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ANALYSIS OF THE INTERPERSONAL PERCEPTIONS OF
STUDENTS IN A DEVELOPMENTAL GROUP

by

Richard Arthur Wyrick

A Dissertation Submitted to the Faculty of the
DEPARTMENT OF PSYCHOLOGY
In Partial Fulfillment of the Requirements
For the Degree of
DOCTOR OF PHILOSOPHY
In the Graduate College
THE UNIVERSITY OF ARIZONA

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THE UNIVERSITY OF ARIZONA
GRADUATE COLLEGE

I hereby recommend that this dissertation prepared under my
direction by Richard Arthur Wyrick
entitled Analysis of the Interpersonal Perceptions of
Students in a Developmental Group
be accepted as fulfilling the dissertation requirement of the
degree of Doctor of Philosophy

Peter Madison
Dissertation Director

April 12, 1972
Date

After inspection of the final copy of the dissertation, the
following members of the Final Examination Committee concur in
its approval and recommend its acceptance:*

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Richard A. Upprich

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ABSTRACT

This study investigated changes in the interpersonal perceptions of students in a developmental laboratory group. The measures of person perception which were constructed by the author were given several times throughout the course. Each of the person perception scales consisted of the same list of 30 bipolar adjective pairs; however, the instructions for completion of the scale items differed. Responses to the common list of adjective pairs were compared across scales to answer a number of experimental questions.

The following results were obtained. As the number of group sessions increased: (1) the individual group members became significantly less accurate in their judgments of how they were being perceived by the other members of the group, (2) the individual group members tended to change their self-perceptions less than the other group members changed their perception of them, (3) the individual group members did not change the degree of dissonance existing between their self-perceptions and their perceptions of how they thought the other group members perceived them, (4) the individual group members' self-perceptions became increasingly and significantly dissonant to the perceptions of them made by the other members of the group, (5) the individual group members' self-perceptions did not

become either more or less similar to their perceptions of the other members of the group, and (6) there was a significant increase in the extent to which the individual group members subjectively felt they knew one another well.

The results were interpreted in terms of several current theories of therapy, research on person perception during psychotherapy, and recent research on the effects of involvement and familiarity in the distortion of person perception. Some implications and ideas for future research and theory in this area were discussed.

INTRODUCTION

Individuals engaged in group therapy tend to develop percepts of how other people in the group perceive them, how they perceive the other members of the group, and how the other members of the group perceive themselves. As in other social settings, personal constructs are by necessity formed with less than complete information about the perceived individuals and as a result are subject to repeated testing for acceptance or rejection as new data become available. However, because the individual is an involved, interacting stimulus object himself and not an objective, detached observer one would expect that change in his perceptions would be effected not only by increased information about the subject but also by his own changing involvement and value concerns for the person being perceived.

This study investigated changes in interpersonal perception as a function of increasing experience in a group therapy setting. Literature relevant to the topic of change in interpersonal perception during therapy falls into three categories: (1) general theories of therapy, (2) studies of the factors affecting distortion and organization in the perception of people, and (3) studies of perceptual and attitude change during therapy.

General Theories of Therapy

Most of the current theories of verbal therapy assume that if therapy is effective the individual becomes more accurate in his perceptions of others and himself. In fact increased accuracy of interpersonal and intrapersonal perception is one of the major goals of therapy for theorists such as Freud (1953), Alexander (1946), Dollard and Miller (1950), and Rogers (1959). However theories of verbal therapy seem to disagree regarding when and how increased accuracy of interpersonal perception is obtained. There are two basic schools of thought on the matter which are that during therapy interpersonal perceptual accuracy: (1) at first decreases and then eventually increases and (2) increases constantly.

Psychoanalysis (Freud, 1953), psychoanalytic therapy (Alexander, 1946), and reinforcement therapy (Dollard and Miller, 1950) stress the role of transference in therapy and indicate that the patient tends with passing sessions to increasingly distort his perceptions of the therapist principally through the defense mechanisms of repression, denial, and projection. For these theories, therapy is basically a working through of the transference relationship which initially takes some time to develop and finally great skill to handle and resolve.

Alexander (1946) comments that, "psychoanalysis, in fact, consists essentially in development of the transference

neurosis and its resolution [p. 72]." Alexander defines transference as "an irrational repetition of stereotyped reaction patterns which have not been adjusted to conform to the present situation [p. 75]." Although Alexander does not specifically use the terms accuracy of perception in his discussions, it is clear that one of the characteristics of transference, as he defines it, is inaccurate interpersonal perception. He further comments that "the transference neurosis impairs reality testing, and it may be necessary, in some cases, to damp down the tendency to develop a transference neurosis in order to facilitate the process of reality testing [p. 78]." Alexander differs from Freud primarily on the extent to which he believes the therapist should control the transference relationship, but he is not in disagreement with Freud on the theoretical explanations for the occurrence of transference. For both Freud (1953) and Alexander (1946) transference and thus decreasing accuracy of perception occurs during therapy when the patient can no longer repress objectionable tendencies (id impulses) which are nevertheless unacceptable and must deny them by projecting them onto the therapist.

Dollard and Miller's (1950) reinforcement theory essentially echoes and restates in different theoretical language the psychoanalytic prediction that during the course of therapy the patient's interpersonal perceptions first decrease and then finally increase in accuracy.

Miller and Dollard (1941) say that the therapist acts as a cue to elicit emotional responses in the patient which the patient cannot either verbalize or adequately control because the responses have never been labeled and thus are not adequately discriminated.

According to Dollard and Miller (1950), the therapist facilitates increased perceptual distortion by remaining ambiguous and by selectively extinguishing anxieties associated with discussing forbidden topics. The therapist's permissiveness serves the purpose of extinguishing fears which previously reinforced the tendency to avoid and inhibit certain emotional responses. As inhibitory responses are extinguished, expressive, unlabeled, and often inappropriate emotional responses appear and are generalized to the therapist. Increased accuracy in perception occurs only if the therapist is able to help the patient label his distorted responses and thus cut down on his indiscriminate generalization to the therapist.

Dollard and Miller (1950), Alexander (1946), and Freud (1953) all strongly stress the role which unconscious material or habits play in the determination of perception and behavior. They also assume that unconscious processes and content are less rational and less realistic than conscious processes and content. Given these general assumptions, it follows that when unconscious content becomes conscious as a result of the therapeutic process,

the patient will, at least at first, be less accurate, less rational, and less realistic in his perceptual judgments.

Theories of personality and therapy which do not stress unconscious processes or heavily emphasize the irrationality of unconscious processes also tend to describe the therapy process as one in which accuracy of perception improves in a positive linear fashion from the onset to the termination of therapy.

Rogers' (1959) client-centered therapy seems to assume that the client's perceptual accuracy improves in a constant fashion during the therapy process. Although Rogers has formulated concepts which refer to the individual's tendency to defend himself against threatening percepts (percepts which are incongruent with the self-concept) by distorting awareness and thus decreasing perceptual accuracy, he seems to believe that the client becomes increasingly less defensive as therapy proceeds and that incongruent perceptions can emerge without increased loss of reality contact. Put in a slightly different way, Rogers feels that a defensive individual is more perceptually inaccurate than one who is in a temporary state of disorganization induced by therapeutic change. Rogers further says, "assuming a minimum mutual willingness to be in contact and to receive communications, we may say that the greater the communicated congruence of experience, awareness, and behavior on the part of the individual, the more the ensuing relationship

will involve mutually accurate understanding of the communications . . . given [p. 240]."

In summary many theories of verbal therapy include increased accuracy in interpersonal perception as one of the outcomes of successful therapy. There is some disagreement regarding whether accuracy improves in a linear positive manner throughout the therapy process. Those theories which include transference as a major explanatory concept tend to predict the occurrence of a period somewhere during the process of therapy in which interpersonal perceptual accuracy decreases. None of the current theories predict exactly when this period of increasing inaccuracy diminishes. Those theories which predict increased inaccuracy assume the inaccuracy is encouraged by the therapist's ambiguity, his permissiveness, and his role similarity to significant past others such as parents and superiors.

None of the current theories of therapy have specifically addressed themselves to the question of whether inaccuracy increases temporarily during group therapy. The processes operating during group therapy may well be somewhat different from those of individual therapy and therefore transference, if it occurs in groups, may result from somewhat different causes and be resolved in a rather different fashion.

Studies of the Factors Affecting
Distortion and Organization in
the Perception of People

Social psychology has developed a number of explanatory concepts which directly relate to accuracy in interpersonal perception. However, a theory which predicts how these concepts might combine in a given class of interpersonal situations such as group therapy does not yet exist.

Person perception has typically been studied in an artificial setting in which specific factors are isolated and manipulated and their effect on perception observed. Quite frequently the object of perception has been a single individual who does not directly interact with the perceiver, a picture of a person, or a film of a person interacting with others.

The general findings of these studies impressively confirm that the individual is very susceptible to group influence, personal need, preconceived impression, and the order and complexity of the stimulus object.

One fairly established finding is that early impressions are more resistant to change than later impressions and that early impressions tend to prevent the acquisition of new information. This primacy effect has been studied by a number of researchers (Anderson and Barrios, 1961; Luchins, 1957; Asch, 1946). In terms of group therapy one might expect that early impressions of other group members

would be resistant to change and that increasing exposure to the other individuals would not drastically influence or change these early impressions.

Personal involvement or investment has also been shown to affect person perception in the direction of personal need satisfaction (Murray, 1933; Proshansky and Murphy, 1942; Atkinson and McClelland, 1948; Bruner and Postman, 1949; Tajfel, 1957). The classic study by Pepitone (1949) is typical of this finding. In his study boys perceptually distorted the power of judges who they believed were in a position to give them a prize based on their evaluation of them. Friendly judges were perceived to have more power in getting them a ticket to a game than unfriendly judges, and boys who wanted the ticket more than other boys also distorted the judge's power more in the direction of their need satisfaction than did the boys less motivated to receive a ticket. One might expect that as group therapy members become more involved with each other and as their personal investment increases with greater exposure, their perceptions of each other and of how the other perceives them would actually become less accurate despite the increasing pool of information that becomes available through increased contact. Newcomb (1956) found that individuals form favorable descriptive impressions of people they believed liked them and unfavorable impressions of individuals they believed disliked them. However, one

study by Newcomb (1963) found that a fairly large group of men living together over a four month period became more accurate, at least in judging each other's attitudes toward institutions, values, and people in general. Newcomb did not attempt to determine if individual members became more accurate in their estimates of how other members perceived them or how other members perceived themselves along personal dimension lines.

Conformity to group pressure may affect the person perceptions of group members, although the strength and nature of that effect is difficult to predict. The individual is probably seldom completely opposed by all the other group members consistently from session to session, and as Asch (1956) has shown, the effect of even one partner is very effective in reducing group pressure effects. In addition, as Vaughan and Mangan (1963) have demonstrated, group pressure is somewhat successfully resisted when the issue embodies important values to the individual. London and Lin (1964) also obtained results which indicate that as task difficulty increases group conformity is reduced.

On the other hand conformity effects are known to increase as stimulus ambiguity increases (Asch, 1956). one might assume that people are more ambiguous than the stimuli typically used in conformity studies. Hence conformity may be an active variable affecting person perception. One of the expressed goals of therapy is to lower the individual's

defenses which could conceivably make him more susceptible to the effects of group pressure to conform.

Certainly one cannot predict whether accuracy of interpersonal perception suffers as a result of group conformity. The consensus perception could be either less or more accurate than perceptions arrived at independently of such pressure depending upon the given situation. If conformity effects are present in group therapy they probably affect the individual's self-description less than his description of group members.

Another finding (Secord and Backman, 1964; Kipness, 1961) related to group conformity is that, as interaction increases, members tend to perceive increased similarity between themselves and other group members. The movement toward assumed similarity is maximized when there is a positive attraction to the object of the perception (Rosenbaum, 1959), and dissimilarity is assumed for persons the individual dislikes (Vroom, 1959). To the extent that increased exposure and interaction with others results in more clearly established positive or negative attractions to them, it follows that the projection or negation of one's own attitudes in others would also increase. And to the extent that projection and negation interfere with a more accurate perception of others, one might expect that increased interaction leads to increased distortion.

Several studies have addressed themselves specifically to whether increased familiarity leads to increased accuracy in interpersonal perception. Interest in this area is relatively recent and therefore some of the findings are rather tentative.

Taft (1966) found that acquaintances were more accurate than strangers in predicting one another's personal responses on a Q-sort task. He did not compare diad groups which varied in their degree of acquaintance. Interestingly, he also found that assimilative projection, the degree to which a subject describes the other person as similar to himself, was significantly greater in the acquaintance group than in the stranger group. Thus assimilative projection was a form of inaccuracy because actual similarity between raters in both groups was equivalent.

Hjelle (1968) extended Taft's (1966) study by comparing three groups which differed in degree of acquaintance. He found that intimate diads (married couples) and casual diads (friends) were both more accurate than nonacquaintances in predicting each other's self-ratings using Q-sort and free-sort methods. However, he found no significant differences between the casual and intimate diads.

Hollander (1956) found that peers in an OCS Navy training program were able to predict with a greater degree of success each other's eventual grades when the judgments

were made near the beginning rather than near the mid-point of training. Familiarity seemed to hamper accuracy.

In another study which suggests that familiarity can lead to decreased accuracy in person perception Levinger and Breedlove (1966) compared spouses' assumed agreement with their actual agreement on a number of social, ethical, moral, political, and religious issues. The spouses' assumed agreement about values exceeded their actual agreement. This disparity between actual agreement and assumed agreement increased with the number of years of marriage.

In the situations studied accuracy of person perception and familiarity beyond a beginning level of acquaintance seem to be either negatively or nonsignificantly associated. In explaining his results Taft (1966) suggests that, "knowing a person too well may lead to so much information about him that the personality judgments give too much weight to some data and far too little to other, more relevant, data [p. 600]." He also suggests that the bias toward making favorable judgments with increased familiarity may eventually result in decreased perceptual accuracy.

Studies of Perceptual and Attitude Change During Therapy

Most studies of perceptual change during therapy have focused on the individual therapy model and

consequently discuss change in the therapist's perception of the patient, or the patient's perception of the therapist.

In examining the literature in this area two fairly consistent findings emerge: (1) the therapist and patient do not agree in their perception of one another or in what they feel is transpiring during therapy; (2) impressions are consolidated and stabilized fairly early in the therapy process. A more uncertain issue is the question of whether the patient's values move toward the therapist's values.

Parloff, Iflund, and Goldstein (1960) did find reasonable congruence between therapist and patient perceptions and therefore it will be presented first. In their study topics introduced by the patient during specific interviews were recorded by independent observers. The patient and therapist were then asked independently to rank the topics in the order of importance to them and in the expected order of importance to the other participant in the therapeutic process. There was a significant similarity between the rankings of the two participants, and each participant (therapist and patient) could predict to a significant degree the order of importance assigned by the other. This study also found that the therapist's predictive ability did not increase after the first therapy hour.

On the other hand, Feifel and Eells (1963) found that therapists and patients differed in their descriptions of the patients' improvement upon successful therapy.

Therapists described behavioral changes such as relief of symptoms and improved social relationships while the patients reported subjective changes such as improved insight, self-understanding, and self-confidence. Heller and Goldstein (1961) found that patients progressively became less accurate about the level of their dependency on the therapist. Patients rated themselves as increasingly independent as the number of sessions increased, however, independent behavior raters perceived increasing dependency on the therapist.

Using the Barrett-Lennard Relationship Inventory, Rogers (1967) found that both patients and independent judges disagreed with the therapists' rating of their own behavior during therapy. Barrett-Lennard (1962) obtained results similar to Rogers with a population of neurotic patients. In the Barrett-Lennard study an insignificant but positive relationship existed between the patient's view of the therapist and the therapist's view of himself while Rogers' results were even more extreme. In the Rogers study, patient and observer views of the therapist's attitudes were negatively correlated with the therapist's own view of his attitudes.

The studies mentioned previously seem to indicate that perceptual accuracy does not necessarily increase during therapy. In a study by Crow (1957) training of medical students in physician-patient relationships resulted

in decreased accuracy in the prediction of subjects' self-ratings as compared with an untrained group. The subjects were viewed on film. Crow claimed that because the trained medical students attempted to account for individual subject differences, their estimates became more variable and less accurate than estimates based on undifferentiated stereotypes.

In addition to the studies which show varying degrees of perceptual inaccuracy in the perception of oneself and others during therapy, a number of studies indicate that the perceiver's impressions are formed relatively early in the therapeutic process. Rubin and Shontz (1960) reported that clinicians showed great diagnostic tenacity in adhering to their initial impressions by generally ignoring new information. Rogers (1967) found that the patient's and therapist's ratings of the therapist's behavior were relatively stable across sessions with a very high correlation between their early and terminal ratings. In the study by Parloff et al. (1960) already mentioned, the therapist's ability to correctly predict the patient's rank ordering of therapy topics did not improve after the first hour. Finally, Meehl (1960), examining therapist perception of the patient, found that the categories formed within the first few sessions are "retained more or less intact, and do not differ much from those found after 24 therapy sessions [p. 22]."

A few studies have claimed that the patient's values become increasingly similar to the therapist's values as therapy contact increases. Rosenthal (1955) is the principal exponent of this position. Rosenthal's interpretation is a general one and has been contested by a number of subsequent studies. Farson (1961) indicated that patients as a group become similar to therapists as a group, but not to their own therapists. A study by Landfield and Nawas (1964) further clarifies Rosenthal's results. They found that patients shifted their present self-concept in the direction of an ideal therapist concept which was organized and described within the framework of the patient's own language. These latter results seem to indicate that patients search for a model with which to identify and emulate, but that the patient is selective in his choice of models and model components.

Thus, one should not expect drastic changes in the individual group member's self-concept either in the direction of some general group personality or group consensus about the individual. The self-concept is very resistant to change (Kelly, 1955) and supported by a very complex and extended network of congruent evaluations by significant others (Backman, Secord, and Peirce, 1963). Change does not seem to come simply from copying others.

Statement of the Problem

Several current theories of verbal therapy predict that the patient's perceptions of his therapist and himself will decrease in accuracy during the course of therapy unless the transference relationship is substantially resolved. None of the major current theories of verbal therapy specifically address themselves to the question of the role transference might play in group therapy. There is, however, no theoretical reason to suppose that transference is not a major variable in group therapy.

A fairly large number of studies have documented that interpersonal perception can be influenced and distorted by such variables as group influence, personal need states, preconceived impressions, assimilative projection, primacy effects, and the amount, order, and complexity of the person data.

A smaller collection of studies indicates that familiarity may eventually lead to distortion in person perception. Familiarity has been simply defined as contact or interaction with another.

The studies which specifically examined person perception during therapy found that some degree of perceptual distortion often does exist and that such distortion may, under some conditions, increase with increasing therapy sessions. In addition, early percepts tend to be retained

to the exclusion of new personality data and self-percepts tend to change very little over sessions.

The present study examined changes in the interpersonal perceptions of students in a developmental laboratory group. On the basis of the preceding survey of the literature the present study hypothesized that as the number of laboratory group sessions increase: (1) the individual's ratings of how others in the group perceive him will become less congruent with the ratings of him made by other group members, (2) the individual's ratings of himself will change less than the ratings made of him by others, (3) the discrepancy between the individual's rating of himself and his rating of how other group members rate him will not change, (4) the individual's rating of himself will become less congruent with the ratings of him made by other group members, (5) the individual's rating of himself will become more congruent with the ratings he makes of other group members, and (6) individuals will report that they feel they know the other group members better.

METHOD

Subjects

The subjects for this study were students enrolled in Psychology 43 (Case Study for Normal Personality), an undergraduate course offered through the Psychology Department at The University of Arizona. This class consisted of 11 students. There were 7 males and 4 females in the sample. The subjects were sophomores, juniors, and seniors. The class met twice weekly, for one and one-half hours. The instructor was a faculty member at the university and a Ph. D. Clinical Psychologist.

Measuring Instruments

Four measures, all constructed by the author, were used in this study. Three measures were employed to tap accuracy of social perception. They were the How I See Myself Scale (Appendix A), How I see the Other Person Scale (Appendix B), and the How Another Sees Me Scale (Appendix C). These three measures of accuracy in interpersonal perception consisted of the same list of 30 bipolar adjective pairs arranged along 5-point interval scales. The instructions, however, differed for each scale. Some of the adjective pairs were selected from Cattell's (1957) bipolar factor labels, others were modified versions of Cattell's labels.

An effort was made to select and revise factor labels so that the result would be a short list of adjectives which comprehensively describe personality, which can be easily understood by college students, and which tend to be appropriate to the description of an individual as he interacts in a group setting. Positive and negative adjectives were counter-balanced. The last measure, the How Well I Know Another Scale (Appendix D), attempted to determine the extent to which the person subjectively felt he knew each of the other members of the group.

All the above measures were constructed so that administration and completion time could be held to a minimum.

Procedure

The subjects of this study were student members of an accredited course called Case Study for Normal Personality. It was the group process as experienced by the members of this course which was examined for its effect upon the students.

Case Study for Normal Personality is an experimental course designed to study the possibility of introducing laboratory methods into the teaching of personality theory. In its present form (as conducted by Professor Peter Madison) the course is exploring the usefulness of group procedures customarily used in clinical settings for their potential adaptability to an academic laboratory format.

The plan for the laboratory in which the data for the present study were gathered called for the use of procedures drawn from group therapy or encounter groups. According to Madison (1971) these procedures have as their aim: (1) producing personality data on each group member through observation of his responses to the procedures and (2) producing whatever favorable developmental impact as might accrue from participation in such a group. The procedures employed are in every way comparable to those used in group therapy except for two differences: (1) they are used on participants who volunteer for this experimental course (with full knowledge of its special character) rather than being patients, and (2) the students are required, at the end of the laboratory, to write a term paper applying theoretical concepts to the observational and experimental personality data produced in the course of the semester's work.

The resemblances of such student development laboratories to therapy and encounter groups is so substantial that any findings should be generalizable to encounter groups and to therapy groups insofar as the patient or student character of the groups is not a critical difference--a point about which we have no knowledge at present.

Since all the measures of this study are measures of process they were given several times throughout the course, and because several of the scales have little

meaning unless they are compared directly with one another, a number of measures were given during the same session or as close as possible in time to one another.

All measures in this study included explicit written instructions for their completion and were administered by the class instructor with a minimum of verbal explanation.

During the first session the students adopted code names in order to maintain subject confidentiality. These code names were then used to group and classify data in the present study.

After the students became oriented to the requirements of the course and became at least somewhat acquainted with each other, the following measures were given. The How I See Myself Scale was given to all the students during session 7 and again during session 26. During session 7 and again during session 25 each student completed the How Well I Know Another Scale for every other person in the group.

During sessions 8, 15, and 27 each student was asked to describe the three other students who received the highest ratings on the first administration of the How Well I Know Another Scale. Each student described three other students on the How I See The Other Person Scale and the How Another Sees Me Scale. With this design each student was asked to rate only those group members he felt he knew best.

RESULTS

Since the interpersonal perception measures are not designed to yield information when examined individually, the How I See Myself Scale, the How I See the Other Person Scale, and the How Another Sees Me Scale were directly compared with each other for each individual in order to derive a set of congruency scores. A congruency score is the absolute scale score difference between the same scale item as it is endorsed on two different tests. A sum of absolute scale score differences (congruency scores) were then computed for each pair of tests for each subject. These total congruency scores were compared across sessions.

It was expected that the group members' ratings of how three other people in the group perceive them (How Another Sees Me Scale) would become less congruent with the ratings of them made by the three other group members (How I See the Other Person Scale). Differences between the group mean congruence scores for sessions 8, 15, and 27 were in the predicted direction (Table 1). To test the significance of these mean differences three analyses of variance (repeated measures on the same subject) were performed. An overall comparison of administrations on sessions 8, 15, and 27 failed to reach significance ($F = 1.328, p > .05$). The results of this analysis are presented in Table 2. Having

Table 1. Group mean congruence scores for sessions 8, 15, and 27.

	Session		
	8	15	27
Mean congruence scores	95.78	103.53	104.00

Table 2. Analysis of variance of the change in the congruence between the individual's ratings of how others perceive him, the How Another Sees Me Scale, and the others' ratings of him, the How I See the Other Person Scale. A comparison of rating--sessions 8, 15, and 27.

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Treatment	127.81	2	63.9050	1.328	> .05
Subjects	2252.91	32	70.4034		
Error	3080.19	64	48.1279		
Total	5460.91	98			

failed to demonstrate significance in the overall analysis, a comparison of sessions 8 and 27 was made. Differences between group mean congruence scores (Table 3) were significant ($F = 6.761$) beyond the .05 level. A comparison of sessions 8 and 15 for group mean congruence score differences (Table 4) was not significant ($F = 3.48$, $p > .05$).

It was further expected that the group members' ratings of themselves on the How I See Myself Scale would change less than the ratings made of them by 3 other group members on the How I See the Other Person Scale. The difference between each student's rating of himself made during sessions 7 and 27 was compared with the difference between the separate ratings of him made by 3 others during sessions 8 and 27. One-way analysis of variance with unequal sample sizes was used. Possible attenuation was not controlled. Although mean differences were in the predicted direction, comparison yielded nonsignificant results ($F = .300$, $p > .05$). The results of this analysis are presented in Table 5.

This study predicted that the discrepancy between the group members' ratings of themselves (How I See Myself Scale) and their ratings of how 3 other group members perceive them (How Another Sees Me Scale) would not significantly change. Differences between each student's rating of himself, made on session 7, and his ratings of how 3 others perceive him, made on session 8, were compared

Table 3. Analysis of variance of the change in the congruence between the individual's ratings of how others perceive him, the How Another Sees Me Scale, and the others' ratings of him, the How I See the Other Person Scale. A comparison of rating--sessions 8 and 27.

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Treatment	279.18	1	279.18	6.761	< .05
Subjects	2174.26	32	67.94		
Error	1321.32	32	41.29		
Total	3774.76	65			

Table 4. Analysis of variance of the change in the congruence between the individual's ratings of how others perceive him, the How Another Sees Me Scale, and the others' ratings of him, the How I See the Other Person Scale. A comparison of rating--sessions 8 and 15.

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Treatment	92.180	1	92.180	3.488	> .05
Subjects	1971.760	32	61.617		
Error	845.829	32	26.432		
Total	2909.760	65			

Table 5. Analysis of variance to compare the change in the individual's ratings of himself on the How I See Myself Scale with the change in the ratings of him made by others on the How I See the Other Person Scale.

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Among	22.916	1	22.9166	.300	> .05
Within	3206.969	42	76.3564		
Total	3229.886	43			

with differences between his rating of himself made on session 26 and his ratings of how 3 others perceive him made on session 27. An analysis of variance (repeated measures on the same subject) technique was employed for this comparison. Consistent with the null-hypothesis of the present study, no mean differences were found ($F = .073$, $p > .05$). The results of this analysis are presented in Table 6.

The present study predicted that the group members' ratings of themselves (How I See Myself Scale) would become less congruent with the ratings of them made by 3 others (How I See the Other Person Scale). Differences between each student's rating of himself made on session 7 and the ratings of him made by 3 others on session 8 were compared with the differences produced from ratings made on session 26 (How I See Myself Scale) and session 27 (How I See the

Table 6. Analysis of variance of the change in the discrepancy between the individual's ratings of himself on the How I See Myself Scale and his ratings on the How Another Sees Me Scale of how others rate him.

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Treatment	2.64	1	2.64	.073	> .05
Subjects	2304.24	31	74.33		
Error	1116.86	31	36.03		
Total	3423.74	63			

Other Person Scale). Consistent with the expectations of this study, analysis of variance (repeated measures on the same subject) revealed a significant ($F = 11.296$, $p < .05$) increase in discrepancy between the individual's self-perceptions and other's perceptions of him as the number of sessions increased. Table 7 presents the results of this analysis.

It was also expected that the group members' ratings of themselves (How I See Myself Scale) would become more like the ratings they make of 3 other group members (How I See the Other Person Scale). The difference between their rating of themselves made on session 7 and the ratings they make of 3 other group members on session 8 were compared with the difference between their self-ratings made on

Table 7. Analysis of variance of the change in the discrepancy between the individual's rating of himself on the How I See Myself Scale and the ratings of him made by others on the How I See the Other Person Scale.

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Treatment	402.65	1	402.65	11.296	< .05
Subjects	1425.88	30	47.53		
Error	1069.35	30	35.64		
Total	2897.88	61			

session 26 and their ratings of others made on session 27. Examination of the mean congruence ratings for early and late sessions revealed very slight differences in the predicted direction. Subsequent analysis of variance (repeated measures on the same subject) results were nonsignificant ($F = .000$, $p > .05$). The data therefore failed to support the hypothesis. Table 8 presents the analysis of variance information derived from the comparison.

Despite the increasing inaccuracy in interpersonal perception suggested by the above expectations, it was further expected that the group members would subjectively feel, as measured by the How Well I Know Another Scale, that they know the other group members more accurately near the end of the course (session 25) than near the start of the

Table 8. Analysis of variance of the change in the congruence between the individual's rating of himself on the How I See Myself Scale and his ratings of others on the How I See Another Person Scale.

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Treatment	1.833	1	1.833	.000	> .05
Subjects	1524.940	32	47.654		
Error	4299.667	32	134.365		
Total	5826.440	65			

course (session 7). This last hypothesis was confirmed. Analysis of variance (repeated measures on the same subject) revealed a significant ($F = 9.431$, $p < .05$) increase over sessions in the extent to which group members felt they knew one another well. The results of this analysis are presented in Table 9.

Summary of Results

As the number of group sessions increased the individual group members:

1. Became significantly less accurate in their judgments of how they were being perceived by the other members of the group, comparison of sessions 8 and 27.

Table 9. Analysis of variance of the change in the ratings for the How Well I Know Another Scale.

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u>
Treatment	283.68	1	283.68	9.431	< .05
Subjects	572.27	10	57.23		
Error	300.82	10	30.08		
Total	1156.77	21			

2. Tended to change their self-perceptions less than the other group members changed their perceptions of them.
3. Did not change the degree of dissonance existing between their self-perceptions and their perceptions of how they thought the other group members perceived them.

In addition, as the number of group sessions increased, the individual group member's self-perceptions:

1. Became significantly and increasingly dissonant with the perceptions of them made by the other members of the group.
2. Did not become either more or less similar to their perceptions of the other group members.

Finally,

1. There was a significant increase over sessions in the extent to which the individual group members subjectively felt they knew one another well.

DISCUSSION

The findings of the present study in general support the notion that during group therapy there is a period (of empirically unknown length) during which accuracy and agreement in certain types of interpersonal perception decrease. The judgments made by subjects in the present study were of a personal nature and hence should be more vulnerable to personal involvement and perceptual distortion effects than less value-laden judgment tasks (Tajfel, 1957). To express the point in terms of an item from one of the scales, an individual may make a more distorted prediction of whether another person thinks he is naive than whether the other person likes to go to baseball games.

Taft (1966) has suggested that accuracy of person prediction should increase as the categories for prediction become more narrow and specifically related to observable behavior. For this reason an attempt was made in the present study to gain a greater degree of specification in the scale items used than that obtained in other studies. Unfortunately, extremely concrete and objective items also tend to lose their personal involvement quality and perhaps their significance. It also seems that many personal evaluations of others and of oneself which are made in the course of normal life are somewhat abstract and not directly

tied to one or to a few concrete behaviors. To require judges to describe others in conceptual terms does not therefore seem to be an artificial or irrelevant task.

Almost all perception must rely to some extent upon the reintegrative efforts and abilities of the perceiver, but person perception seems to utilize the reintegrative process more than other perceptual tasks. No doubt the complexity of people as stimuli (Taft, 1966), the vague, violdietig quality, of much of their output (Leeper and Madison, 1959), and the matching complexity of the person perceiver contributes to a perceptual task of rather high difficulty and opportunity for inaccuracy.

Western society seems to place great faith in the power of increased information to make accurate judgments more possible and more frequent. This study suggests, however, that at least in the area of person perception, increased information may also be accompanied by increased bias and/or confusion.

The present finding that certain types of interpersonal perceptual accuracy decreased over sessions is similar to findings in studies of familiarity by Levinger and Breedlove (1966) and Hollander (1956) but conflicts with Hjelle's (1968) results. The present results also support the findings of Rogers (1967), Feifel and Eells (1963), Heller and Goldstein (1961), and Crow (1957) to the extent that they found the presence of perceptual distortion in

psychotherapy. This finding can also be related to those studies which have attempted to isolate and control variables responsible for distortion in the perception of people (Tajfel, 1957; Atkinson and McClelland, 1948; Proshansky and Murphy, 1942; Murray, 1933).

The other results of the present study suggest a rather interesting set of relationships. The individual group members preserved almost unchanged their self-concepts and the degree of discrepancy between their self-concepts and how they believed others saw them. They did so even though the other group members did not accurately perceive the increase in disagreement occurring between their own view of themselves and the view of them held by others.

Several possible explanations of the above results can be given. Individuals could have perceived changes in one another but not have perceived any changes in themselves. The group members also could have gained new information about each other; information which the sending individuals were not aware that the others had received, although the sending individuals may or may not have been aware of the information themselves. It is possible that judges are better able to predict how others see them on a first impression basis or new acquaintance basis, but much less able to determine what facets of themselves are being attended to and valued by their more intimate or familiar friends.

If perceptual information about a person is conflicting and contradictory one would not expect that an increase in such information should necessarily lead to a more accurate perception of him.

If behavioral changes were actually occurring during the groups, a matter which was not investigated, the changes would be viewed from different perspectives depending on whether one were the perceiver of change in another, or the perceiver of change in oneself. The frames of reference might be drastically different. For example, if a group member recognized his increasing openness and self-confidence within the group setting, but perceived no commensurate change occurring in his dormitory relationships or in his class-room associations, he might well minimize its overall importance as a general change in his personality. The other group members not directly aware of his behavior outside the group might conclude that his increasing openness and confidence with them was a general change affecting all of his relationships.

Other examples can be imagined. A rather frequent finding in behavior therapy literature (Yates, 1970) is that behavioral change often precedes self-recognition of that change and a corresponding attitudinal change to account for it. Sundberg and Tyler (1962) have noted that some time may elapse, perhaps several months, between the occurrence of psychoneurotic symptoms, as viewed by others,

and any change in the individual's performance on diagnostic tests such as the MMPI. Such a lag in perceptual recognition of personality changes could account for the group members' increasing inability to predict accurately how they were being perceived by others, and would explain why the discrepancy between the individuals' self-descriptions and their descriptions of how others describe them remained constant even though the actual discrepancy between the individuals' self-descriptions and the descriptions of them made by others increased. It is conceivable then that actual behavioral change may lead to a period of perceptual inaccuracy, bias, and possible disorganization, all of which could last until the behavioral changes are perceptually integrated into the individual's organization of himself.

Somewhat out of step with the results discussed so far, the present study found that the group member's descriptions of one another did not become more like their own self-descriptions. This finding is rather puzzling in that quite a few studies have reported a positive association between self-projection (assimilative projection) and familiarity (Taft, 1966; Levinger and Breedlove, 1966; Secord and Backman, 1964; Kipness, 1961; Rosenbaum, 1959; Vroom, 1959). Rosenbaum (1959) has proposed that positive attraction to the object of the perception maximizes the tendency toward assumed familiarity and that dislike for

the object of perception maximizes the tendency toward assumed dissimilarity. Perhaps in the present sample positive and negative attractions remained balanced for the group as a whole even though the valences might have changed in value. There is also the possibility that the design of the course which stressed the application of theoretical concepts to the personality data observed inhibited the uncritical tendency to see others as extensions of oneself. In support of this interpretation, Crow (1957) found that the personality judgments of medical students were less stereotyped but not more accurate after training in personality assessment through interviews.

Despite the significant increases in inaccuracy and disagreement found in the types of interpersonal perception already discussed, the group members subjectively felt they knew one another better near the end of the course than at the beginning. Certainly this is not a surprising finding.

In some sense, they are probably right. Obviously they received more information about one another as the sessions increased. Person X, for instance, might, after 12 sessions know that person Y likes to date boyish, lithe-looking, asthenic girls rather than buxom, earthy ones--a piece of information he did not have on the seventh group session. Friendship seems to be built in part upon such bits of information. For example, it is comforting to know what kind of food and drink to serve a friend when he stops

by for an evening. The security received from having accurately made such a rather concrete prediction may make one feel that in general he knows the other person fairly well.

The point of all this may be that a sense of closeness, investment, and involvement in another is not necessarily hampered by the decreases in accuracy described in the present study.

Implications

The theories of Freud (1953), Alexander (1946), and Dollard and Miller (1950) all predict that after an initial decrease in perceptual accuracy, due to transference, perceptual accuracy improves as the transference relationship and the individual's conflicts are resolved. The subjects in the present study met twice weekly, for one and one-half hours, for a total of 27 sessions. No improvement in accuracy was found on session 27; however, the pattern of increasing inaccuracy had slowed to the point that there was very little difference in congruence scores between sessions 15 and 27. To test further the transference prediction, a study similar to the present one could extend the examination of perceptual accuracy to a group meeting for perhaps one year. If subsequent studies confirm the findings here and also find no later improvement in person perception accuracy

over an even greater number of sessions, the goals of some of the current schools of group therapy may need revision.

The theory that attitude change lags behind behavioral change (Yates, 1970) and that this lag accounts for the results of the present study could be partially tested by readministering the scales used in the present study to the group members several months after termination of their group. An increase in accuracy over the last session would support this theory. Group member involvement might also be less several months after termination and such a decrease might also contribute to increased perceptual accuracy on a posttest. A continuing decrease in accuracy would be more difficult to explain.

The role which involvement plays, as distinguished from familiarity, might be examined by administering interpersonal perception scales to two or more groups that are controlled for their level of personal involvement between members. The groups could then be compared with one another for group differences in perceptual accuracy. If adequate involvement measures were developed or selected, a single laboratory group could be used with members high in mutual personal involvement compared with members low in mutual personal involvement.

The present study could be improved by the addition of other measuring techniques such as Q-sort and free-sort methods. Correlation with such measures would help to

determine the validity of the present scales. It might also be informative to determine what changes occur in the group members' abilities to judge how other group members describe each other. A How Another Sees Another Scale could be easily added to the measures already developed.

Although the data could have been analyzed in such a way, the present study did not examine whether the group members changed their perceptions of how others perceived them more than they changed their self-perceptions. The results of such a comparison would be directly related to, and probably highly correlated with, the finding that the discrepancy between the group members' self-perceptions and their perceptions of how others perceive them did not change over sessions.

The present study did not administer any congruence scales until session seven of the group because it was assumed that accuracy would increase during these early sessions (Taft, 1966). A slight change in design would allow a test of this assumption. Such a test would in all probability contribute to the now generally accepted conclusion that some knowledge of the person to be judged is better than none at all.

Later studies of interpersonal perception in groups might also examine changes in the personality content area of perception. The present study was not designed to examine whether specific personality factors were seen to

change more than others as the group sessions increased. The question of which factors of personality tend to be most inaccurately perceived was also not asked.

The author received the impression while scoring the raw data that certain individual group member differences existed in the ability to correctly judge others and that individual patterns of change in accuracy were also present. It seems entirely possible that certain personality variables or learned skills could be associated with the ability to integrate new information about others in a way that facilitates accurate judgment of their attitudes.

Another impression again not supported by any analyses or statistical comparisons, was that group members seemed to vary in the extent to which their personality judgments of others fluctuated from one extreme to the other. Extreme fluctuations seemed to be associated with value decisions about the individual being judged. He was seen as either all good or all bad, but not as a combination of the two poles.

APPENDIX A

HOW I SEE MYSELF SCALE

Session _____

My Code Name _____

On this test describe yourself using a list of adjectives which come in pairs. The pairs are at opposite ends of the scale. There are 5 points on each scale. Checking a 1 or 2 means that you think the adjective on the left is more descriptive of you than the adjective on the right which is indicated by checking 4 or 5. Unless you have absolutely no idea which of the two adjectives is more descriptive of you do not check a 3. The closer the number is to the adjective the more descriptive that adjective is of you as you see yourself. Thus, on the first item, a 1 would mean you see yourself as more dependent than a 2 because 1 is closer to the word "dependent" than is a 2, and a 5 would mean you see yourself as more independent than a 4 because 5 is closer to the word "independent" than is a 4.

Be sure you put a check mark for each of the 30 scales. Do not omit any. Use only one check mark for each scale.

dependent	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	independent
unconventional	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	conventional
timid	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	adventurous
calm, patient	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	excitable, impatient
suspicious	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	trustful
insightful re- garding self	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	lacking self insight
boastful	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	modest
cultural interests	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	commonplace interests
cool, aloof	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	company seeking
acts individ- ualistically	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	goes with group
solemn	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	lighthearted
imaginative	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	unimaginative
undependable	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	loyal
prone to jealousy	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	not easily jealous
decisive in thinking	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	slow to make up his mind
tough	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	sensitive
humorous	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	dry
insightful re- garding others	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	naive regarding others
lacking confidence	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	self- confident
thoughtful	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	unreflective
awkward, soci- ally clumsy	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	polished, poised composed

adaptable	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	rigid
expressive	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	reserved
depressed, pessimistic	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	cheerful, joyous
responsible	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	frivolous, immature
quitting	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	persevering
shows strong interest in opposite sex	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	little interest in opposite sex
careful	___ : ___ : ___ : ___ : ___	carefree
lacking aes- thetic interests	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	aesthetic
assertive	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	submissive

APPENDIX B

HOW I SEE THE OTHER PERSON SCALE

Lab 7, Session _____

My Code Name _____

Code Name of the Other _____

Your task here is to describe another person as he or she appears to you. You may not see the person in the same way that he or she sees himself. Please try to describe how the person seems to you even though you think he may disagree with your perceptions.

In order to describe the person you are given a list of adjectives which come in pairs. The pairs are at opposite ends of the scale. There are 5 points on each scale. Checking a 1 or 2 means that the adjective on the left is more descriptive of the person than the adjective on the right which is indicated by checking 4 or 5. Unless you have absolutely no idea which of the two adjectives is more descriptive of the person you are rating do not check a 3. The closer the number is to the adjective the more descriptive that adjective is of the person. Thus on the first item, a 1 would mean the person is more dependent than a 2, because 1 is closer to the word "dependent" than is a 2,

and a 5 would mean the person is more independent than a 4 because 5 is closer to the word "independent" than is a 4.

Be sure you put a check mark for each of the 30 scales. Do not omit any. Use only one check mark for each scale.

dependent	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	independent
unconventional	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	conventional
timid	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	adventurous
calm, patient	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	excitable, impatient
suspicious	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	trustful
insightful re- garding self	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	lacking self insight
boastful	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	modest
cultural interests	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	commonplace interests
cool, aloof	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	company seeking
acts individ- ualistically	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	goes with group
solemn	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	lighthearted
imaginative	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	unimaginative
undependable	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	loyal
prone to jealousy	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	not easily jealous
decisive in thinking	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	slow to make up his mind
tough	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	sensitive
humorous	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	dry
insightful re- garding others	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	naive regarding others
lacking confidence	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	self- confident
thoughtful	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	unreflective
awkward, soci- ally clumsy	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	polished, poised composed

adaptable	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	rigid
expressive	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	reserved
depressed pessimistic	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	cheerful, joyous
responsible	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	frivolous, immature
quitting	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	persevering
shows strong interest in opposite sex	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	little interest in opposite sex
careful	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	carefree
lacking aes- thetic interests	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	aesthetic
assertive	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	submissive

APPENDIX C

HOW ANOTHER SEES ME SCALE

Lab 7, Session _____

My Code Name _____

Code Name of the Other _____

On this test you are to pretend that you are _____ and from his or her viewpoint describe yourself. In other words, describe yourself as you think the other person sees you even if you disagree with the other's opinion of you.

In order to describe yourself as the other person perceives you a list of adjective pairs are given. The pairs are at opposite ends of the scale. Checking a 1 or 2 means that the adjective on the left is more descriptive of how the other person sees you than the adjective on the right which is indicated by checking 4 or 5. Unless you have absolutely no idea which of the two adjectives is more descriptive of how the other person sees you do not check a 3. The closer the number is to the adjective the more descriptive that adjective is of how the other person perceives you. Thus on the first item, a 1 would mean the other person sees you as more dependent than a 2 because 1 is closer to the word "dependent" than is a 2, and a 5 would

_____mean the other person sees you as more independent than a 4 because 5 is closer to the word "independent" than is a 4.

Be sure you put a check mark for each of the 30 scales. Do not omit any. Use only one check mark for each scale.

dependent	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	independent
unconventional	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	conventional
timid	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	adventurous
calm, patient	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	excitable, impatient
suspicious	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	trustful
insightful re- garding self	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	lacking self insight
boastful	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	modest
cultural interests	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	commonplace interests
cool, aloof	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	company seeking
acts individ- ualistically	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	goes with group
solemn	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	lighthearted
imaginative	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	unimaginative
undependable	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	loyal
prone to jealousy	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	not easily jealous
decisive in thinking	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	slow to make up his mind
tough	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	sensitive
humorous	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	dry
insightful re- garding others	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	naive regarding others
lacking confidence	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	self- confident
thoughtful	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	unreflective
awkward, soci- ally clumsy	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	polished, poised composed

adaptable	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	rigid
expressive	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	reserved
depressed pessimistic	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	cheerful, joyous
responsible	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	frivolous, immature
quitting	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	persevering
shows strong interest in opposite sex	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	little interest in opposite sex
careful	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	carefree
lacking aes- thetic interests	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	aesthetic
assertive	<u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u>	submissive

APPENDIX D

HOW WELL I KNOW ANOTHER SCALE

For each of the persons listed below please rate how well you know them. Fill out one rating scale for each person on the list.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Session_____

My Code Name_____

Code Name of the Other_____

How Well I Know Another Scale

Considering just the things he says and does in
group, I think I know him:

1	2	3	4	5	6	7
Not at all						Extremely well

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