfortunately, in the literature, the conceptualization of acquaintanceship in empirical studies has been inadequate. Paunonen (1989) asked his subjects to rate their acquaintanceship with target persons on a 9-point scale, from 1 (*known not at all*) to 9 (*known extremely well*). But asking how well somebody knows another might be tantamount to asking, "How well can you judge the personality of the target person?" Colvin and Funder (1990) and Hase and Goldberg (1967) have shown that some targets, because of the personality traits that they manifest, are more judgeable or knowable than others. Asking a person how well he or she knows another might result in an answer of either (a) degree of acquaintanceship or (b) a rating of judgeableness of the target, when only (a) is desired.

This study does not suffer from that particular potential confound, but we must acknowledge that our conceptualization of acquaintanceship is equally limited. It is now necessary to advance the concept of acquaintanceship beyond that of a 1-to-9 response or an indication of how many months two people have know each other. Two suggestions are in order. First, acquaintanceship should be viewed as a *dyadic* variable. It always involves two people; hence the assessment of acquaintanceship should incorporate aspects of both the acquaintance and the target. This helps to alleviate the problem of assessing judgeability rather than assessing acquaintanceship. Second, single-item measures of acquaintanceship are probably not sensitive enough to adequately assess the relationship between two people. Therefore, it might be beneficial to use a multi-item, multidimensional assessment device that is theoretically derived with known psychometric properties, such as the Relationship Closeness Inventory (RCI; Berscheid, Snyder, & Omoto, 1989), which asks the acquaintance to describe the type of relationship with the target, the amount of hours spent with the target, the activities done with the target, and the amount and kind of influence the target has on the acquaintance. The assessment of acquaintanceship, whether one uses the RCI or some other measure, will benefit from the broader and richer conceptualization espoused by Berscheid et al. (1989).

Implications for Accuracy

The results of our study, combined with those of previous studies (e.g., Cloyd, 1977; Funder & Colvin, 1988; Jackson et al., 1973; Norman & Goldberg, 1966; Paunonen, 1989; Taft, 1966), make a powerful statement: There is now growing evidence to suggest that close acquaintances make accurate judgments of targets' personalities.

We argued in the introduction that the two, albeit imperfect, criteria for accurate judgments of personality must converge and diverge in conceptually meaningful ways if one is to become confident that judgments of personality are indeed accurate. One criterion, interjudge agreement, has been shown to be positively related to acquaintanceship; that is, greater acquaintanceship results in greater agreement between self and others' judgments of personality. We have argued elsewhere (Funder & Colvin, 1988) that the most parsimonious explanation of this acquaintanceship effect is that acquaintances have information available to them when judging targets that strangers do not possess. Although this explanation seems plausible to us, critics might seize on our warning that "agreement does not necessarily imply accuracy" and suggest that the acquaintanceship effect is an artifact. We feel compelled to lay that misunderstanding to rest by integrating both past and present results. The beginnings of a "nomological net" have clearly emerged as the two criteria, *interjudge agreement* and *behavioral prediction*, have together demonstrated conceptually meaningful patterns of convergent and divergent results. These patterns clearly imply that acquaintances can accurately judge the personalities of their friends and acquaintances.

Some readers might sense a discrepancy between our claims that judgments of personality are accurate, on the one hand, and that the multiple correlations in Tables 1 and 3 are considerably less than 1.0, on the other hand. First, the utility of correlations in the range shown in these two tables has traditionally been severely underestimated (Funder & Ozer, 1983; Ozer, 1985; Rosenthal & Rubin, 1982). Rosenthal and Rubin (1982)

have shown that a correlation of .32 between a medical treatment and an outcome (i.e., alive or dead) would result in a 66% success rate for patients who receive the medical treatment. It is clear that a correlation in that range can be meaningful and important. Second, when we claim that people make accurate judgments, we do not mean that people make perfect judgments in the normative sense. Rather, the judgments that people make, in the terminology of Herbert Simon, meet the satisficing criterion. In other words, judgments are made that reflect general patterns of behavior and, as a consequence, contain some amount of *noise* (e.g., recall our discussion on bandwidth fidelity); however, the judgments are sufficiently sensitive to predict behavior in a wide variety of situations.

Summary and Conclusion

This research on the accuracy of personality judgments has incorporated the logic that Cronbach and Meehl (1955) proffered some years ago. Through this approach, the scope and boundaries of the acquaintanceship effect have been illuminated. In particular, a robust finding is that greater acquaintanceship results in better agreement and prediction of friends' personalities. A boundary condition on acquaintanceship was found: Judgments by acquaintances and strangers provided comparable behavioral predictions when the situation in which strangers observed targets was similar to the situation to which targets' behavior was predicted. We argued that the boundary condition is a function of situational similarity; that is, when strangers observe and predict the behavior of targets in similar situations, the predictive validity of their judgments will be comparable with that of judgments provided by close acquaintances. However, as the situations in which strangers observe and predict behavior become dissimilar, the predictive validity of their judgments can be expected to decrease, whereas the predictive validity of acquaintances' judgments will remain relatively stable over a variety of situations.

These results, integrated with previous studies, serve as evidence that judgments of personality are often accurate. As the outlines of the nomological net of evidence continue to emerge, future studies will contribute to a better understanding of when and how accurate judgments of personality are made.

References

Ajzen, I., & Fishbein, M. (1977). Attitude–behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin, 84,* 888–918.

Albright, L., Kenny, D. A., & Malloy, T. E. (1988). Consensus in personality judgments at zero acquaintance. *Journal of Personality and Social Psychology, 55,* 387–395.

Amabile, T. M., & Kabat, L. G. (1982). When self-descriptions contradict behavior: Actions do speak louder than words. *Social Cognition, 1,* 311–325.

Bakeman, R., & Gottman, J. M. (1986). *Observing interaction: An introduction to sequential analysis.* Cambridge, England: Cambridge University Press.

Bem, D. J., & Funder, D. C. (1978). Predicting more of the people more of the time: Assessing the personality of situations. *Psychological Review, 85,* 485–501.

Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42,* 155–162.

Berscheid, E., Snyder, M., & Omoto, A. (1989). The Relationship Closeness Inventory: Assessing the closeness of interpersonal relationships. *Journal of Personality and Social Psychology, 57,* 792–801.

Block, J. (1978). *The Q-sort method in personality assessment and psychiatric research.* Palo Alto, CA: Consulting Psychologists Press. (Original work published 1961)

Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. A. Collins (Ed.), *Minnesota Symposium on Child Psychology* (Vol. 13, pp. 39–101). Hillsdale, NJ: Erlbaum.

Brinberg, D., & McGrath, J. E. (1985). *Validity and the research process.* Beverly Hills, CA: Sage.

Bruner, J. S., & Tagiuri, R. (1954). Person perception. In G. Lindzey (Ed.), *Handbook of social psychology* (Vol. 2, pp. 634–654). Reading, MA: Addison-Wesley.

Cairns, R. B., & Green, J. A. (1979). How to assess personality and social patterns: Observations or ratings? In R. B. Cairns (Ed.), *The analysis of social interactions: Methods, issues, and illustrations* (pp. 209–226). Hillsdale, NJ: Erlbaum.

Cloyd, L. (1977). Effect of acquaintanceship on accuracy of person perception. *Perceptual and Motor Skills, 44,* 819–826.

Colvin, C. R., & Funder, D. C. (April, 1990). *Differences in judgability: The "good target" of personality judgments.* Paper presented at the meeting of the Western Psychological Association, Los Angeles, CA.

Cook, M. (1984). *Issues in person perception.* London: Methuen.

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

Cronbach, L. J., & Gleser, G. C. (1965). *Psychological tests and personnel decisions.* Urbana: University of Illinois Press.

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52,* 177–193.

Digman, J. M., & Inouye, J. (1986). Further specification of the five robust factors of personality. *Journal of Personality and Social Psychology, 50,* 116–123.

Fiske, D. W. (1949). Consistency of the factorial structures of personality ratings from different sources. *Journal of Abnormal and Social Psychology, 44,* 329–344.

Fletcher, G. J. O., Danilovica, P., Fernandez, G., Peterson, D., & Reeder, G. D. (1986). Attributional complexity: An individual differences measure. *Journal of Personality and Social Psychology, 51,* 875–884.

Funder, D. C. (1980). On seeing ourselves as others see us: Self–other agreement and discrepancy in personality ratings. *Journal of Personality, 48,* 473–493.

Funder, D. C. (1987). Errors and mistakes: Evaluating the accuracy of social judgment. *Psychological Bulletin, 101,* 75–90.

Funder, D. C. (in press). Judgments of personality and personality itself. In K. Craik, R. Hogan, & R. Wolfe (Eds.), *Fifty years of personality psychology.* New York: Plenum Press.

Funder, D. C., & Colvin, C. R. (1988). Friends and strangers: Acquaintanceship, agreement, and the accuracy of personality judgment. *Journal of Personality and Social Psychology, 55,* 149–158.

Funder, D. C., & Colvin, C. R. (1991). Explorations in behavioral consistency: Properties of persons, situations, and behaviors. *Journal of Personality and Social Psychology, 60,* 773–794.

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., & Harris, M. J. (1986). On the several facets of personality assessment: The case of social acuity. *Journal of Personality, 54,* 528–550.

Funder, D. C., & Ozer, D. J. (1983). Behavior as a function of the situation. *Journal of Personality and Social Psychology, 44,* 107–112.

Gage, N. L., & Cronbach, L. J. (1955). Conceptual and methodological problems in interpersonal perception. *Psychological Review, 62,* 412–422.

Gormly, J. (1984). Correspondence between personality trait ratings and behavioral events. *Journal of Personality, 52,* 220–232.

Guilford, J. P., & Fruchter, B. (1978). *Fundamental statistics in psychology and education* (6th ed.). New York: McGraw-Hill.

Hase, H. D., & Goldberg, L. R. (1967). Comparative validity of different strategies of constructing personality inventory scales. *Psychological Bulletin, 67,* 231–248.

Heberlein, T. A., & Black, J. S. (1976). Attitudinal specificity and the prediction of behavior in a field setting. *Journal of Personality and Social Psychology, 33,* 474–479.

Hogan, R. (1969). Development of an empathy scale. *Journal of Consulting and Clinical Psychology, 33,* 307–316.

Jackson, D. N. (1982). Some preconditions for valid person perception. In M. P. Zanna, E. T. Higgins, & C. P. Herman (Eds.), *Consistency in social behavior: The Ontario Symposium* (Vol. 2, pp. 251–279). Hillsdale, NJ: Erlbaum.

Jackson, D. N., Chan, D. W., & Stricker, L. J. (1979). Implicit personality theory: Is it illusory? *Journal of Personality, 47,* 1–10.

Jackson, D. N., Neill, J. A., & Bevan, A. R. (1973). An evaluation of forced-choice and true–false item formats in personality assessment. *Journal of Research in Personality, 7,* 21–30.

McClelland, D. C. (1972). Opinions reflect opinions: So what else is new? *Journal of Consulting and Clinical Psychology, 38,* 325–326.

McCrae, R. R., & Costa, P. T., Jr. (1985). Updating Norman's "adequate taxonomy": Intelligence and personality dimensions in natural language and in questionnaires. *Journal of Personality and Social Psychology, 49,* 710–721.

McCrae, R. R., Costa, P. T., Jr., & Busch, C. M. (1986). Evaluating comprehensiveness in personality systems: The California Q-Set and the five factor model. *Journal of Personality, 54,* 430–446.

McKinnon, D. W. (1962). The nature and nurture of creative talent. *American Psychologist, 39,* 484–495.

McNemar, Q. (1947). Note on the sampling error of the difference between correlated proportions or percentages. *Psychometrika, 12,* 153–157.

Medin, D. L. (1989). Concepts and conceptual structure. *American Psychologist, 44,* 1469–1481.

Moskowitz, D. S., & Schwarz, J. C. (1982). Validity comparison of behavior counts and ratings by knowledgeable informants. *Journal of Personality and Social Psychology, 42,* 518–528.

Murray, H. A. (1938). *Explorations in personality.* New York: Oxford University Press.

Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology, 66,* 574–583.

Norman, W. T., & Goldberg, L. R. (1966). Raters, ratees, and randomness in personality structure. *Journal of Personality and Social Psychology, 4,* 681–691.

Ozer, D. J. (1985). Correlation and the coefficient of determination. *Psychological Bulletin, 97,* 307–315.

Paunonen, S. V. (1989). Consensus in personality judgments: Moderating effects of target–rater acquaintanceship and behavior observability. *Journal of Personality and Social Psychology, 56,* 823–833.

Rosenberg, S., & Sedlak, A. (1972). Structural representations of implicit personality theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6, pp. 235–297). San Diego, CA: Academic Press.

Rosenthal, R., Hall, J. A., DiMatteo, M. R., Rogers, D. L., & Archer, D. (1979). *Sensitivity to nonverbal communication: The PONS test.* Baltimore: Johns Hopkins University Press.

Rosenthal, R., & Rubin, D. B. (1982). A simple, general purpose display of magnitude of experiment effect. *Journal of Educational Psychology, 74,* 166–169.

Ross, L. (1977). The intuitive psychologist and his shortcomings. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 10, pp. 174–214). New York: Academic Press.

Schneider, D. J., Hastorf, A. H., & Ellsworth, P. C. (1979). *Person perception* (2nd ed.). Reading, MA: Addison-Wesley.

Shannon, C. E., & Weaver, W. (1949). *The mathematical theory of communication.* Urbana: University of Illinois Press.

Snyder, M. (1979). Self-monitoring processes. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 12, pp. 85–128). San Diego, CA: Academic Press.

Snyder, M., & Ickes, W. (1985). Personality and social behavior. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (3rd ed., Vol. 2, pp. 883–947). New York: Random House.

Taft, R. (1966). Accuracy of empathic judgments of acquaintances and strangers. *Journal of Personality and Social Psychology, 3,* 600–604.

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.

Weigel, R. H., Vernon, D. T. A., & Tognacci, L. N. (1974). Specificity of the attitude as a determinant of attitude–behavior congruence. *Journal of Personality and Social Psychology, 30,* 724–728.

Received June 4, 1990
Revision received August 9, 1990
Accepted September 17, 1990 ■