

"THE OBJECT-PERSON HYPOTHESIS"
A DIMENSION FOR INTERACTION
ANALYSIS

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THEIR



ABSTRACT

"THE OBJECT-PERSON HYPOTHESIS" A DIMENSION FOR INTERACTION ANALYSIS

By

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The Object-Person hypothesis was proposed in an effort to contribute to the understanding of how individuals treat others. The construct describes a continuum of behaviors and concepts, elements of which can be labelled object-oriented and other elements of which can be labelled person-oriented. The object-oriented individual treats others in such a way that he negates their individuality; thus, he tends to give advice as if it were an order and his statements must be treated as "truth". In contrast the person-oriented individual is more open about his feelings and treats others with respect for their individuality; thus he tends to give advice as counsel, statements as information. The idea closely parallels that of Maslow's (1964) self-actualizing and deficit-motivated men.

It was hypothesized that trained observers could reliably rate Ss as object-oriented or person-oriented. Furthermore, it was hypothesized that others who interacted with each S could reliably rate S and that Ss self-ratings would be less related to "others'" ratings and observer ratings than the latter two would be to each other.

Two measures were designed to rate the object-person construct. One, the Behavior Impressions (BI) is a series of 5-point scales designed by E using the concepts involved in the object-person construct. The second, the Object-Person Rating Scale (OPRS) is a behavioral measure consisting of six categories of behaviors set along the object-person continuum. This measure was designed by E and the three observers, who subsequently served as trained raters. Three pre-group measures were included; the Marlowe-Crowne Social Desirability scale, the Es scale of the MMPI, and the Attribute Preference Inventory (form 5), a measure of the expressiveness-conformity dimension. Other correlate constructs were included as items 9-12 of the BI: likeability, individuality, ingratiation and how much S was liked by the rater.

In order to get to know one another Ss participated in interaction groups for four sessions of 90-120 minutes each. Following the group interactions Ss were randomly paired off within groups and asked to interact for 40 minutes. During this time they were rated by the three trained observers.

Significant reliabilities, ranging from 0.60 to 0.70 were obtained between the three observers on the OPRS and between the observers' impressions of Ss on the BI and OPRS ($\underline{r} = .88$). The intraclass reliability between raters on the OPRS was 0.85. The hypothesis that the object-person construct provides a set of behaviors that can be

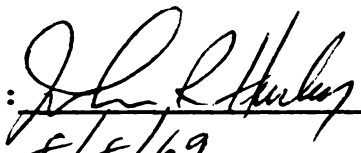
rated reliably by trained observers was supported. The observer based BI vs. OPRS correlation is difficult to interpret however, because the observers made both ratings at the same time.

The data supplied by the Ss on the OPRS was significantly higher than observers' ratings. This was not true on the BI. Variability of subject ratings of selves and others was less than observers' ratings on both measures. The hypothesis that "others'" ratings and observers' ratings would correlate more highly with each other than self-ratings would correlate with either of them was supported by OPRS, but not by BI data.

Construct validity evidence was supplied by significant correlations ($\underline{r} = .49$, $\underline{r} = .50$) between observers' and partners' ratings on the OPRS and between the latter and observers' BI ratings. Also, simple ratings of individuality, likeability, and being liked were linked to the person-orientation, thus establishing a preliminary net of construct validity evidence. This liking and likeability evidence also raises the possibility that the O-P measures might actually be indirect measures of likeability.

Both object-person indexes were found to correlate non-significantly ($p > .05$) with widely used measures of need for approval (Marlowe-Crowne SD), ego-strength (MMPI), and

a newer index of the expressiveness-conformity dimension (API). These O-P indexes also proved independent of a simple direct rating of ingratiating behaviors.

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"THE OBJECT-PERSON HYPOTHESIS"
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INTRODUCTION

Writings in the recently named Humanistic Psychology have opened up an area of study for the psychologist previously reserved for the philosopher. The premise that man is inherently good, or at least neutral, provides a more viable frame-of-reference than the classical Freudian framework. Less emphasis is placed on treating the sick, while more emphasis is placed on making the not sick become fully functioning, psychologically healthy, "self-actualizing people.

To build on this philosophy the researcher must discover those characteristics which he believes define a person as healthy. These characteristics may be observed during person to person interaction. Observation of this behavior must define concrete characteristics. The problem, however, is to look at concrete behavior without descending to the smallest components of behavior (i.e. hand movements, etc.). This is a method consistently used by social psychologists and political scientists, among others, for studying human behavior. In fact, this is what the "active" therapist must do in proposing new behavior to his client. He does not propose leg movement, facial expression, etc. He proposes patterns of behavior that will hopefully improve that person's interaction with others. If others can clearly perceive the new behavior, and there is evidence that they can (Geteles, 1965), then well-trained observers should be able to effectively code

behavior on the verbal and conceptual levels. If the behavior specified by the experimenter can be reliably observed by trained observers, observation of the behavior should be essentially the same for anyone trained to watch for it; and thus, provide a reliable construct.

This kind of observation precludes, at least for the moment, looking at causes and underlying processes. It searches for a useful classification for describing the way people treat each other. Hopefully a meaningful construct can be uncovered. The utility of such a construct can be determined in "active" psychotherapy and counselling. It can be used to simplify, in the client's mind, the treatment he has been receiving from others, and the treatment he has been dishing out to others. Hopefully such constructs can also be used to modify the client's behavior. This step is, in my mind, the final one in the validation of a clinical construct.

As a beginning, this study will be limited to defining what I believe to be a meaningful construct, and attempting to reliably classify behavior using this construct. I have called this construct the object-person hypothesis. It is possible that people can be placed along a continuum as those who treat others as "objects" and those who treat others as "persons". These concepts require further definition.

An "object" in its simplest form is something one can rule over. The object-oriented individual reacts to others as if they were "objects". The "object" is utilized for the individual's own needs. The object-oriented individual tends to give advice as an order and offers information as the "truth". On the other hand he is rejecting of others' advice, while blocking much feedback of information. He is also more rigid than the person-oriented individual. In other words, in relating to another as an "object", other is negated as a thinking, feeling, functioning, experiencing individual.

Relating to another as a "person" seems to entail saying: "Other is an experiencing, functioning, etc. individual with thoughts and feelings, who I am/am not pleased to know, and who I see as having a right to his own thoughts and actions". The person-oriented individual is critically accepting of others' advice, opinions and information, while freely offering his own as counsel, suggestion and information. He demonstrates respect for and interest in other individuals, without eliminating the possibility of demonstrating anger and dislike. In this sense he is more open than his object-oriented counterpart. More basic perhaps, is his treatment of others as selves in their own right.

The construct described has its philosophical roots in the writings of Martin Buber. In I and Thou Buber

(1958) describes two ways of relating which are comparable in some ways to the person and object orientations. He calls them I-Thou and I-It. The I-Thou "establishes the world of relation". The relationship is direct and all-encompassing. "If I face a human being as my Thou", he says, "... he is not a thing among things... he is Thou and fills the heavens... all else lives in his light". The world of I-It which is the more common is "the world in which man has to live". It involves experiencing but not relating. The difficulty in researching the philosophy is that the I-Thou is an almost heavenly relationship which is difficult to attack behaviorally.

A review of the Psychological Abstracts of the past seven or eight years shows little research specifically relevant to the present study. J. F. Bugental's Challenges of Humanistic Psychology (1967), a review of articles dealing with concepts and research in humanistic psychology, presents several research studies. The research presented however, though sharing the humanistic philosophy, does not employ measurement devices like those used in the present study. Perhaps this is partly because of Bugental's view of the humanistic psychologist as one who "gives primary concern to man's subjective experience and secondary concern to his actions..."

Maslow's Toward a Psychology of Being (1962, 1968) provides the best description of the area into which this

study fits. Maslow's "deficit-motivated" man (p. 36), seeing others as tools for the gratification of his needs, and his now famous "self-actualizers" provide the closest thing to the object-person hypothesis found in the psychological literature. Where Maslow's focus is on the personality itself, mine is on the treatment of others by the person. Maslow finds that less than 1% of the population meets his criteria for "self-actualizing". If the person-oriented individual is in some way analogous to the "self-actualizer", one would expect to label no Ss in the present study person-oriented. One implication of the theory then, is that the person-oriented individual is less easily found in Western society than his object-oriented counterpart.

This provides a restatement of a general hypothesis of the study; that the more traditional mode of treatment of others in this society is object-oriented. This general hypothesis will not be researchable within the framework of the study. It provides the philosophical basis for the working hypotheses stated below:

(1) that the object-person hypothesis provides a distinction of behaviors that can be rated reliably by:

- (a) judges trained in the hypothesis, and
- (b) others who interact with the subject

(2) correlations of judges with others will be higher than either correlations of Ss with others or judges.

The identification of people on the basis of the object-person hypothesis presents several problems. One of these is the probability that a person actually functions or is perceived as functioning at different parts of the continuum at different times. Another is that the construct may get bound up in other variables such as nice-guyness, ego-involvement, social desirability, ego-strength, etc. In order to control for these kinds of problems, the study originally was to have been limited to verbal interactions of topics chosen for their emotional loading. It was E's belief that controversial situations are most likely to bring out peoples' characteristic reactions. During group interactions it became clear to E that the less structure he placed in the situation the more likely that Ss would behave in ways E believed to be characteristic.

METHOD

Subjects

Subjects, recruited from General Psychology classes were asked to participate in a research project which would take ten hours of their time over a period of several weeks. Also, that it would involve participating in small group discussions in which they would learn more about themselves and others. The Ss were divided into four groups of 11 or 12 members each. Nearly all Ss were 18 years of age and college freshmen. E assigned Ss to groups to obtain a nearly equal mixing of sexes in each group.

Measures

Three pre-group measures were administered to the Ss: (a) Marlowe-Crowne Social Desirability (SD) Scale (Appendix 1), (b) Barron's Ego-Strength (Es) Scale from the MMPI (Appendix 2), and (c) the Attribute Preference Inventory, Form 5 (API)(Appendix 3). It was hypothesized that if the object-person hypothesis was actually measuring other variables such as need for social approval, ego-strength, and expressiveness or conformity, some evidence of this would show up in these measures. The inclusion of these measures, and also of items 9-12 of the Behavior Impressions (see Fig. 1), was to ascertain if the provisional object-person measures were actually measuring a new construct or if

older constructs would satisfactorily account for the same behaviors. The abbreviations for the three measures, given above, will be used throughout this paper.

The SD scale purports to measure how much of an individual's behavior is approval motivated or "socially desirable". In an attempt to establish construct validity Marlowe and Crowne (1964) report several empirical relationships with the construct which are specified by and consistent with the theory. Among these relationships was a greater amount of conformity among high need for approval Ss and a higher frequency of expected responses in a implied demand situation. High need for approval was also linked to easier verbal conditioning and to Rosenthal's experimenter bias. Within the context of their work, Marlowe and Crowne also report that high need for approval Ss tend to elicit unfavorable evaluations from others.

The Es scale of the MMPI is usually seen as an estimate of adaptability and personal resourcefulness. It "appears to measure the various aspects of effective personal functioning usually subsumed under the term ego-strength". The scale was originally designed to predict progress in therapy. In early research Barron (1953b) reports a significant difference in Es scale scores between the improved therapy group and the unimproved group. It was suggested that the measure could be used to predict success in therapy.

The API is a measure of conformity and expressiveness. It is scored so that attributes C (curious), F (assertive and self-reliant) and J (imaginative) are related to expressiveness (E). Attribute B (neat and clean), E (considerate and cooperative), and H (respectful toward adults) are related to conformity (C). The API yields a single composite score (attribute rankings C+F+J minus attribute rankings B+E+H + 21) - the E-C index - which taps the expressive-conformity dimension. In establishing the scale Hurley and Randolph (1969) asked Ss to freely nominate preferred attributes. Ten weeks later they obtained rankings of similar attribute classifications (API-3). The statistically reliable associations between these diverse sets of data provided the strongest evidence for validity of the API. Meaningful interrelationships among the attribute subsets associated with expressiveness and conformity were also demonstrated.

Two measures were designed to tap the hypothesized object-person dimension. The first, Behavior Impressions (BI) was designed by E along the conceptual lines of his definition of the object-oriented and the person-oriented individuals (see Appendix 4). The measure includes five-point scales on such concepts as acceptance of advice and information, giving of advice and information, rigidity, acceptance of others, respect for others, and several other traits. Items 1-8 refer directly to the object-person

hypothesis. These items will be used to obtain a composite object-person score (Σ BI) on this measure. Items 9-12 are designed to later correlate with the ratings to yield data on how much influence the individual's likeability, individuality vs. conformity, degree of ingratiation and actually being liked might have on the ratings. It was hoped that these correlate concepts might assist to define the object-person construct more precisely for subsequent research.

The final measure is the Object-Person Rating Scale (OPRS) (see Appendix 5). The scale consists of six categories of behaviors which are thought to exist along the object-person dimension. When rated, the scale should provide an approximation of where an individual stands along that dimension. This scale was designed by E and the three trained observers. The design procedure will be discussed in Training of Observers.

Procedure:

Each group of Ss met at least four times for a period of 90-120 minutes over a time period that ranged from 1½ to two months. Groups 1 and 2 met from November 1968 to January 1969 with a break for two weeks between their second and third sessions. Groups 3 and 4 met from January to February 1969. Ss who finished the study attended every group meeting. Some Ss dropped out or were asked to leave

for failure to attend group sessions. Dropout data is given at the end of the Methods section.

E acted as leader of all groups. At the first meeting the groups were instructed that the purpose of these groups was to learn more about oneself and others. It was suggested that one way to do this is to discuss controversial topics of interest to the members. It was further suggested that honesty and openness were important if one's true feelings were to be made clear. The groups were also instructed that in order to make the group experience more meaningful they should feel free to comment on the personality or role of any person in the group at any time. E generally limited himself to observations about roles or interactions in the group. Opinions on topics were offered when requested.

Following these group sessions each member was asked to rate each other member and himself on the BI. Ss were then paired randomly within their own groups. They were asked to come in and talk with their partners and be observed doing so. Each pair member was asked to spend 35-40 minutes talking to the other. It was suggested that they again dwell on controversial topics and if they desired, to discuss people in the group and things that went on in the group, etc. These instructions left the Ss in a relatively unstructured situation. It was originally proposed to ask the Ss to act out a helper-helpee

relationship in which each member of the pair would get to act in each role. This was attempted, discussed and dropped during pilot work (see below). At the end of thirty or thirty-five minutes E interrupted the paired discussion and asked the Ss to rate themselves and their pair-partner on the OPRS . Verbal instructions were given as follows:

This scale consists of sets of behaviors that have been grouped. Although you may find behaviors in different categories that have been demonstrated by you and your partner, choose the one set for each of you that best fits you, and then your partner.

Observers

During these discussions the pairs were observed through one-way mirrors by three trained observers. At the end of each discussion the observers rated each S on both the BI and OPRS. The correlation between these scales might be important in establishing some kind of construct validity. The observers themselves were three Psychology 490 students, two females and one male, who were trained along the lines of the definitions of the object-person hypothesis. They were chosen for their willingness to commit themselves to the time involved in the project.

Training of Observers

Construction of the OPRS: The observers were required to read Maslow's Toward a Psychology of Being in order to familiarize themselves with some of the concepts in this area and some of the concepts which led up to the object-person hypothesis. We then met approximately once a week for about eight weeks. The purpose was to develop a six or eight category scale which would provide a continuum of behaviors relevant to the hypothesis. The form prototype for this scale is the Hurley Self-Disclosure Rating Scale (Hurley, 1967).

Our first meetings were devoted to my description of the object-oriented and person-oriented individuals and to free associations about the actual behaviors of each type of individual. We then began to break these behaviors down into several categories. Each one of us would discuss a behavior and say why it belonged to a certain category of individual. It was probably in these discussions that I determined that the categories could not be mutually exclusive and that an individual could exhibit behaviors in more than one category.

These discussions led into semi-role-playing experiences. When one of us was able to conceptualize an individual in a given category he would act out a few lines that that individual might say. The final result of these meetings was six categories of behaviors which were then tested in pilot work.

A necessary part of these meetings was an emphasis on each observer's mode of perception of others. Because they were active in designing the scale it was necessary that their own perceptual biases be brought out and examined by the others. As an example, one observer felt that a behavior like a ready smile was a definite sign of person-orientation. E and the other observers offered different interpretations- some opposed to the initial interpretation- of an individual who smiled indiscriminately. Awareness of others' modes of perception seemed to help each observer to become more discriminating in such judgements.

At this point E felt that some practice in the actual rating situation was necessary. One of the observers was asked to leave for failure to fulfill her commitments. A new observer was found who was somewhat familiar with the concepts through contact with E and a faculty member in the humanistic area. She was trained in what amounted to a condensation of our work into one thorough indoctrination session.

Pilot work

E recruited two pairs of Ss to be observed and rated on the preliminary scale. These pairs had never met each other before the experiment. They were given the original instructions, which included the reference to a helper-helpee relationship. Reference to group experience was omitted. Following these paired observations, E and

observers redefined several of the categories, rearranging some of the behaviors. Then, with a nearly final scale, it was possible to choose two pairs from the groups to serve as pilot Ss. These pairs were observed and one or two final changes were made in the OPRS.

Due to difficulties in implementing the intended helper-helpee relationship task, this suggestion was changed.

Final instructions to the pairs were as follows:

Since you know each other from the group experience no introduction is necessary. We can begin. All I am asking is that you talk to each other for 35 to 40 minutes. You might find it easiest to talk about some controversial topics in which you are both interested. Or, you might concentrate on things that occurred in the group, or on people in the group. You are free to choose. At the end of time I will interrupt you and ask you to fill out one more scale. As you have probably guessed you are being observed. The things you say will not be used for purposes other than this study, and no individual statements will be identified.

Unfortunately the two pilot pairs were not randomly selected. Later realization made it clear that E had chosen two of the quietest group members and one member who was not well-liked by others in his group. E too is aware of experiencing some dislike for these Ss. Table 1 contains data on the pilot Ss on several measures. The difference between Ss and pilot Ss on SD was significant, ($t = 4.09$, $N = 31$, 4 , $p < .01$), in that these pilot SS were unusually high in "need for approval".

TABLE 1

Pilot Study Data				
Pilot S	Es	SD	E-C index	OP
1	44	23	14	9
2	40	21	19	13
3	44	20	12	6
4	43	21	18	10
\bar{X}	42.7	11.1	18.2	9.5

Dropouts

Ten Ss of the original 45 dropped out of the study or were asked to leave because of absence from group meetings. One of these refused to appear for the final phase of the study. Although no reason was obtained, she seemed highly resentful of the whole procedure. Of the other nine, three were from Group 1, three were from Group 2, two were from Group 3, and one was from Group 4. E recontacted these Ss in an attempt to find out why they could not continue as participants in the study. Four were rushing the Greek system. Of these, three expressed an interest in continuing but were unable to arrange the time for group meetings. E informed them that under the circumstances it would be impossible for them to continue participation. Two said they had no time, which probably resulted from lack of interest. One male was working to get through school and couldn't arrange to have the group times off. One female had just become engaged and said she had too much to do.

Finally, one male said he preferred music and drugs to talking to people. Table 2 contains comparisons of dropouts (D) and continuees (C) on the pre-group measures. Only the difference on the Es scale approached significance.

TABLE 2

Pre-group measures of Dropouts and Continuees

Measure	\bar{X}_C (N=31)	\bar{X}_D (N=10)	df	<u>t</u>
ES	45.1	40.6	39	1.94
SD	12.9	12.4	39	.36
E-C index	21.2	18.2	39	.53
p < .05				

RESULTS

Ratings given on the Object-Person Rating Scale by the trained observers were examined for overall reliability and inter-observer correlations. Using Ebel's formula* (Guilford, 1954) the reliability of the scale, given three ratings for each S, is .85. Inter-observer correlations (observers 1, 2, 3) are as follows: $r_{12}=.67$, $r_{13}=.60$, $r_{23}=.70$. The average inter-observer reliability found by this method is .66.

Self-ratings, partner ratings and observer ratings on the OPRS are compared in Table 3. Self and partner ratings are both significantly higher than observer ratings.

TABLE 3
Comparison of Ratings on the OPRS

Comparison	Source of rating			df	t
	Self	Partner	Observer		
	$\bar{X}(SD)$	$\bar{X}(SD)$	$\bar{X}(SD)$		
Self vs. Observer	4.71(.92)		3.99(1.1)	122	3.23*
Partner vs. Observer		5.29(.73)	3.99(1.1)	122	6.07*
Self vs. Partner	4.71(.92)	5.29(.73)		60	2.74*

* $p < .01$ (two-tailed)

*The formula is based on an analysis of variance model

$$r_{kk} = \frac{V_p - V_e}{V_p}, \text{ where } V_p = \text{variance for } \underline{Ss}, V_e = \text{error variance}$$

Table 4 contains the equivalent comparisons for the BI. Only the difference between self and observers' ratings approaches significance.

TABLE 4
Comparison of ratings on the BI

Comparison	Source of rating			df	<u>t</u>
	Self \bar{X} (SD)	Others \bar{X} (SD)	Observers \bar{X} (SD)		
Self vs. Observer	36.93 (5.4)		34.47(7.7)	122	1.62
Others vs. Observer		35.39(4.3)	34.47(7.7)	122	.62
Self vs. Others	36.93 (5.4)	35.39(4.3)		60	.97
p < .05					

Further comparisons with the OP scale use the total score summed over observers for each individual (Σ OP). The range of these scores was from 5-18 out of a possible range of 3-18. The BI scales 1-8 were dealt with by summing individual scale ratings for each S and then summing over raters to obtain Σ BI_O (sum of behavior impressions for observers), Σ BI_G (group members), and BI_S (self-ratings) for each rating source. The scales were adjusted so that the highest numerical rating (5) always indicated the greatest degree of person-orientation.

Comparison of the observers' ratings on the two measures (Σ OP with Σ BI_O) yields a correlation of .88. Partner ratings on the two scales do not correlate ($r = .00$). The

following correlations were computed between rating sources on the BI: $\angle BI_O$ with $\angle BI_G$ ($\underline{r} = .18$), $\angle BI_O$ with BI_S ($\underline{r} = .19$), and $\angle BI_G$ with BI_S ($\underline{r} = .20$). For the OPRS self-ratings correlated .33 with observers' ratings and .28 with partners' ratings. The correlation ($\underline{r} = .49$) between observers' and partners' ratings was statistically significant ($p < .01$). A comparison of partners' ratings on the OPRS and BI_O yielded a correlation of .50 ($p < .01$).

Correlate constructs of social desirability, "ego-strength" and expressiveness-conformity, measured by the pre-group tests were compared with observers' ratings on both scales. SD did not correlate significantly with either $\angle OP$ ($\underline{r} = .25$) or with $\angle BI_O$ ($\underline{r} = .22$). The Es scale correlated .18 with $\angle OP$ and .02 with $\angle BI_O$. The API E-C index correlated .16 with $\angle OP$ and .12 with $\angle BI_O$. Intercorrelations of these measures were also low. The SD scale correlated .16 with both the Es scale and the E-C index. The correlation between SD and Es is nearly identical ($\underline{r} = .17$ vs. $\underline{r} = .16$) to that reported by Marlowe and Crowne (1964). The E-C index and Es scale were not related ($\underline{r} = .00$).

$\angle OP$ and $\angle BI_O$ were also compared with items 9-12 of the BI scales. These items, dealing with likeability, individualism, ingratiation and liking are reprinted in Figure 1. They are scored in the indicated direction.

FIGURE 1

Items 9-12 of the Behavior Impressions Scale

Item #

9	This measure of likeability is not necessarily identical with your liking of the person				
	Likeable			Unlikeable	
	1	2	3	4	5
10	Individualist			Conformist	
	1	2	3	4	5
11	How ingratiating (apple-polishing) is this person?				
	Very much			Very little	
	1	2	3	4	5
12	How much do you like this person?				
	Very little			Very much	
	1	2	3	4	5

In addition E was also interested in comparing the correlate constructs in BI 9-12 with those concepts represented by the pre-group measures. The two sets of correlations referred to, in addition to intercorrelations between BI items 9-12 are reported in Table 5. All data except pre-tests and BI_s, is observer data.

TABLE 5
Comparisons with BI items 9-12

	Item #			
	9	10	11	12
OP (ratings)	-.71*	-.73*	.30	.69*
BI _O (items 1-8)	-.78*	-.66*	.20	.82*
BI _S	-.14	-.05	.15	.18
9 (obs.) Unlikeable	----	.46*	-.09	-.70*
10 (obs.) Conformist	----	----	-.64*	-.45*
11 (obs.) Non-ingratiating	----	----	----	.04
12 (obs.) Personal Liking	----	----	----	----
Es	-.02	-.47*	.10	.16
SD	-.03	-.05	.10	.16
E-C index	-.27	-.11	-.24	.09

* $p < .01$ (two-tails)

Because of the high correlations between liking and the BI and OP scales, the overall relationship between others' BI ratings and their liking of the person was examined. For an N of 218, $r = .96$.

Finally, qualitative reports should be included here about the groups. The group discussions were designed to short-cut the acquaintance process so that S s came to the paired interaction knowing each other relatively well. It is impossible to tell how much effect the groups had in changing individual behavior patterns. Little change is suspected, although this probably varied from group to group and from individual to individual. Following is a

discussion of the group interactions. Prior to each discussion I have noted the composition of the final Ss in relation to the number of Ss with which each group began. The original group size can be computed by adding all the numbers in parentheses. Final group size was all Ss excluding dropouts.

Group 1: (7 Ss, 4 dropouts) This group began with a discussion of women's hours in dormitories but quickly got into a more personal level when it became evident that several of the men in the group believed in a so-called "double standard". This group eventually became a personal problem solving group for many of the members. The topics did not differ from the traditional dormitory fare of dating and parent problems. Three members of this group dropped out during the sessions. The one S who refused to participate in the paired interaction was a member of this group.

Group 2: (6 Ss, 2 pilot Ss, 3 dropouts) This group was the only one of the four to meet off-campus. The discussion was mainly intellectual, dealing with serious topics such as love, sex and religion. Most members of this group appeared more defensive than members of other groups. E attempted with this group to deal with interpersonal styles. Little change was noted. Three members of this group were lost.

Group 3: (8 Ss, 2 pilot Ss, 2 dropouts) This group was the most active group and varied most in the style of its

sessions. One male member set the pace by describing his values which were at variance with most other members' values. One female member shared with the group her disgust with his ideas at a later meeting. A great deal of time was spent working through their differences and eventually they became the closest people in the group. The group also spent one meeting in a typical bull session about movies, girls, guys, etc. This group was least prone to worrying about what E wanted to hear. Two members were lost.

Group 4: (10 Ss, 1 dropout) This group came closer to working with feelings and interactions of the members than the other groups. This was mainly due to the presence of one male member who has had some experience in sensitivity groups. Two or three of the members made sure that everyone in the group got some feedback on their behavior. Racial problems were dealt with in this group due to the presence of two blacks. One member was lost.

Dropouts and pilot Ss:

The data given in this section concerned only those Ss who participated in the final phase of the study. Data on dropouts and those Ss selected for pilot work was given in

LAST METHODS. In order to determine whether those Ss who dropped out were different from the continuees, differences on pre-group measures were reported and no significant differences were obtained. The many different reasons for

dropping out (reported earlier) make it difficult to draw conclusions on the effect those Ss might have had on the study.

Pilot data indicated a significant difference between continuee SD scores (lower) and pilot SD scores (higher). This might add to E's data on why these Ss were chosen as pilots. Predictably perhaps, the pilot OP ratings were lower. The mean OP rating of the pilot data, when figured into the larger body of data causes only a negligible change. Thus, selection of pilot Ss had no detrimental effect on the study.

DISCUSSION

Introduction

The major question raised by the study is whether the object-person hypothesis or construct has been meaningfully operationalized as a basis for classification of observable behaviors. In order to test the object-person hypothesis two measures were designed which were thought to tap the traits and behaviors necessary for individuals to be labelled object-oriented or person-oriented. This section begins with a discussion of the behaviorally oriented Object-Person Rating Scale (OPRS) and expands to include the Behavior Impressions (BI) measure. The next step deals with correlate constructs of ego-strength, social approval motive, expressiveness-conformity, unlikeability, conformity, non-ingratiation, and how much S was liked. A discussion of the hypotheses and validity of the construct follows. Finally a summary and some suggestions for further research are presented.

Object-Person Rating Scale

Using Ebel's formula (Guilford, 1954, p. 395) the behaviorally oriented OPRS attained an intraclass reliability of .85. Averaging the three inter-observer correlations yields a value of $\bar{r} = .66$. The behavior sets rated on this scale were significantly reliable for the three observers. The number of assignments made to each category of the rating scale was as follows: "1": 1,

"2": 7, "3": 20, "4": 40, "5": 14, and "6": 11. The OPR ratings of the three trained observers ranged from 5-18 (of a possible 3-18). That so much of the possible range was employed indicated that a strong distinction was made between categories.

A closer examination of the OPRS may be useful. Categories 5 and 6 describe defined behaviors that are demonstrated by the person-oriented individual, including his responses to and giving of feedback, and seeking resolution of problems. These two categories represent the behaviors of the theoretical individual presented in the introduction. Categories 3 and 4 were the most frequently employed. The "4" category describes a person who is primarily conventional but who, with some risk to his present relationship patterns, could become person-oriented. The "3" category describes a person who is basically bored with others. His behavior of "It's okay for you but I wouldn't do it" brings in the possibility that he is devaluing other's actions and thoughts. The "2" person appears to be afraid to respond to others on their level. As the study progressed however, it was evident that 2 was the most poorly defined category on the scale. Any further work with the scale demands a reconsideration of the "2" person. The "2" category might be reconstructed in this way:

"Tends to look away from other when talking to him. Makes frequent changes of subject and generally avoids responding to feedback.

Presents non-caring facade in relation to feedback. Comments often appear irrelevant. Laughs nervously when confronted. Behavior appears fearful."

The "1" category describes a person who is clearly rigid and hostile.

That so few persons were assigned to categories 1 and 2 suggests: (1) that category 2, as written, was difficult to employ. This resulted in assigning Ss who might have been assigned to 2 to other categories. (2) that individuals belonging in these categories infrequently show up in a college population, and (3) categories 1 and 2 do and should represent extremes in the population, and 3 and 4 should be viewed as the more traditionally object-oriented.

Comparison of rating sources - OPRS and BI

Ss OPRS ratings of themselves and of their paired interaction partners were significantly higher and less variable than their ratings by the trained observers. There are two distinct interpretations: (1) Ss overrated themselves and others to an extent which restricts its meaningfulness, and (2) the scale itself provides no real distinction of behaviors - the observers were "reading it in" from their training sessions. The correlation ($r = .49$; $p < .05$) between partners' ratings and observers' ratings indicates that the Ss, when rating their paired-interaction partners, were able to make the same directional distinctions with the scale that the trained observers did. Thus, the OPRS was reliable for observers' and partners' ratings, even though

overrating occurred. The literature on self-ratings suggests that overrating oneself is a very common phenomenon. An interesting point in the overrating argument is that partners' ratings were significantly higher than self-ratings. In fact, the raw data demonstrates that few Ss (3) gave themselves "6"'s, while many more (13) gave "6"'s to their partners. It might be guessed that there was a wish on the part of the Ss to "be nice" to their partners, in case they might compare ratings after leaving the experimental surroundings. These extremely high ratings might cast some doubt on the use of the partners' ratings for interpretation. There must also be some doubt of the utility of the OPRS measure when used by untrained participant-observers. Perhaps the measure is one that is best used by trained observers.

Comparable statistical treatment of the BI disclosed no significant differences between observers', self-, and other group members' ratings. As expected, the difference between self-ratings and observers' ratings approached significance ($t = 1.62$), although "others'" ratings and observers' ratings did not differ. The low correlation ($r = .18$) between observers' and "others'" ratings indicates little association between the two sets of ratings. There are two major explanations: (1) The two sets of ratings were made under different environmental circumstances and, thus, may both be accurate measures of Ss at different times. "Others'" ratings were made outside the group situation based on interactions in the group, while observers' ratings were made immediately after the paired interactions,

(2) the observers' BI ratings were made at the same time as their OPRS ratings and thus, may suffer from some contamination. The numerical closeness of the three sets of ratings is reason enough to assume that this measure was useable by untrained Ss.

The doubt shed on the "others'" and self-rating data (significant difference between observers', partners' and self-ratings on the OPRS, low correlations between the sets of data on the BI) has led E to rely primarily on observers' ratings for the main body of interpretation and statistical analysis. This is perhaps also a result of E's greater interest in the "observers" findings of the study.

By-group comparisons

The comparisons of self, "other", and observer ratings (see Table 6) suffer from one major shortcoming; the comparisons fail to account for notable differences between the groups. E observed that groups 3 and 4 were clearly "better" groups in terms of number of members actively participating, depth of participation, number of dropouts, and E's feeling that group members had acquired greater interpersonal competence in the group. On the assumption that the trained observers' ratings were accurate it might be hypothesized that the "better" groups, 3 and 4 would attain greater congruence among observer, self and "other" ratings than would be true for groups 1 and 2. Some of the

BI data seems to offer support for this hypothesis while OPRS data does not. The relationships between sets of data for each group are presented in Table 6.

TABLE 6

By-group comparisons of self, other and observer ratings

Group/N	Between $\{BI_o$ and:		Between $\{OP$ and:
	$\{BI_{\bar{G}}$	BI_s	self OP
1 7	-.20	.22	.71
2 6	.40	-.70	.23
3 8	.10	.45	-.21
4 10	.73*	.49	.55
1&2 13	-.15	-.04	.56*
3&4 18	.48*	.41	.25

$p < .05$ (two-tailed)

Related to these data is the fact that groups 1 and 2 had a break of 2-3 weeks between sessions two and three. The result seemed to be a loss of any depth that might have developed during session 2. The stated hypothesis in this paragraph, that groups 3 and 4 self and "other" ratings should correlate more highly with observer ratings than is true for groups 1 and 2 received modest support.

Pre-group measures:

Results of the three pre-group measures were correlated with observer data on both the OPRS and the BI. It was found that relationships obtained between both measures and ego-strength (measured by the Es scale) and the social approval motive (measured by the Marlowe-Crowne SD scale)

were non-significant. Also, the API expressiveness-conformity index was found to have little in common with object-person scores measured by either scale in the study. Of these various linkages, the highest correlation was between the SD scale and the OPRS. This correlation of .25 is too small to have played a significant part in rating individuals. Intercorrelations between the three pre-group measures are also low. These results indicate that the object-person ratings are distinguishable from the types of variables measured by these pre-group tests. Tentatively then, these object-person measures when used by trained raters, are distinguishable from self-reported measures of ego-strength, approval motive, or expressiveness-conformity.

Behavior Impressions items 9-12:

The BI items 9-12 represent other constructs that can be correlated with the OPRS and BI scores. Ratings of likeability, individuality and how much the observer actually liked the subject were strongly correlated with the scores on both scales. Thus, the more likeable the person, the more individualistic, and the more liked, the greater probability that he would be rated person-oriented. This does not mean that the observers rated only liked individuals as person-oriented. It is also likely that person-oriented individuals were more highly liked by these three observers. However, any ratings so closely tied to liking should be viewed cautiously, and shed some doubt on the validity of the construct (see Validity). In fact, the ratings by the

other group members on the Behavior Impressions correlated .96 with their "liking" ratings. So most of the variance in the BI scores is at least equally attributable to "liking".

The high degree of relationship of individualism to the person-oriented individual is not surprising. The object-person theory would predict a strong association between individuality and the person-orientation and conversely, between the object-orientation and conformity. This is supported by the trained observer data which suggests that person-oriented individuals are viewed as individualists by others. The "ingratiation" measure on the BI indicated a slight relationship between the person-oriented individual and the individual who is less ingratiating. That finding combats the suspicion that the apple-polisher would get the high ratings on the object-person scales.

Intercorrelations of these ratings yield further interpretations. The highest intercorrelation ($\underline{r} = .70$) is between personal liking and likeability. These two items might be viewed as having measured the same variable. Ingratiation and conformity are the next most highly associated ($\underline{r} = .64$) variables. Perhaps the most interesting relationship is the correlation of .45 ($\underline{p} < .01$) between liking and individualism. Like those person-oriented, "individualists" were apparently liked more by the raters.

Comparison of pre-group measures and BI 9-12:

Several points only indirectly related to the object-person hypothesis are considered here. Perhaps the most interesting is the low correlation ($r = -.11$) between individualist-conformist scores on the BI and the E-C index expressiveness-conformity scores. This raises questions of validity. Individuality measured by the BI correlated significantly with ego-strength, supplying positive evidence for construct validity of this BI rating. Also interesting were the low correlations of the need for approval (SD) scale with likeability, liking and ingratiation. Thus, the high SD person was not necessarily liked, nor viewed as ingratiating. Unlikeability of the high need-for-approval S was also apparently operating in E's choice of pilot Ss. Pilot Ss attained significantly higher SD scores than the study Ss.

Object-Person Hypothesis:

It was suggested that the traditional mode of relating in Western society is object-oriented. Maslow's data on self-actualizers suggests that less than 1% of the population is self-actualizing. If the person-oriented individual is truly representative of Maslow's self-actualizers, probably no person-oriented individuals would have appeared in the study sample.

Arbitrarily defining the person-oriented individual as one who received at least a "5" from each observer, the proportion (5 of 31 Ss) of person-oriented individuals in

this sample is clearly greater than the number of self-actualizers in Maslow's samples. Holding to the assumption that the person-orientation is analogous to self-actualization, it might be suggested that the present sample, drawn entirely from introductory psychology students at Michigan State University has a different base rate of person oriented or self-actualizing individuals than Maslow's samples. This however, is unlikely since the difference in the proportions (16% in this sample to about 0.1% for Maslow's sample) of self-actualizers or person-oriented individuals is so great.) More likely is the interpretation that the person-orientation is much easier to reach than self-actualization based on Maslow's criteria, and thus, is not self-actualization. The behaviors in categories "5" and "6" then, the person-oriented behaviors, are clearly insufficient for concluding that an individual is self-actualizing.

The present study, as expected, provides insufficient evidence for the argument that the object-orientation is the traditional mode of relating in Western society. The data indicates that for this sample, arbitrarily defining the person-oriented individual as above, the predominant mode of relating was toward the more object-oriented categories of the measure.

Working hypotheses

Hypothesis 1a, that the object-person hypothesis provides a distinction of behaviors that can be rated reliably by judges trained in the hypothesis was supported ($r_{Ebel} = .85$).

Hypothesis 1b, that reliable ratings can be obtained from others interacting with S, was not tested due to comparatively low variability of "others'" ratings on both measures. (Tables 3 and 4).

It was also hypothesized that the observers' ratings would correlate more highly with Ss' ratings of others than Ss' self-ratings would correlate with either observer or "other" ratings. This hypothesis was supported by the significant OPRS correlation ($r = .49$) between observers' and partners' ratings and lower non-significant correlations between self-ratings and partners' ratings ($r = .28$) and between self-ratings and observers' ratings ($r = .33$). However the BI data did not support this hypothesis, as it revealed little relationship between observers' ratings, self-ratings, and "other" ratings. The extremely high partners' ratings on the OPRS make interpretation of this hypothesis difficult. For this sample though, ratings by a fellow group member were more closely associated with trained observers' ratings than either was with self-ratings.

Problems of observer ratings

It is clear that E has chosen to rely primarily on observer data for interpretation, for reasons of doubt in the accuracy or utility of subject data and greater personal interest in observer data (see also Comparison of rating sources). This in itself presents problems because the

assumption has to be made that the trained observers are in fact accurately rating the object-person construct as measured. A more serious complication arises from the methodology of having the observers rate both the BI and OPRS during the same time period immediately after the paired interaction. The ratings on the two measures were probably contaminated by this method, which led to non-independence of the measures. There is no way to determine how much of the correlation ($\underline{r} = .88$) between $\{BI_o$ and $\{OP$ is attributable to contamination. The contamination of the observers' ratings on the two measures must shed some doubt on any interpretations based on the cited correlation.

Validity

The correlation of .88 between $\{OP$ and $\{BI_o$ might have provided the best evidence for construct validity were it not for the non-independence of the ratings. Thus, the significant correlation of .49 between observers' ratings and partners' ratings on the OPRS provides the best validity evidence for the construct, measured by the OPRS. Further evidence is provided by the significant correlation ($\underline{r} = .50$) between the partners' OPRS ratings and the $\{BI_o$, thus establishing a non-contaminated link between the measures.

In discussing validity, Cronbach and Meehl (1955) suggest that it is necessary to evaluate construct validity by integrating evidence from many different sources. Marlowe and Crowne (1964) cite their basis for construct

validity as anchored in the number of empirical relationships they can establish for the construct which are specified by and consistent within the theory. The significant correlations between the person-orientation ratings (OPRS, BI) and likeability ($r = .71, .75$), individuality ($r = .73, .66$), and personal liking ($r = .69, .82$) begin to provide a net of validation evidence.

That individuality is characteristic of the person-oriented individual is clearly consistent with the theory. The present study provides an empirical link between the two. The question of liking and likeability is more controversial. Any construct, the ratings of which can be so closely linked to liking must be viewed cautiously. Likeability is consistent with the theoretical person-orientation. It is also reasonable to assume that somewhat sophisticated observers would like person-oriented individuals. Thus, the link between liking, likeability and the person-orientation strengthens the construct validity argument. It can also be argued however, that E has constructed two measures which are not rating a new construct but are, in fact, indirect measures of likeability. A study designed to separate liking and likeability from the object-person construct is described in Implications.

Summary and Implications for further research

The object-person hypothesis, as stated in the introduction to this paper, received tentative support as a reliable construct when employed by trained observers. The

study also separated the object-person construct from indexes of ego-strength, social-approval motivation, and expressiveness-conformity. Correlations of .49 between $\{OP$ and partners' OPRS ratings and .50 between partners' OPRS ratings and BI_0 provided the best evidence for construct validation. A link was established between the object-person construct and individuality, measured by a direct method. A strong link was established between the person-orientation, likeability, and being liked. These links were cited as the initiation of a net of validating evidence for the construct. The major interpretations were based on the trained observers' data.

Criterion groups: An important step in validating the construct is to establish criterion groups whose members fall primarily in one area of the continuum. Thus, it might be suggested the FBI agents would be rated lower say, than public-relations specialists. One simple study involving psychotherapy would involve examining the relationships between effective and ineffective therapists and their ratings on the object-person measures. The therapy ratings could be obtained from clients who would rate therapists on such concepts as "warmth", "helpfulness", "personal liking", etc. The object-person theory would predict that the "better" rated therapists would receive the high person-oriented ratings from the observers.

Untrained observers: Since there is no obvious ultimate criterion against which to test the validity of the

construct, the next step involves having untrained observers rate individuals on both measures. The study would involve having five or six untrained observers rate Ss during paired interactions. Their reliability would demonstrate the communicability of the construct as represented by the measures.

General guidelines for future research: This overview of possible further research projects will be concerned primarily with generalities. The most important project will be to eliminate contamination of the ratings. This might be accomplished by using an even number of untrained raters and having half use one measure and half use the other. The correlation between the measures should then be uncontaminated.

Several problems in the handling of Ss became apparent in this study. One question was whether E had some effect on the Ss during group sessions, thus encouraging more person-oriented behaviors. There are two alternatives for future research: (1) that groups of Ss interact without a leader, and (2) that Ss be chosen who know each other before the study. The latter seems particularly important because it suggests a study of friendships and couples. It is also probably true that individuals interact differently with different others. Thus, in future studies, individuals should be observed in different situations several different times.

Construct validation: The establishment of construct validity involves a potentially endless chain of studies all measuring concepts that are consistent with the construct. A relevant question in the present study is what part liking played in ratings of the object-person construct. In order to attempt to separate liking from the construct the following study is proposed. E would choose from a previous study the three individuals rated the most person-oriented and the three rated the most object-oriented. These Ss would serve as untrained observers in the next study. If these observers do not overrate the new Ss it would be hypothesized that the object-oriented observers would not like the person-oriented Ss as much as the person-oriented observers, but, if they use the measures objectively inter-observer correlations would still be significant. It is more likely that the ratings will always be subject to some "halo effect" and it will be necessary to incorporate liking into the theory.

Therapeutic value: It was stated in the introduction that the most important value in a clinical construct was its value in therapy. One simple study aimed at this would involve an explanation and description of the person-oriented individual. Then the individual could role play the person-orientation. After several role-playing (shaping or modelling) experiences, the individual could again be observed in interaction with others. If a change to a higher point on the scale takes place, then the role-playing experience has been successful and the construct is useful.

The whole idea of using the object-person construct in therapy implies a value judgement on the part of the therapist that the person-orientation is a good thing to strive for. It implies a belief that the person-orientation will facilitate more satisfying interpersonal experiences for the client. The philosophy is that through these interpersonal relationships the client will grow, and strive to become a "healthy" human being. The object-person hypothesis purports to be a step in that direction.

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APPENDIX 1: Marlowe-Crowne Social Desirability Scale

Name _____

Personal Reaction Inventory

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. Then circle the appropriate letter in front of the statement.

Remember: Answer each item as it pertains to you personally.

- | | | | |
|---|---|-----|--|
| T | F | 1. | Before voting I thoroughly investigate the qualifications of all the candidates. |
| T | F | 2. | I never hesitate to go out of my way to help someone in trouble. |
| T | F | 3. | It is sometimes hard for me to go on with my work if I am not encouraged. |
| T | F | 4. | I have never intensely disliked anyone. |
| T | F | 5. | On occasion I have had doubts about my ability to succeed in life. |
| T | F | 6. | I sometimes feel resentful when I don't get my way. |
| T | F | 7. | I am always careful about my manner of dress. |
| T | F | 8. | My table manners at home are as good as when I eat out in a restaurant. |
| T | F | 9. | If I could get into a movie without paying and be sure I was not seen, I would probably do it. |
| T | F | 10. | On a few occasions I have given up doing something because I thought too little of my ability. |
| T | F | 11. | I like to gossip at times. |
| T | F | 12. | There have been times when I felt like rebelling against people in authority even though I knew they were right. |
| T | F | 13. | No matter whom I'm talking to, I'm always a good listener. |
| T | F | 14. | I can remember "playing sick" to get out of something. |

- T F 15. There have been occasions when I took advantage of someone.
- T F 16. I'm always willing to admit it when I make a mistake.
- T F 17. I always try to practice what I preach.
- T F 18. I don't find it particularly difficult to get along with loud mouth, obnoxious people.
- T F 19. I sometimes try to get even rather than forgive and forget.
- T F 20. When I don't know something I don't at all mind admitting it.
- T F 21. I am always courteous, even to people who are disagreeable.
- T F 22. At times I have really insisted on having things my own way.
- T F 23. There have been occasions when I felt like smashing things.
- T F 24. I would never think of letting someone else be punished for my wrong doings.
- T F 25. I never resent being asked to return a favor.
- T F 26. I have never been irked when people expressed ideas very different from my own.
- T F 27. I never make a long trip without checking the safety of my car.
- T F 28. There have been times when I was quite jealous of the good fortune of others.
- T F 29. I have almost never felt the urge to tell someone off.
- T F 30. I am sometimes irritated by people who ask favors of me.
- T F 31. I have never felt that I was punished without cause.
- T F 32. I sometimes think when people have a misfortune they only got what they deserved.
- T F 33. I have never deliberately said something that hurt someone's feelings.

APPENDIX 2: MMPI Es scale.

Please answer true or false to the following:

1. During the past few years I have been well most of the time.
2. I feel unable to tell anyone about myself.
3. I pray several times every week.
4. I would certainly enjoy beating a crook at his own game.
5. I have had very peculiar and strange experiences.
6. My plans have frequently seemed so full of difficulties that I have had to give them up.
7. I am not afraid of fire.
8. I like science.
9. I think Lincoln was greater than Washington.
10. I am made nervous by certain animals.
11. I am easily downed in an argument.
12. I have strange and peculiar thoughts.
13. When I get bored, I like to stir up some excitement.
14. Christ performed miracles such as changing water into wine.
15. I feel sympathetic towards people who tend to hang on to their griefs and troubles.
16. I am in just as good physical health as most of my friends.
17. I have never had a fainting spell.
18. I brood a great deal.
19. Everything is turning out just like the prophets of the Bible said it would.
20. I do many things which I regret afterwards (I regret things more or more often than others seem to).
21. I have had blank spells in which my activities were interrupted and I did not know what was going on around me.
22. I find it hard to keep my mind on a task or job.
23. Dirt frightens or disgusts me.
24. I very much like horseback riding.
25. The man who had most to do with me when I was a child (such as my father, stepfathers, etc.) was very strict with me.
26. I am afraid of finding myself in a closet or small closed place.
27. My way of doing things is apt to be misunderstood by others.
28. I have had some very unusual religious experiences.
29. I frequently find myself worrying about something.
30. I feel weak all over much of the time.
31. My hands have not become clumsy or awkward.
32. I have met problems so full of possibilities that I have been unable to make up my mind about them.
33. I believe my sins are unpardonable.
34. I can be friendly with people who do things which I consider wrong.
35. When I am with people, I am bothered by hearing very queer things.
36. I sometimes feel that I am about to go to pieces.

37. I have often been frightened in the middle of the night.
38. One or more members of my family is very nervous.
39. I feel tired a good deal of the time.
40. At times I have fits of laughing and crying that I cannot control.
41. I like to flirt.
42. I get mad easily and then get over it soon.
43. I have a cough most of the time.
44. I have a good appetite.
45. When I leave home, I do not worry about whether the door is locked and the windows closed.
46. I am attracted by members of the opposite sex.
47. I have had no difficulty in keeping my balance in walking.
48. If I were an artist, I would like to draw flowers.
49. I like collecting flowers or growing house plants.
50. Parts of my body often have feelings like burning, tingling, crawling, or like "going to sleep".
51. I never attend a sexy show if I can avoid it.
52. Sometimes some unimportant thought will run through my mind and bother me for days.
53. I have diarrhea once a month or more.
54. At times I hear so well it bothers me.
55. Often I cross the street in order not to meet someone I see.
56. I like to talk about sex.
57. My skin seems to be unusually sensitive to touch.
58. I like to cook.
59. When someone says silly or ignorant things about something I know, I try to set him right.
60. I do not like to see women smoke.
61. I dream frequently about things that are best kept to myself.
62. I seldom worry about my health.

APPENDIX 3:

ATTRIBUTE PREFERENCE INVENTORY, Form 5

Instructions: After reading completely through the qualities or characteristics of persons, as listed below, assign number "9" to the quality or attribute which you believe would be the most desirable quality in this list for a ____ year-old person. Then assign "8" to the attribute which you regard as second most desirable, "7" to the third most desirable and so on. Continue until you have assigned numbers 9 through 0 to all of these listed qualities. Or, you may prefer to begin with what you regard as the least desirable quality; if so, give it "0" and assign "1" to the next most undesired quality, etc. You may, of course, change your mind or correct any assigned numbers as you go along. Please assign a number to each of these attributes, even if you find it quite difficult to make some choices. No tie scores, please.

MALE

responsible and trustworthy	_____A
neat and clean	_____B
curious	_____C
interacts well with others	_____D
considerate and cooperative	_____E
assertive and self-reliant	_____F
able to make friends	_____G
respectful toward adults	_____H
fun-loving and carefree	_____I
imaginative and creative	_____J

When finished with this side, please turn the page over and continue.

This time we would like to obtain your preferences of the same list of qualities, but with reference to a FEMALE of the same age, rather than for a MALE. The rest of the instructions are the same as before.

FEMALE

responsible and trustworthy	_____A
neat and clean	_____B
curious	_____C
interacts well with others	_____D
considerate and cooperative	_____E
assertive and self-reliant	_____F
able to make friends	_____G
respectful toward adults	_____H
fun-loving and carefree	_____I
imaginative and creative	_____J

For research purposes, the following information would be most helpful if you are willing to disclose it.

Your age or date of birth _____

Your sex (encircle): male female

Encircle the highest year of education you have completed:

Grade School: 1 2 3 4 5 6 7 8

High School: 9 10 11 12

Business College or Technical Training: 13 14

Regular College: 1 2 3 4(BA), 5 6 7 8

Name(s) of Advanced Degree(s) _____

Your name, or, if you prefer, some 5-digit code number which you would be sure to recognize later, such as someone's birthdate or telephone number. Please avoid simple numbers like 12345 or 99999.

THANKS FOR YOUR COOPERATION

APPENDIX 4: Behavior Impressions

Please rate each member of your group, including yourself on the following dimensions. Judge on the basis of your interactions with each individual and his interactions with others, as observed in the group. Try to differentiate each question from the others and answer as carefully as you can.

1. Often an individual gives data of some sort to those around him. Your perception of his data-giving behavior is important.

(A) Gives advice as an order

Gives advice as counsel and suggestion

1 2 3 4 5

(B) Gives information as helpful additive to conversation

Gives information as "fact, the only truth, the last word."

1 2 3 4 5

2. Rejects others

Accepts others

1 2 3 4 5

3. Respects others as individuals

Fails to respect others as individuals

1 2 3 4 5

4. Often an individual in a group is in a position where he can obtain data from those around him. The following questions ask you to rate the reactions of others and of yourself on this data.

(A)	Anti-data-seeking (blocks others from feedback, uncaring about others' thoughts)	Data-seeking (elicits & encourages reactions of others)
-----	---	---

1	2	3	4	5
---	---	---	---	---

(B)	Rejecting of advice & opinions	Accepting of advice & opinions
-----	-----------------------------------	-----------------------------------

1	2	3	4	5
---	---	---	---	---

5.	Humanitarian (use your own broad definition)	Machiavellian (manipulates & utilizes others for own gain)
----	--	---

1	2	3	4	5
---	---	---	---	---

6.	Unsympathetic	Sympathetic
----	---------------	-------------

1	2	3	4	5
---	---	---	---	---

7.	Considerate	Inconsiderate
----	-------------	---------------

1	2	3	4	5
---	---	---	---	---

8. Rigidity may be defined as a "relative inability or unwillingness to change one's actions or attitudes..."

Rigid

Flexible

1 2 3 4 5

9. This measure of likeability is not necessarily identical with your liking of the person.

Likeable

Unlikeable

1 2 3 4 5

10. Individualist

Conformist

1 2 3 4 5

11. How ingratiating (apple-polishing) is this person?

Very much

Very little

1 2 3 4 5

12. How much do you like this person?

Very little

Very much

1 2 3 4 5

APPENDIX 5: Object-Person Rating Scale

1. Frequently responds quickly to other's feedback; sometimes openly attacks the supplier with devaluing remarks or hostility. In doing so he consistently employs dogmatic (unqualified) statements. In giving advice he becomes angry if it is disagreed with. Tends to be extremely interruptive and rejecting of others' ideas.

3. Responses to feedback are matter-of-fact statements, indicative of boredom. Non-verbal responses show clear signs of boredom (including little modulation of tone and loudness). Often responds with statements like: "It's okay for you but I wouldn't do it". There is a subtle connotation of devaluing other. When angry he tends to become shaky, red in the face, while verbally expressing a clearly non-anger response. Contributes little feedback to the conversation.

5. Uses "I" context of speech and shows willingness to clarify own statements. Responds to much feedback; sometimes after thinking it over. Varied facial expression often and acknowledges others' statements by shaking head, saying m-hm or comparable behaviors. When talking or listening to others, looks at them rather than at extraneous stimuli

2. Tends to look away from other when talking to him. Makes frequent changes of subject and generally avoids responding to feedback. Responses that he makes are consistently quick, and often irrelevant. Is also interruptive. Ignores others' feedback.

4. Uses "you" context of talking and rarely uses "I". Moderates many areas of disagreement. Responds more often and more freely to positive feedback than to negative. Rarely commits himself strongly to anything. Non-verbal behavior expresses interest (looking at other, varied facial expression); though not as much interest as 5. This individual is not bored.

6. Shows all positive behaviors of 5 and consistently demonstrates an interest in the growth of discussion. Questions others on their views and thoughts in the discussion and offers alternative solutions to others' problems. Even when disagreeing focuses on the problem rather than devaluing other. In the other direction, actively seeks the feedback of others. He is open about seeking help and advice.

INSTRUCTIONS: Please assign the rating which most closely fits each individual, according to his interactions with you and others. Please rate yourself and others.

APPENDIX 6: TABLE 7

Individual Subject Data

	OPRS by Observer:			BI by Observer:			OP	Self OP Part			{BI _O	BI _S	Part BI	BI _G	Pre-group:			BI item:			
	Subject 1	2	3	Observer 1	2	3		OP	Self	OP					Part	SD	ES	API	9	10	11
Group 1	1	4	5	4	13	5	6	35	43	41	119	40	41	42.8	18	49	24	4	8	10	13
	2	4	4	4	12	5	5	31	39	37	107	38	31	35.0	9	40	33	6	9	9	11
	3	4	3	4	11	6	5	35	25	39	99	41	47	38.8	18	45	15	10	10	11	10
	4	5	4	5	14	5	6	45	40	44	129	38	36	34.3	10	52	11	6	6	11	12
	5	6	6	6	18	6	6	46	44	47	137	35	44	29.8	14	50	29	5	4	12	11
	6	4	4	4	12	5	5	38	28	35	101	43	34	35.0	16	43	6	5	9	11	13
	7	2	3	3	8	2	5	21	23	24	68	32	36	34.5	13	43	16	9	11	10	7
Group 2	1	3	4	3	10	5	6	31	41	34	106	25	45	37.8	5	47	17	9	6	12	12
	2	3	3	3	9	4	3	26	20	28	74	38	38	33.4	12	46	20	11	14	7	9
	3	3	4	3	10	5	5	24	32	26	82	43	47	41.0	12	28	36	7	11	8	9
	4	4	4	3	11	5	5	34	37	34	105	36	39	39.4	8	40	4	7	11	9	11
	5	3	2	4	9	5	5	27	29	38	94	37	36	38.2	18	44	26	8	9	10	10
	6	3	2	3	8	5	5	31	24	31	86	38	32	38.6	19	43	19	9	12	9	9
Group 3	1	2	5	5	12	5	6	20	41	40	101	22	32	30.0	10	52	24	6	8	10	11
	2	4	4	4	12	5	4	26	37	39	102	38	34	38.0	13	44	21	6	9	10	10
	3	6	6	5	17	5	5	40	46	44	130	42	38	32.7	18	52	17	7	6	11	14
	4	2	1	2	5	5	5	19	15	23	57	-	39	34.0	8	57	18	11	10	12	5
	5	4	4	4	12	5	5	24	34	34	92	35	31	33.1	12	49	NS	9	8	10	9
	6	5	4	5	14	3	6	39	38	44	121	34	36	39.6	9	44	19	7	8	7	11
	7	4	4	4	12	4	5	31	38	39	108	29	31	29.0	11	44	23	6	12	9	12
	8	4	5	4	13	5	6	32	41	39	112	40	32	34.2	10	42	39	6	7	11	10
Group 4	1	5	6	6	17	5	6	47	42	48	137	40	30	42.0	17	53	36	3	6	10	15
	2	3	4	5	12	5	5	21	37	39	97	34	39	35.4	17	54	32	7	9	11	10
	3	4	4	3	11	2	5	36	37	34	107	36	35	38.8	7	36	9	6	12	10	10
	4	5	4	2	11	4	5	31	35	17	83	29	41	31.1	15	40	25	8	8	10	11
	5	6	5	5	16	5	6	29	31	39	99	39	49	38.9	18	46	16	7	6	13	8
	6	3	4	3	10	4	4	31	37	32	100	36	36	29.7	16	40	37	7	13	8	11
	7	6	6	6	18	6	6	45	50	47	142	45	42	41.9	12	48	25	4	5	12	15
	8	3	4	4	11	5	5	30	35	42	107	40	45	36.2	13	48	20	6	8	10	11
	9	4	3	4	11	5	6	34	30	31	95	48	30	24.8	17	42	7	9	9	12	11
	10	4	4	4	12	5	6	38	38	33	109	37	36	34.1	6	40	13	6	9	11	10

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