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UTILITY OF THE MODERATOR VARIABLES, CONSISTENCY AND OBSERVABILITY, IN PERSONALITY ASSESSMENT

by

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Utility of the Moderator Variables, Consistency and Observability, in Personality Assessment" submitted by Kimberley L. McEwan in partial fulfillment of the requirements for the degree of Master of Science.

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ABSTRACT

The present research was designed to investigate factors influencing self-other congruence in personality assessment. Specifically, the extent to which a) moderator variables, b) position on a pathological or non-pathological dimension, c) nature of the trait being assessed, and d) form of trait measurement promoted agreement between subjects' self-assessments and the assessments of their peers on the personality dimensions of Neuroticism and Extraversion was examined. Except for the moderator variables, all other factors had a substantial impact on concordance between subjects and peers. An inventory format of trait measurement was found to be superior to a global rating scale in achieving higher self-other correlations, yet contributed to disagreement for Introverted and Neurotic subjects. It was discovered that Introverts tend to rate their level of Extraversion lower than their peers, while Neurotics perceive their Neuroticism as higher than their peers. In general, more self-other agreement was possible on ratings of Extraversion than Neuroticism. Results of the study are discussed in terms of the attentional deployment of the various groups. It is suggested that the amount of internally directed versus externally directed attention may influence the veridicality of self-perceptions. Concomitants of Neuroticism and Introversion are discussed

as possible causal agents in facilitating high levels of self-focus.

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INTRODUCTION

Statement of the Problem

The value of the construct, personality trait, has been questioned extensively over the past few decades. Attempts to establish the existence of traits through a self-other consensus have, for the most part, been unrewarded. In answer to the relentless criticisms of personality theory, a new approach has emerged suggesting that trait ascriptions may prove their predictive utility if assessed within a more idiographic framework. Specifically, the use of moderator variables, such as cross-situational consistency and public observability, has been recommended as a means of enhancing self-other agreement. Two works (Bem & Allen, 1974; Kenrick & Stringfield, 1980) have shown some usefulness for these moderators in this type of paradigm. In a pilot study, however, it was found that the two moderators, consistency and observability, did not promote subject-peer congruence for both a group of high and low socially anxious subjects. This failure to replicate earlier findings suggested that the usefulness of moderator variables in enhancing the agreement between self and others may be limited to certain populations or at least certain ranges of a given population distribution. The present research attempts to determine to what extent, and under what conditions, the moderators, consistency and observability, influence concordance between self-other assessments. In particular, the effects of these moderators for extreme scorers on a pathological and non-pathological dimension are explored.

The present work adheres to the trait based approach to the study of personality. Though the approach taken circumvents the classic person-situation debate in this area, a synopsis of the status of the major positions will be provided before examining the empirical literature that directly relates to the central thesis of self-other congruence. Comprehensive reviews of issues pertaining to the person-situation dispute are available elsewhere (Epstein, 1979; Mischel, 1979).

Approaches to the Study of Personality

Trait theories have all but relinquished their claim to the study of personality on more than one occasion in the past fifty years. Essentially, the lack of predictive utility in terms of trait-behaviour congruence has been the weak link in trait based approaches to personality (Mischel, 1968). In formalizing the criticisms of personality theory, Mischel (1973) proposed that if no stability in behaviour can be found, then the notion of enduring traits is untenable. Yet trait theorists continue to offer a sporadic defense to such attacks in a number of forms. The resilience of a trait perspective, some feel (Bem & Allen, 1974), is largely attributable to the intuitive appeal of an individual differences based explanation of human behaviour. Moreover, our language reflects a propensity to evaluate persons rather than situations (Bem & Allen, 1974). And many of the terms in our lexicon imply the role of volition in behaviour. Kenrick and Stringfield (1980) discuss the adaptive significance of trait ascription and suggest that selection of this strategy in man may account for our tendency to overgeneralize from limited information. Mischel (1979) has referred to this oversimplification as 'cognitive economics': an efficient means of handling complex and often inconsistent information about persons.

The empirical works to corroborate these impressionistic and intuitive notions have been few and far between. Perhaps the earliest studies which were successful in demonstrating the validity of traits were those of Hartshorne and May (1928, 1929, cf. Epstein, 1979). These studies, commonly cited as evidence against a trait position found low intercorrelation among subtests assessing behavioural indicants of honesty, but revealed that when the tests were combined into a single measure reliability coefficients increased to .73. Later, again examining just one disposition, Olweus (1977) evaluated a group of adolescent boys over a three year period on the trait of aggression. Stability for this period was found to approximate .6 or .7. Block (1977), studying the stability of a number of personality variables from childhood to adulthood, found that half of the 114 measures showed statistically significant stability between junior high and senior high school, with approximately one quarter of the variables reaching this level from senior high to age 30. Such are the more rewarding attempts to establish the fundamental nature of traits. Numerous other endeavours, though, have failed to demonstrate sufficent stability among behaviours in different situations (see Mischel, 1973). Typically, "personality coefficients" (Mischel, 1968) in these studies account for no more than ten percent of the variance.

With the lack of promise in the pursuit of the trait perspective, energies were directed to the seemingly more fruitful endeavour of classifying situations rather than people . The extreme view of the situationist is that personality may simply be regarded as a number of behavioural states manifest in different situations. Situationism seeks to identify the S-R relationships between the environment and behaviour (Bowers, 1973). Much of this work employed the experimental model to determine the proportions of variance accounted for by persons versus situation. Endler and Magnusson (1976) found that the variance due to situations was approximately ten times that due to persons. A further boost for the situationist position was provided by Jones and Nisbett (1971) who identified a bias in person perception which resulted in the attribution of more stability to individuals across situations than is objectively warranted suggesting stability was more illusory than real. This same argument though was was used to yield the opposite conclusion and the question was asked whether this bias is a result of observing stability in behaviour and hence evokes the assumption of constancy even when not demonstrated. In essence the tendency to overestimate stability cannot be regarded as proof that there exists no stability in behaviour (Epstein, 1979). Moreover, Olweus (1977) has suggested that in using analysis of variance to provide evidence for the situationist approach, there has been a failure to control for the range of values in the two components, situations and persons. Usually situations, in such studies, are selected over a large range and individuals over a restricted range, thus forcing the variability associated with external factors to be greater.

Just as personality theory has been criticized for its restricted approach, situationism seemed guilty of losing sight of the necessary role of intrapsychic variables in determining behaviour (Bem, 1972). The extremity of the two opposing positions of trait versus situational influences on behaviour soon became apparent to some as a narrow and limited course, likely to yield few meaningful insights into the construct of personality (Bowers, 1973). As a result an interactionist position was advocated as a compromise and answer to the objections of the two extreme views. The argument here is that only through consideration of both intrapsychic and environmental factors can the stability of behaviour be recognized. Again, by utilizing the analysis of variance model, a number of studies sought to confirm this theoretical position by demonstrating that more variance would be associated with the interaction between persons and situations that either of these two components on their own.

Unfortunately, the promise of the interactionists was not convincingly upheld. Rather what became obvious from these works was that "the predominate source of variance was error variance" (Epstein, 1979, p.1104). With this glaring lack of predictive accuracy evidenced by alternatives to the trait position, the traditional approach to personality was reconsidered with a closer look at the means of assessing behaviour encouraged. Alker (1972) had earlier warned that, in trait theory, techniques rather than the notion itself were responsible for insubstantial findings.

Recently, it has been recognized that it may be possible to delineate the conditions under which trait-relevant behaviours will emerge. Epstein has argued that "a trait is a generalized tendency for a person to behave in a certain manner over a sufficient sample of events and does not imply that he or she will exhibit trait relevant behaviour in all situations or even on all occasions of the same situation" (1979, p.1102), suggesting that we have been misguided in attempting to capture stability in traits without allowing for such behavioural aggregrations. If Epstein is right, then we must recognize, as both Bem (1972) and Mischel (1973) have pointed out, that individuals are the best source of information about their own behaviour as they have the most experience observing themselves.

The following sections will discuss those studies which have attempted to circumscribe the trait approach in terms of strengths and weaknesses through examining the mode of assessment, the effects of moderators, and statistical artifacts in this kind of research. Specifically, the review will focus on papers which evaluate the convergent validity of traits through an assessment of self-other congruence.

Self-Other Congruence in Personality Assessment

One means of establishing the fundamental nature of traits is to demonstrate some sort of consensual validation that traits exist. This seems an especially expedient means if the raters have had an opportunity to observe the ratee over a large number of situations. Thus, while there will be some situational variability, eventually the enduring aspects of the personality in question should emerge. Basically this method is preferred over simple self-ratings which are often unreliable and, at times, oddly unrelated to the trait-relevant behaviours derived by the experimenter (Mischel, 1968). In essence, we are willing to believe if both the subject and an observer say the subject possesses a particular trait that he indeed does possess it.

Funder (1980) claims in a discussion of 'symbolic interactionism' or, more informally, the 'looking glass self', that a person's self-concept reflects the way he appears to others. If we learn about ourselves through social feedback then our self-perceptions should show considerable agreement with the perceptions of others. Unfortunately, this predicted congruence has found little empirical support. In a recent paper by Shrauger and Schoeneman (1979), a number of naturalistic studies are cited which have attempted to identify correspondence between self and others on a variety of traits. These authors conclude from their review that approximately half of the studies show no significant agreement between self-judgements and others' evaluations. The balance of studies report significant but low correlations. Most worrisome in all of this literature is that few factors have been clearly identified as facilitative or detrimental to self-other congruence. Agreement, it seems, is most readily achieved if the trait being assessed is one which involves interaction with others (ie. sociability, Hase & Goldberg, 1967; extraversion, Eysenck, 1962; Peterson, 1965).

While Jackson, Neill and Bevan (1973) have shown that correspondence between self and peer judgements is greater for judges closely acquainted with the subjects than for raters who do not know the subject well, they have not stated whether social intimacy increases congruence over levels achieved when not considering this variable. Other than this, the effects of subject variables, level of peer affiliation, trait type, and method of measurement and analysis remain unexamined.

The lack of association between self-perceptions and others' actual evaluations suggest either that people cannot accurately assess themselves or that observers misperceive the others' fundamental nature or some combination of both. A higher degree of correspondence has been found between subjects perceived reactions of others and self-concept than when measures are based on actual reactions (Sherwood, 1965; Walhood & Klopfur, 1971, c.f. Shrauger & Schoeneman, 1979). Such findings contradict the 'looking glass self' notion of self-concept. The relevant research shows that "subjects' self-evaluations may be weakly related to others' opinions of them because they frequently do not know what others' opinions are" (Shrauger & Schoeneman, 1979, p.558).

The Impact of Moderator Variables on Self-Other Congruence

Including moderators in personality assessment allows one to ask if the behaviour of individuals within defined subgroups is more predictable than the behaviour of individuals taken as an entire group. Bem and Allen (1974) were the first to examine the effect of cross-situational consistency as a moderator of correspondence between self and other ratings. In an attempt to prove "our intuitions right; the research wrong" (1974, p.503) in seeking stability in behaviour, Bem and Allen identified a group of subjects who reported being characteristically consistent across situations on two personality dimensions. Individuals who rated themselves as exhibiting little situational variability on the traits of friendliness and conscientiousness showed more, though not significantly greater, agreement with the assessments of their parents and peers than a high variability group. Interestingly and curiously ignored by Bem and Allen, the high variability group of situationally inconsistent subjects show agreement with peers on the trait of friendliness of .56. Selecting those persons who are cross-situationally consistent improves this coefficient by a meagre .06 points. The moderator showed better discriminant validity in differentiating the two groups on behavioural measures such as group participation and initiation of conversation.

Consensual validation of the trait of conscientiousness doesn't fare quite as well, with the consistent group demonstrating congruence with others of .45 and high variability reducing the coefficient to about half the size. Conscientiousness, it seems, is not as discernable a characteristic as is friendliness. When averaging intercorrelation among all self-other ratings and rating-behaviour coefficients, it was found that the low variability group showed significant convergent validity coefficients. Yet in terms of consensus between self and other, only a nonsignificant improvement can be recognized.

In a more recent examination of self-other congruence, Kenrick and Stringfield (1980) used Bem and Allen's moderator consistency and incorporated a second qualifier, public observability. In this study subjects were asked to describe themselves on bipolar adjective scales derived from Cattell's 16 personality factors and rate how cross-situationally consistent and publicly observable they were on each dimension. Further, subjects were to choose their most consistent trait. A trait-by-trait analysis revealed that the moderator consistency resulted in some improvement over unmoderated correlations on about half of the dimensions. It was found that when consistency enhanced correlations then observability generally had the same effect. Yet a few exceptions arose, with the trait of emotionality, in particular, defying this pattern. The reverse effect held for consistency moderated emotionality: high consistency resulted in a decrement in congruence, low consistency an increment. Observability, however, did serve to strengthen correlations on this trait.

The impact of the moderators was most evident when subjects were compared on their most and least consistent trait. Traits chosen as most consistent resulted in significantly higher intercorrelations among raters than those obtained for least consistent traits. A further dichotomizing of subjects produced a group above the median on both self-rated observability and consistency for their most consistent dimension. A small increment in agreement was demonstrated over the simple split of most and least consistent. Curiously, though, correlations for the 'worst' group (those subjects below the median on consistency and observability) all broke the +.30 predictive barrier. These anomalies, unfortunately, are left unexplained by the study's authors. Kenrick and Stringfield also fail to provide a compelling argument in terms of how this new "truly idiographic approach" of comparisons based on a conceptual versus specific (content) level has a practical value. Furthermore, it should be noted that all figures in the Kenrick and Stringfield (1980) study are averaged across self-parent, self-peer and parent-peer correlations and thus are not completely pure indicators of self-other congruence.

The moderator observability was further examined in a study by Funder (1980) which specifically addressed self-other agreement in personality ratings. In the Kenrick and Stringfield (1980) work it was demonstrated that the utility of moderator variables appears to be trait specific. Drawing from the actor-observer research (Jones & Nisbett, 1971), Funder offers an explanation of the differential effect of the moderator observability. Using the California Q-sort test, Funder examined the agreement between self ratings and the combined ratings of two peers. All 100 items of the personality inventory were objectively assessed for their observability and social desirability characteristics. Though the correlation between observability ratings and self-other congruence was negligible, it was noted that the inventory items evidencing significant self-other agreement were somewhat more observable than those showing nonsignificant agreement. Social desirability was found to relate positively to self-other agreement. Funder went beyond a correlational analysis to study discrepancy between self and other ratings. As confirmation for attribution theory, he found that traits rated more characteristic of the subject by peers were significantly higher in outward observability than those rated characteristic by self. Thus, characteristics salient to the self will be rated as personally more important, while characteristics most evident to observers will be perceived most typical by outsiders.

In Funder's contrast of items placed higher by self with items rated higher by others, it is clear on simply face value that the self-selected items are more internal (cognitive or mood related), while the other-selected items are more external in nature. Funder's finding that these most characteristic items show significant discrepancy between self and peers seems inconsistent with both Bem and Allen's (1974) and Kenrick and Stringfield's (1980) work. Though, as the previous studies did not examine self-other differences, but simply looked at the degree of covariance, it is difficult to equate Funder's results.

While this study is the first to consider directly the role of the trait being assessed, some difficulty emerges with Funder's definition of the term trait. For example, the highest level of self-other agreement was obtained on the item " is concerned with philosophical issues". Funder does not attempt to relate these discrete dispositions to a fundamental trait structure and although 51 of the 100 items show significant self-other correlations, it remains unclear exactly which personality dimensions are best at predicting this level of agreement.

Prototypicality and Personality Assessment

One study that departs from the self-other measurement approach in personality assessment but has clear implications for the issue of perceptual accuracy is Cantor and Mischel's (1979) investigation of prototypicality and personality impressions. These authors have suggested a cognitive organization of personality types into category structures. Drawing on the work of Rosch and Mervis (1975) in information processing, Cantor and Mischel suggest that personality categories are organized around prototypes or best exemplars with which are associated feature lists or networks of defining characteristics. Good prototypes are said to have three criterial aspects: breadth in the behaviours linked with that personality type, an absence of behaviours associated with a mutually exclusive (opposing) personality type, and cross-situational consistency in the manifestation of that trait (Cantor & Mischel, 1979).

Cantor and Mischel tested the notion that the more prototypical a person was of a particular personality type, the more easily information about that person could be encoded, retrieved and elaborated. By manipulating the degree of prototypicality of six hypothetical characters, they generated a number of nine sentence descriptions of the character types, pure Extraverts or Introverts, mixed Extravert-other or Introvert-other (ie. Extravert and Good Samaritan), and inconsistent Extravert-Introvert. Subjects were presented with the information about the various hypothetical characters and were tested for immediate recall and delayed recall, two days later. Cantor and Mischel found that the amount of correct recall was greater for pure characters than for the inconsistent and mixed characters in both the immediate and delayed recall conditions. Concrete behaviours, the more situation-specific items, as opposed to abstract items were remembered better for pure personality types. In addition, a main effect was noted for trait type with better recall evidenced for Extraversion over Introversion. In documenting general impressions about the stimulus characters, subjects were prone to generate more novel material about pure characters. This previously unpresented, impression information was found to be consistent with the character's original attributes.

Cantor and Mischel conclude that character consistency or prototypicality greatly affects both recollection and impressions of personality. Moreover, when characters match a number of features associated with the prototype of a personality category, we are willing to attribute to them other unobserved characteristics that we know to be associated with that particular prototype. Though Cantor and Mischel interpret their findings as evidence of facilitation of correct assessment of others, it seems that these results could also be construed as a potential bias for overestimating traits in others, thereby facilitating disagreement between self and other assessments.

If we allow the authors' interpretation of findings, then the logical implication for convergent validity in personality measurement is that people high in a particular trait, being more prototypical, should demonstrate more agreement with others' assessments of themselves. Inadvertently testing the effects of prototypicality on self-other agreement, an early study by S.B.G. Eysenck (1962) had subjects nominate friends they considered to be extreme on the dimensions of Extraversion and Neuroticism. Four groups of outstanding characters, Extraverts, Introverts, Stables, and Neurotics were contacted by mail and asked to complete the Maudsley Personality Inventory (MPI). Calculating the mean scores for each group, Eysenck found that nominated Introverts and Extraverts differed significantly from each other with respect to Extraversion. A similar significant difference was noted for Neuroticism, although the split was not quite as large. Again using nominated groups, Eysenck and Eysenck (1963) showed that factor loadings from a principal components analysis of the MPI differentiated well between selected Introverts and Extraverts but provided a less clear distinction between levels of Neuroticism. These studies would appear to support the prototypicality hypothesis although Cantor and Mischel may have some trouble explaining the degree of dispersion found in the extreme groups.

Nature of the Trait Being Assessed

Throughout the literature which assesses personality through self-other ratings, it has been claimed that low agreement is due to the unobservable nature of the trait in question. Traits, it was thought, could roughly be divided into the private realm, in which these aspects of self are unavailable to outsiders, or the public sphere, in which the trait in question is very noticeable to others. This conceptual distinction has allowed Bem and Allen (1974) and Kenrick and Stringfield (1980) to dismiss negligible correlations for certain traits. But, in fact, it was this internal-external aspect of traits that prompted Kenrick and Stringfield to include the moderator observability in their examination of Cattell's personality factors. Presumably, the rationale is that even private traits may be recognized by others if the person's behavioural repertoire includes overt indices of that particular trait. The sporadic enhancement attained through including this moderator testifies that this public-private contrast is a little too simplistic a distinction. Emphasizing the utility of observability moderation on subjects' most consistent dimension, Kenrick and Stringfield ignore the uncomfortable fact that a number of traits are not discerned by others even when subjects rate these traits as being very visible characteristics of self. This would be theoretically acceptable if those poorly predicted traits were ones which intuitively appeared unavailable to external assessment, but unfortunately this is not the case. The Cattell traits which suffered from observability moderation (that is showed a decrement in coefficient size) are intelligence, suspiciousness, and conscientiousness.

Funder (1980), in his examination of the effects of observability on self-other congruence, only confirms the futility of considering this qualifier. Funder found the correlation between self and other ratings to be virtually unrelated to the objective observability rating when examining the full range of items. Furthermore, private aspects of self, such as philosophical concern, showed considerable correlations between self and peers.

Very few authors have had anything to say about what contributes to the observable aspects of personality and consequently the above results are difficult to accomodate theoretically. Daryl Bem (1972), while not specifically addressing the issue of public observability in behaviour, provides some insights into the limitations of self-evaluation. If one separates the private-public distinction from the internal-external distinction, then it is possible to see how the self may be an unreliable source of information. A trait may fall into the private sphere without involving a lot of internal, self-directed attention (ie. conscientiousness). Conversely, some private traits will demand attention to the self because of the strong affective component (ie. emotionality). In terms of Bem's (1972) self-perception theory, aspects of self which involve a large internal attentional component will interfere with realistic self-evaluation. Bem has argued that "to the extent that internal cues are weak, ambiguous or uninterpretable, the individual is functionally in the same position as an outside observer" (1972, p.2). Implicit in this theory is the notion that self-perception may be distorted by an overreliance on internal cues.

Within the framework of this theory, a pilot study was conducted which examined self-other agreement on the trait of anxiety, known to comprise a strong physiological (ie. internal) component (Lang, 1978). Social phobics were chosen as subjects since this disorder is characterized by a sensitivity to bodily events (Nichols, 1974). It was anticipated that the socially anxious individual's internal scrutiny would interfere with his role as his own observer. Twenty high and twenty low socially anxious participants made self-ratings and gave permission to obtain ratings from their peers on the traits of friendliness, conscientiousness, and anxiety. Observability and consistency ratings were also obtained from peers for the three aspects of self. Unlike previous reports this study found that discrimination on the basis of trait variability and public observability did not prove effective in promoting congruence on any of the personality dimensions. Plotting mean discrepancy scores for the two groups revealed that the high anxious significantly overestimated their anxiety while the low anxious had a tendency to underestimate this aspect of self. No such pattern emerged for the other two traits.

Finding low unmoderated correlations, plus no usefulness in incoporating moderators in enhancing self-other agreement was expected for the high anxious group. That the low anxious group showed similar trends raised the question of whether there was something unusual about the sample of subjects used in the study. As the other comparable experiments had investigated 'normal' samples, the pilot study results suggest that there may be inherent difficulties in selecting individuals who are statistically deviant on personality dimensions.

It is clear from the above discussion that both the nature of the trait being examined and type of population used must be considered in studies that set out to validate the usefulness of the trait approach through establishing a consensus between self and others.

Statistical Analysis of Self-Other Judgement Data

Most of the research in this area has measured self-other congruence through the degree to which the ratings covary. Of the 49 studies cited by Shrauger and

Schoeneman (1979), approximately three-quarters used correlation between self and other judgements as the dependent measure. One of the problems with this is, of course, that no information is gleaned on the discrepancy between ratee and rater assessments. Moreover, unless the investigator examines his raw data through scatter plots, he will be unsure if a negligible linear correlation is due to a lack of covariance or due to a curvi-linear relationship between the raters' scores which may obscure the true relationship of the variables. In addition, if special groups are examined in isolation from a total random sample, a truncation of the data set may limit the variance on one or both variables and conceal the actual extent of the covariance (Carroll, 1961). Comparing mean scores of subjects' and others' ratings is one way to examine the degree of overall disagreement, but it reveals little of the individual correspondence for each pair of ratings. Hence, with a highly skewed or unusually flat or peaked kurtotic distribution of one of the variables, one could erroneously conclude from just an examination of group means that considerable agreement was present when this was not the case.

A few studies have employed factor analysis as a means of assessing whether self-identified personality structures are similar to peer organization of the subject's traits. Passini and Norman (1973) have shown that personality structures often exist in the rater's head rather than reflecting the trait structure of the person being rated in that perceived personality structures appear to be the same for complete strangers as for close acquaintances. A further problem with the factor-analysis technique is that uncovering the cognitive organization of what is known about a person will not always provide information about discrete traits within that organization.

A less sophisticated means of comparison between self and other judgements is to establish some criterion for acceptable discrepancy and then to simply count the number of observations which agree and those which do not. In Shrauger and Schoeneman's review, only three studies opted for this means of analysis. The lack of popularity of the more basic analyses would seem due to the propensity of researchers to use linear models to interpret their data. Moreover, little attention is given to identifying the underlying scale of the data collected and as a result the question of suitability of statistical techniques is often ignored.

Overview of the Present Research

The present research seeks to overcome some of the limitations identified in the previous sections. Of critical importance will be a comparison of self-other congruence on a pathological and nonpathological dimension.

The Eysenck Personality Inventory (EPI) has been selected for trait measurement as it provides a parsimonious partitioning of personality into two major dimensions. That the dimensions of Extraversion and Neuroticism consistently emerge from factor analytic studies attests to their fundamental nature and relevance to all or, at least, most individuals. The personality dimension Neuroticism is defined as a general emotional overresponsiveness. Individuals exhibiting such emotional lability are said to be less resilient to stress and predisposed to affective disturbances (Eysenck & Eysenck, 1969). The Extraversion scale represents a more neutral dimension measuring sociability and impulsiveness. As predicted by Bem's self-perception theory, it should be more difficult to achieve self-other congruence on an emotionally laden trait such as Neuroticism.

A second issue addressed in the present work will be that of statistical deviance on personality dimensions. The performance of extreme scorers on the Neuroticism and Extraversion scales will be assessed against self-other correlations for the middle groups. Identification of highly neurotic subjects will allow an appraisal of the differences between a pathological and normal sample. Alker (1972) has argued that past personality research has suffered from a lack of heterogeneity in subject populations and recommends combining normal and disturbed samples to observe the full range of variation.

The effects of the moderators, cross-situational consistency and public observability, on the two traits will be examined for the subgroups in an effort to determine whether the usefulness of these qualifiers is in any way influenced by position along the trait continua. In the pilot study, discussed earlier, these moderators were found to be ineffectual in promoting self-other agreement in groups of high and low anxious subjects.

The current study will also compare the method of global personality assessment with the more complex personality inventory. Mischel (1968) stresses that the greater the number of items assessed, the more the chance of reliability of the instrument and hence, validity. Vingoe (1966) has demonstrated the discriminative validity of global ratings, showing that subjects divided into introverts and extraverts on the basis of a seven point bi-polar scale had significantly different EPI Extraversion scores. Global ratings have been found to correlate well with the EPI Extraversion and Neuroticism scales when a brief description is provided for each trait prior to the self-rating (Harrison & McLaughlin, 1969) or when the scale, not accompanied by the experimenter's definition, is of considerable range (Farley & Soper, 1976). The relationship between smaller range global ratings, such as the 1 to 7 rating scales used by Bem and Allen (1974) and Kenrick and

Stringfield (1980), and the EPI scales will be examined in the present work. Further, the effects of the moderators on correlations between self judgements and the evaluations of others may be studied for both the global and specific forms of trait measurement.

By asking subjects to nominate three peers of varying levels of intimacy, the effects of emotional distance on self-other agreement can be examined. Intuitively it is felt that introverted and neurotic subjects may disclose less and thus be less predictable to more distant peers. Again, the effects of trait position and trait type will be assessed in the analysis of peer intimacy.

Unlike procedures in other studies, both correlational analyses and analyses of variance will be utilized to determine self-other agreement.

Predictions

1. EPI trait assessment will provide significantly greater agreement between self and peers than that obtained through uni-dimensional ratings.

2. Self-other congruence on the trait of Extraversion will exceed levels obtained in the assessment of Neuroticism.

3. The moderator variables Consistency and Observability will significantly enhance correlations between subjects and peers for the middle groups of Neuroticism and Extraversion.

4. Agreement between subjects and peers will also be increased by the moderators within the low and high ranges of Extraversion.

5. Extreme scorers on the dimension of Neuroticism will show negligible correlations between self and other ratings and these correlations will not be significantly influenced by the moderator variables.

6. For high Neuroticism subjects, the interaction between trait type and trait-position will produce significantly greater discrepancy between self and other assessments.

7. Peer intimacy will show the greatest effects for introverts and neurotic subjects, with increasing congruence directly related to intimacy level.

METHOD

Subjects

Subjects were 227 undergraduates registered in a 1980 fall semester psychology course at the University of Calgary. All questionnaires were completed during scheduled psychology lectures. At time of participation, subjects gave permission for the experimenter to obtain similar ratings from their nominated peers. With 45 subjects leaving the questionnaire incomplete, a total of 182 subjects were actually sampled. All participation was voluntary.

Materials

Eysenck Personality Inventory: All subjects completed the Eysenck Personality Inventory (EPI) (Eysenck & Eysenck, 1968). This fifty-seven item questionnaire yields scores on the traits of Neuroticism (N) and Extraversion (E), in addition to a lie score which assesses the tendency to 'fake good'. The EPI, originally developed in 1963, has received ample validational support since its origin (Eysenck & Eysenck, 1969; Tellegen, 1978). Test-retest reliability for the EPI is high, ranging between .84 and .94 (Eysenck & Eysenck, 1968). In the present experiment, the EPI was slightly modified to include variability and observability ratings between 1 and 7 for each item.[1]

Global Personality Rating: Similar to Kenrick and Stringfield's (1980) procedure, subjects made global personality assessments. This form consisted of four questions concerning the subject's Extraversion and Emotionality.[2] The four ratings involved selecting a point on a 1 to 7 scale to indicate a) the degree to which the subject possessed the trait in general, b) how variable the trait was across situations, c) how observable the trait was to others, and d) an ideal position on the trait dimension. This last variable has been included to examine whether self-assessments on these dimensions may be influenced by negative or positive valences inherent in the trait descriptors.

Inclusion of the 1 to 7 trait ratings served a dual purpose. First, it was an attempt to adhere as closely as possible to procedures used in previous studies of this type, and second, it was believed these measures may serve as a validity check of sorts. Such ratings allow us to

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[1] The inventories of forms completed by subjects and nominated peers are available from the author.

[2] Note that Neuroticism is referred to as Emotionality in the global rating form. The labelling has been altered to attenuate the strong negative connotation associated with the descriptor 'neurotic'. Since Eysenck has interpreted the Neuroticism factor as an emotional-stable dimension, there would appear to be no serious problem with this rewording.

ascertain if the subject's personal conception of the two traits corresponds to the dimensions the EPI is measuring.

The EPI will be referred to as the specific form while the 1 to 7 rating will be referred to as the global form of measurement.

Peer Nomination Form: This form asked the subject to designate three peers of varying degrees of acquaintance for participation in the study. The only restriction on peers named was that they not be a member of the subject's immediate family. For each peer nominated, subjects provided complete address information. The peer nomination form also obtained signed permission for the experimenter to contact the peers by mail and have them evaluate the subject's personality.

Design and Procedure

Before completing the questionnaire, subjects read a brief instruction sheet containing a sample EPI question. To control for possible order effects half of the subjects completed first the specific (EPI) and then the global rating form, while the balance of subjects were presented with the reverse order of forms. Completion of all forms required approximately 30 minutes. Once this data had been collected from participants, the nominated peers were contacted by mail. Peers completed forms identical to the subject except that the specific form did not contain the variability and observability ratings. While the global rating form was worded in the third person, the original format of the EPI was maintained and peers were asked to complete this inventory as they believed the subject would. Information was obtained from the peers regarding the nature and duration of the relationship with the subject.

Peers were asked to return the questionnaires in a pre-stamped university addressed envelope (provided by the experimenter) at their earliest convenience. All data included in the present results is from forms returned within a thirty day period.

Approximately 60 days after the subjects completed the personality inventories, two of the psychology sections were revisited and participants were asked to complete the global personality ratings again. This allowed a test-retest reliabiliy estimate to be calculated for this instrument.

Subjects were divided into High, Middle, and Low groups of Extraversion and Neuroticism on the basis of their scores on the EPI personality scales. Degree of congruence was assessed by computing the Pearson product moment correlations between self and peer rated specific scales and self and peer global trait ratings. The influence of the moderators was assessed for subjects as a whole and for subgroups by dividing the groups into high and low Consistency and high and low Observability on the basis of median splits. Separate analyses were performed on moderator reports for the specific items and those based on the global ratings. As well, the correlations between self and others were examined for those subjects who report being both highly consistent and highly observable. Data were also subjected to analyses of variance to determine whether difference scores between subject and peer ratings significantly depart as a function of trait being assessed, trait position, level of peer intimacy and/or measurement technique.

Correspondence was also examined between the two forms of personality assessment, in addition to determining the degree to which they permit agreement between subject and peer ratings. The extent to which subjects' ideal ratings differ from their self-evaluations is examined for associations with both trait type and trait position.

RESULTS

Subject Attrition

Table 1 depicts attrition rates for the initial 182 subjects. If all subjects had named three peers as requested, a total of 546 peers would have been contacted. As all subjects did not comply with this part of the study, only 481 peers were accessible. Due to attrition on the part of the peers combined with a few subjects supplying incorrect address information, 28% of the nominated peers did not complete the questionnaire. There were no significant differences in attrition rates between groups formed in relation to the two personality scales of Extraversion and Neuroticism.

In some cases, unfortunately, none of the peers named returned the forms, resulting in 14 subjects being dropped from all self-other analyses. Thus, our total sample consisted of 168 subjects.

Reliability of Global Measures

Twenty subjects completed the global personality form approximately two months after their initial participation in the study. Test-retest reliability figures for all ratings were found to be low. For the global personality assessments of Emotionality and Extraversion, reliabilities

TABLE 1

Subject Attrition

	Subjects	Possible Peers	Nominated	Returned
Neuroticism				
Low	53	159	134(84%)	89(66%)
Mid	77	231	204(88%)	152(75%)
High	52	156	143(92%)	106(74%)
Extraversion				
Low	57	171	147(86%)	107(73%)
Mid	68	204	179(88%)	131(73%)
High	57	171	155(92%)	109(70%)
Total	182	546	481(88%)	347(72%)

TABLE 2

Unmoderated Self-Other Correlations for All Subjects

All Subjects	Peer 1	Peer 2	Peer 3	Peer X
N - Specific	.33	.28	.35	.37
N - Global	.32	.19	.24	.25
E - Specific	.55	.55	.40	.63
E - Global	.19	.41	.22	.38
n	(139)	(122)	(86)	(168)

were .56 and .60 respectively. For consistency ratings the reliabilities were .42 and .49 for Emotionality and Extraversion respectively. The observability ratings were less reliable at .24 for the observability of Emotionality and .17 for Extraversion observability ratings. Assessments of the ideal position on the two dimensions resulted in reliability coefficients of .73 for emotionality and .72 for Extraversion.[1]

Peer Intimacy and Self-Other Congruence

Demographic data collected on peers shows that the length time the peer knew the subject was, for the most part, over three years for Peer 1, at least one year for Peer 2 and less than a year for Peer 3. In terms of relationship to the subject, Peer 1 was usually a close friend while Peers 2 and 3 tended to be acquaintances, classmates or coworkers. Referring to Table 2, the unmoderated correlations for all subjects, reveals that closeness of peer exerts no effect on self-other agreement.

The hypothesis that High Neurotics and Introverts, perhaps disclosing less, would show more agreement with Peer 1 than with Peers 2 and 3 was not supported. Though with the most distant peer, Introverts show virtually no agreement, this difference is not significantly different

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[1] In keeping with other studies of this nature, the scale of measurement is assumed to interval.

from the correlation of .22 obtained when E status is not considered. High Neurotic subjects show relatively consistent agreement across peers. In a two-way (Position x Peer) analysis of variance using all subjects no main effect or interaction on self-peer difference scores were observed for peer intimacy. This result held for Extraversion group (source: Peer, $F(2,338) = 2.23$, $p > .01$; source: Peer x Position, $F(4,338) = .53$, $p > .01$) and Neuroticism groups (Peer: $F(2,338) = .79$, $p > .01$; Peer x Position: $F(4,338) = .76$, $p > .01$).

Fearing that missing information at the various peer levels may have obscured the impact of peer intimacy, a group of 52 subjects, who had nominated three peers and for whom all three peers had completed the ratings, was identified. Examining self-other differences for this group showed results similar to the earlier analyses with no effects for peer operating. Thus, all future analyses will be performed on the mean of peer ratings.

Unmoderated Correlations for All Subjects

As no significant effect on self-ratings as a function of presentation order of the two personality assessment forms was found, all respondents have been treated as one group forming a total sample of 168 subjects. In keeping with previous studies of this kind, most of our self-other correlations were modest, clustering around .30. The mean self-peer correlation for all four ratings was .25. A look at the subject-mean peer correlations in Table 2 shows that one striking exception arises in this pattern. Assessment of subjects' Extraversion with the Eysenck Personality Inventory allowed significantly greater agreement between subject and peer than on any other rating (.63 vs .37, $p < .001$; .63 vs .25, $p < .001$; .63 vs .38, $p < .001$).[1,2]

Mean scores for subject and peer ratings for the four scales, presented in Table 3, indicate that subjects show higher specific Neuroticism scores than those obtained through peer assessments ($t(166) = 4.8$; $p < .001$). All other mean differences between self and peer ratings were nonsignificant.

Specific Versus Global Ratings

Our prediction that assessments made on the basis of a detailed questionnaire such as the EPI would yield greater accuracy in observer ratings of subjects was essentially supported. The self-other correlation based on mean peer

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[1] All tests of significance are performed on Fisher's Z-score transformations of the correlation coefficients.

[2] Probability rates are reported for all comparisons. Using Dunn's multiple comparison procedure (Keppel, 1973), alpha has been adjusted on a per comparison basis. With 20 comparisons performed, to maintain a .05 error rate, the critical level of alpha becomes .002.

TABLE 3

Means and Standard Deviations for All Subjects

Rating		Subject	P1	P2	P3	PX
N - Specific	Mean	12.0	10.1	10.4	9.4	9.9
	S.D.	4.3	4.8	4.8	4.9	4.8
E - Specific	Mean	12.4	12.9	13.5	12.6	12.9
	S.D.	3.9	4.5	4.7	5.1	4.7
N - Global	Mean	4.6	4.5	4.5	4.1	4.4
	S.D.	1.4	1.4	1.5	1.4	1.2
E - Global	Mean	4.1	4.4	4.2	4.3	4.3
	S.D.	1.6	1.5	1.6	1.6	1.4

scores for the specific measure (EPI), N and E combined, was .51 as compared to .31 for the two global ratings. This difference which occurs at the p .01 level is largely influenced by the high congruence on the Extraversion dimension of the EPI. The correlation here between mean peer and subject of .63 is considerably above those obtained in Kenrick and Stringfield's study in which the maximum unmoderated correlations on global assessment of Cattell's 16 personality factors was .46. A situation specific approach to trait assessment did not prove significantly superior to a global rating on the Neuroticism dimension though a small increment was evident (.37 vs .25, $p > .01$). Some advantage, it is clear, over global ratings is possible with more sensitive, albeit more complex measures.

The correspondence between the global and specific rating of the two traits, though significant, is surprisingly low. For Emotionality the two scales correlate .42 ($p < .001$); for Extraversion they correlate .48 ($p < .0001$).

Trait-Position,Trait-Type and Self-Other Congruence

Subjects were divided into High, Mid and Low groups of Neuroticism by simply dividing the two original EPI distributions into thirds. The fact that clean division at exactly the 33rd and 66th percentile was made impossible by ties at these points resulted in unequal n's among groups.

TABLE 4

Mean Scores, Range, and Sample Size for Subgroups

Group	EPI Score Range	n	Specific Mean Score	Global Mean Score
Low Neuroticism	2 - 9	48	7.0	3.8
Mid Neuroticism	10 - 14	73	12.0	4.7
High Neuroticism	15 - 23	47	17.2	5.3
Low Extraversion	3 - 10	53	7.9	3.2
Mid Extraversion	11 - 14	65	12.5	4.2
High Extraversion	15 - 22	50	17.0	4.9

Ties were, in each case, included in the Mid range group. Score range, sample size and means are presented for the six groups in Table 4. In terms of self-other congruence for these groups, Table 5 clearly reveals that our hypothesis predicting a lack of agreement between subject and peers for High Neuroticism scorers was not confirmed. High Neurotic subjects show as good, and in most cases better agreement, with their peers as the Low and Mid Neurotic group. For the globally assessed traits, correlations exceed those obtained when subjects are taken as a whole but are not significantly improved. The only comparison that approached significance is of the High and Low Neurotic groups on the global emotionality rating (.47 vs .02, $p < .008$). Dividing subjects into the three Extraversion groups resulted overall in a decrement in coefficent size. No one position along the Extraversion dimension appears superior in enhancing self-other agreement on any of the four scales.

While correlation captures the extent to which the subject-peer ratings systematically covary, it may at the same time mask the magnitude of self-other discrepancies. Thus, two three-way analyses of variance were conducted in which the dependent variable was the normalized[1] subject-peer difference score. Subjects were nested within

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[1] Scores were normalized by subtracting the mean for each measure and dividing by the individual cell standard deviations.

TABLE 5

Self-Other Congruence Within Subgroups

Low Neuroticism	
N - Specific	.15
N - Global	.02
E - Specific	.78
E - Global	.38
n	(48)
Mid Neuroticism	
N - Specific	.08
N - Global	.32
E - Specific	.48
E - Global	.24
n	(73)
High Neuroticism	
N - Specific	.35
N - Global	.47
E - Specific	.57
E - Global	.54
n	(47)
Low Extraversion	
N - Specific	.30
N - Global	.20
E - Specific	.24
E - Global	.42
n	(53)
Mid Extraversion	
N - Specific	.37
N - Global	.18
E - Specific	.31
E - Global	.11
n	(65)
High Extraversion	
N - Specific	.37
N - Global	.43
E - Specific	.16
E - Global	.20
n	(50)

the position factor (Low, Mid, High) and measurement technique (Global, Specific) and trait assessed (Neuroticism, Extraversion) were treated as repeated measures. A separate analysis was performed for E and N groups. Table 6 reveals that when subjects were grouped on the basis of EPI-E scores, all possible two-way interactions emerged as significant. Figure 1 illustrates the position x trait, position x measure, and measure x trait interactions in this analysis. As the interaction between all three factors (shown in Figure 2) was not significant, simple main effects (Keppel, 1973) were explored for the two-way interactions. Measure was found to have its greatest effect for Introverts with the specific form contributing the most variance to self-other discrepancies ($F(1,163) = 6.86$, $p < .01$, Figure 1b). While the difference between between the specific form and global form of measurement is significant at the .05 level ($F(1,163) = 6.62$) for High Extraverts, a Tukey's test of the means (Kirk, 1968) shows that the difference in magnitude between each measure's effect on self-other discrepancy scores in nonsignificant. Again, for Introverts, trait type had its greatest effect ($F(1,163) = 28.75$, $p < .001$, Figure 1a). This group show a significant negative discrepancy from their peers in rating themselves on extraversion, while the Mid and High Extraverts do not significantly differ from their peers when rating this dimension. For the measure x trait interaction, a simple

TABLE 6

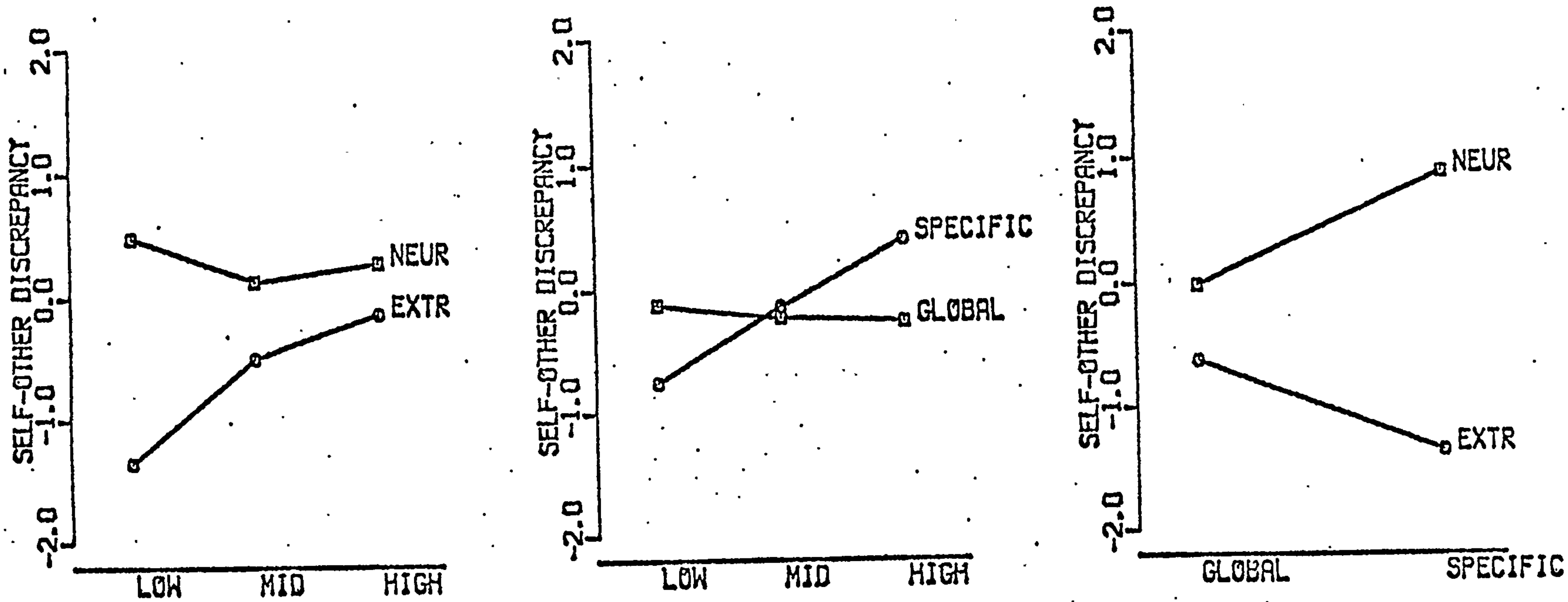
Effects of Trait, Measure and Position on Self-Other Differences for Neuroticism Groups

Source	SS	df	MS	F	sig.
Position	38.36	2	19.18	14.93	.0001
ss/P	209.33	163	1.29		
Measure	.00	1	.00	.00	ns
M x P	5.22	2	2.61	2.94	ns
M x ss/P	144.66	163	.89		
Trait	36.03	1	36.03	32.15	.0001
T x P	56.36	2	28.18	25.15	.0001
T x ss/P	182.63	163	1.12		
M x T	7.58	1	7.58	10.81	.002
M x T x P	5.49	2	2.74	3.91	.03
M x T x ss/P	114.27	163	.70		

TABLE 7

Effects of Trait, Measure and Position on Self-Other Differences for Extraversion Groups

Source	SS	df	MS	F	sig.
Position	6.31	2	3.16	2.27	ns
ss/P	226.20	163	1.39		
Measure	.00	1	.00	.00	ns
M x P	10.68	2	5.34	6.81	.001
M x ss/P	127.87	163	.79		
Trait	37.09	1	37.09	31.31	.0001
T x P	15.40	2	7.70	6.50	.002
T x ss/P	193.13	163	1.18		
M x T	11.95	1	11.95	17.76	.0001
M x T x P	3.41	2	1.71	2.53	ns
M x T x ss/P	109.77	163	.67		



a) Trait x Position b) Measure x Position c) Measure x Trait

FIGURE 1 Two-way Interactions for Extraversion Groups

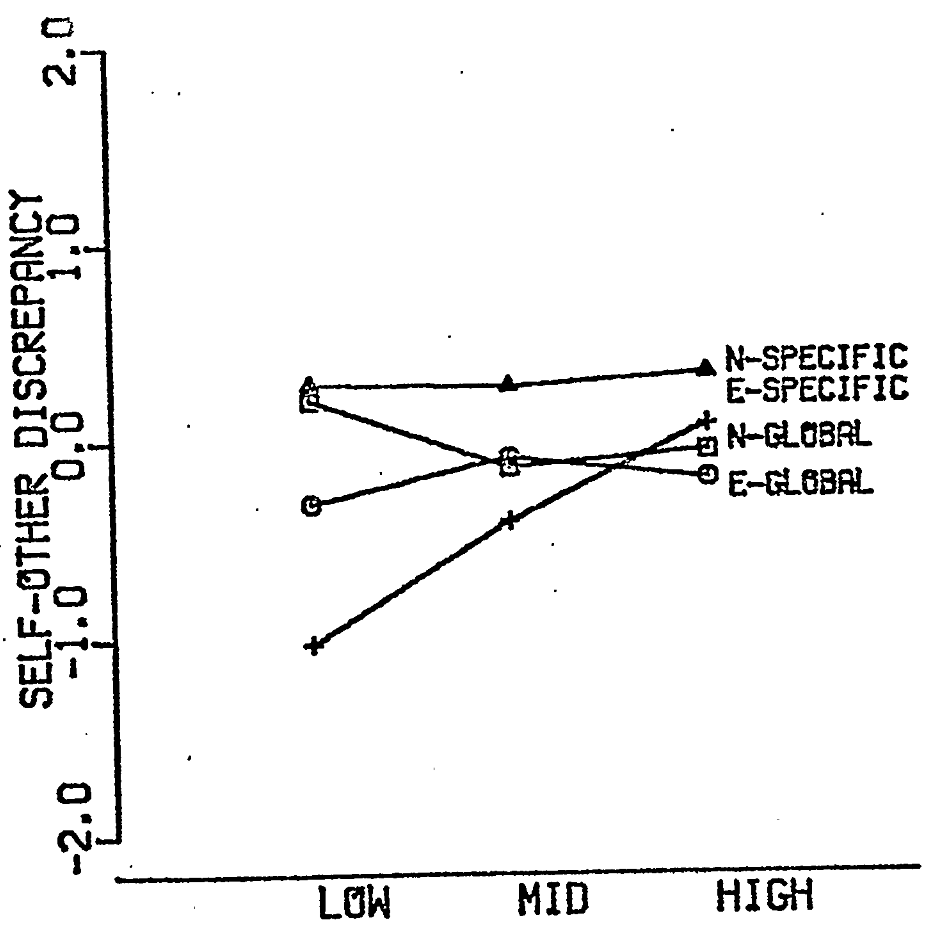


FIGURE 2
Trait x Measure x Position Interaction for Extraversion Groups

main effect of trait occurs for for the specific measure only ($F(1,163) = 70.4$, $p< .0001$,Figure 1c). Specific trait assessment results in a high positive discrepancy for Neuroticism ratings and a high negative discrepancy for Extraversion ratings.

The second analysis, partitioning subjects on the basis on EPI-N scores yielded a significant three-way interaction, shown in Table 7. A simple interaction analysis identified a trait x measure effect for both Mid ($F(2,163) = 5.07$, $p< .01$) and High Neurotic groups ($F(2,163) = 5.16$, $p< .01$). A further analysis of the simple, simple mains (Keppel, 1973) revealed that trait had a significant effect if specifically measured for Mid Neurotics ($F(1,163) = 20.09$. $p< .001$) and for High Neurotics ($F(1,163) = 56.95$, $p< .0001$). For the High scorers, the effect of trait held for the global measure as well ($F(1,163) = 8.16$, $p< .01$). For the Mid Neurotic group, while the difference between specific Neuroticism and Extraversion discrepancies is significant, it is clear in Figure 3 that the deviations associated with each trait are similar in magnitude. Figure 3 graphically depicts the effects of both repeated variables at the various levels of Neuroticism, showing that the specific form of measurement for the trait of Neuroticism in the High Neurotic group results in the greatest self-other difference. The extent to which trait-type contributes to this effect is evident in Figure 4.

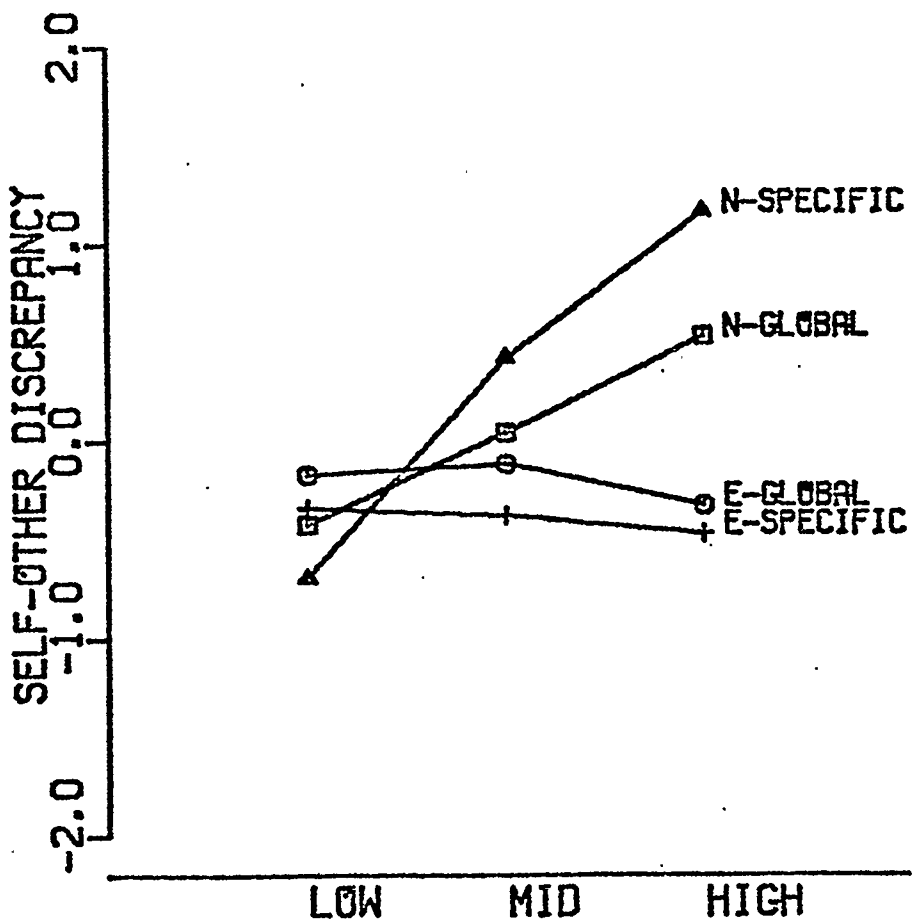


FIGURE 3
Trait x Measure x Position Interaction
for Neuroticism Groups

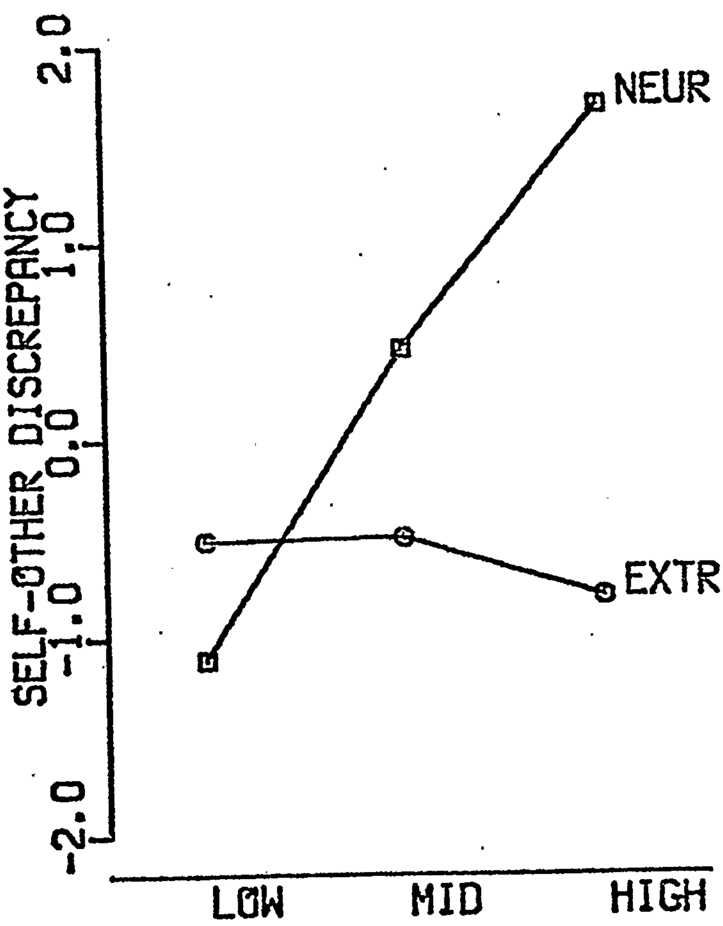


FIGURE 4
Trait x Position Interaction for Neuroticism Groups

Thus, we were surprised the same effect didn't occur when grouping subjects on the basis of a global variability rating. While agreement for the low variability group of the specific E dimension is not significantly improved, .63 as an unmoderated correlation is remarkably high against the traditionally recognized .30 maximum in validity coefficients (Bem & Allen, 1974). Even with the use of the moderator Consistency in a trait by trait examination, Kenrick and Stringfield could at most elevate self-other agreement to .51. This increment was only accomplished on the trait of friendliness with the high Consistency group unable to break .50 on any of the other 15 remaining Cattell dimensions.

Observability: On the dimensions of Neuroticism and Extraversion, use of the moderator, Observability, appears as ineffectual as Consistency (see Table 9). Again in one instance (global E), enhancement was observed in the direction opposite to that predicted. For the reverse and predicted effect, unfortunately, no significant improvement is achieved over the unmoderated correlations for the mean peer ratings. Kenrick and Stringfield met with considerably more success in demonstrating that agreement on 13 of their 16 Observability moderated trait ratings was improved over a low Observability group, yet also conclude that overall this moderator is limited in enhancing trait predictability.

TABLE 8

Consistency Moderated Correlations for All Subjects

	Specific Lo	Specific Hi	Global Lo	Global Hi
Neuroticism	.41	.37	.18	.41
Extraversion	.55	.70	.35	.42

TABLE 9

Observability Moderated Correlations for All Subjects

	Specific Lo	Specific Hi	Global Lo	Global Hi
Neuroticism	.18	.49	.16	.38
Extraversion	.60	.63	.38	.35

TABLE 10

High Consistency, High Observability Subjects

	Specific	Global
Neuroticism	.52	.60
Extraversion	.68	.40

Thus, we were surprised the same effect didn't occur when grouping subjects on the basis of a global variability rating. While agreement for the low variability group of the specific E dimension is not significantly improved, .63 as an unmoderated correlation is remarkably high against the traditionally recognized .30 maximum in validity coefficients (Bem & Allen, 1974). Even with the use of the moderator Consistency in a trait by trait examination, Kenrick and Stringfield could at most elevate self-other agreement to .51. This increment was only accomplished on the trait of friendliness with the high Consistency group unable to break .50 on any of the other 15 remaining Cattell dimensions.

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Also tested was Funder's (1980) finding that traits showing the higher correlations would be rated as more observable. Extraversion Observability ratings were significantly higher than those for Neuroticism whether the rating was global ($t(167) = 3.92$, $p < .0005$) or specific ($t(167) = 7.05$, $p < .0001$). Like Funder's results self-other correlations were higher for the more observable trait of Extraversion.

High Consistency and High Observability Subjects: Grouping those subjects who were above the division points on both moderators allowed us to assess the combined effects of Consistency and Observability. Again the results of this analysis are present for both the general and specific methods of dichotomizing subjects. As is clear from Table 10, the global use of the moderators results in significant improvement for the emotionality rating (.60 vs .25, $p < .002$). This partitioning of subjects appears to be the most promising yet with some improvement being gained on every rating.

Moderator Effects within Subgroups

To examine the effects of the two moderators on the Low, Mid, and High groups of Neuroticism and Extraversion, subjects within these groups were classified as either high or low Consistency (Observability) on the basis of first specific and then global ratings. Table 11 shows that

TABLE 11

Consistency Moderated Correlation for Subgroups

	Specific		Global	
	Lo	Hi	Lo	Hi
Neuroticism				
Low Neuroticism	.10	.37	-.12	.29
Mid Neuroticism	.31	.03	.05	.48
High Neuroticism	.48	.08	.51	.42
Extraversion				
Low Extraversion	.28	.71	.43	.43
Mid Extraversion	.15	.26	.37	-.07
High Extraversion	.17	.14	.05	-.10

TABLE 12

Observability Moderated Correlations for Subgroups

	Specific		Global	
	Lo	Hi	Lo	Hi
Neuroticism				
Low Neuroticism	-.07	.38	.00	.59
Mid Neuroticism	.04	.24	.41	.27
High Neuroticism	.55	.24	.29	.16
Extraversion				
Low Extraversion	.51	.56	.46	.48
Mid Extraversion	.37	.28	-.06	.16
High Extraversion	-.01	.32	-.55	.24

overall the moderator, variability, is ineffectual. The High Neurotic group show a trend similar to when subjects are taken as a whole in that low Consistency facilitates agreement between subjects and peers for both the global and specific forms of measurement. In general, global assessment of variability results in negligible differences in correlation in the three Neuroticism groups. Similarily, this moderator did not enhance coefficients for the Extraversion groups. Examining the correlations for globally assessed variability, we see that the coefficients for the Mid and High Extraverts drop to negative relationships. Selecting subjects who rated themselves as highly Observable on the global N dimension allowed significantly greater agreement for the Low Neuroticism subjects (as represented in Table 12; .59 vs .02 $p < .0001$). High Neuroticism scorers though, are more in line with their peers on the specific rating if they feel their emotionality is not observable to others. For the Extraversion groups Observability moderation produced no meaningful improvement. A low negative relationship emerged for globally assessed low Observability for the high E group.

Actual Versus Ideal Ratings

The means of the subjects' ideal ratings for Extraversion and Neuroticism of 4.5 and 4.2 respectively, do not significanlty differ ($t(167) = 1.8$). The degree to which subject's assessment of self differs from an ideal point on trait dimensions was found to be very much a function of relative position on that trait. This finding held for both Extraversion groups ($F\ (2,165) = 18.6$, $p < .0001$) and Neuroticism groups ($F\ (2,165) = 12.3$, $p < .0001$). A Tukey's comparison of means test (Kirk, 1968) revealed that the self-ideal discrepancy in the High Neurotic group was significantly greater than that found in the Low and Mid Neuroticism subjects. For the dimension of Extraversion, the Introverts were farther from their considered ideal than the other two groups. It was noted that the Neurotics' ideal rating was lower then their actual position while Introverts felt an ideal level of Extraversion was higher than their characteristic position.

Social Desireabiliy

Eysenck and Eysenck (1963) have stated that Lie scores of 4 or greater must be considered suspect as the respondent may have falsified his report thus invalidating his scores on the N and E scales. In the hopes of enhancing self-other agreement, we dropped all subjects for whom either the subject or one of the peers had Lie scores of 4 or more leaving a sample of 94 subjects. As shown in Table 13 this selection had virtually no effect on Neuroticism but caused a slight decrease in Extraversion self-other correlations. As it clear from Table 14 deleting the high Lie scorers did not seem to substantially influence self-other congruence at any position of Extraversion or Neuroticism for either form of assessment.

Overall the Lie scale correlates -.10 with Neuroticism and -.21 with Extraversion.

TABLE 13

Self-Other Correlations for Honest Subjects

N - Specific	.38
N - Global	.24
E - Specific	.51
E - Global	.34
(n = 94)	

TABLE 14

Self-Other Correlations for Honest Subgroups

	Specific	Global
Low Neuroticism		
N	.14	.21
E	.75	.33
(n = 22)		
Mid Neuroticism		
N	.15	.20
E	.39	.28
(n = 43)		
High Neuroticism		
N	.28	.40
E	.44	.47
(n = 29)		
Low Extraversion		
N	.64	.31
E	.32	.35
(n = 20)		
Mid Extraversion		
N	.26	.24
E	.16	.16
(n = 41)		
High Extraversion		
N	.26	.05
E	.34	.27
(n = 33)		

DISCUSSION

Measure and Moderator Influence on Self-Other Congruence

Although the concurrent validity of global ratings with regard to Extraversion has previously been demonstrated (Farley & Soper, 1976; Harrison & Mclaughlin, 1969; Vingoe, 1966), the present study found the correspondence between specific and global assessments to be unimpressive. That less than 25 percent of the variance is shared by the two instruments suggest that subject's implicit understanding of what is entailed by the trait terms Extraversion and Neuroticism differs from the personality categories encompassed by the EPI. The two measures showed not only limited systematic covariation but a differential effectiveness in relation to self-other agreement. In general the specific measure (complete EPI questionnaire) proved superior to global ratings for this purpose. This is not too surprising in that when observers make judgements of actors' personalities, such judgements would seem to be the result of a review of behaviours exhibited by the target person. As Bem and Allen (1974) point out, we don't first impose a label on the personality in question but rather organize the representative behaviours into a common category. Thus, in asking peers to assess subjects on certain traits, the EPI provides a kind of behavioural checklist which would facilitate the evaluation process.[1] Global assessment, on the other hand, in not providing examples of discrete trait-relevant behaviours, relies primarily on recall and hence, allows more room for error. Moreover, the trait terms may by defined differently by different individuals (Schneider, 1973) and thus contribute to disagreement between raters.

The effects of the moderators, Consistency and Observability, were also different for the two types of assessment. However, though differences were observed, it is evident that moderator effects were too weak to be considered practical for either measurement. When subjects were dichotomized on the basis of the global variability ratings, effects on self-other congruence were consistent with Bem and Allen's findings. Low situationally variable subjects show somewhat greater agreement with their peers than their highly variable counterparts. Like Bem and Allen's data though, in no case is the increment significant over the unmoderated correlations. When variability was measured by the mean of the EPI items, low variability allowed some improvement in congruence but only for the trait of Extraversion.

Neuroticism ratings showed an opposite trend after

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[1] This is not to imply that the EPI is only comprised of overt behaviours, but rather that attitudes and beliefs must also be considered behavioural response indices.

Consistency moderation, with situationally inconsistent subjects becoming more congruent with their peers. This seeming enigma concurs with Kenrick and Stringfield's (1980) results on Cattell's emotionality dimension. Emotional variability appears to be more easily recognized by observers. While there is little theoretical basis for this finding in the personality literature, work in the information processing area provides a possible interpretation of such results (Moray, 1969) Often, the more inconsistent or unpredictable a stimulus is, the more impact its presentation has on the perceiver. Thus, variable emotional reactions may act as attention gainers, alerting the observer to that aspect of the subject. In accomodating the inconsistent behavioural information, the observer may indulge in a closer examination of the target person and as a result acquire a more lucid and accurate impression of him/her.

Overall, the effects of the moderator, cross-situational Consistency, appear to be unsystematic. Consistency, it seems particularly on private dimensions of self, is not always available to outside observers. Though Bem and Allen have shown that high and low variable subjects differ significantly on experimenter defined behavioural indices, trait variability was not a factor in determing self-other congruence in their or our work. Kenrick and Stringfield have also concluded that no functional advantage is gained in incorporating the moderator, Consistency. In fact the correlation between the mean Consistency rankings and the obtained coefficients for Cattell's 16 personality factors was near zero. A serious problem with this moderator may be finding a valid measure of Consistency, one that means the same to the individual raters (Mischel, 1973). There is, at present, no empirical validation of self-report Consistency measures and certainly, the present study has demonstrated that the reliability of such reports is questionable.

Examination of the moderator, public Observability, revealed the same spotty performance. Like Consistency, a lack of Observability sometimes resulted in more agreement between self and others on Neuroticism and Extraversion. These results are in line with Kenrick and Stringfield's which showed the same irregularities as a result of Observability moderation. It was noted that the dimension of Extraversion, generally evidencing greater subject-peer correlations, was characterized by higher Observability ratings than Neuroticism. It seems though, that Observability does not promote self-other agreement. Rather, Extraversion, by nature, may simply be a more public dimension. And, though Funder (1980) may argue that is is the socially desirable aspects of Extraversion that contribute to the consensus, this study found that the ideal ratings for Extraversion status were not significantly different from emotionality.

As discussed in the Results section, our predictions regarding the effects of the moderator variables on the subgroups were not confirmed. The moderators did not prove to be more useful at any particular location on either trait. Personality researchers may do well, at this point, to abandon the pursuit of Consistency and Observability as variables in attempts to establish consensual validation of traits, at least until some construct validity has been demonstrated for these moderators.

Trait Deviance and Self-Other Agreement

The rationale behind controlling for the effects of trait Observability was basically that the individuals are assumed to be aware of how accessible a particular aspect of their character is to others (Kenrick & Stringfield, 1980). That the subject may be the best source of information about his own behavior, given that he has the most experience observing himself has been stressed by a number of theorists (Bem, 1972; Mischel, 1973). Since, in actuality, this appears not to be the case, the lack of agreement between subjects and peers must be influenced by other factors. The present experiment has demonstrated that this may in part be due to deviance on trait dimensions. Correlations between self and others were little influenced by the division of subjects into low, mid and high Neurotics and Extraverts, yet the size of the subject-peer discrepancies varied markedly as a function of grouping. While high Neurotic subjects estimated their Neuroticism as significantly higher than their peers' assessments, Introverted subjects showed a strong tendency to report their Extraversion as lower than as was perceived by their peers. The discrepancy observed for the high Neurotic subjects was robust enough to emerge whether assessments were global or specific, whereas the difference in the Introverted group was only apparent with the more sensitive, specific, measure.

One possible explanation for the self-other differences in these two groups is that both are plagued by social shyness. Introverts are said to prefer to avoid social participation due to a lack of interest, while Neurotics tend to avoid social activity out of fear (Eysenck & Eysenck, 1969). Thus, both personalities, being less socially active, may lack sufficient social interaction thereby preventing realistic evaluation of self and/or precluding the opportunity for adequate peer evaluation.

The difficulty of achieving consensual agreement on the trait of Neuroticism generally, whether examining self-other correlations or difference scores, corroborates earlier speculation regarding the complex nature of emotionally laden components of personality. The finding that high Neurotic subjects tend to report their Neuroticism as higher than it is actually perceived to be by outsiders, is parallel to the results of the pilot work involving socially anxious subjects and suggests that pathology related factors may be influencing the self-perception process. These results confirm predictions derived from Bem's (1972) Self-Perception theory. Bem has suggested that the salience of internal cues may be related to the disparity between and actor and observer perceptions. In the assessment of traits which involve a large internal component, the actor will devote a substantial amount of attention to cues that the observer cannot be privy to. Wicklund (1975) has argued that any stimuli that induce self-focus will influence the self-evaluation process. A postulate of both Bem's Self-Perception theory and Wicklund's Objective Self Awareness theory is that if attention is directed towards the self and away from the environment, little opportunity is available to observe the social feedback considered instrumental in shaping self-concepts. One who is attentive to and sensitive to social stimuli is more likely to develop an image of self that is reasonably consistent with that formed by outsiders (Shrauger & Schoeneman, 1979).

Certain factors, it seems, in the highly neurotic or anxious personality direct attention to self resulting in an inadequate surveillance of the social environment or, perhaps an interference with veridical perception of envrionmental cues (Sarason, 1975). As physiological arousal has repeatedly emerged as a precipitator of self-focused attention (Bem, 1972; Borkovec, 1976; Carver &

Scheier, in press), the labile autonomic nervous system, concomitant of Neuroticism, (Eysenck & Eysenck, 1969), may direct attention inward in the personality type.

While a number of other factors may be influencing the divergence between self and other assessments of neurotic subjects, the strong somatic component associated with this group suggests their self-perception may be influenced in a way similar to highly anxious subjects. Many studies demonstrating the link between Neuroticism and anxiety are available. The N dimension shows a significant postive relationship with the Taylor Manifest Anxiety scale (Eysenck & Eysenck, 1969; Meites, Lovallo, & Pishkin, 1980), the Speilberger Trait Anxiety scale (Loo, 1978), and measures of both somatic and psychic anxiety (Schalling, Cronholm, & Asberg, 1975). Just as high socially anxious subjects were found to report their anxiety as significantly higher than as assessed by their peers, neurotic subjects showed a similar tendency to over report their Neuroticism. Thus, high levels of anxiety and Neuroticism, characterized by physiological overreactivity, may engender a shift in attention from external to internal concerns.

As to whether this attention to self results in an ignorance of social feedback and, as a consequence, promotes an inaccurate representation of self or whether the self-focus enables a more perspicuous self-percept is somewhat equivocal. As the effects of awareness of autonomic arousal have been well argued (Costello, 1971) and repeatedly demonstrated (Borkovec, 1973, 1976; Buss, 1980; Carver & Scheier, in press), it is conceivable that autonomic nervous system activity may exert a greater attentional demand and hence, have a more pronounced influence on self-perception.

As well, there has been some suggestion with regard to anxiety that with an awareness of somatic events, a magnification of the anxiety experience may ensue (Nichols, 1974). Such theorizing explains why the high socially anxious pilot subjects experiencing somatic symptoms felt their nervousness was considerably more manifest than it actually was. The present data suggest that similar phenomenon may be operating in the high Neurotic group causing them to overestimate their emotionality.

Interpretation of the self-other discrepancies observed for Introverted subjects is more difficult. These individuals evidenced a notable departure from peer ratings, believing themselves to be more introverted than they appear to others. The social withdrawl common to this population could mean Introverts are deprived of the interpersonal feedback deemed necessary for self-evaluation. Or possibly, the lack of social contact may preclude others having the opportunity to encode sufficient information to develop a representative schema of the Introverted person. As well, it is conceivable that the lack of affiliation with others would allow considerably more attention to be directed towards self. As with high Neurotic subjects, such self-focus may interfere with the self-perception process. Though Introverts exhibit higher EEG activity than Extraverts (Eysenck, 1969; Gale, 1973, cf. M.W. Eysenck, 1976), the impact of such cortical arousal on conscious awareness has not been demonstrated. Thus, at present the attentional deployment of the Introvert may not be attributed to physiological mechanisms.

Actual versus Ideal Trait Position

Interestingly, it is the two groups which evidence the greatest discrepancy from their peers assessment that appear to be discontent with their standing on the relevant dimension. Except for the Introverted and Neurotic individuals, characteristic and ideal levels of Extraversion and Neuroticism generally coincide for all other subjects. It seems that the preferred level of emotionality for Neurotic subjects is significantly lower than their actual level based on self-evaluation. Introverted subjects also express a discontent with their low Extraversion status stating that an ideal position would be one significantly higher than their own. These two groups not only appear to recognize their deviance on these traits but also intimate a belief that there is some maladjustment associated with their position. The heightened self-concern, typical of Neurotics, may engender a worry over one's inadequacies. Objective self awareness theory states that self-focus produces a comparison between actual and ideal self creating a negative affect if one falls short of the desired self. Introverted subjects see themselves as less extraverted than their peers perceive them, and thus might be closer to their ideal position. As well, Neurotic subjects are perceived as less emotional than their own self-reports and nearer to their believed ideal.

Accuracy in Person Perception

For the most part, the issue of accuracy has been ignored in the study of person perception. When a lack of agreement is observed among perceivers, as is the case in most studies examining self-other congruence, responsibility may be assigned to a number of posssible agents. Presumably, when congruence is achieved, we conclude that the impressions of both raters are accurate and that accounts for their concordance. When disagreement occurs, however, interpretations are less clear. Disagreement may be due to one of the following: a) the subject misperceives him/herself, b) the observer misperceives the subject, or c) both a) and b). As well, at some point, one might want to consider such epistemological issues as whether traits are at all measureable. The present discussion will concern itself with the three more tangible possibilities.

One school of thought proposes that only the individual can be a reliable source of information given his/her exclusive experience with self (Bem, 1972; Mischel, 1973), and argues against notion a) above. Clearly the frequent use of self-report measures in psychological research attest to the pervasive acceptance of Bem and Mischel's position. There is, however, a growing body of evidence that suggests a number of variables may influence perception of self (see Buss, 1980 for a recent review). The factor that the previous section of this discussion emphasized was that of emotional arousal. While such internal activity may direct activity away from environmental cues and obscure objectivity, it may be too great an inferential leap to conclude that the resulting self-perception is erroneous. In fact, if heightened phsyiological arousal is experienced, then this, being a correlate of Neuroticism (Eysenck & Eysenck, 1969) and anxiety (Lang, 1978), would seem proof that the indivdual is in the pathological range of those dimensions and thus his/her assessments of self are accurate.

In terms of the accuracy of peer's perceptions, it may be argued that the lack of agreement among peers is evidence that the error variance is attributable to observers. This though, may be due to the influences of peer intimacy in that one level of intimacy may be more expedient in promoting accurate objective evaluation over other levels. The present work found no effect for peer intimacy suggesting that any effect of this variable is not pervasive enough to enhance self-other agreement. Cantor and Mischel (1979) suggest that when one knows a person well, the surface inconsistencies in behaviour across situations are probably less influential. As well, the 'fundamental attributional error' (Jones & Nisbett, 1972) to attribute a trait basis to actors' behaviour is depicted as an error on the part of the observer.

The issue of accuracy in person perception is a nebulous one. While the present work has found some support for the notion of arousal-interference in self-perception in that it was only the high neurotic group who significantly overestimate their emotionality, it is clear that even this interpretation is not as straightforward as it seems. Moreover, while agreement in group means was obtained for the other subjects, the lack of predictable covariation among raters in all subgroups indicates that a high level of congruence between any one pair of raters may be unattainable even in non-deviant subjects. Thus, it seems that the lack of agreement is due to both actors and observers. The degree of self-other disagreement due to the actor seems to vary with the actor's deviance on trait dimensions, particularly if his/her position on that trait may be construed as pathological. As well, accuracy of self-percept appears to be influenced by the amount of self-directed versus other-directed attention.

CONCLUSIONS

In summary, the present study has uncovered no usefulness in incorporating the moderator variables, Consistency and Observability, in personality measurement. This may be due to the fact that self-report measures of such aspects of self are highly unreliable. The major findings herein are a) the superiority of the Eysenck Personality Inventory in allowing higher self-other correlations over global personality ratings, b) that self-other mean differences are significantly increased in certain predictable ranges of the distribution being measured, c) that actual and ideal ratings also significantly depart for Introverted and Neurotic subjects, and d) that, irrespective of trait status, agreement on emotionally laden traits, such as Neuroticism, is more difficult to achieve than on a pathologically neutral trait like Extraversion.

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