

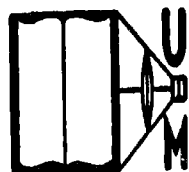
DOCTORAL DISSERTATION SERIES

TITLE PERSONAL INFLUENCE AND OPINION CHANGE
IN CONFERENCES

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UNIVERSITY OF MICH. DATE 1950

DEGREE Ph. D. PUBLICATION NO. 2411



UNIVERSITY MICROFILMS

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PERSONAL INFLUENCE AND OPINION CHANGE
IN CONFERENCES

By
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A Dissertation Submitted in Partial Fulfillment of
the Requirements for the Degree of Doctor of
Philosophy in the University of Michigan

July, 1950

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ACKNOWLEDGEMENTS

This study was part of the research program of the Conference Research project, sponsored at the University of Michigan by the Office of Naval Research. I am indebted to these organizations and to Dr. Harold Guetzkow, the Project Coordinator, for the research opportunities and facilities provided. Dr. E. Lowell Kelly and the staff of the Veterans' Administration Program for the Selection of Clinical Psychologists made available the pooling groups on which the study was done.

Since the study was conducted in a team research setting, it required the cooperation of many people. Dr. Leon Festinger helped plan the study and interpret some of the results. Nancy Forrest, Marian Heilman, Andrew Kapos, N. Edd Miller, Georgia Perry, and Sid Rosen observed the groups. Dr. R. Freed Bales helped train the observers. Florine Schiff and H. Ted Cohen assisted in the analysis of the data. Georgia Jaycox and Gloria Parsons helped in the preparation of the manuscript. I am deeply grateful to all of these people for their assistance.

I want to thank the twenty-four clinicians who were the group participants in the study.

I appreciate the interest of the members of my committee, and, especially, I am indebted to Dr. Donald G. Marquis for his help from the inception of the study to the completed manuscript.

PREFACE

The study here reported is a contributing facet to a mosaic of research organized around one area. As described by Marquis⁽¹⁷⁾, program research consists of a number of separate studies which are coordinated to give information about some topic too extensive to be handled by a single researcher or discipline. This dissertation is coordinated with other research activities of the Conference Research project. Accordingly, it becomes most meaningful in the framework of the aims, theory, and previous findings of that project.

The project is investigating small group conference process, and is especially concerned with the decision-making conference used for administrative purposes. The Conference Research study attempts to understand such groups in terms of their dynamics and the effects of interpersonal behavior on the group processes.

The impact of the previous studies on the present one is most marked with respect to variables chosen for study and the general theoretical framework within which the relationships are derived. The plan is to outline here the framework of interrelated hypotheses used in Conference Research, reserving the detailed theoretical discussions for the appropriate later sections. The specific theories which led to the formulation of the present study are discussed fully in the succeeding sections.

Broadly, the project attempts to relate variables existing prior to the conference and variables appearing during the process

of the conference to certain of the conference outcomes. Examples of outcome variables are "rated satisfaction with the conference decision" or "objective quality of the decision." Some process variables, by way of illustration, are "audibility of communication", "leadership style", or "influence of members on each other". Examples of pre-conference factors are friendship relations among the group's members or the formal status hierarchy within the organization.

The present study is closely related to a previous study on similar groups done at Wellesley, Massachusetts in 1948⁽⁹⁾. It is an advantage of the sequential nature of program research that experiments and studies can be redone with the inclusion of warranted modifications.

This study was conducted using real-life groups whose purpose was not related to this research. There was little opportunity to manipulate the groups, but chiefly to observe and to measure. The study is, therefore, a naturalistic one and a discussion of the value of a non-manipulative study may be appropriate.

In a relatively virgin research area, the investigator faces the difficult task of formulating a framework of theory within which to conduct his research. The ideal of a hypothetico-deductive scheme is difficult to realize, so that the field type of research may prove a valuable beginning point. Here, the investigator attacks the problem in a real life situation, measuring the variables under natural conditions. Even here there is evident a quasi-theory or set of

hypotheses, which are apparent in the choice of variables to be observed and/or measured.

In a naturalistic study, the researcher is able to discover some of the important variables and relationships, which provide the raw material for the first theory. Then more rigorous derivations, preferably amenable to laboratory manipulation, can be made from the young theory, which thereafter may be continually modified and sharpened. Such a program of theory development has been carried out successfully in an area similar to the one with which this study is concerned by Back, Festinger, and Schachter^(6,3,21).

The present study was begun with several sets of not closely coordinated hypotheses. As the analysis progressed, it became apparent that with the inclusion of a few additional conditions a more parsimonious theory of group functioning could encompass the findings in the study and permit derivation of new, related, testable hypotheses. It is the plan of this presentation to discuss the original framework in which the study was conceived, report the results, and develop the modifications to the present theory. In a final section, a coordinated presentation of the modified theory will be made. The writer believes that this procedure points up the value of a naturalistic study.

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I. STUDY DESIGN

Introduction

Under various rubrics, influence and its counterpart, change, have been major concerns to social psychologists. During the pre-experimental period, Le Bon discussed the crowd as an influencer of individual behavior. Social psychology itself had its inception in the studies of suggestion and imitation, stemming from the work of the French psychologists on hypnotism. These studies are obviously concerned with a change in an individual's behavior as influenced by another individual. The tremendous literature on attitude change and propaganda may be thought of as fitting the paradigm "attempts to influence and the resulting change." Krech and Crutchfield⁽¹²⁾ recognize the similarity of these avenues of study since their major emphasis in a discussion of propaganda is on prestige suggestion.

Early studies on the convergence of individual judgments when they are introduced into groups include the work of Moore⁽¹⁸⁾ and Allport⁽¹⁾. More recently, Sherif⁽²²⁾ has conceptualized in new terms the group's effect on individual opinions and has studied the enduringness of the change. The presence of a group may be thought of as the influencing agent. Scientists at the Research Center for Group Dynamics have undertaken the task of defining the characteristics of groups which can exert influence on their members. The central concept of these researchers is "cohesion" which is defined by Festinger^(7, p.7) as "the resultant of all the forces acting

on the members to remain in the group". Back⁽³⁾, Thibaut⁽²⁴⁾, and Schachter⁽²¹⁾, among others, have made contributions in delimiting and manipulating the specific forces which make for group cohesion.

Another body of applicable work are the prestige suggestion studies, from which the generalization may be drawn that a prestigious person can induce an attitude change in the subject who accords him prestige^(15,16). It is irrelevant to the present discussion whether the change is preceded by a phenomenal restructurization, as Asch⁽²⁾ emphasizes.

The present study is concerned with the characterization of influential participants in face-to-face groups. The literature in this area is meagre. For one, Back⁽³⁾ manipulated the cohesion of groups in which he studied influence by structuring the attractiveness of the group members toward each other. His general conclusion is that there is more influence in groups in which the members are personally attractive to each other. Heyns⁽⁹⁾ studied pooled judgment conferences similar to the ones with which we are concerned in the present study. His findings indicate that a group participant's influence is related to the attitudes of the other group members toward him.

The Veterans' Administration Research Project for the Selection of Clinical Psychologists provided a unique opportunity to study personal influence and opinion change in small conference groups.

The Setting¹

One phase of the Veterans' Administration Research Program² involves the assessment of trainees in clinical psychology by other psychologists who have studied the assessee's file. The file contains such information as an autobiography, projective test protocols, objective tests, interest inventories, etc.

Four assessors³ individually perused the applicant's file and rated him on a total of forty-two items (see Appendix A for the rating scale). After the four sets of individual ratings were entered on a single sheet by each assessor, the four participants met in a pooling session to decide on a common rating for each of the forty-two variables. During each pooling session, four cases were discussed. The designated roles of leader and recorder were rotated among the four participants so that during the functioning of a single four-man pooling team, each participant performed each role once.

The compositions of the pooling teams were changed weekly, so that by the end of the five-week assessment program, each participant had worked with every other one at least once. A participant was a member of five successive teams by the completion of the program.

¹For a discussion of these groups from the point of view of the VA Program see the article by Kelly and Fiske⁽¹¹⁾.

²Referred to hereafter as the "VA Program".

³The assessors are the conference participants who are the subjects of this study and will be referred to as "participants".

The assessment program was in operation for five weeks during the summer of 1949. Every week, six such four-men groups operated, making a total of thirty groups studied during the course of the summer.

The Participants

The participants were twenty-four graduate students in clinical psychology at the University of Michigan. On the whole, they had had previous opportunity to become acquainted with each other in their classes and during their clinical field work.

Procedure¹

The measurements made may be divided into two classes:

(1) those made during the actual pooling session, and (2) those made out of the pooling session, but during the assessment program. (Appendix B is a chronological file of the in-session measures made on one case. Appendix C is a file of the extra-session measures in actual time sequence.)

I. In-Session Measures (see Appendix B)

Measures were made at the time the participants discussed three items as well as when the final item of the VA Program rating

¹Appendix E contains detailed definitions of all the variables.

scale was discussed (Appendix A). The three items will be called "on-route" items and the last item will be designated, hereafter, the "final" item. The differential use of the items will be made clear in later chapters. The on-route items were chosen on the basis of their similar correlations with the final item and their similar variances, based on the results of the 1947 assessment program⁽¹⁰⁾. They were treated as equivalent items, and the measures made on them were interchanged after the second and fourth weeks of the assessment program. For example, the rating scales used on Item 33 during the first two weeks were used on Item 38 during the third and fourth weeks that the assessment program operated.

Consider the procedure for a group discussing one case during the first week of the assessment program. Each meeting was attended by an observer whose job was to distribute and collect forms and to record the group's process (Appendix D is the instructions to observers).

Participants discussed and made group decisions on the first thirty-two items without interruption from the observer. Before discussion on Item 33, a rating of "Satisfaction with Own Rating" was obtained. After a group decision on the on-route item was reached, a rating of "Satisfaction with the Group Decision" was obtained.

As with Item 33, a rating of "Satisfaction with Own Rating" was obtained on Item 38. The designated chairman of the case computed the arithmetic mean of the four independent own-ratings and announced this to the group. A rating of "Satisfaction with the Mean Rating" was then obtained. Again, after the group reached a decision, a rating of "Satisfaction with the Group Decision" was measured. After a decision was reached on the item, the observer categorized the decision process as either integration, compromise, capitulation, or acquiescence.

Procedures for Items 40 and 42 were identical with each other. First, ratings of "Satisfaction with the Group Decision" were obtained. Then each participant ranked his three colleagues in the order in which the three influenced him, and also estimated the order of his own influence on the others. Finally, each participant indicated a "post-pooled" rating on the item. The post-pooled rating is the answer to the question: "Although you have just reached a pooled decision, what do you personally think would be the best rating on this item?" Again, the observer categorized the decision process as integration, compromise, capitulation, or acquiescence (Form XB).

The procedure for measures made on Item 42 remained constant throughout the study.

All measures, with the exception of "conscientiousness" and "amount of participation" were made on eight point scales. Conscientiousness varies from zero to one hundred percent as does "amount of participation".

During each pooling session, the group's process was recorded using a method devised by Bales⁽³⁾ for study of any group. Observers trained with Bales' help coded each subject-predicate unit spoken into one of twelve categories with the designation of "by whom" and "to whom".

II. Extra-Session Measures (see Appendix C)

- A. On the day before the assessment program was begun, ratings were made by each participant of the amount of prestige¹ each of the other participants had for him. He also estimated how he would be rated on this variable.
- B. When the assessment program was completed, each participant rated the amount that he personally liked the other participants with whom he had worked and estimated his own mean rating on this variable.

¹ Ratings of assessment prestige were made by the participants at the end of the fourth week of the assessment program. Since it correlates .72 with personal prestige, only the latter was used in the analysis.

- C. Also at the end of the assessment program, each participant rated his colleagues as to how functionally valuable each was in reaching the best possible decision. On this variable he also estimated his own mean rating.
- D. After completion of the assessment program, each participant was asked to designate what percentage of forms for the present study (not the VA assessment) he completed as best he could. The participants' response to this question was used as his conscientiousness score.
- E. Quality-of-own-rating is the discrepancy between the participant's own rating on the final item and the criterion rating for this item developed by the VA Program staff.

Figure 1 is a schematic resume of the study design.

Plan of Analysis

With the data as described, several analyses are possible. For one, satisfaction with decision might be studied with the group rather than the individual as the unit of study, i.e., an analysis of the several measures with the mean satisfaction with decision expressed by the group. Such a study is being done elsewhere on these data⁽¹³⁾.

Another possible analysis might be in terms of the individual over the total assessment program. Each individual, it

Figure 1

Schematic Summary of Study

Pre-Assessment Orientation	First Week	Second Week	Third Week	Fourth Week	Fifth Week	Post- Assessment
Procedure for 6 Conferences Each Discussing 4 Cases. <u>One Case:</u>						
Prestige Rating	Discussion of Items 1-32 (Observer codes process) Satisfaction with Own Rating (Item 33) Satisfaction with Group Decision (33)	6 conferences each discussing 4 cases	6 conferences each discussing 4 cases	6 conferences each discussing 4 cases	6 conferences each discussing 4 cases	Liking Rating Functional Value Rating Conscientiousness
	<u>Discussion of Items 34-37</u> Satisfaction with Own Rating (38) Satisfaction with Mean Rating (38) Satisfaction with Group Decision (38)					
	<u>Discussion of Items 39 and 40</u> Satisfaction with Group Decision (40) Rank Others and Self on Influence (40) Post Pooled Rating (40) Observer categorizes decision process					
	<u>Discussion of Items 41 and 42</u> Satisfaction with Group Decision (42) Rank Others and Self on Influence (42) Post Pooled Rating (42) Observer categorizes decision process					

will be remembered, participated in five consecutive groups.

For this study, the analysis is made in terms of the individual participant within a given group. Since the problem we have chosen concerns prediction within a given conference, the method of analysis follows unequivocally. Each group discussed four cases in a meeting of three to four hours' duration, which represented the task for one week. The next week the individuals were redistributed into different groups. Since there were a total of thirty groups with four participants in each group, the analysis is on the basis of one hundred and twenty participants. This means that scores for twenty-four individuals appear five times, but for the present purposes, we may consider that the analysis is based on one hundred and twenty participants.

An example of the method of analysis may be helpful. One problem faced later is to relate a participant's apparent influence to the amount that he is liked by the other participants in the group. The influence score is the mean of his influence scores on the four cases discussed by that group. This score is correlated with the mean of the three liking ratings given the participant by his three colleagues in this particular group.

Reliability

The study design permits ascertainment of the reliabilities of a limited number of the measures. Reliabilities of the liking and functional value ratings were calculated in a previous study and may be taken as indirect indices of the same measures made during the present study.

Heyns⁽⁹⁾ administered the interpersonal ratings two times, ten days apart, during the course of a previous assessment program. The tasks of the groups were identical to the groups here under discussion and the participants were professional clinical psychologists, a population roughly comparable to ours. Since the wording of the questions was the same as ours, Heyns' reliability figures are given as supporting the reliability of the present instruments. As can be seen in Table I, the liking and functional value ratings were highly reliable.

In the present study, personal prestige was measured before the assessment program and prestige in the assessment program was measured at the end of the fourth week of meetings. In spite of the different questions, the correlation between the two sets of ratings is .72, indirectly indicating adequate reliability of the prestige variable.

Table 1

TEST-RETEST RELIABILITY OF THE SOCIOMETRIC RATINGS*
(N = 24)

Personal Liking	.97**
Functional Value	.94**

** Significant at the 1% confidence level.
* Data from Heyns(9).

II. INFLUENCE AND CHANGE IN REACHING GROUP DECISIONS

Introduction

Influence and opinion change are reciprocally related. The objective of influence is to induce a change on the recipient of influence. On the other hand the influencer's success is measured by the degree of change which he effects. The purpose of this section is to explore the various indices of influence and change devised in the present study, and to discuss the rationale of the hypotheses concerning them.

Participants, in their primary roles as assessors, reached independent own-ratings on a number of variables. Later each of the four participants announced his own-ratings to the group and arrived at a single group decision on each variable. The discrepancy between the participant's own-rating and the group decision is the amount that he had to change and is called his apparent change.

These apparent change scores are used in the calculation of apparent influence scores for each participant. The influence scores are defined as the sum of the apparent changes of the other three participants in the direction of a participant's own rating.¹

In pooling situations such as these where the task involves large numbers of repetitive decisions, it was recognized that there may be irreconcilable differences. Yet the external pressures to

¹ Examples of the calculations of these scores are given in Appendix E.

reach a group decision are intense. Under such circumstances, participants are likely to reach decisions with which they do not fully concur.

Previous assessment programs took cognizance of this problem by permitting dissenting participants to submit minority reports. Experimentally, researchers handle the problem of inability to reach complete accord by instructing the subjects that they need not reach full agreement on the tasks on which influence will be measured.

In the present study, to handle the problem of a participant changing his opinion because of extraneous pressures without sincerely accepting the group decision, the concepts of real change and real influence were developed. "Real change" is defined as the discrepancy between "own" and "post-pooled" rating and indicates how much of the apparent change is a sincere change of opinion. On one on-route item and on the final item of each case, participants were given an opportunity to indicate a post-pooled rating in answer to the question: Although you have just reached a pooled decision, what do you personally think would be the best rating on this item?

A participant's "real influence" is defined as the sum of the real changes of his three colleagues in the direction of his own rating.

The discrepancies between the two influence and two change scores provide a clue to the participant's satisfactions, as will be elaborated in another section (cf. p.26).

In large part, the variables which were chosen to predict the various kinds of influence and change were suggested by Heyns' study⁽⁹⁾. He was concerned with the prediction of what we are presently calling apparent influence and apparent change. He studied twenty-four pooling groups composed of three men each. The tasks of the groups were identical with those of the present study, although the cases being assessed were different. Heyns' predictors were the attitudes of conference participants toward each other along the dimensions of functional and emotional dependency, liking, and prestige.

Another source pointing to the kinds of variables which predict influence is the study of group cohesion by Back⁽³⁾. He says that the influence of a group on a member is a function of cohesion, which he derives from three dimensions or forces. These are: (1) personal attractiveness of the members for each others, (2) group prestige, i.e., the members had high prestige for each other, and (3) task direction, i.e., the group's task was presented as a test of the participant. With respect to influence, Back concludes that "the discussion (in cohesive groups) was more effective in producing influence, and group members changed more toward their partners' positions."

Back conceptualized these variables as group properties. In the present study the variables hypothesized to relate to influence and change are thought of as interpersonal attitudes among the group members rather than as properties of the group. Said in another way,

we are interested in how attitudes accorded and received by a specific participant relate to his influence and change in the group. In short, the unit of analysis in the present study is the individual participant and his characteristics rather than the properties of the group.

Another important reference for the selection of variables to be measured in this study were the prestige suggestion experiments. Although these studies do not concern face-to-face groups, the results unequivocally state that a prestigious source can cause a change of opinion.

Based on the above sources, a group of variables broadly designated as "interpersonal attitudes" were measured. Specifically, these are ratings of personal liking for the other participants, ratings of prestige accorded the other participants, and ratings of the functional value of the other participants in reaching the best possible decisions. The general hypothesis is that the attitudes of the other participants toward a particular participant are related to the influence he exerts on them. Reciprocally, the hypothesis states that the attitudes of a single participant toward his colleagues relates to the amount that he changes in their direction.

The predicted relationships, above, have been developed in terms of a participant's apparent influence. Real influence, it will be recalled, represents a more intrinsic opinion change which the influencer is able to induce in his colleagues. Therefore, if it

follows that the characteristics of an influencer are related to his degree of apparent influence, then there should be an even higher relationship between these characteristics and his real influence.

To this point, the arguments for the hypothesized relationships have been developed in terms of influence. Similarly, with reversal in direction of the relationships, apparent and real change should show the same relationships to the predictors. That is, where- as influence is hypothesized to be related to the attitudes of his colleagues toward the influencer, the amount that a participant changes his opinions should be related to his own attitudes toward the others. For example, a participant's apparent change is hy- pothesized to relate to how much he likes others, whereas his appa- rent influence was hypothesized to relate to how much he is liked by others.

Another group of variables whose study we thought meaningful in relation to influence were per cent participation and quality-of-own-decision. These did not grow out of a consistent body of know- ledge, but were selected according to the dual criteria of plausi- bility and expediency of measurement in the observation situation.

An underlying assumption for the emphases which manuals of practical advice to conference leaders place on equal participation among conference members is that the high participators will exert undue influence in the groups. More specifically stated, the hy- pothesis is that the talkers will be influential in reaching the

group decision. Contrary evidence was uncovered in the study of pooling conferences by Heyns⁽⁹⁾. He found that amount of participation and influence were inversely related, which he interprets to mean that the possessor of the deviant own-rating defended his rating, yet eventually moved toward the more central group decision. The relation between percent participation and influence was tested in the present study.

Another variable hypothesized to be related to influence is quality-of-own-decision. This hypothesis however is hedged about by several reservations. The high quality own-rating must be adequately presented to the group by the participant, and the other participants must perceive the quality of the rating.

It will be recalled that influence and change scores are calculated on both on-route items and on the final item. The assumption is that the final item decision, because of its summary nature, is perceived by the participants as more important than the others, and based on this assumption differential predictions are made for the relationships of the predictors to influence on-route and influence on the important decision. On route influence, considering the huge number of such small decisions, may be based on the desire to complete the preliminaries expediently and make the major decision. If this is true, we may expect there to be more real influence on the final item than on the on-route item. In summary, based on importance of the task to the participant, the relations of the predictors to

influence and change should be consistently higher on the final item than on the on-route item.

Imbedded in the discussion above, are these specific hypotheses:

1. The influential participant is one who will be liked by, prestigious to, as well as valued by his colleagues.
2. The participant who participates verbally a great deal will not be influential in these groups.
3. A participant who has a high quality own rating will be influential in these groups.
4. The participant who likes his colleagues and regards them as prestigious and valuable will change his opinion in the direction of their own ratings.
5. The liking, prestige, functional value, participation, and quality measures relate more highly to real influence and real change than to apparent influence and apparent change.
6. The relationships of liking, prestige, functional value, percent participation, and quality-of-own-decision to influence and change on the final item are higher than to influence and change on the on-route items.

Results and Discussion

The correlation coefficients testing the above hypotheses are reported in Tables 2 and 3. The correlations, on the whole, do not differ significantly from zero. None of the few significant correlations are coherent with our expectations.

To get more reliable scores for each participant, his total influence and change in the five conferences were calculated and the resulting scores correlated with the overall interpersonal attitudes toward him. The correlations were not significant.

Since on a priori grounds all the hypothesized relationships are plausible and many of them are substantiated elsewhere in the literature, a series of analyses of the influence-change data were initiated to account for the lack of significant correlations. The operations will be briefly described since they culminated in an explanation of the influence-change processes which shows them to be predictable events, although at a different level of analysis from our original thinking.

To test the hypothesis that average amount of influence was too gross an index because of the mutually cancelling effects of consistently small influence followed by large influence on a few items, an index based on frequency of influence was devised. Across a series of items, the number of times a participant was more influential than his three colleagues was tallied. This was done for the last eleven items in twenty different cases. The surprising result was that there

Table 2

CORRELATIONS BETWEEN PREDICTORS AND INFLUENCE

	Apparent Influence Final Item (N = 120)	Apparent Influence On-Route (N = 120)	Real Influence Final Item (N = 108)	Real Influence 3rd On-Route Item (N = 116)
Prestige Accorded Participant	.16	.07	.11	.03
Liking for Participant	.00	-.11	.11	-.02
Functional Value of Participant	.08	-.09	.08	.00
Per cent Participation	.04	.13	-.07	-.07
Quality of Own Rating	-.05	-----*	-.01	-----*

* Quality data are available only on the final items.

Table 3

CORRELATIONS BETWEEN PREDICTORS AND CHANGE
(N indicated in parentheses)

Predictors	Apparent Change Final Item	Apparent Change On-Route	Real Change Final Item	Real Change 3rd On-Route Item
Prestige Accorded Others	.02 (118)	-.04 (118)	.10 (118)	.02 (114)
Liking for Others	.02 (119)	-.03 (119)	.02 (119)	.18*(115)
Functional Value Accorded Others	.05 (120)	.06 (116)	.06 (120)	.06 (116)
Per cent Participation	-.08 (120)	-.09 (120)	.12 (120)	.10 (116)
Quality of Own Rating	-.23**(120)	-----+	-.13	-----+

** Significant at the 1% confidence level.

* Significant at the 5% confidence level.

+ Quality data are available only on the final items.

were no individual differences among the four participants in frequency of influence.

Following from the above finding, the problem of the consistency of a single participant's influence was investigated. There are three levels at which a participant could demonstrate consistent influence:

1. Item to item within a single case.
2. Case to case within a single meeting.
3. Meeting to meeting within the five week assessment program.

By use of the statistic "epsilon-squared" (e^2) the variance within a class can be tested against the variance of the means of the classes. A negative "epsilon-squared" indicates that the variance estimated from means of classes is less than that estimated from within classes (20, p. 355).

On the basis of this analysis, the participants showed no consistent apparent influence at any of the three levels: item to item ($e^2 = -.99$); case to case ($e^2 = -1.7$); meeting to meeting ($e^2 = -4.9$).

The conclusion which we can draw from the above analyses is that at the three levels at which apparent influence could be exercised, the intra-individual variability is greater than the inter-individual variability. This finding provides the reason for the lack of relations between influence-change and the predictors. We were attempting to predict a highly variable event.

The next step in the analysis was an attempt to find the principles which governed the exercise of influence on a decision. On the final item, the mean of the four own ratings was correlated with the group decision. The correlation is .94, showing that the most common decision was the mean. Accordingly, the highest influence score on the item would accrue to the participant whose own-rating was at or near the mean of the four ratings. On the other hand, the participant whose own rating was most discrepant from the mean would change the most. Another demonstration of this point is that the correlation between a participant's apparent change and the discrepancy between his own rating and the mean is .78.

The settling-on-the-mean decision process coupled with the above mentioned individual variability in influence scores means that no single participant entered the conference with his own rating consistently at the mean of the four own ratings.

The conclusion to be drawn from the above results is that by far the major determinant of the influence and change scores with which we have been working was the position of the participant's rating in relation to the mean of own-ratings at the outset of the discussion. Little wonder that the personal and interpersonal characteristics of the individual participants with which we were concerned had little predictive value!

The question can legitimately be asked, what are the factors predisposing groups to reach decisions in such a fashion? Back (3, p.28)

in discussing cohesion and decision reaching makes the following points:

1. If there is little pressure on the participants to conform (in terms of their attitudes toward the group) they will reach a group decision at the median of the own positions.
2. By so doing, the change for each individual member can be kept at a minimum.

A retrospect over the procedures and purpose of the assessment is helpful in deciding whether these groups meet the criteria of attitudes of non-conformity to the group. Participants entered the pooling sessions with their own ratings (and this point is crucial) knowing through explicit instructions given them by the VA Program staff that their clinical abilities would be evaluated on their own rather than on the group's decisions. It is the consensus of the observers that the general attitude of the participants toward the conferences was one of a necessary evil to be completed as expeditiously as possible. In other words, there were strong external pressures keeping the participants in the groups, but these pressures were not internalized. In addition, the participant's orientation was toward own success rather than the group's success on the problem.

Groups in which there is such low involvement with the groups' process and products are designated, for the purpose of this discussion

individualistic groups, a concept which will later be elaborated in detail (cf. p.42).

Other data collected on these groups support the inference that they were individualistic groups. At the conclusion of the discussion of one on-route item and the final item, the observer categorized the nature of the decision process, as to whether it was Acquiescence, Compromise, Integration, or Capitulation. Definitions are:

Acquiescence -- accepting original solution proposal without much discussion.

Compromise -- taking an intermediary position, so that conflicting opinions may be resolved with as little change as possible to the original positions of the participants.

Integration -- the final decision is composed of or results from the contributions of all or several of the group members.

Capitulation -- the accepting of a solution proposal by others who give up their previously held opinions.

Table 4 presents the frequency with which each of the decision processes occurred. Only 21.3% of the decisions were categorized as

Table 4

NATURE OF GROUP DECISION PROCESS
(N = 215)

Acquiescence	40.0%
Compromise	26.6%
Integration	21.3%
Capitulation	12.1%

integration. A total of 82.7% of the decisions were arrived at by acquiescence, capitulation, and compromise, procedures which are consistent with attitudes of low involvement with the group¹.

Another clue to the low interest in the group is the time taken to complete the case. In a random sample of thirty-four cases on which data concerning the duration of the case discussion are available, the average time devoted to the discussion of a case was sixty-three minutes, or 1.5 minutes per item.² It must be emphasized that the stringent time limits, although to some extent due to practical considerations, were self imposed.

Festinger⁽⁵⁾, who was interested in the communication process in the groups being discussed in the present study, arrived independently at some insights about the nature of influence in the groups. He says that the intense (self-imposed) time pressures under which the participants operated prevented a real influence process. His specific interests in the groups were the amount and direction of communications, depending on the position of the participant's own rating relative to the four own ratings. He, for example, expected the greatest amount of communication to originate with those who were in extreme positions. Although the evidence is only suggestive,

¹ For other discussion of the decision reaching process see p. 37

² The impression of the short time spent on each item is somewhat mitigated by the fact that many of the items are interrelated, so that there are not forty-two totally independent decisions.

Festinger believes that there were many real attempts to influence but that they were frustrated by the time limits.

The finding that most of the decisions were made by the group participants changing their own ratings toward the mean is reminiscent of the early social psychological studies of the effect of the group upon individual judgments^(1,18). The procedures of these experiments were investigated to see whether they were applicable to the present situations. The method of these experiments was to have individuals make aesthetic or psychophysical judgments alone and repeat them later in the presence of a group. The general conclusion is that the group tended to decrease the number of extreme judgments -- "there was a general centripetal tendency" (19, p.693).

An important characteristic (for our purpose) of the early experiments was the nature of the groups. Individuals who had made previous independent judgments were introduced into collections of other people without the individuals regarding each other as interdependent. These were groups in only a limited sense, and are roughly analogous to the individualistic groups of the present study.

In summary, none of the originally hypothesized relationships to the participants' influence and change scores were confirmed. Analysis showed that there was a lack of individual consistency in influence and change from item to item, case to case, and meeting to meeting. Further investigation demonstrated that the correlation between the mean of the four own-ratings and the group decision is

.94, leading to the conclusion that the most common decision was at the mean of the four ratings. This finding led to the characterization of the groups as "individualistic", meaning that the participants had little involvement with the group. Other indices of low interest in the group are few of the decisions were reached by a process of integration and the short time spent on each item.

It is recognized that alternative explanations of the occurrences in these groups are possible. For example, the fact that all the participants had access to the same information may have predisposed them to show no consistent individual influence, and to decide on the mean of the own decisions as the best group decision.

The concept of "individualistic groups" was chosen because it emphasizes the same kinds of group characteristics which other researchers have treated and facilitates the applicability of the present findings to the previous work.

III. INFLUENCE-CHANGE AND SATISFACTION WITH DECISION

In a previous section (cf. p. 11) the lack of relationships between influence, change and the predictor variables was attributed to the fact that no single participant exercised consistent influence. Rather, the participant who chanced to enter the group discussion with his own rating near to the mean of the four own ratings received the highest influence score. However, on a single item there are individual differences among the participants concerning the amount that each had to change in order for the group to reach a pooled decision. It is possible, therefore, to study this relation on single items with no disadvantage due to the inconsistency of individuals from item to item. The question asked in this section is, How does the discrepancy between a participant's own rating and the group decision relate to his satisfaction with the group decision? In terms of the present design, an analogous question is, How does a participant's personal influence relate to his satisfaction with the decision on which he has been influential?

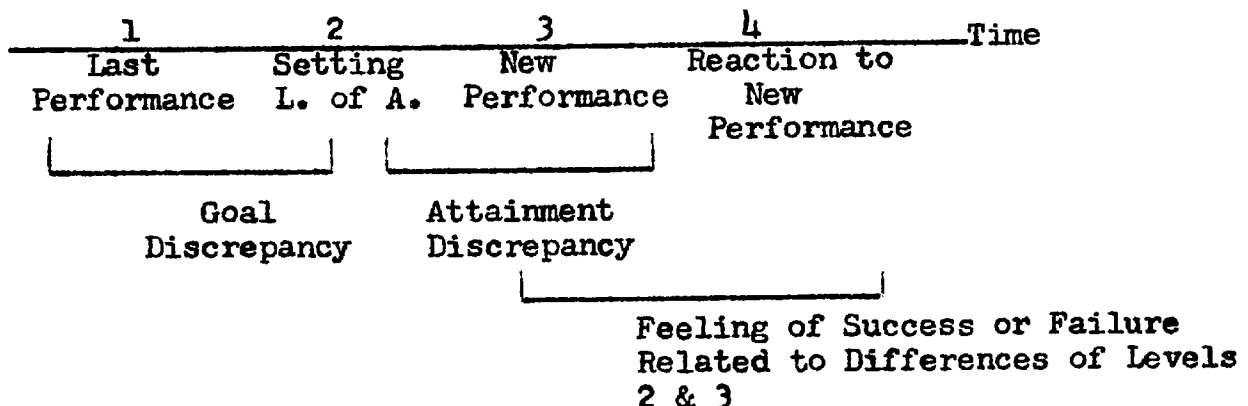
The major outcome variable studied by Conference Research is "satisfaction with the group decision", to which are related other aspects of a conference. The many heterogeneous conferences observed by Conference Research made it infeasible to obtain external criteria with which to evaluate the conference outcomes. The satisfaction ratings permit the derivation of an internal criterion from the conference

participants themselves. Besides its use as a criterion, satisfaction with decision has other intrinsic values as a psychological variable. For one, it is not improbable that satisfied participants will be motivated to carry the decision through.

In this section, the effect of a conference participant's influence and change in reaching the group decision will be studied as it relates to his ratings of satisfaction with that decision. In the pooling conferences, participants rated their satisfaction with the group decision on three on-route as well as on the final item.

Sperling⁽²³⁾, in a previous Conference Research experiment, had his subjects arrive at their own decisions on a problem before reporting to them a group decision. He entitled the dissatisfaction expressed by the participants whose own decisions were disparate from the group's, the "loser's effect". His analysis of this phenomenon was in terms of the level of aspiration studies.

Following Lewin, et al^(14, p. 334), the typical level of aspiration experimental design involves this time sequence:



The application of the level of aspiration paradigm to the present study requires certain modifications of Lewin's thinking. Consider a single item in the forty-two item scale. The own rating on that item which the participant makes previous to entering the group is for him the desired group decision and may, for the present development, be thought of as Step 2 in the above diagram. Here the participant has arrived at what he considers, under the circumstances, the best rating of the item and expects (sets his level of aspiration for) the group to agree on this rating.

Step 3 in the present set-up is the group decision. The attainment discrepancy is what we have heretofore called "apparent change", that is, the discrepancy between own and the pooled rating. Level of aspiration theory then says that the attainment discrepancy engenders feelings of success or failure, depending on whether the discrepancy is positive or negative. The final point is modified to say that success is inversely proportional (or failure is directly proportional) to the apparent change (attainment discrepancy).

After step 3, reaching the group decision, three things could happen to the participant's thinking about the ratings:

1. The participant is satisfied with the group decision because it is close to his own decision.
2. The participant is dissatisfied with the group decision because it is disparate from his own decision.

3. The participant is satisfied with the group decision even though it is disparate from the group decision.

Points 1 and 2 derive from the above discussion; 3 will be clarified now. During the process of the discussion, the participant may have come to see that the particular group decision is preferable to his own. The participant, in other words, experiences a sincere change of opinion. In terms of the present design, to the degree that the participant's post-pooled rating approaches the group decision, we say that he has experienced "real change". The dissatisfaction engendered by a less intrinsic change of opinion (apparent change) should be attenuated if the change is to the participant a sincere acceptance of a rating closer to or congruent with the group decision. In short, the correlation between real change and satisfaction, if the above reasoning is correct, should be less than the correlation between apparent change and satisfaction.

Festinger⁽⁷⁾ in recent theorizing about social communication discusses the basis for an individual's evaluation of his opinion. The scale for evaluation ranges from "physical reality" to "social reality". The applicability of Festinger's thinking to this problem merits its reproduction in detail.

Opinions, attitudes, and beliefs which people hold must have some basis upon which they rest for their validity. Let us as a start abstract from the many kinds of bases for the subjective validity of such opinions, attitudes, and beliefs one continuum along which they may be said to lie. This continuum we may call a scale of degree of physical reality. At

one end of the continuum, ... (is) complete dependence upon physical reality..... It would thus seem that where there is a high degree of dependence upon physical reality for the subjective validity of one's beliefs or opinions the dependence upon other people for the confidence one has in these opinions or beliefs is very low.

At the other end of the continuum.... dependence upon physical reality is low or zero..... Upon what does the subjective validity of (the) belief depend? It depends to a large degree on whether or not other people share his opinion and feel the same way he does. If there are other people around him who believe the same thing, then his opinion is, to him, valid..... Thus where the dependence upon physical reality is low the dependence upon social reality is correspondingly high. An opinion, a belief, an attitude is "correct", "valid", and "proper" to the extent that it is anchored in a group of people with similar beliefs, opinions, and attitudes. (Italics are my own.)

The level of aspiration theory and social reality thinking are complementary in this way. The task given the participants of rating the applicants was a complex one, to which there was no ready, correct answer. Dependence on physical reality was low. Given the assumption that own rating constituted the participant's level of aspiration, it could be either confirmed or denied by the social reality of the agreed-upon group decision. Closeness of the level of aspiration to social reality would be attended by success feelings; disparity, by feelings of failure.

To this point the discussion has been in terms of change. With the alteration of direction of relationship, similar relationships are predicted between influence and satisfaction. That is, the influential participants since they have either achieved or come close to their level of aspiration will have success experiences which will be reflected in

their satisfaction ratings. Since real influence is calculated from his colleagues' real change concerning which the influencer has no direct insight, the relationships between satisfaction and real influence should hold only insofar as the latter variable is related to apparent influence.

On two on-route items, participants rated satisfaction with own ratings prior to group interaction on the items. The satisfaction-with-own rating may be thought of as the participant's confidence that his own rating is a good one. The confidence is probably engendered by the adequacy of the rating as perceived by the participant before he has had opportunity to test social reality.

If the participant, then, believes that his own rating is a good one, he will be less willing to change. Reciprocally, if he defends his rating adamantly because he thinks it is good, he will eventually exert more influence in the group. The assumption implicit here is that the participant who thinks his own rating is correct will overtly defend it during group process.

The sum up, on the basis of level of aspiration theory and the concept of social reality discussed above, the following specific hypotheses will be tested:

1. To the degree that participants apparently change their own rating in order for the group to reach a decision, they are dissatisfied with the group decision.

2. Satisfaction with the group decision is more highly related to apparent than to real change.
3. Participants who are apparently influential in reaching a group decision are satisfied with that decision.
4. Conference members who are satisfied with their own rating will influence their colleagues in the direction of that rating.
5. Conference members who are satisfied with their own rating will change little toward the group decision.

Results¹

The correlation coefficients by which the hypotheses concerning change and satisfaction were tested are reported in Table 5. On the final item and on all three on-route items, there is a significant inverse relationship between satisfaction with the group decision and apparent change (the discrepancy between own rating and pooled decision).

The correlations between real change and ratings of satisfaction with the group decision are not significant on the on-route or on the final item. "Real change" is defined as the difference

¹In this section, the significance levels of the correlation coefficients are determined for an $N = 120$, which represents the same twenty-four individuals participating in five different meetings. Since previous analysis (cf. p. 19) showed that the individuals were not consistent in their influence and opinion change from meeting to meeting, use of $N = 120$ is justified for these variables.

Table 5

CORRELATIONS BETWEEN CHANGE SCORES AND
SATISFACTION WITH DECISION

	Satisfaction with Group Decision		
	1st On-Route Item	2nd On-Route Item	3rd On-Route Item
Apparent Change	-.46** (N=115)	-.37** (N=120)	-.49** (N=117)
Real Change	.04 (N=114)	----- ⁺	.00 (N=114)
Residual Disagreement	-.34** (N=116)	----- ⁺	-.50** (N=114)
Resistance to Change	-.45** (N=114)	----- ⁺	-.02 (N=110)

** Significant at the 1% confidence level.

+ Data available only on final and 3rd on-route item.

between a participant's own-rating and post-pooled rating.¹ Comparison of the two sets of correlation coefficients (see Table 5) shows that apparent change correlates significantly with decision satisfaction whereas real change does not. Thus the hypothesis that satisfaction is more highly related to apparent change is confirmed.

Two indices relating to a participant's change were devised. The first index, "Residual Disagreement" is defined as,

$$\text{Post Pooled Rating} - \text{Group Decision.}$$

The index varies between the limits of 0 and 7, there being a maximum of eight points on the scales used in this study. The range on this index was actually 2.58 points. Where the participant's post-pooled-rating equals the group decision, he has experienced real change and shows, in consequence, no residual disagreement. Maximum residual disagreement, on the other hand, would occur in the instance where the two ratings were at opposite extremes of the eight point scale. Another way to define residual disagreement is

$$\text{Apparent Change} - \text{Real Change,}$$

that is to say, when real equals apparent change, there is no residual disagreement.

Following from the introductory discussion concerning the general relationships between change and satisfaction, the prediction

¹ The post-pooled rating is the answer to the question, Although you have just reached a pooled decision, what do you personally think would be the best rating on this item?

concerning a significant, inverse relationship between residual disagreement and satisfaction is borne out on both the final item and the on-route item (see Table 5).

The second index is "Resistance to Change" which is defined as

$$\frac{\text{Group Decision} - \text{Post pooled Rating}}{\text{Own Rating} - \text{Group Decision}}, \text{ or}$$

$$\frac{\text{Apparent Change} - \text{Real Change}}{\text{Apparent Change}}.$$

It is clear that the numerator of this index is the Residual Disagreement index discussed above. The "Resistance to Change" index varies between values of 0 and +1. If the participant's post pooled rating is equal to the group decision, he has accepted the group decision and, consequently, shows no resistance. At the other extreme, when the participant's post pooled rating equals his own rating, i.e., he has shown no real change, the numerator equals the denominator of the expression and the participant shows the maximum resistance to change.

The rationale of this index was to adjust the participant's residual disagreement for the total amount that the participant was forced to change, at least superficially to arrive at the group decision; hence the denominator. For example, a residual disagreement of two points when the participant apparently changed three points is probably quite different psychologically from a residual disagreement of two points when the apparent change is six points. In the first

case the resistance index equals .66; in the second, the index equals .33, indicating that the first participant is more resistant, even though the two residual disagreements are equal.

The prediction that the more resistant participant is less satisfied is borne out on the final item, but not on the on-route item (see Table 5).

Note in Table 5 that the correlations are almost all of the same order of magnitude. The first impression is that we are in actuality measuring the same factor. Yet the intercorrelations among the change scores and indices vary between .45 and .55, indicating that the scores are not identical.

The original thinking was that since apparent change is at least in part real change, purifying the score as in the "residual disagreement" index should raise the correlation between that index and satisfaction. Likewise, the reasoning holds for the "resistance-to-change" index, with the added fact that this index was expected to be an even more sensitive indicator of dissatisfaction. However, since there is no correlation between real change and satisfaction, manipulating apparent change to remove the part of the opinion change which is sincere does not increase the relation with dissatisfaction.

To this point, satisfaction with decision has been related to various change indices. The warranted general conclusion is that the more a participant must change from his own to a group solution the less satisfied he is with the group solution.

The most parsimonious statement which can be made about the influence-satisfaction hypotheses (see Table 6) is that all the correlation coefficients are in the predicted direction. On the third on-route item there is a significant (at the 5% level) positive relationship between influence and satisfaction. The significant correlation between real influence and satisfaction on the final item is unexpected since the influencer had no objective evidence concerning his own real influence. This score, it will be remembered, is calculated from the real changes which were unknown to the other participants.

A possible accounting for the relations between real influence scores and satisfaction is that they are due to the common variance between apparent and real influence. To the extent that they are related, the satisfaction rating might be engendered by the participant's apparent influence which was readily obvious to him. The correlation between apparent and real influence on the final item is .53; and on the on-route item, it is .49. When apparent influence is held constant and real influence and satisfaction are correlated, the resulting partial correlation is .14. This represents a reduction below the level of significance from the original correlation of .19, which was significant at the 5% confidence level. The result lends credence to our belief that the relations between real influence and satisfaction are mediated through apparent influence.

Table 6

CORRELATIONS BETWEEN INFLUENCE SCORES AND
SATISFACTION WITH DECISION

	Satisfaction with Group Decision			
	Final Item	1st On-Route Item	2nd On-Route Item	3rd On-Route Item
Apparent Influence	.13(N=115)	.07(N=120)	.07(N=120)	.17*(N=117)
Real Influence	.19*(N=107)	-----+	-----+	.02(N=114)

* Significant at the 5% confidence level.

+ Data available only on final and 3rd on-route item.

To sum up, the evidence regarding the relations between influence and satisfaction with decision is only suggestive that the hypothesized positive relationships hold.

The next set of hypotheses in this area concern the relations between satisfaction-with-own rating and influence and change. Results are reported in Table 7. Participants most satisfied with their own ratings tend to be least influential, yet also tend to do the least changing. Correlations calculated on the second on-route item are significant, and, on the first item, are suggestive. Our original predictions, it will be recalled, were that the participants most satisfied with their own ratings would exert the most influence and change the least. A reconciliation of these results is attempted later in the discussion.

Although the process of opinion change most frequently involved setting the group decision at the mean of the own-ratings, inspection of the change patterns on individual items showed that the change was made at times by only one participant, at other times, by more than one person. The next problem explored was whether the participant who had to change his own rating in the direction of the group decision evidenced more satisfaction when he and one or more of his colleagues also had to make changes than when he alone changed.

To test this hypothesis each of the one hundred and twenty cases were divided as to whether or not the greatest change on the final item was due to a single minority member moving toward the majority, i.e., toward the mean of their own ratings. The minority member is

Table 7

CORRELATIONS BETWEEN SATISFACTION-WITH-OWN-RATINGS AND
INFLUENCE-CHANGE SCORES
(N = 120)

	Satisfaction with Own 1st On-Route Item	Satisfaction with Own 2nd On-Route Item
Apparent Influence -- 1st On-Route Item	-.03	----
Apparent Influence -- 2nd On-Route Item	----	-.24**
Apparent Change -- 1st On-Route Item	-.16+	----
Apparent Change -- 2nd On-Route Item	----	-.21*

** Significant at the 1% confidence level.

* Significant at the 5% confidence level.

+ Significant at the 6% confidence level.

defined as that participant whose own rating is the most divergent from the mean of the four own ratings. This arrangement of ratings appeared in sixty of the one hundred and twenty cases. The sixty cases were further subdivided (1) into ones in which the minority member changed alone to the rating held commonly by the three other participants and (2) into ones in which other members also changed, although by definition to a lesser degree than he.

Examples of the two kinds of change patterns are:

I. Participant	A	B	C	D
Own Rating	5	5	5	8
Group Decision	5			
Apparent Change	0	0	0	3

II. Participant	A	B	C	D
Own Rating	5	6	4	8
Group Decision	5			
Apparent Change	0	1	1	3

Although in both examples the greatest change is by the participant who originally is farthest from the mean of the other participants in the second example he is not alone in having to change. The question asked is whether the unaccompanied minority member is less satisfied than the deviant who is not alone in having to change.

The sixty cases were divided into Type I and Type II minority change, there being 74% in the former and 26% in the latter. A test for the significance of differences in mean satisfaction between the two types of minority members was not significant ($t = .33$).

Discussion

The point has previously been introduced in this presentation that the results become coherent when the groups are thought of as individualistic. By this we mean that the participants have an attitude of low involvement with the group and the forces keeping the participants in the groups are external. In a succeeding section, a theory encompassing groups of this nature will be presented (cf. p.42,f.)

From the above results, three general conclusions are garnered, the problem being to see how they might derive from our conceptualization of these groups.

1. As the own ratings and group decisions are disparate, there is dissatisfaction with the group decision.
2. There is a suggestion that influence is accompanied by satisfaction with the group decision.
3. Participants satisfied with their own ratings exert little influence and change little.

The first conclusion, the "loser's effect", need not be unique to individualistic groups. It appears in the study by Heyns⁽⁹⁾ and in Sperling's experiment⁽²³⁾. It seems at this point that it is a general phenomenon of conference participants to experience some dissatisfaction if the group decision is disparate from their own. However, it is expected that the effect is most intense (i.e., the correlation coefficient is higher) among individualistic groups.

How do we explain the differences in the relations of change and influence to satisfaction with the group decision? For one, there is a fundamental phenomenonal difference between influence and change to a participant. Change directly concerns the participant because it is a response he must make. Influence, on the other hand, depends on responses which others must make.

The results concerning satisfaction-with-own-decision, change, and influence are partly contrary to the predictions, since satisfaction-with-own-rating correlates significantly and negatively with both apparent influence and apparent change. Originally, the predictions were based on the assumption that participants were concerned with arriving at the best possible group solution. It seemed plausible then that the participants who thought they had done a good job would want the group to arrive at the same "correct" decision.

Taking the new point of view that the participants were most vitally concerned with their own rating and less concerned with the adequacy of the group product, it follows that those participants who

thought they had done their best would withdraw from the group process. The operative attitude was one of disinterest in the group result, especially if there was satisfaction with the own product which would be the sole object of evaluation. The satisfied participants probably did not attempt to influence their colleagues, but, on the other hand, neither did they want to change their own favored rating.

In summary, the amount that a participant changed is related to his satisfactions; there is a suggestion that his influence is related to his satisfaction. Those participants who were most satisfied with their own ratings exerted the least influence and also changed the least. These results were discussed as being consistent with the characterization of the groups as "individualistic".

IV. A THEORY OF INDIVIDUALISTIC GROUPS

Recurrently in the presentation, a characterization of the thirty groups as individualistic made the findings coherent. Previously the point was made that a basic value of field research is that it provides the raw material for modifications to the theory, and, on that justification, this section will be devoted to an outline of a theory and hypotheses which encompass the present findings and permit further derivations.

The problem chosen is to explain an individual's behavior in a group of a particular kind toward which he has definite attitudes. At another level, the problem might have been conceptualized in terms of the characteristics of the group. However, the present approach is a social psychological one -- concern over an individual's behavior in a social situation.

1. The definition of individualistic groups

Participants in individualistic groups are involved primarily with their own ideas, solutions, and opinions. Their own opinions are, of course, introduced into the group, but there is an attitude on the part of the participants of low involvement with or interest in the group process or group product.

The forces to enter and remain in the group derive from a source external to the participant and are not accepted by them as own forces.

Operationally, such a group could be structured by experimental instructions to the participants to regard their own opinions as paramount.

2. The definition of integrated groups

Participants in integrated groups are interested primarily in the high level functioning and products of the groups. Their own ideas and opinions are secondary to the ones arrived at as a result of interaction in the group. The forces to remain with and perform in the group derive from the participants themselves, although the original forces composing the group may have been external to the participants. There is, in other words, an attitude of high involvement with the group.

These groups may be experimentally structured by convincing the participants that each will be evaluated not on his own but on the group's product.

There are, in summary, two factors on which the two kinds of groups are characterized: (1) the attitude of the participants toward the group, and (2) the participant's perceptions of the forces keeping them in the group.

The two above definitions may be thought of as the extremes of a cohesion dimension which Festinger, et.al.⁽⁷⁾ use to characterize groups. They define cohesion as "the resultant of all the forces

acting on the members to remain in the group." For our purposes, the definition may be modified to stipulate that the forces to remain in the group be accepted by the participants and made own forces. In individualistic groups, for example, the pressures to stay in the group are strong but are always perceived as unwelcome, outside pressures.

The following hypotheses are framed in ~~terms~~ of a comparison between individualistic and integrated groups.

1. Communication

Hypothesis 1a. Holding constant the size of the problem to be discussed, the length of the total communication process will be less in the individualistic than in the integrated groups.

Hypothesis 1b. Individualistic groups will tolerate less irrelevant contributions than will the participants in the integrated groups.

Both these hypotheses are based on the notion that the individualistic groups are interested principally in satisfying the external pressures and removing these pressures as expediently as possible. In the groups which we have been discussing, suggestions of corroboration come from the stringent time limits imposed upon themselves by the participants.

2. Value of the Group

Hypothesis 2a. The major value of the groups to the individualistic participants is as a criterion source for evaluation of their own opinions.

This hypothesis was employed axiomatically in the body of the dissertation. It is possible to set up an experimental situation in which it could be tested.

3. Outcomes

Hypothesis 3a. Objective quality of solution will be lower in individualistic than in integrated groups.

The implicit assumption here is that a group of qualified and interested participants can arrive at a higher quality decision by interacting than can a single participant.

Hypothesis 3b. The mean satisfaction-with-group-decision ratings will be higher in the integrated than in the individualistic groups.

Participants in the integrated groups, striving for the best possible group decisions, will prolong the group process in order to reach a solution satisfactory to all.

Hypothesis 3c. Participants in individualistic groups will show more dissatisfaction with the group's decision as it departs from their own opinions than will the participants in the integrated groups.

In the vocabulary of the present study, the loser's effect will be higher in self-centered than in group-centered groups. This is not to say that there will be no loser's effect in the integrated, only that it will be less intense.

4. Attitudes of Participants toward Each Other

Hypothesis 4a. There will be higher personal liking for each other among the participants in the integrated than in the individualistic groups.

A general conclusion from the cohesion studies is that members like each other more in highly cohesive groups (e.g., French⁽⁸⁾).

Hypothesis 4b. Participants will depend more on each other in the integrated than in the individualistic groups.

Hypothesis 4c. There will be more toleration of deviants in the integrated than in the individualistic groups.

This hypothesis stems from several sources. The deviant is defined as one whose own opinions differ from the mean of the opinions of his colleagues. If, in general, there is more personal liking in the group-centered groups, this attitude should work toward the acceptance of the deviant. Also, these groups motivated to obtain the best possible group product will make an attempt to integrate the deviant's position into the final decision. However, if he insists on maintaining his deviant position too long, the integrated groups will reject him completely⁽²¹⁾.

5. Influence and Opinion Change

Hypothesis 5a. Solutions in the individualistic groups will be reached which involves the least personal change to each participant.

Corollary 1. The most common decision will be at the mean of the individual opinions.

Two considerations lead to the hypothesis. The mean is closest to satisfying everyone, especially if there is not a large dispersion among the own opinions. A lesser consideration is that the mean is the most expedient decision in terms of time. These points are similar to Schachter's⁽²¹⁾ conceptualization of cohesion. For groups to be cohesive, the group must be able to exercise a power field over the individual participants. This is the same as our saying that the externally induced forces must be accepted by the participants.

The similarity between the conceptions of "individualistic" and of "non-cohesive" groups merits a comparison of the two concepts. One way of creating cohesive groups is to bring together people who like each other or have prestige for each other⁽³⁾. If there are no detracting circumstances, groups which are characterized by high sociometric choice may be thought of as cohesive. In turn, the accepted theory of cohesive groups would say that cohesive groups are characterized by higher satisfaction with decision, higher decision quality, and more real opinion change than non-cohesive groups^(3,7,21).

A usual measure of cohesiveness was obtained in this study. Participants ranked the five groups in which they participated in the order of their willingness to continue with the group. The sum of the ranks assigned a specific group by its four members is the "attractiveness" score for that group. As other experimenters^(3,21) have found the attractiveness of a group is related to the sociometric choices of its members on liking, prestige, and value in reaching group decisions (see Table 8).

Nevertheless, the relationships between the attractiveness of the groups and the behavior in the groups do not confirm the predictions which cohesion theory makes for cohesive groups. The correlations in Table 9 indicate that neither the attractiveness of the group nor the sociometric attitudes on which the attractiveness scores are in part based relate to the satisfactions, decision qualities, and real opinion changes in the groups. The conclusion to be drawn from these findings is that sociometric attractiveness among the group members does not predict cohesive group behaviors. Rather, a more important consideration in these groups is the participants' involvement with the group task. Where involvement is lacking, the sociometric attractiveness of the group does not determine the kinds of behavior which are expected in cohesive groups. Groups which behave in the manner of these groups are characterized as "individualistic", meaning that the participants have an attitude of low involvement with the group task and are principally concerned with their own opinions.

Table 8

CORRELATIONS BETWEEN THE MEAN SOCIOMETRIC CHOICES IN
THE GROUP AND THE ATTRACTIVENESS OF THE GROUP

(N = 30)

	<u>Group Attractiveness Score</u>
Liking	.36
Prestige	.44**
Functional Value	.48**

** Significant at the 1% confidence level.

* Significant at the 5% confidence level.

Table 9

CORRELATIONS BETWEEN ATTRACTIVENESS OF THE GROUP, MEAN SOCIOMETRIC CHOICES IN THE GROUP, AND SELECTED GROUP BEHAVIORS

(N = 30)

	<u>Attractiveness of the Group</u>	<u>Liking</u>	<u>Prestige</u>	<u>Functional Value</u>
Satisfaction with Decisions	.23	.28	.15	.23
Quality of Decisions	.00	.35	.21	.33
Real Opinion Change	.20	.14	.27	.15

VI. SUMMARY AND CONCLUSIONS

Thirty four-member conferences were observed. Twenty-four graduate students in clinical psychology made up these groups and were so rotated that each individual had an opportunity to work with every other at least once. The task of these groups was to arrive at group decisions on forty-two ratings. Each participant had previously reached an independent own-rating on all items. The "final item" was the most important group decision; the remaining forty-one items are designated "on-route" decisions.

Since participants entered the conferences with their own ratings and later reached a single group decision, the amount that each participant changed was calculated. The amount that the other three participants changed in the direction of a participant's original own rating represented his influence. Variables hypothesized to be relevant to a participant's personal influence and opinion change, such as a participant's prestige in the group, were measured. In addition, the relations between change, influence, and satisfaction with the group's decision were explored.

Results:

1. Participants showed no consistency in their influence or change scores from item to item within a case, case to case within a meeting, or meeting to meeting within the assessment program.

2. The most frequent decision making process was for the four participants to move to the mean of their own ratings.
3. The more that a participant had to change his own rating in the direction of the group decision, the more dissatisfied he was with that decision.
4. There is suggestive evidence that if a participant were influential in determining the group decision, he was satisfied with that decision.
5. The participant who was satisfied with his own rating tended to exert little influence in these groups, yet he tended not to change his own rating.
6. Participants who alone have to change in order for the group to reach a decision are no more satisfied with the decision than participants who in changing their opinions are accompanied by some of their colleagues.

Conclusions

Groups which arrive at decisions in the manner of these groups are characterized as "individualistic", meaning that the participants have an attitude of low involvement with the group and are principally concerned with their own opinions. These groups are also held together by strong external pressures.

BIBLIOGRAPHY

1. Allport, F. H. The influence of the group upon association and thought. J. Exp. Psychol., 1920, 3, 159-182.
2. Asch, S. The doctrine of suggestion, prestige and imitation in social psychology. Psychol. Rev., 1948, 55, 250-276.
3. Back, K. The exertion of influence through social communication. Unpublished Ph.D. dissertation, Massachusetts Institute of Technology, 1949.
4. Bales, R. F. Interaction Process Analysis. Cambridge, Massachusetts: Addison-Wesley Press, Inc., 1950.
5. Festinger, L. Means and extremes. University of Michigan, The Research Center for Group Dynamics, 1949 (unpublished manuscript).
6. Festinger, L., Schachter, S., and Back, K. Social Pressures in Informal Groups: A Study of a Housing Project. New York: Harper, 1950 (in press).
7. Festinger, L., et al. Theory and Experiment in Social Communication. Ann Arbor, Michigan: Edwards Brothers, Inc., 1950.
8. French, J. R. P., Jr. Organized and unorganized groups under fear and frustration. In Authority and Frustration: Studies in Topological and Vector Psychology III. Iowa City, Iowa: University of Iowa Press, 1944.
9. Heyns, R. W. Factors related to influence, opinion change, and decision satisfaction in pooled judgment conferences. University of Michigan, Conference Research Project, 1949 (Manuscript in preparation).
10. Kelly, E. L., Fiske, D. W. The Selection of Clinical Psychologists. Ann Arbor, Michigan: Edwards Brothers, Inc., 1948.
11. Kelly, E. L., and Fiske, D. W. The prediction of success in the VA training program. Amer. Psychol. (in press).
12. Krech, D., and Crutchfield, R. S. Theory and Problems of Social Psychology. New York: McGraw-Hill Book Company, Inc., 1948.
13. Levin, H. Some factors related to a groups' satisfactions with their decisions. University of Michigan, Conference Research Project, 1950 (Manuscript in preparation).

14. Lewin, L., et al. Level of Aspiration. In Personality and the Behavior Disorders, (J. McV. Hunt, Ed.), New York: The Ronald Press Co., 1944.
15. Lewis, Helen B. An experiment on the operation of prestige suggestion. In Newcomb, T. M. and Hartley, E. L. (Eds.) Readings in Social Psychology, New York: Henry Holt and Co., 1947.
16. Lorge, I. Prestige, suggestion, attitudes. J. Soc. Psychol., 1936, VII, 386-402.
17. Marquis, D. G. Research planning at the frontiers of science. Amer. Psychol., 1948, 3, 430-438.
18. Moore, H. T. The comparative influence of majority and expert opinion. Amer. J. Psychol., 1921, 32, 16-20.
19. Murphy, G., Murphy, Lois B., and Newcomb, T. M. Experimental Social Psychology. New York: Harper, 1937.
20. Peters, C. C. and Van Voorhis, W. E. Statistical Procedures and their Mathematical Bases. New York: McGraw-Hill Book Company, Inc., 1940.
21. Schachter, S. Deviation, rejection, and communication. In Festinger, et al., Theory and Experiment in Social Communication. Ann Arbor, Michigan: Edwards Brothers, Inc., 1950.
22. Sherif, M. The Psychology of Social Norms, New York: Harper, 1936.
23. Sperling, P. I. Attitude dispersion and its perception as related to satisfaction with a group product. Unpublished Ph.D. dissertation, University of Michigan, 1949.
24. Thibaut, J. An experimental study of the cohesiveness of under-privileged groups. In Festinger, et. al., Theory and Experiment in Social Communication. Ann Arbor, Michigan: Edwards Brothers, Inc., 1950.

A P P E N D I X A

VA PROGRAM RATING SCALE

RESEARCH PROJECT ON THE SELECTION OF CLINICAL PSYCHOLOGISTS

REFERENCE POPULATIONS FOR RATINGS

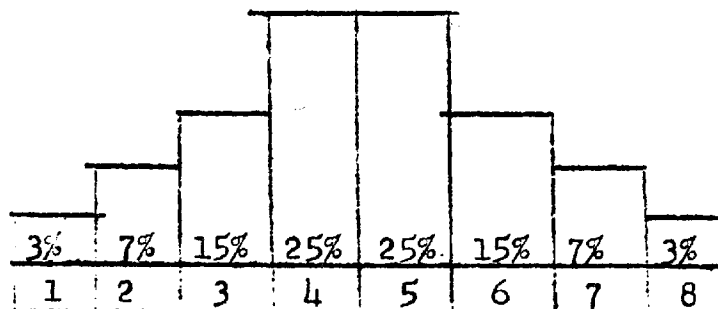
For Scales A and B the candidate is rated as he is today.

The reference group is first year clinical psychology graduate students in universities accredited by the APA to offer training in clinical psychology.

For the Criterion Skills (Scale C), the candidate is rated as he will be five years from now. The reference population is VA clinical psychologists who have had four years of academic and on-the-job training. (P-4 and above.) In rating a candidate on the Criterion Skills, the assumption is made that he will have completed the training and will have been employed by the VA. A rating of 3 or below means that it is doubtful that the candidate will ever qualify for a P-4 rating with respect to the trait being rated. It is possible that some candidates will later qualify for a P-4 position even though they rate 3 or below on a few Criterion Skills.

RATING SCALE

All ratings will be made in terms of an eight point scale illustrated graphically as follows:



Left Side (Scale A)
Low (Scales B & C)

Right Side (Scale A)
High (Scales B & C)

RATING SCALE DEFINITIONS

SCALE A
(#0-22)

(For ratings on this scale, 1 = extreme on left side, 8 = extreme on right side.)



Note: The attributes in Scale A refer to behavior which can be directly observed on the surface. In using this scale, disregard any inferences about underlying dynamics or causes.

0. Your general feeling toward the student: How much do you like him?
- Dislike him - v - Like him very much
1. Readiness to cooperate - v - Obstructiveness
Finds ways of cooperating de- Frequently is "difficult."
spite difficulties.
2. Consistent - v - Inconsistent
Behaves in the same general way Shows changing and unpredictable
from day to day. moods and behavior.
3. Assertive - v - Submissive
Attempts to dominate or influ- Tends to let people have their
ence his associates. way.
4. Depressed - v - Cheerful
Does not smile or laugh easily Generally bubbling over with good
or frequently. cheer. Optimistic. Enthusiastic.
Prone to cheerful, witty remarks.
5. Irresponsible - v - Serious
Not inclined to take responsi- Accepts appropriate responsibili-
bilities seriously. Thought- ties toward others. Shows serious-
less. Unaware of responsibili- ness of purpose.
ties of his age. (Do not con-
fuse with #17: Conscientious
vs. not conscientious.)
6. Gregarious (adient toward - v - Non-gregarious (abient from peo-
people) ple)
Is attracted by and moves to- In social grouping, isolates him-
ward people in social situa- self.
tions.

/ / / / / / / /
1 2 3 4 5 6 7 8

7. Easily Upset - v - Unshakable
Easily embarrassed or put off balance. Gets confused in emergency. Blushes, shows excitability, becomes incoherent. Momentary "nervousness," not general emotionality. Self possessed. Does not lose composure under emotional provocation.
8. Narrow Interests - v - Broad Interests
Uninformed in many areas. Narrow, simple, interests. Provincial outlook. Talks and acts in an informed way in a wide variety of areas.
9. Suspicious - v - Trustful
Believes rather too quickly that he is being unfairly treated. Imagines on insufficient grounds that people strongly dislike him. Interprets things as having reference to himself when none is intended. Feels persecuted. Accepts statements of others without suspicion (not necessarily "gullible.")
10. Generous - v - Self-centered, selfish
Generous and considerate in actions involving others at considerable self-sacrifice. Irritable and resentful or withdrawing from situations requiring consideration of others. Talks and acts exclusively in terms of own interests.
11. Silent - v - Talkative
Says very little. Talks a lot, to everybody. Takes the initiative in conversations. When addressed, responds quickly.
12. Cautious - v - Adventurous
Avoids the strange and new. Looks at all aspects of a situation overcautiously. Does the safe thing. Seeks and readily enters into new experiences and situations.

/ 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8

13. Socially poised and adept
Polite, poised, and tactful
in social situations. Deals
with people gracefully and
skillfully.

- v - Socially clumsy, awkward in
social situations. Tactless in
social situations. Crude in
speech and manners. Omits pro-
per formalities. Does not meet
people gracefully. Gauche.

Note: Applies to relationships
with one or more persons.

14. Rigid
Sticks to his own ideas and
does not adapt to ways of
doing things differently from
his own. Does not change and
broaden with experience.

- v - Adaptable, flexible
Appropriately modifies his be-
havior to situations. Accepts
compromises where needed. Is
not upset, surprised, baffled,
or irritable if things are
different from what he expected.

15. Dependent
Asks for reassurance and sup-
port. Attaches himself to
individuals and groups in-
stead of relying on himself.

- v - Self-sufficient
Does not lean on others in situa-
tions calling for independent
action.

16. Placid
Outwardly calm and relaxed.

- v - Worrying, anxious
Appears to worry constantly,
harried; overtly anxious. Shows
agitation.

17. Conscientious
Behavior characterized by
truthfulness, honesty, un-
selfishness.

- v - Not conscientious
Not too careful about right and
wrong where own wishes are con-
cerned. Not particularly just,
honest, or unselfish. Inclined
to somewhat shady transactions.

18. Imaginative
Has a rich and vivid imagina-
tion. Thinks of unusual angles
and aspects of a question.
Sensitive to a multitude of
emotional and other possibili-
ties not realized by the average
person.

- v - Unimaginative
Lack in imagination. Approaches
problems in a literal matter-of-
fact fashion. Unresponsive to
the subtleties in a situation.

1 2 3 4 5 6 7 8

19. Marked Overt Interest in Opposite Sex - v - Slight Overt Interest in Opposite Sex

Dates a good deal and/or talks a lot about opposite sex. Extremely aware of women as women. (Disregard inferred needs or drives.)

Talks very little about women. Does not use opportunities for contacts with women.

20. Frank - v - Secretive
Comes out readily with his real feelings on various questions. Expresses his feelings, sad or gay, easily and constantly.

Keeps his thoughts and feelings to himself.

21. Dependent Minded - v - Independent Minded
Intellectually dependent on others. Generally accepts the opinion of a group or of authority without much thought.

Thinks things out for himself. Examines every question persistently and individualistically. Makes up his own mind.

22. Limited overt emotional expression - v - Marked overt emotional expression
Is apathetic, sluggish, or constricted.

Shows hyperkinetic, agitated behavioral responses; is overly excitable and over-demonstrative.

SCALE B
(#23-31)

(For ratings on this scale, 1 = left side or low, 8 = right side or high.)



Since many of the following attributes (#23-30) are broad factors, it is unlikely that any person will fit all of the phrases grouped together at one pole of a given variable. Note also that for some items, neither extreme necessarily represents a desirable attribute.

23a. Ability to develop and maintain warm interpersonal relationships.

23b. Social Adjustment: How well does he adjust to varied interpersonal situations? (Includes sexual adjustment only as it affects social adjustment in general.)

Acts without consideration for feelings of others; often rejected by others, often appears aloof, hostile, or irritable.

Actively considers feelings of others; readily gains acceptance in interpersonal relationships; maintains a friendly and likeable manner.

24. Appropriateness of Emotional Expression: How appropriate are his emotional responses to the situation?

Fails to adapt his emotional responses to the needs of the situation; shows disorganized or overly constricted emotional responses.

Shows emotional responses of a quality and intensity befitting the situation; reacts spontaneously but appropriately; shows well integrated and flexible patterns of emotional behavior.

25. Characteristic Intensity of Inner Emotional Tension: How intense is his inner emotional life as inferred from all available clues?

Inner emotional life characterized by a minimum of persistent internal tensions.

Has strongly repressed emotional drives resulting in inner turmoil; great inner conflict and strong pent-up emotions.



26. Sexual Adjustment: To what degree do his sexual needs and activities affect his overall adjustment?

His sexual needs and activities seriously interfere with his overall adjustment.

His sexual needs and activities definitely enhance his overall adjustment.

27. Motivation for Professional Status: How strong is his drive for the status-rewards of a professional career?

28. Motivation for Scientific Understanding of People: How strong are his drives toward acquiring the facts, theories, and skills necessary for the scientific understanding of individual human beings?

29. Insight into Others: How much insight does he have into the attitudes, emotions, and motivations of others?

Interprets behavior at its face value; insensitive to any but gross differences in behavior; does not develop any integrated understanding of behavior or of people.

Has good awareness of underlying dynamics of behavior; is sensitive to subtle nuances of behavioral responses; is able to develop integrated understanding of the behavior of people.

30. Insight into Himself: How much insight does he have into the underlying dynamics of his own attitudes, emotions and motivations?

31. Quality of Intellectual Accomplishments: What is the characteristic quality of his intellectual output?

Intellectual work is characteristically of low quality.

Characteristically produces intellectual work of high quality.

SCALE C - CRITERION SKILLS
(#32-42)

(For ratings on this scale, 1 = low, 8 = high)

Ratings on #33-42 refer to his performance five years hence.

What will be his level of competence or skill in the varied aspects of:

32. Academic Performance: (during next three or four years) How well will he:

Effectively master course content, successfully complete courses in general psychology, clinical psychology, statistics, and related fields; satisfy language requirements for the doctorate; pass general examinations.

33. Clinical Diagnosis: How well will he:

Recognize dynamics underlying particular responses in both objective and projective tests, observe significant interrelationships among responses, relate findings to case history and other clinical data.

Elicit from the patient information required for mental status examinations and case histories; ascertain and evaluate attitudes and incidents of psychological significance in the patient.

Synthesize clinical findings to arrive at an integrated picture of personality development, structure, and function.

34. Individual Psychotherapy: How effectively will he:

Conduct various types of individual psychotherapy.

35. Group Psychotherapy: How effectively will he:

Conduct various types of group psychotherapy.

36. Research: How well will he:

Recognize and define important research problems in clinical psychology; critically evaluate and apply the research findings of others; think with originality and scientific rigor; employ appropriate experimental design and statistical methods; grasp practical implications of finds; present results and conclusions in clear, comprehensive, and well-organized form.

/ / / / / / /
1 2 3 4 5 6 7 8

37. Administration: How well will he:

Plan and develop psychological programs; make proper administrative decisions; delegate responsibility appropriately; elicit cooperation from subordinates and superiors; maintain high morale among his staff; carry out or direct an appropriate public relations program.

38. Supervising Clinical Psychologists: How well will he:

Carry out the professional supervision of subordinates assigned to him for duty and on-the-job instruction; assign their duties; evaluate their performance; instruct them in clinical techniques; perform other aspects of in-service training.

39. Teaching Psychology (in a College or University): How well will he:

Teach college courses in general psychology; motivate students, present concepts and procedures, stimulate critical thinking about and integration of course materials, evaluate the products of learning.

40. Professional Interpersonal Relations: How well will he:

Work cooperatively with superiors, subordinates, members of the mental hygiene team, and other professional personnel concerned with the patient's welfare; participate in the give and take of staff conferences; contribute to group decisions.

41. Integrity of Personal and Professional Behavior: How well will he:

Recognize and fulfill professional responsibilities; live up to personal commitments; show loyalty to professional obligations in the event of outside pressure or promise of personal gain; maintain discretion concerning professional matters; appropriately conform with commonly accepted standard of moral and social behavior; refrain from coloring facts, evasion, lying, etc.

42. Overall Suitability for Clinical Psychology: In view of his assets and liabilities, how well will he be able to:

Carry out the several duties, diagnosis, therapy and research specified for the position of clinical psychologist (P-4 and above) in the VA.

A P P E N D I X B

IN-SESSION MEASURES ON A SINGLE CASE

(First On-Route Item)

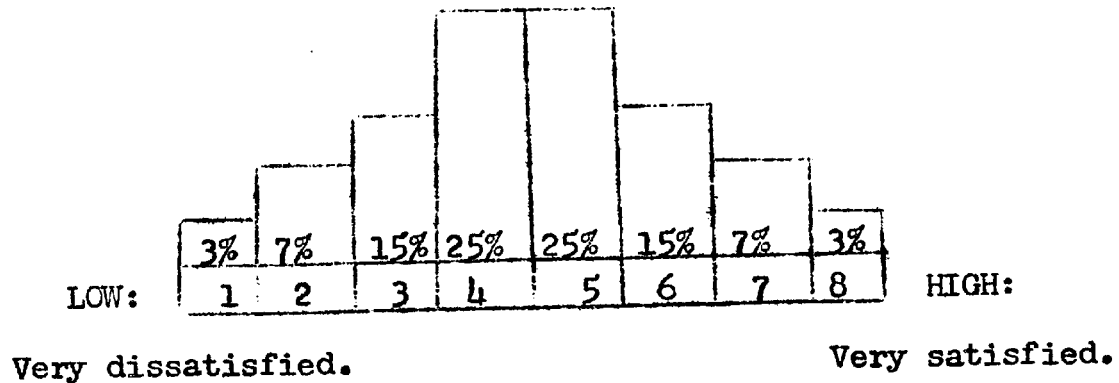
FCO-D

Name _____
Date _____
Subject _____
Pooling Session _____

FORM IIA

Using the eight point scale illustrated graphically at the bottom of the page, indicate your answer to this question:

All things considered, how satisfied are you with your own rating of Item _____?



Rating _____

(First On-Route Item)

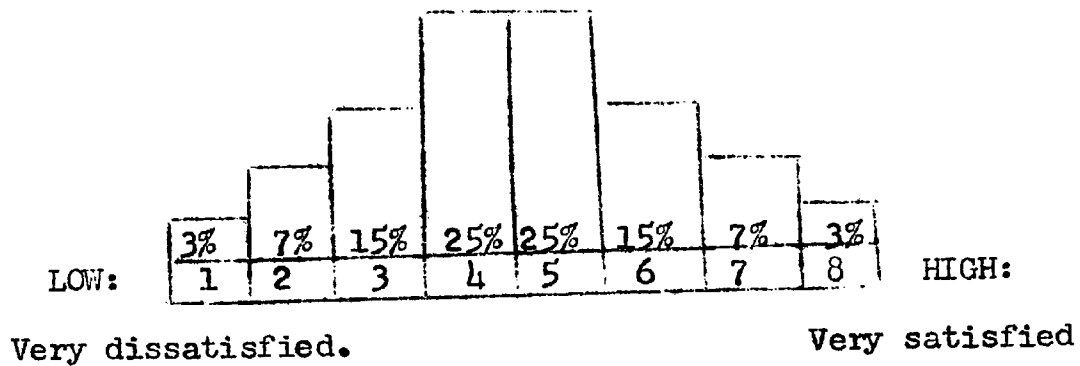
FCO-D

Name _____
Date _____
Subject _____
Pooling Session _____

FORM IIB

Using the eight point scale illustrated graphically at the bottom of the page, indicate your answer to this question:

All things considered, how satisfied are you with the pooled decision arrived at by this group on Item _____?



Rating _____

(Second On-Route Item)

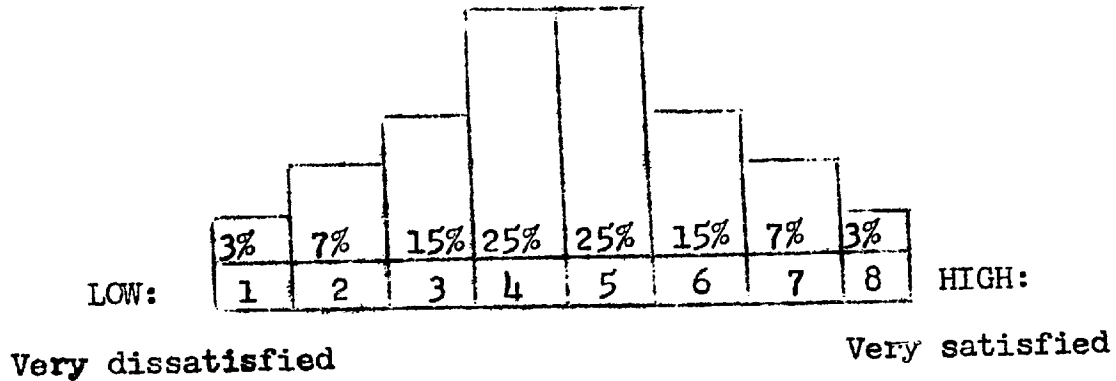
FCO-D

Name _____
Date _____
Subject _____
Pooling Session _____

FORM IIA

Using the eight point scale illustrated graphically at the bottom of the page, indicate your answer to this question:

All things considered, how satisfied are you with your own rating of Item _____?



Rating _____

(Second On-Route Item)

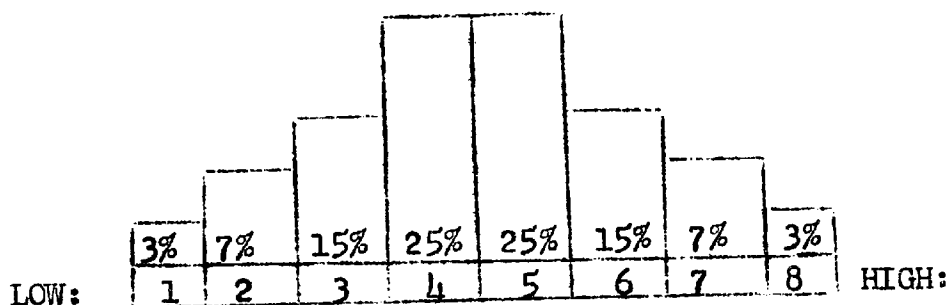
FCO-D

Name _____
Date _____
Subject _____
Pooling Session _____

FORM III

Using the eight point scale illustrated graphically at the bottom of the page, indicate your answer to this question:

All things considered, how satisfied would you be to use the mean of these four ratings of Item _____ as the final group decision?



Very dissatisfied.

Very satisfied.

Rating _____

(Second On-Route Item)

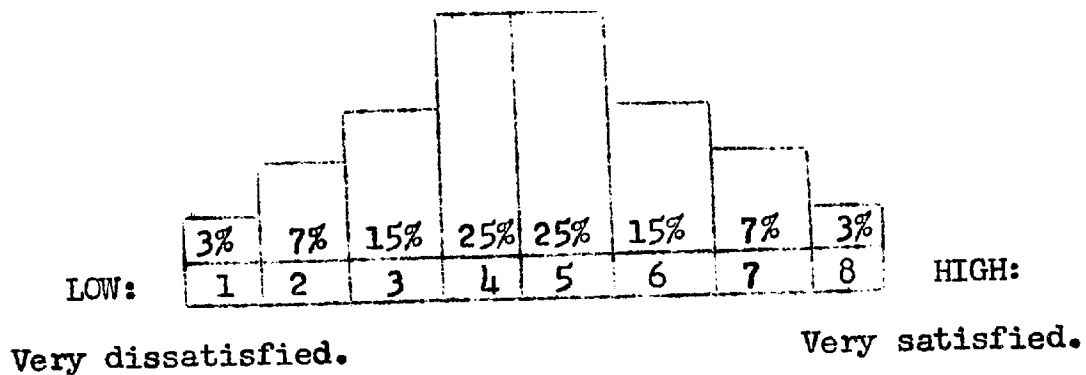
FCO-D

Name _____
Date _____
Subject _____
Pooling Session _____

FORM IIB

Using the eight point scale illustrated graphically at the bottom of the page, indicate your answer to this question:

All things considered, how satisfied are you with the pooled decision arrived at by this group on Item _____?



Rating _____

(Third On-Route Item)

FCO-D

Name _____
Date _____
Subject _____
Pooling Session _____

FORM IV

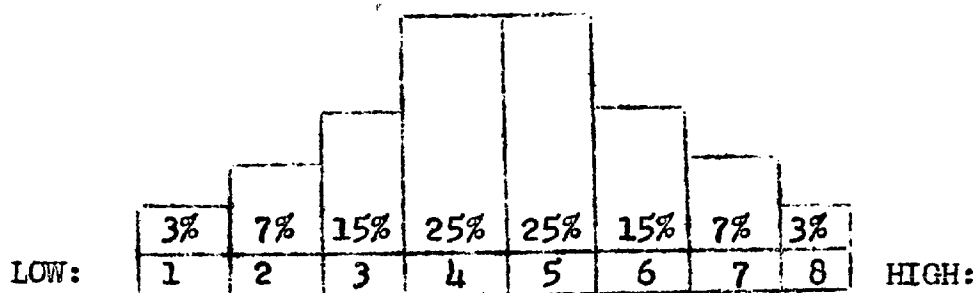
1. Using the eight point scale illustrated graphically at the bottom of the page, indicate your answer to this question:

All things considered, how satisfied are you with the pooled decision arrived at by this group on Item _____?

2. On the three lines below write the names of the other members of this pooling team. Rank them (1-high, 2, 3-low) as to the amount of influence they had on you in reaching the final decision on this item; and then rank them in the order of your estimated influence on each of them.

Name	Their Influence on you	Your Influence on them

3. Although you have just reached a pooled decision, what do you personally think would be the best rating on this item? _____



Very dissatisfied.

Very satisfied.

(Third On-Route Item)

FCO-D

Observer _____
Pooling Session _____
Case No. _____
Date _____

FORM X

OBSERVER RATINGS

- A. After the team has reached a decision on Item _____, indicate the predominant characteristic of the solution process by checking one of the categories below:

Integration _____
Compromise _____
Capitulation _____
Acquiescence _____

- B. Do the same for the decision on Item 42.

Integration _____
Compromise _____
Capitulation _____
Acquiescence _____

Integration -- The individual opinions are woven together into common end-product.

(Final Item)

FCO-D

Name _____
Date _____
Subject _____
Pooling Session _____

FORM V

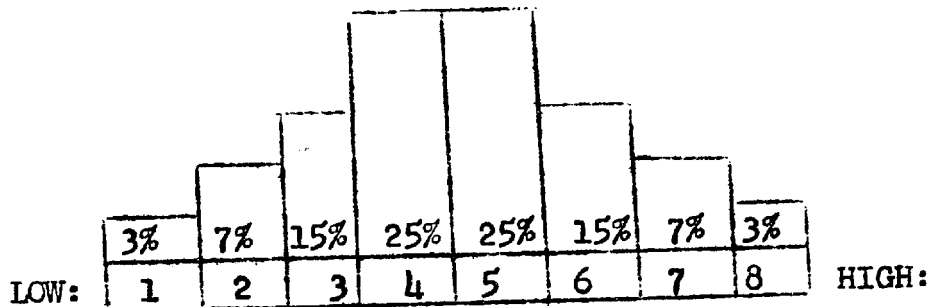
1. Using the eight point scale illustrated graphically at the bottom of the page, indicate your answer to this question:

All things considered, how satisfied are you with the pooled decision arrived at by this group on Item 42? _____

2. On the three lines below write the names of the other members of this pooling team. Rank them (1-high, 2, 3-low) as to the amount of influence they had on you in reaching the final decision on this item; and then rank them in the order of your estimated influence on each of them.

Name	Their Influence on you	Your Influence on them

3. Although you have just reached a pooled decision, what do you personally think would be the best rating on this item? _____



Very dissatisfied.

Very satisfied.

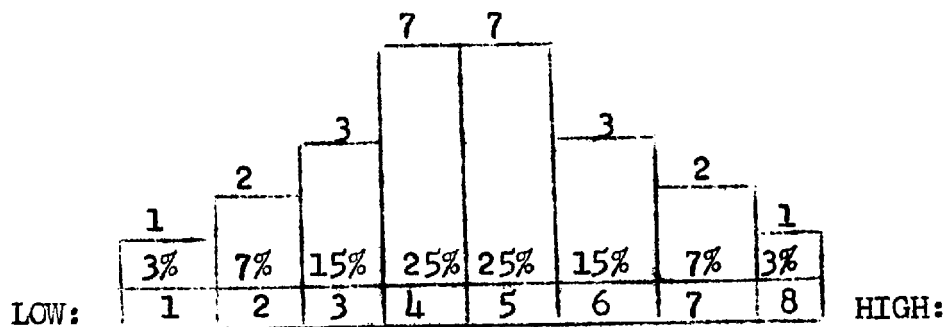
A P P E N D I X C

EXTRA-SESSION MEASURES

FORM I

Use the entire assessment staff as your reference population. Make your distribution conform to the percentages indicated on the eight point scale illustrated graphically below. Rate the members of this staff on the following question?

How much prestige as a clinician does this person have for you?



Not very much prestige

Very much prestige.

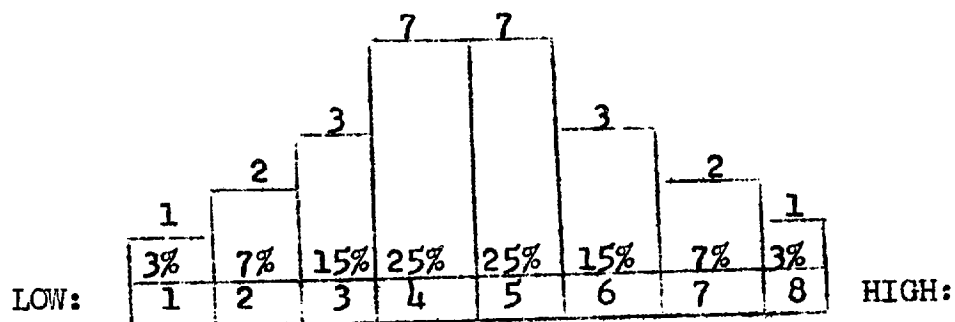
Note: The number at the top of each column of the histogram indicates how many times each of the ratings should be used in the table below. Be sure to assign each rating the number of times shown.

Name	Prestige for you	Name	Prestige for you
McNeil		Cleveland	
Goldstein		Calden	
Shapiro		Garman	
Shire		Segal	
Stotsky		Aronson	
Brownfain		Cohen	
Housman		Stan Schneider	
Sinnett		Silverman	
Winter		Eglash	
Osborn		Bennett	
Dibner		Snyder	
Brandwein		Hover	
Simkin		Malcolm	
Dailey		Davidson	
N. Berlow		Shirley Schneider	

How do you think you will be rated on this question? _____

FORM VIII

A check mark has been placed opposite the name of each member of the staff with whom you have worked in pooling sessions. Use this group as your reference group. Make your distribution conform to the percentage indicated on the eight point scale illustrated graphically below. Rate these people on:



Don't like very much.

Like very much.

Note: The number at the top of each column of the histogram indicates how many times each of the ratings should be used in the table below. Be sure to assign each rating the number of times shown.

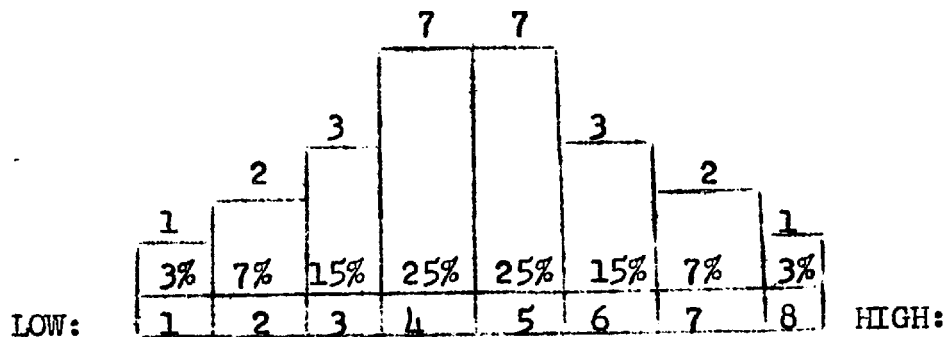
Name	Worked with	Ratings	Name	Worked with	Ratings
McNeil			Cleveland		
Goldstein			Calden		
Shapiro			Garman		
Shire			Segal		
Stotsky			Aronson		
Brownfain			Cohen		
Housman			Stan Schneider		
Sinnett			Silverman		
Winter			Eglash		
Osborn			Bennett		
Dibner			Snyder		
Brandwein			Hover		
Simkin			Malcolm		
Dailey			Davidson		
N. Berlow			Shirley Schneider		

How do you think you will be rated on this question? _____

FORM VII

A check mark has been placed opposite the name of each member of the staff with whom you have worked in pooling sessions. Use this group as your reference group. Make your distribution conform to the percentages indicated on the eight point scale illustrated graphically below. Rate these people on:

How valuable in the pooling sessions is this person in helping reach the best decisions?



Not very valuable.

Very valuable.

Note: The number at the top of each column of the histogram indicates how many times each of the ratings should be used in the table below. Be sure to assign each rating the number of times shown.

Names	Worked with	Ratings	Names	Worked with	Ratings
Brandwein			Dibner		
Bronfain			Shire		
Winter			Goldstein		
Aronson			Stotsky		
Cohen			Eglash		
Stan Schneider			MacNeil		
Dailey			Bennett		
Shapiro			Segal		
Osborn			Davidson		
Garman			Cleveland		
Snyder			Hover		
Simkin			Calden		
Berlow			Shirley Schneider		
Silverman			Malcolm		
Housman			Sinnett		

How do you think you will be rated on this question?

FORM XI

During the course of the assessment program you have made several hundred ratings on satisfaction, influence, etc., for Conference Research. By and large the ratings have been carefully made and valuable. However, because of time pressures or lack of information, some of your ratings may have been pretty off-hand and casual. On the scale below, estimate the percentage of your responses which, regardless of the amount of time you spent on them, were careful estimates -- about the best that you could have done.

Percentages	-	100
	-	90
	-	80
	-	70
	-	60
	-	50
	-	40
	-	30
	-	20
	-	10
	-	0

A P P E N D I X D

INSTRUCTIONS TO OBSERVERS

INSTRUCTIONS TO OBSERVERS

General Instructions

Pooling sessions will be held Tuesday from 1:00 to 5:00 P.M. in 300 West Medical. Distribute yourselves so that there is one observer for every pooling team. Two cases will be discussed Tuesday afternoon and then the same four people will meet later in the week to work on two additional cases, making a total of four. Since the clinicians have autonomy in deciding when and where to meet the second time, it might be a good idea for the observer to interject his wishes on this decision. If possible, stay with the same four people for both sessions. If this is not possible, please notify Levin as soon as possible so that arrangement can be made.

Specific Instructions

The following procedure will hold for each case discussed during the pooling session:

1. Record interaction (at bottom of first sheet write)
 - a. Composition of the group.
 - b. Leader for that case.
 - c. Recorder for that case.
 - d. Pooling Session Number.
 - e. Your own initials.

Then staple all sheets for each case together.

2. Before the clinicians start discussing Item 33, interrupt (diplomatically) and distribute Form IIA (blue).
3. After they have reached a pooled decision on Item 33, distribute Form IIB (blue).
4. Before they start Item 38, Distribute Form IIA (pink).
5. When IIA has been collected, announce the mean, which you will have, for this item and distribute Form III (pink).

6. When a pooled decision has been reached on Item 38, distribute Form IIB (pink).
7. After a pooled decision has been reached on Item 40, distribute Form IV (yellow).

Note: The items on which the above information will be collected will be changed on July 19 and July 29. The new items will be announced then.

8. Check the manner in which the decision on Item 40 was reached on Form XA.
9. Distribute Form V after a decision has been reached on Item 42.
10. Check the manner in which the decision on Item 42 was reached on Form XB.
11. Be sure the identifying information is on each questionnaire. Return with interaction records to 302 Mason Hall as soon after the pooling session as possible.
12. Clip together all the questionnaires and interaction sheets for each case and keep them separate from the other cases.

Note: Certain other forms will be distributed at the end of the fourth and fifth weeks. You will receive them at those times.

A P P E N D I X E

DEFINITIONS OF VARIABLES

I. Dependent Variables

A. The Satisfaction Variables

1. Satisfaction with decision (final item)*

Definition: All things considered, how satisfied are you with the pooled decision arrived at by this group on Item 42?

2. Satisfaction with on-route decisions*

Definition: All things considered, how satisfied are you with the pooled decision arrived at by this group on Item ____?

Note: Satisfaction with group decisions was measured on three on-route items (designated as first, second, and third on-route items). The questions defining each on-route satisfaction are identical with the exception of the item number.

3. Satisfaction-with-own-rating*

Definition: All things considered, how satisfied are you with your own rating of Item ____?

Note: Satisfaction with own rating was measured on two on-route items (the first and second items).

* The star indicates that the score entered for a participant is the mean of his scores on the four cases discussed during a single pooling session.

4. Satisfaction with mean*

Definition: All things considered, how satisfied would you be to use the mean of these four ratings of Item _____ as the final group decision?

Note: Satisfaction with the mean was measured on the second on-route item.

B. The Influence and Change Variables

Note: The three definitions following are given preparatory to definitions of influence and change.

1. Own decision

Definition: A participant's rating on a given item made previous to the group's discussion of that item.

2. Group decision

Definition: The pooled decision reached by the group on a particular item.

3. Post-pooled decision

Definition: Although you have just reached a pooled decision what do you personally think would be the best rating on this item?

* The star indicates that the score entered for a participant is the mean of his scores on the four cases discussed during a single pooling session.

4. Apparent influence*

Definition: The sum across the three other participants of the number of points which each changed from his own to the group decision in the direction of a given participant's own rating.

Example:

Participants #	1	2	3	4
Own Rating	4	6	2	3
Group Decision	5			
Apparent Influence of Participant #1	$= 1 + 2 + 1 = 4$			
Apparent Influence of Participant #2	$= 1 + 3 + 2 = 6$			
Apparent Influence of Participant #3	$= 0 + 1 + 0 = 1$			
Apparent Influence of Participant #4	$= 0 + 1 + 1 = 2$			

Note: Apparent Influence scores were calculated on the final item and the three on-route items. In addition, "Apparent Influence On-Route" is the sum of Apparent Influence on Items 32-41 (Scale C of the VA Rating Scale).

5. Real Influence*

Definition: The sum across the three other participants of the number of points which each changed

* The star indicates that the score entered for a participant is the mean of his scores on the four cases discussed during a single pooling session.

from his own rating to his post-pooled rating, in the direction of a given participant's own rating.

Example:

Participants #	1	2	3	4
Own Rating	2	6	5	3
Post-pooled Rating	2	5	4	4

Real Influence of Participant #1 = $1 + 1 + 0 = 2$

Real Influence of Participant #2 = $0 + 0 + 1 = 1$

Real Influence of Participant #3 = $0 + 1 + 1 = 2$

Real Influence of Participant #4 = $0 + 1 + 1 = 2$

Note: Real Influence on-route is calculated on the third on-route item. Real Influence is also calculated on the final item.

6. Apparent change*

Definition: Own rating - Pooled rating.

Note: Apparent change is calculated on the three on-route items. Apparent change on-route is the sum of a participant's apparent changes on Items 32-41 (Scale C of the VA Rating Scale). Apparent change is also calculated on the final item.

* The star indicates that the score entered for a participant is the mean of his scores on the four cases discussed during a single pooling session.

7. Real change

Definition: Own Rating - Post-pooled rating.

Note: Real change on-route is calculated on the third on-route Item. Real change is also calculated on the final item.

8. Resistance-to-change*

Definition: Pooled rating - Post-pooled rating

Own rating - Group Decision

Note: Resistance to change on-route is calculated on the third on-route item. Resistance to change is also calculated on the final item.

9. Residual disagreement

Definition: Pooled rating - Post-pooled rating.

Note: Residual disagreement on-route is calculated on the third on-route item. Residual disagreement is also calculated on the final item.

II. Predictors

A. Prestige

Definition: How much prestige as a clinician does this person have for you?

* The star indicates that the score entered for a participant is the mean of his scores on the four cases discussed during a single pooling session.

1. Prestige accorded participant.

Definition: The mean of the three prestige ratings given to the participant by the three other participants who work with him in a group.

2. Prestige accorded others.

Definition: The mean of the participant's three ratings of the three other participants with whom he works in a group.

B. Self-estimate of prestige.

Definition: How do you think you will be rated on this question (refers to the question under A, above).

C. Personal liking

Definition: To what extent do you personally like each member of the assessment staff because of the kind of person he is?

1. Liking for participant

Definition: The mean of the three liking ratings given to the participant by the three other participants who work with him in a group.

2. Liking for others

Definition: The mean of the participant's three ratings of the other three participants with whom he works in a group.

D. Self-estimate of liking

Definition: How do you think you will be rated on this question (refers to the question under C, above).

E. Functional value

Definition: How valuable in the pooling sessions is the person in helping reach the best decisions?

1. Value accorded participant

Definition: The mean of the three functional value ratings given to the participant by the three other participants who work with him in a group.

2. Value accorded others

Definition: The mean of the participant's three ratings of the three other participants with whom he works in a group.

F. Self-estimate of functional value

Definition: How do you think you will be rated on this question (refers to the question under E, above).

G. Per-cent participation*

* The star indicates that the score entered for a participant is the mean of his scores on the four cases discussed during a single pooling session.

Definition: Per-cent of the total contributions initiated during the discussion of a case which were initiated by the participant.

H. Conscientiousness

Definition: During the course of the assessment program you have made several hundred ratings on satisfaction, influence, etc., for Conference Research. By and large, the ratings have been carefully made and valuable. However, because of time pressures or lack of information, some of your ratings may have been pretty off-hand and casual. On the scale below, estimate the percentage of your responses which, regardless of the amount of time you spent on them, were careful estimates--about the best that you could have done.

I. Quality of own decision*

Definition: Own rating - criterion rating.

Note: Quality scores are available only on the final item.

The criterion rating was made independently by the universities at which the assessee is in residence.

* The star indicates that the score entered for a participant is the mean of his scores on the four cases discussed during a single pooling session.