THE EFFECT OF FREEDOM OF CHOICE ON GROUP ATTRACTIVENESS

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ABSTRACT

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The rationales underlying the hypotheses of this study were based on Leon Festinger's theory of cognitive dissonance and on the effects of reinforcement theory. According to dissonance theory, a choice between two or more membership alternatives should arouse dissonance. The subsequent pressure to reduce dissonance should result in a more favorable evaluation of the chosen group and a less favorable evaluation of the unchosen group. In a no-choice situation, dissonance should not be present and no changes in evaluation of the groups should occur, except for those changes resulting from positive or negative reinforcement associated with being assigned to a desirable or undesirable group.

The present study manipulated the freedom of choice in determining group membership and the attractiveness of the chosen and unchosen alternatives. It was predicted that in a choice situation, the more attractive the rejected alternative in a choice between groups, the greater the dissonance incurred and consequently, the greater the resultant pressure to reduce this dissonance. To reduce this dissonance, the person should evaluate the chosen unattractive group more favorably and the unchosen attractive group less favorably than subjects in a comparable no-choice condition. Information that the alternative chosen is the more attractive of the alternatives available should have positive secondary reinforcement value. As a

result of receiving this rewarding information, the individual should evaluate the chosen attractive group higher in attractiveness than subjects in a comparable no-choice condition, since in the no-choice condition the reinforcement associated with the act of choosing would not be present.

Dependent variables in the study were ratings of attractiveness of the chosen group, ratings of the unchosen group, time spent listening to the unchosen group, time spent looking at average ratings of the groups, desire to change groups, and ratings of the experimenter.

The procedure for the study involved having the eighteen male subjects in each condition--High Choice - Attractive Chosen, No-Choice - Attractive Chosen, High Choice - Unattractive Chosen, and No-Choice - Unattractive Chosen--report individually to the experimental room. The experimenter read the instructions to each S, indicating that the S either did or did not have a choice as to which of two discussion groups he would belong, which were purportedly on-going groups which had previously met several times. Then E played a tape recording of the chosen or assigned group and administered a group attractiveness questionnaire. E then played a recording of the unchosen or unassigned group and administered a group attractiveness questionnaire for that group. Then E again administered a group attractiveness questionnaire for the chosen group. The other dependent measures were administered following the last questionnaire.

Contrary to predictions, there were no significant differences in the ratings of the chosen or assigned and unchosen or unassigned

groups in the choice and no-choice conditions. Reinforcement theory could account for the obtained ratings of group attractiveness. Those subjects who were rewarded by being placed in an interesting group, regardless of whether they did nr did not choose the group, rated the group even higher after hearing the boring unchosen group. Subjects who were punished by being placed in a boring group rated the group even lower after hearing the interesting group. There were no significant differences in the amount of time spent listening to the unchosen or unassigned group, the amount of time spent looking at the average ratings of the groups, the rating of the experimenter and in the desire to change groups.

One possible explanation offered for the lack of significant differences between the choice and no-choice conditions was the psychological reactance resulting from the forced choice situation which may have eliminated or significantly reduced dissonance arousal in the choice conditions. Post-experimental interviews indicated that the alternative of not participating in the experiment may have been important for many subjects, and this factor may have reduced the perceived freedom of choice in the situation, consequently depressing dissonance arousal.

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CHAPTER I

RATIONALE AND HYPOTHESES

Rationale

Group attractiveness is generally considered to be an important variable in determining certain communication behaviors of the members of the group. (e.g., Back, 1951; Costley, 1964) Most prior research on group attractiveness has dealt with the group after its formation, and in particular, with variables within the on-going group which correlate with group cohesiveness or attractiveness. Only in recent years have researchers begun to deal with the ways variables relating to group formation itself affect subsequent member perceptions of group attractiveness. According to Festinger's theory of cognitive dissonance, the amount of freedom an individual has in selecting the group to which he will belong should influence the subsequent attractiveness of the group for the individual. (Festinger, 1957, 1964)

First of all, dissonance theory predicts that "all decisions or choices result in dissonance to the extent that the alternative not chosen contains positive features which make it attractive also, and the alternative chosen contains features which might have resulted in rejecting it. Hence, after making a choice, people seek evidence to confirm their decision and so reduce dissonance." (Zajonc, 1960, p. 290) Cohen adds that "given the centrality of the act of choice in either selecting an alternative or complying to an induced discrepant behavior, . . . the theory certainly implies that a person who is forced to behave in a manner he would avoid if he could

experiences no dissonance." (Cohen, 1960, p. 303)

Briefly, then, if an individual perceives that he has freedom of choice in a decision between alternatives, dissonance is produced by selecting one alternative at the expense of others. One of the ways in which this dissonance may be resolved is by a re-evaluation of alternatives; in other words, the chosen alternative may be judged more attractive and the unchosen alternative less attractive after the choice is made. In a no-choice situation, however, the decision process and resultant dissonance described in the choice situation should not be present, and consequently, no re-evaluation should occur.

The effect of freedom of choice on subsequent perceptions of group attractiveness may also be partially explained in terms of differences in the magnitude of secondary reinforcement values in situations with varying amounts of freedom of choice. If on the basis of limited information an individual selects an alternative which he later finds out is the more desirable of two available alternatives, the positive reinforcement resulting from confirmation of a wise decision should result in a more favorable evaluation of the chosen alternative than if a choice had not been made. Even in a no-choice situation, however, an individual who has been assigned the more attractive of two alternatives should be somewhat rewarded by information related to the desirability of the alternatives and should increase his rating of the assigned alternative as this information becomes available. In the situation where later information demonstrates that an unwise choice was made; i.e., where the individual selects an alternative which he later finds out is the less desirable of two available alternatives, the negative secondary reinforcement

resulting from such a choice should tend to depress the attractiveness ratings of the selected alternative. However, this person should still be affected by the dissonance incurred in making the choice, and consequently, some increase in the ratings of the selected group should occur. On the other hand, the person who is assigned to an undesirable group should rate the assigned group even lower after the information about the alternatives is made known because of the negative reinforcement resulting from being assigned to an undesirable group. In other words, the individual will experience relative deprivation.

The effect of freedom of choice on ratings of attractiveness of alternatives, then, can be explained in terms of dissonance reduction, differences in secondary reinforcement, or a combination of both factors.

Review of the Literature

Research evidence strongly supports the hypothesis that varying choice situations result in varying ratings of the attractiveness of both the chosen and unchosen alternatives. More specifically, it has been found that under greater degrees of choice an individual will evaluate the chosen alternative more favorably and unchosen alternatives less favorably. Brehm (1956) manipulated choice by having undergraduate females in the high choice condition choose between two manufactured articles, with the impression that they could keep the chosen article as payment for participating in the experiment. In the "gift" (no-choice) condition, the experimenter "randomly" selected an article rated as highly desirable for the subject. Corrected pre to post desirability rating changes were used to measure attitude

change. Chosen articles increased in desirability from pretest to posttest, while similar articles in the no-choice condition did not.

Cohen, Brehm and Fleming (1958) used justification for compliance as the independent variable. They assumed that the amount of justification used to get the subjects to cooperate would be related to the perceived freedom of choice. High justification Ss were given several reasons why they should write an essay expressing an opinion discrepant from their own. Low justification Ss were given only the necessary instructions plus the option not to participate. The dependent variable was the amount of attitude change toward the discrepant position. Although an analysis using all the Ss did not result in significantly different attitude change in the two conditions, when Ss with extreme original attitudes were thrown out, the low justification Ss changed their attitude toward the discrepant position more than the high justification Ss. However, the difference between the two conditions reached a significance level of only .07.

In a second study by Rabbie, Brehm and Cohen (1959), perceived choice was manipulated in the same manner. When attitudes were measured immediately after the decision to take a discrepant position, as well as after the behavior was actually engaged in, Ss in the low justification (high choice) condition showed significantly more attitude change toward the discrepant position than Ss in the high justification (low choice) condition.

Festinger and Carlsmith (1959) tested the hypothesis that "the greater the pressure used to elicit overt behavior, the weaker will be the tendency for an individual to change his opinion so as to bring it into correspondence with what he has said or done." Pressure was

manipulated by the amount of money offered to take part in a disagreeable, monotonous task. As predicted, Ss in the low pressure condition (high choice) rated the experimental tasks significantly more enjoyable than Ss in the control and high pressure (low choice) conditions.

Cohen and Brehm (reported in Brehm and Cohen, 1962) used three conditions of choice manipulated by the amount of threat utilized to get subjects to participate. The task involved copying random numbers for 3 to 4 hours, with attitude toward the task as the dependent variable. Contrary to predictions, members of the high threat group were most favorably disposed towards the random numbers task. However, this group also reported that they had the greatest amount of freedom, thus supporting the dissonance theory prediction.

Cohen, Terry and Jones (1959) manipulated choice by asking Ss in the high choice condition three times if they wanted to hear the experimenter read a message which contained information contrary to the S's beliefs. In the low choice condition, the Ss were simply told that the E was going to read the contrary information to them. The results indicated that the more discrepant the counter-argument, the more the attitude change in the high choice condition, but not in the low choice condition.

Wells (1964) manipulated choice by instructing Ss that they did or did not have a choice as to which message they could read, with the following variations: (1) One-message, no-choice; (2) Two-messages, challenged choice; (3) Two-messages, choice; (4) Two-messages, stressed choice; and (5) Two-messages, denied choice. Attitude change in the treatment groups toward the position advocated in the messages

did not differ significantly. Wells attributes this lack of signif-cance to several factors, including the contaminating factor of choice involved in cooperating or not cooperating with the experimenter, varying feelings about the importance of the reading task, and varying feelings about the importance of the choice between messages.

Festinger has pointed out several factors which may influence the amount of dissonance produced in a choice situation. (Festinger, 1957, pp. 37-42; 1964, p. 156) Three of these factors are the importance of the decision, the relative attractiveness of the unchosen alternative, and the amount of cognitive overlap between alternatives.

Importance of decision is related to the consequences of making the decision, as well as to the extent to which the decision reflects on the individual's self-image; i.e., the amount of personal involvement associated with the decision. Brehm (1959) asked Ss (8th grade pupils) to rate 34 vegetables on liking. Then each S was offered the choice of stopping or of eating an unliked vegetable. A small inducement was used to encourage the Ss to try the disliked vegetable. In a low consequence condition, willing Ss ate the vegetable and filled out a questionnaire again. In a high consequence condition, when the S had almost finished eating his vegetable, he was casually told that his parents would receive a letter indicating that the S was eating the vegetable--the implication being that the S might be required to eat more of the dislike vegetable at home. As predicted, the mean increased liking for the previously disliked vegetable was significantly greater in the high consequence condition than in the low consequence condition.

Zimbardo (1960) and Deutsch, Krauss and Rosenau (1962) found that Ss who were more personally involved in the decision changed significantly more in favor of a chosen alternative than Ss who were not as personally involved. Zimbardo informed Ss in the high personal involvement condition that their judgements would indicate their basic social values, personalities, and outlook on important problems. Deutsch, et al., told Ss that their selection of a spread for bread would indicate such personal characteristics as leadership aptitude, executive potential, and artistic judgement. Half of the Ss were given this inducement before the choice and half after the choice was made. The amount of pretest-posttest change toward the chosen spread was significantly greater for the high than the low self-involvement group for flavor ratings, but there were no significant differences for general preference ratings. The two high involvement groups did not differ significantly.

The relative attractiveness of the unchosen alternative as a determinant of post-choice attitude change was investigated by Brehm (1956). Brehm varied the relative desirability of the two articles between which Ss were asked to choose as follows: (1) High dissonance, one-half to one and one-half scale points apart; (2) Medium dissonance, about two scale points apart; and (3) Low dissonance, about three scale points apart. Half the Ss were also asked to read four (fictitious) research reports, each of which evaluated a product by listing several good and bad points. Half the Ss receiving information were given information evaluating the chosen product; half were not. Under the condition of no information, attitude change was greater for high dissonance than for low dissonance Ss, but the difference was not

significant. Under the information condition, high dissonance Ss demonstrated significantly greater attitude change than low dissonance Ss, thereby lending support to Festinger's theory.

Amount of cognitive overlap as a determinant of amount of attitude change following choice was investigated by Brehm and Cohen (1959). In this study, 6th grade children indicated how well they liked certain toys, chose one of a selected group as a reward, and then re-rated the toys. Half chose from among highly similar toys, i.e., toys with a high degree of cognitive overlap, and half chose from among highly dissimilar toys. Significantly more change in attitude toward the chosen alternative occurred in the dissimilar condition than in the similar condition, supporting Festinger's hypothesis.

One of the few attempts to test dissonance theory in the small group context is a study by Aronson and Mills (1959). In the high dissonance condition, Ss read aloud extremely embarrassing material before joining the group; in the mild condition, they read aloud mildly embarrassing material; and in the control condition, they were simply told that they would be members of the group. Aronson and Mills found that Ss who underwent the severe initiation--i.e., those who read extremely embarrassing material--rated the group as significantly more attractive than did Ss in the mild or control conditions.

Chapanis and Chapanis (1964), Rosenberg (1965) and others have criticized the Aronson and Mills study because of possible alternative explanations of the results. In a replication of the Aronson and Mills study, Gerard and Mathewson (1966) utilized electric shocks to vary the severity of initiation and added additional treatment conditions

to control for "relief" and "contrast" effects, explanations based on similarity of the content of the two phases of the experiment, and explanations related to pleasure derived from successfully passing the initiation. Gerard and Mathewson concluded that their results ruled out these alternate interpretations and supported the original dissonance or "suffering-leading-to-liking" hypothesis.

The present study attempts to take into account the previous criticisms of dissonance research. In addition to the criticisms noted above, Chapanis and Chapanis criticized some dissonance research because Ss were selectively eliminated, with the remaining Ss being most likely to yield significant results in the direction predicted. In the present study, a relatively direct manipulation of freedom of choice is utilized, thus minimizing the possibility of alternative explanations of results, as well as minimizing the possibility of evaluation apprehension and incredulity. Ss are randomly assigned to conditions, and no Ss are selectively eliminated from the analysis of data.

Freedom of Choice and Attractiveness of Group

The present study systematically manipulates the freedom of choice in a decision between groups, and the attractiveness of the chosen and unchosen alternatives, to study the effects of these variables on subsequent ratings of group attraction.

On the basis of the theory and evidence cited above, it would be predicted that after an individual has made a decision to join one group at the expense of rejecting another group, he will experience dissonance due to the possible rewards foregone in the rejected

relationship. Furthermore, as the individual encounters information which indicates that the group he selected is less attractive than the group which he rejected, the dissonance experienced should increase and ratings of the attractiveness of the chosen group should be even higher. By contrast, if an individual later finds that the group he has selected is the more attractive group, the positive secondary reinforcement associated with making a correct decision should also result in higher ratings of group attractiveness.

As indicated above, an important factor which should influence the amount of dissonance and consequent change in the ratings of the alternatives is the attractiveness of the alternatives between which an individual chooses. In the study by Brehm (1956) cited above, it was found that the prior knowledge of the relative desirability of alternatives can have an effect on the ratings of the alternatives following choice. In many choice situations, such as the choice between groups with which an individual is unfamiliar, much of the information about the attractiveness of the alternatives is not available until after the choice is made and the individual has had the opportunity to observe or participate in the group activity. What effect does knowledge about the relative attractiveness of alternatives following choice have upon the dissonance experienced by the individual? Assuming that a choice between groups results in commitment as defined by Festinger and that the decision does unequivocally affect the individual's subsequent behavior and is not simply a "statement of preference" (Festinger, 1964, p. 156), then after the choice is made, as information becomes available about the

desirability or attractiveness of the alternatives, predictable changes in the evaluation of the alternatives should result.

First of all, on the basis of Festinger's assumption concerning the relative attractiveness of alternatives, the more attractive the rejected alternative in a choice situation between groups, the greater the dissonance incurred, and consequently, the greater the resultant pressure to reduce this dissonance. In other words, any information that challenges an individual's decision, such as the information that the unchosen alternative is more attractive or more interesting than the chosen alternative, should increase his dissonance. To reduce this dissonance, the person should evaluate the chosen unattractive group more favorably after receiving the new information.

An individual in a no-choice situation assigned to an unattractive group, on the other hand, should experience no dissonance, and any additional information indicating that he has been assigned to an unattractive group should provide negative reinforcement. Consequently, the individual in a no-choice condition should rate the assigned unattractive group even lower in attractiveness after receiving additional information concerning the relative attractiveness of the alternatives.

Specifically, hypotheses 1 and 2 to be tested in this study are the following:

H_1: Subjects in the Choice condition will rate a chosen boring group higher after hearing the unchosen interesting group[1] than before hearing the unchosen group.

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[1]The terms "boring group" and "interesting group" are used to indicate relatively unattractive and relatively attractive alternatives in a choice between groups. The terms are operationally defined in Chapter II.

H_2: Subjects in the No-choice condition will rate an assigned boring group lower in attractiveness after hearing the unassigned interesting group than before hearing the unassigned group.

After an individual has made a choice, information that the alternative chosen is the more attractive of the alternatives available should have positive secondary reinforcement value. As a result of this rewarding information, the individual should evaluate the chosen attractive group even higher in attractiveness after receiving information about the unchosen unattractive group.

For an individual in a no-choice situation, assignment to a desirable or attractive group should be somewhat rewarding, and consequently, he should rate the assigned interesting group higher in attractiveness after hearing information about the unattractive unassigned group. However, this increase should not be as great as in the choice condition because the reinforcement associated with the act of choosing would not be present.

On the basis of the preceding rationale, hypotheses 3 and 4 to be tested in this study are the following:

H_3: Subjects in the Choice condition will rate a chosen interesting group higher after hearing the unchosen boring group than before hearing the unchosen group.

H_4: Subjects in the No-choice condition will rate the assigned interesting group higher after hearing the unassigned boring group than before hearing the unassigned group.

The rationale for hypotheses 5 and 6 is the same as for the preceding hypotheses; namely, that dissonance will be experienced following choice, and that this dissonance may be reduced by evaluating the chosen alternative higher (H_5) and the unchosen alternative lower (H_6) after the choice is made. Dissonance should not be experienced

in the no-choice condition, and the ratings of the assigned and unassigned alternatives should be affected only by the positive or negative reinforcement associated with being assigned to a desirable or undesirable group. Some change in ratings would be expected in the no-choice condition, as discussed in relation to hypotheses 2 and 4, although this change should not be as great as in the choice condition, since dissonance effects would not be present.

H_5: Subjects in the Choice condition will rate the chosen alternative, whether interesting or boring, higher than subjects in the No-choice condition will rate comparable alternatives.

H_6: Subjects in the Choice condition will rate the unchosen alternative, whether interesting or boring, lower than subjects will rate comparable alternatives in the No-choice condition.

In addition to re-evaluating alternatives to reduce dissonance produced in a choice situation, an individual may also seek information which confirms his decision and avoid information which challenges his decision and increases his dissonance.[1] In other words, if an individual who chooses a boring group finds that the unchosen group is interesting, he should experience increased dissonance and should be unwilling to spend as much time listening to the unchosen interesting or attractive group as someone for whom the information does not produce dissonance. Since no volition is exercised by an individual in a no-choice situation, knowledge of the interesting, unassigned group should not produce dissonance, and this individual should be willing to listen to the information for a longer period of time than an individual in the choice condition. The specific hypothesis to be

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[1]In a study by Canon (reported in Festinger, 1964) it was found that some people will seek dissonance-producing information if they feel that the information is useful to them. It is doubtful that knowledge of a rejected group in a non-competitive situation would be perceived as useful.

tested is the following:

H_7: Subjects in the Choice condition will be willing to spend less time listening to an unchosen interesting group than subjects in a comparable No-choice condition.

Since knowledge that the rejected group is less attractive than the chosen group would be dissonance-reducing, an individual in a choice situation should be willing to spend more time listening to the boring or unattractive unchosen group than would an individual in a comparable no-choice situation. In addition, this knowledge would reinforce the individual's choice, and therefore should provide positive secondary reinforcement. The individual in the choice condition should therefore be willing to spend more time listening to a boring rejected group because of its secondary reinforcing and dissonance-reducing qualities. The specific hypothesis is:

H_8: Subjects in the Choice condition will be willing to spend more time listening to an unchosen boring group than subjects in a comparable No-choice condition.

The rationale for hypothesis 9 is based on the commitment effect associated with making a decision. Festinger points out that the result of the "process of establishing cognitive elements consonant with the decision and eliminating dissonant elements . . . would be to stabilize or 'freeze' the decision." (Festinger, 1957, p. 34) Consequently, individuals in the choice conditions should be less willing to change groups after a choice has been made. On the other hand, individuals in the no-choice conditions should be less committed to their assigned groups, and consequently should be more willing to change groups, since the stabilizing process of dissonance reduction would not have taken place. In an experiment on post-decision regret, Festinger and Walter (reported in Festinger, 1964) found that many Ss

reversed their preference from an original ranking when they actually made their choice. However, the reversal was made between alternatives only one scale unit apart on a 13 point scale, and the reversal took place when they actually made their commitment, rather than after the commitment was made. The authors note that it is plausible to maintain that following a decision there is a sudden salience of dissonance that is experienced as regret about the decision, but the data indicate that the regret phenomenon is probably fleeting. The specific hypothesis to be tested in this study is:

H_9: Subjects in the Choice condition will less frequently express a desire to change groups than subjects in a No-choice condition.

One way in which the subjects in an experimental situation could reduce dissonance, if they select an undesirable alternative, would be to evaluate unfavorably the experimenter who is conducting the experiment. Because of positive secondary reinforcement, subjects who select a desirable alternative should rate the experimenter more favorably. The specific hypothesis is:

H_{10}: Subjects in the Choice condition who are placed in an interesting group will rate the experimenter more favorably at the end of the experiment than subjects who are placed in a boring group.

In addition to having no choice, subjects who are assigned to a boring group should feel punished because they are assigned to a relatively undesirable group. As a result, these subjects should rate the experimenter lower than subjects who are assigned to an interesting group. Because of dissonance reduction in the choice condition, however, subjects selecting the boring group should rate the experimenter even lower than the subjects in the no-choice condition. The specific

hypothesis to be tested is:

H_{11}: Subjects in the No-choice condition who are assigned to an interesting group will rate the experimenter more favorably than the subjects who are assigned the boring group, but this difference will not be as great as in the choice condition.

Since knowledge of how others have rated the two groups in a choice situation would increase the dissonance of the individuals who select a boring group, these individuals should avoid such information. On the other hand, such information would be reinforcing and dissonance-reducing to individuals who select an interesting group, and they should spend more time looking at the information.

H_{12}: Subjects in the Choice condition who are placed in a boring group will spend less time looking at the average ratings of the two groups than subjects who are placed in an interesting group.

CHAPTER II

PROCEDURES AND RESULTS

Introduction

The present study will be reported in terms of two separate experiments, Experiment I and Experiment II.

Experiment I, which will be reported first, had some procedural weaknesses which made an interpretation of the results questionable. The design and over-all results of Experiment I are reported in this study since the experiment indicates some factors which can possibly affect the arousal of dissonance in choice situations, but which are not made explicit in Festinger's statement of dissonance theory. In particular, the amount of information necessary to make a decision between alternatives which would result in dissonance arousal has not been adequately discussed in previous research, and this was a possible contaminating factor in Experiment I. This will be discussed more fully following the report of Experiment I.

Experiment II, which attempted to correct the weaknesses of Experiment I, utilized different subjects and slightly different procedures. Changes in the experimental procedures and the results of Experiment II will be reported following the description of Experiment I.

EXPERIMENT I

Procedures in Experiment I

Subjects

Seventy-two male college students, eighteen randomly assigned

each of four treatment conditions, were the subjects for Experiment I. Subjects volunteered from undergraduate classes in sociology, speech and psychology at Michigan State University during the summer, 1965. The average age of the subjects in Experiment I was 24.2, with a range from 18 to 44. Thirty-six Ss, or 50 per cent, were over 21 years old.

Procedure

Upon volunteering, Ss were told that they would be participating in a series of on-going discussions which would require several meetings. Each S was randomly assigned to a Choice or No-choice condition, and to a boring or interesting chosen or assigned group.

Ss reported individually to a room in which they found the E, a tape recorder, and a table and chair for the S. The E explained that discussions were being held to explore the problem of homosexuality among university students. The E read the instructions, indicating that the S either did or did not have a choice as to which discussion group he would belong. After the S had signed his name on the sign-up sheet, which had the fictitious names of the other two members on it, E said:

> The other members of the group to which you belong already have met a couple of times, and to get you caught up on what they have been discussing, I have a tape recording of their last discussion. I'll play part of it for you to give you an idea of what they are like, and then I'd like to get your impression of what the discussion group you are in is like. I might also mention that any description you give of them is strictly confidential, and they won't see your rating of them.

Then E played a tape recording of the "chosen" or "assigned" group, and after it had been played, he administered the group

attractiveness questionnaire. The the S was told:

> We are also interested in your impression of the other group which was available, but which you rejected (or were not assigned to). I'll play a short tape for you taken from their last discussion, and then I'd like to get your impression of what this group is like. I'd like for you to listen long enough to have a good idea of what the discussion is like, and after you feel you've heard enough, you may ask me to turn off the recorder. Again, your ratings will be strictly confidential.

E recorded the amount of time that each S indicated he was willing to spend listening to the second tape recording. Then E said, "There's only a little more left, so we might as well listen to the rest of it," and continued playing the tape. This insured that all Ss were, in fact, exposed to both entire recordings. All Ss readily agreed to listen to the remainder of the tape.

After hearing the second tape, the S was handed a questionnaire to evaluate the second group, and the S was reminded that he was now evaluating the rejected (or unassigned) group. After it had been filled out, the S was given a third questionnaire to evaluate the chosen or assigned group again, according to how the S felt about the group at that moment. The headings at the top of each questionnaire corresponded to the tape to which the evaluation applied. One was headed "RATINGS OF CHOSEN GROUP" and the other "RATINGS OF UNCHOSEN GROUP". In the No-choice condition, the terms "ASSIGNED" and "UNASSIGNED" were used in the headings.

After the S had filled out the questionnaires, including the rating of the experimenter, E asked him if he would like to look at the average ratings of the same two groups which were made by about twenty people who had heard the discussions. The amount of time spent

looking at the rating sheets was recorded by E with a stop watch. Then the S was asked if he would now like to change groups; i.e., if he would rather belong to the unchosen or unassigned group. This concluded the S's participation in the experiment.

Before the S left the room, E told him that he would be notified when to come for an actual discussion practice, in order to leave him with the impression that the experiment would have "real" discussions. After all Ss had participated in the experiment, they were informed of the nature of the experiment and told that no discussions would take place.

A summary of the experimental design is found in Table 1.

Independent variables

Freedom of choice. The amount of choice in the two conditions was manipulated by the verbal instructions to the participants in the experiment. Those assigned to the Choice condition received the following instructions:

> You are going to take part in a series of group discussions with two other participants. However, since we have two groups which do not have their quota of members, you may have your choice as to which group you would like to belong. We have the groups labeled on this sheet of paper, with the names of the other two members in each group. Choose which group you want to join and sign your name in the space provided. You have a choice between Group A and Group B, and since you may be spending a good deal of time with these individuals, you should make your choice carefully.

Those assigned to the No-choice condition received the following instructions:

> You are going to take part in a series of group discussions with two other participants. We have two groups which do not have their quota of members, but you are assigned to Group A.

Table 1. Summary of the Experimental Design

CHOICE	ATTRACTIVENESS OF ALTERNATIVES		TIME OF RATING		
	(Chosen Group)	(Rejected group)	M_1T_1*	M_2T_2	M_1T_3
Free Choice	Interesting	Boring	FC(IC)$_1$**	FC(BR)$_2$	FC(IC)$_3$
	Boring	Interesting	FC(BC)$_1$	FC(IR)$_2$	FC(BC)$_3$
	(Assigned)	(Unassigned)			
No choice	Interesting	Boring	NC(IA)$_1$	NC(BU)$_2$	NC(IA)$_3$
	Boring	Interesting	NC(BA)$_1$	NC(IU)$_2$	NC(BA)$_3$

*M_1T_1 = Rating of chosen or assigned group after hearing the tape of the chosen or assigned group.

M_2T_2 = Rating of rejected or unassigned group after hearing the tape of the rejected or unassigned group.

M_1T_3 = Re-rating of the chosen group or assigned group after hearing and rating both groups.

**The symbols used to represent the cells in the design are interpreted as follows:

FC = Free choice condition
NC = No choice condition
(IC) = Rating of interesting chosen group
(BC) = Rating of boring chosen group
(BR)= Rating of boring rejected group
(IR) = Rating of interesting rejected group
(IA) = Rating of interesting assigned group
(BA) = Rating of boring assigned group
(BU) = Rating of boring unassigned group
(IU) = Rating of interesting unassigned group
1,2,3 = Time at which measurement is taken, as indicated above.

Thus, FC(IC)$_1$ would be interpreted as free choice condition, rating of an interesting chosen group at Time 1, or immediately after hearing the tape of the chosen group.

The other dependent measures, including the rating of the experimenter, the desire to change groups, and the amount of time spent looking at "average" ratings of groups," would be taken after Time 3.

> We have the groups labeled on this sheet of paper, with the names of the other two members in each group. You do not have a choice, so sign your name in the space provided under Group A. I might add that you may be spending a good deal of time with these individuals.

Interesting and boring groups. The nature of the fictitious discussion groups was manipulated by having two trained discussants record the discussions from scripts. As pointed out above, Ss were asked to listen to both the chosen (or assigned) and unchosen (or unassigned) groups. The boring group was characterized by a dry, factual, uninteresting discussion. Discussants used numerous pauses, repetitions, and vague or incomplete statements. The interesting group carried on a lively, personal and colorful discussion, with a fast pace, personal anecdotes, and interest demonstrated by comments made by the group members. Both content and delivery were varied in the two groups, although both discussions were on the same general topic. The discussion scripts used in Experiment I can be found in Appendix A.

In a pretest of the experimental messages, it was found that the discussions were consistently rated in the direction anticipated by the experimenter. Twenty-five college students were randomly assigned to two groups, each of which rated one of the discussions. These Ss were not used in the actual experiment, and were asked to rate the groups as objectively as possible. Table 2 shows the means and standard deviations of the responses to Test I, a questionnaire containing fourteen statements describing desirable and undesirable characteristics of groups. The questionnaire was coded so that the lower the score, the higher the attractiveness of the group.

Table 2. Pretest Means of Attractiveness Ratings on Test 1

"Interesting group" n = 13		"Boring group" n = 12			
Mean	Standard deviation	Mean	Standard deviation	t	p
34.92*	10.59	52.83	15.76	3.36	<.01

*14.00 = most attractive; 98.00 = least attractive.

The second part of the attractiveness questionnaire (Test II), a semantic differential type scale on which Ss rated the concept "Members of the Group", yielded results similar to the first part. Twelve pairs of bipolar adjectives were used in the semantic differential. The results of Test II are presented in Table 3.

Table 3. Pretest Means of Attractiveness Ratings on Test II

"Interesting group" n = 13		"Boring group" n = 12			
Mean	Standard deviation	Mean	Standard deviation	t	p
31.23*	8.00	45.58	13.71	3.23	<.01

*12 = most attractive; 84.00 = least attractive

As Tables 2 and 3 indicate, the "interesting" group was consistently rated more attractive than the "boring" group, and the difference in ratings was significant at the .01 level of significance.

Two open-ended questions were included in the pretest to determine the appropriateness of the topic and to ascertain if the discussions were offensive. Almost without exception, the pretest Ss found the topic appropriate for college students to discuss and did not find the discussions offensive. No one questioned authenticity, indicating that they were willing to accept the fact that these were actual discussions.

Dependent variables

Group attractiveness. As indicated above, group attractiveness was measured by a questionnaire containing 12 statements describing desirable and undesirable characteristics of groups. The S was asked to indicate the extent to which the statements applied to the group in question on a fifteen point scale. The other group attractiveness measure was a semantic differential type scale, with twelve bipolar adjectives, using "Members of the Group" as the concept being rated. The questionnaire was modified on the basis of the pretest data, since certain items appeared to be unrelated to the interesting or uninteresting quality of the group; i.e., the discussion topic was rated nearly the same on the pretest by both groups. Since the data from both tests yielded essentially the same results, and since the semantic differential scale was slightly more reliable, only the results from the semantic differential were used to test the hypotheses related to group attractiveness. This scale was also more similar to the scale used by Aronson and Mills in their study of the effects of severity of initiation on group attractiveness.

The group attractiveness questionnaire can be found in Appendix B.

Time spent listening to unchosen group. Ss were told that they could quit listening to the second (unchosen or unassigned) group at any time. The amount of time spent listening was recorded with a stop-watch. As mentioned earlier, Ss were then asked to listen to the remainder of the recording, so that all Ss were exposed to both entire recordings.

Rating of experimenter. On the last questionnaire administered to the Ss, the following item was used to measure the Ss' evaluation of the experimenter:

> Circle a number on the following scale indicating your general reaction to the experimenter who is conducting this experiment.

favorable 1 2 3 4 5 6 7 [8] 9 10 11 12 13 14 15 unfavorable

Time spent looking at average ratings of groups. After the Ss had filled out all questionnaires, they were asked if they would like to see how a group of about 20 people had rated the same discussions. The Ss were handed a questionnaire for each group with the heading, "Average Ratings of Group A" and "Average Ratings of Group B". So that these ratings would not influence S's decision to change groups when asked, the questionnaires were marked in a relatively neutral fashion. The amount of time spent looking at the average ratings of the groups was recorded by E.

Desire to change groups. After the S handed back the average rating sheets, he was asked if he would like to change groups; i.e., if he had chosen or was assigned to Group A, he was asked if he would now rather belong to Group B. E recorded whether or not the S wished to change groups.

Results of Experiment I

Group Attraction Ratings

Table 4 contains a summary of the means and standard deviations of the group attraction measure for both the chosen and rejected group for all conditions at Time 1, Time 2, and Time 3 in Experiment I.

Table 4. Summary of the Means of the Group Attractiveness Ratings for All Conditions at Times 1, 2 and 3 in Experiment I

Condition		Chosen Group Time 1		Rejected Group Time 2		Chosen Group Time 3	
Chosen group	Rejected group	$\bar{X}$	sd	$\bar{X}$	sd	$\bar{X}$	sd
Choice							
Interesting	Boring	38.05[1]	11.73	43.00	15.10	39.22	13.46
Boring	Interesting	44.83	9.19	41.28	14.17	48.17	10.76
No-choice							
Interesting	Boring	35.00	8.45	48.27	13.94	36.72	10.50
Boring	Interesting	36.06	8.58	44.22	13.02	34.94	8.49

[1]When observing the means in the analyses of group attractiveness in this chapter, a low mean is indicative of high attractiveness, while a high mean is indicative of low attractiveness.

Table 5 contains a summary of the three factor analysis of variance, Lindquist Type III design, utilized to test the significance of these data. (Lindquist, 1953, 281-284) The two between effects were Choice and Attractiveness of chosen and unchosen Alternatives, and the within effect was the repeated measures on the same subjects.

Table 5. Summary of the Three Factor Analysis of Variance of Scores on the Group Attractiveness Measure in Experiment I

Source of variance	df.	MS	F	p
Between				
Choice (A)	1	550.67	3.01	n.s.
Attractiveness of alternatives (B)	1	127.57	.68	n.s.
A/B	1	528.91	2.84	n.s.
Error (b)	68	186.55		
Within				
Time of Measurement (C)	2	646.17	5.79	$<.01$
A/C	2	743.01	6.66	$<.01$
B/C	2	264.95	2.37	n.s.
A/B/C	2	80.15	.72	n.s.
Error	136	11.63		

It can be seen that the main effects of Choice and Attractiveness of Alternatives, and the interaction of Choice and Attractiveness of Alternatives were not significant. The Time of Measurement within effect and the first order interaction of Choice and Time of Measurement were significant at the .01 level. The first order interaction of Time of Measurement and Attractiveness of Alternatives, and the second order interaction of Choice, Attractiveness of Alternatives and Time of Measurement, were not significant.

There were no significant differences in the group attractiveness ratings in Experiment I consistent with dissonance predictions. As Table 4 indicates, the chosen and assigned groups were rated approximately the same, and the only significant differences in the analysis

can be attributed to the Choice--Boring-Interesting condition, where the observed differences are opposite those predicted by dissonance theory.

In addition, the data from Experiment I indicate some possible procedural weaknesses which are noted below.

Procedural Weaknesses of Experiment I

First of all, the data from Experiment I indicate that the attractiveness manipulation was not successful. This could probably be accounted for by the fact that summer school students, who were older and more mature than regular term freshmen and sophomores, were used in the experiment, while the discussions were designed for more typical freshmen. Consequently, the older Ss may have perceived the "boring" group, which was more factual, as more interesting and attractive than less mature Ss, and they may have perceived the "interesting" group, which was less factual and more personal, as less interesting and attractive than less mature Ss.

In addition, the choice manipulation may not have been successful in Experiment I. Ss in Experiment I were asked to choose between "Group A" and "Group B" without receiving any information about the members of the groups. Because of this, Ss had no basis for making a decision. Many Ss in Experiment I, when given a choice between the two groups, stated that it didn't make them any difference since they had no knowledge about either of the groups. Since a feeling of choice or volition is critical to Festinger's theory, this lack of information about the choice alternatives may have reduced or eliminated the S's

perceived control of his behavior and later consequences, and any outcome of his decision could easily be attributed to chance or to "luck".

The procedures for Experiment II were changed to attempt to overcome the weaknesses noted in Experiment I.

EXPERIMENT II

Procedures of Experiment II

Subjects

Ss for Experiment II were taken from freshman communication and speech courses during the regular academic year. The average age of Ss in Experiment II was 19.6, with only seven Ss over 21. These seven older Ss were distributed over all four conditions, so there was no consistent age bias in the treatment groups.

Procedure

The procedure for Experiment II was essentially the same as Experiment I, with the following modifications.

When Ss first arrived in the experimental room, they were asked to fill out an information card with their age, academic major, interests, hobbies and magazine preferences. Ss were then given similar fictitious information cards describing the members of the groups available. In the Choice condition, Ss were told to read the information cards and make a choice in terms of which group they would like to join. In the no-choice condition, Ss were given the cards and told that they were assigned to either H-5 or C-3, the labels used for the groups. Ss were randomly assigned to either H-5 or C-3 by the

experimenter to control for bias due to the information on the cards.

The rest of the procedure for Experiment II was the same as that used in Experiment I.

Independent variables

Freedom of choice. In Experiment II, Ss were given fictitious information cards on the members of the two groups between which they were asked to choose. The information cards stated the group members' age, major, occupational plans, hobbies, interests and preferred magazines. The members of both groups were matched in many respects, to control as much as possible for the influence of the cards on later group attractiveness ratings. Although the descriptions of the groups were not radically different, Ss were willing to make a choice between the groups based on this information. Copies of the fictitious information cards can be found in Appendix C.

Interesting and boring groups. To help insure that the attractiveness manipulation would be successful in Experiment II, new discussions on the topic of mental health of college students were recorded. The same criteria were used to manipulate attractiveness in Experiment II as in Experiment I. An attempt was made to make the boring group even more dull, with more pauses, more trivial comments, and fewer statements containing relevant factual information. On the other hand, an attempt was made to make the interesting group lively, personal and colorful, with content which would appeal to a freshman or sophomore. The data reported in the results section of this chapter indicate that the attractiveness manipulation was successful in Experiment II. The discussion scripts used in Experiment II can be found in Appendix D.

Dependent variables

The dependent variables in Experiment II were the same as in Experiment I. The first part of the group attractiveness questionnaire, which was eliminated from the analysis of results in Experiment I, was not administered in Experiment II.

Results of Experiment II

First of all, the overall analysis of variance for the group attractiveness ratings for Experiment I will be summarized, and then the individual hypotheses and data will be analyzed.

Table 6 contains a summary of the means and standard deviations of the group attractiveness measure for both the chosen and rejected group for all conditions at Time 1, Time 2 and Time 3 in Experiment II.

Table 6. Summary of the Means of the Group Attractiveness Ratings for All Conditions at Times 1, 2 and 3 in Experiment II

Condition		Chosen Group Time 1		Rejected Group Time 2		Chosen Group Time 3	
Chosen group	Rejected group	$\bar{X}$	sd	$\bar{X}$	sd	$\bar{X}$	sd
Interesting	Boring	38.95	11.45	68.33	9.10	34.06	12.69
Choice							
Boring	Interesting	52.62	11.88	29.11	9.90	56.78	11.93
Interesting	Boring	35.28	11.73	67.95	7.97	29.45	12.41
No-choice							
Boring	Interesting	57.34	10.46	30.39	8.21	61.34	10.94

Table 7 contains a summary of the three factor analysis of variance, Lindquist Type III design, utilized to test the significance of these data.

Table 7. Summary of the Three Factor Analysis of Variance of Scores on the Group Attractiveness Measure in Experiment II

Source of variance	df.	MS	F	p
Between				
Choice (A)	1	5.35	.03	n.s.
Attractiveness of Alternatives (B)	1	275.63	1.45	n.s.
A/B	1	554.24	2.91	n.s.
Error (b)	68	190.52		
Within				
Time of Measurement (C)	2	256.53	3.17	.05
A/C	2	1.62	.02	n.s.
B/C	2	22707.06	280.97	.01
A/B/C	2	76.53	.95	n.s.
Error (w)	136	80.92		

The only significant effects in Experiment II for the group attraction ratings were the Time of Measurement within effect and the interaction of Time and Attractiveness of Group. The ratings of the unchosen or unassigned group at Time 2 were generally lower than the ratings of the chosen or assigned group at either Time 1 or Time 3, resulting in the significant within effect. The interaction of Time and Attractiveness of Group was a function of the interesting rejected or unassigned group being rated much higher at Time 2 than the chosen or assigned boring groups at Time 1 or Time 3, and the boring rejected or unassigned group being rated much lower at Time 2 than the interesting chosen or assigned groups at Time 1 or Time 3. This would indicate that the attractiveness manipulation in Experiment II was successful, since the boring group was consistently rated low in attractiveness and the interesting group was consistently rated high in attractiveness, these differences resulting in the significant interaction.

Hypotheses of the Study

The analyses reported below were conducted to test the hypotheses of the study. Comparisons of two means were tested with *t* tests, and comparisons of more than two means were tested by means of *F* tests and studentized range statistics. (Winer, 1962, p. 77) For the *t* tests, two-tailed tests of significance were employed. The significance level used in the study was .05. Results of only Experiment II are reported under each hypothesis, since the procedural weaknesses in Experiment I make the results of that experiment difficult to interpret.

Hypothesis 1

Subjects in the Choice condition will rate a chosen boring group higher in attractiveness after hearing the unchosen interesting group than before hearing the unchosen group. $(FC(BC)_3 > FC(BC)_1)$[1]

The change in rating of group attractiveness from Time 1 to Time 3 for the chosen boring group in Experiment II was in the opposite direction as predicted, but the difference did not reach a satisfactory significance level.

Hypothesis 2

Subjects in the No-choice condition will rate an assigned boring group lower in attractiveness after hearing the unassigned interesting group than before hearing the unassigned group. $(NC(BA)_3 < NC(BA)_1)$

Table 8 contains a summary of the mean ratings of attractiveness of the assigned boring group in the No-choice condition at Time 1 and Time 3 in Experiment II. It can be observed that the assigned group was rated lower at Time 3 than at Time 1, as predicted.

Table 8. Mean Ratings of Attractiveness of the Assigned Boring Group in the No-choice Condition at Time 1 and Time 3 in Experiment II

Time 1 Mean	Time 3 Mean	difference	t	p
57.34	61.34	-4.00*	2.59	$<.05$

*A negative difference indicates a decrease in the rating of attractiveness from Time 1 to Time 3.

[1]The symbols following each hypothesis refer to the cells in the experimental design on page 22.

Hypothesis 3

Subjects in the Choice condition will rate a chosen interesting group higher in attractiveness after hearing the unchosen boring group than before hearing the unchosen group. $(FC(IC)_3 > FC(IC)_1)$

Table 9 contains a summary of the mean ratings of attractiveness of the chosen interesting group in the Choice condition at Time 1 and Time 3 in Experiment II. It can be observed that the chosen interesting group was rated significantly higher at Time 3 than at Time 1, supporting the prediction made.

Table 9. Mean Ratings of Attractiveness of the Chosen Interesting Group in the Choice Condition at Time 1 and Time 3 in Experiment II

Time 1 Mean	Time 3 Mean	difference	t	p
38.95	34.06	+4.89	3.34	$<.01$

Hypothesis 4

Subjects in the No-choice condition will rate the assigned interesting group higher in attractiveness after hearing the unassigned boring group than before hearing the unassigned group. $(NC(IA)_3 > NC(IA)_1)$

Table 10 contains a summary of the mean ratings of attractiveness of the assigned interesting group in the No-choice condition at Time 1 and Time 3 in Experiment II. It can be seen that the assigned interesting group was rated significantly higher in attractiveness at Time 3 than at Time 1, supporting the prediction made. The additional prediction that this increase would be less than the increase in the Choice condition, however, was not supported, since the increase in the No-choice condition slightly exceeded that of the Choice

condition.

Table 10. Mean Ratings of Attractiveness of the Assigned Interesting Group in the No-choice Condition at Time 1 and Time 3 in Experiment II

Time 1 Mean	Time 3 Mean	difference	t	p
35.28	29.45	+5.83	3.04	$<.01$

Hypothesis 5

Subjects in the Choice condition will rate the chosen alternative, whether it is interesting or boring, higher than subjects in the No-choice condition will rate comparable alternatives. This difference should be manifested at both Time 1 and Time 3. ($FC(IC)_1 > NC(IA)_1$; $FC(BC)_1 > NC(BA)_1$; $FC(IC)_3 > NC(IA)_3$; $FC(BC)_3 > NC(BA)_3$)

Table 11 contains a summary of the two factor analysis of variance of ratings of attractiveness at Time 1 in Experiment II, and Table 12 contains a summary of the Time 3 analysis. It can be observed that the Choice main effect and the interaction of Choice and attractiveness of Alternatives were not significant. At both Time 1 and 3, only the Attractiveness main effect was significant, indicating that the attractiveness manipulation was successful in Experiment II.

Table 11. Summary Table of the Two Factor Analysis of Variance of Ratings of Attractiveness at Time 1 in Experiment II

Source of variance	df.	MS	F	p
Choice (A)	1	5.01	.04	n.s.
Attractiveness of Alternatives (B)	1	5742.35	44.24	$<.01$
A/B	1	316.68	2.44	n.s.
Error	68	129.81		

Table 12. Summary Table of the Two Factor Analysis of Variance of Ratings of Attractiveness at Time 3 in Experiment II

Source of variance	df.	MS	F	p
Choice (A)	1	.01	.00	n.s.
Attractiveness of Alternatives (B)	1	13420.68	93.00	$<.01$
A/B	1	378.13	2.62	n.s.
Error	68	144.30		

The critical difference test using the studentized range statistic revealed no significant differences in ratings related to Hypothesis 5. The boring chosen and assigned groups were rated about the same in the Choice and No-choice conditions, and so were the interesting chosen and assigned groups. This was true both at Time 1 and Time 3.

The findings in Experiment II, then, do not support Hypothesis 5.

Hypothesis 6

Subjects in the Choice condition will rate the unchosen alternative, whether it is interesting or boring, lower in attractiveness than

subjects in the No-choice condition will rate comparable alternatives. ($FC(BR)_2$ $NC(BU)_2$; $FC(IR)_2$ $NC(IU)_2$)

Table 13 contains a summary of the two factor analysis of variance of ratings of the unchosen or unassigned group at Time 2 in Experiment II. Again, only the difference related to Attractiveness of Alternatives was significant. The main effect of Choice and the interaction of Choice and Attractiveness of Alternatives were not significant. A critical difference test using the studentized range statistic did not reveal any significant differences between pairs of means relevant to Hypothesis 6. In other words, in both the Choice and No-choice conditions, the boring unchosen and unassigned groups were rated in a similar fashion, and the interesting unchosen and unassigned groups were rated about the same. The results of Experiment II do not support Hypothesis 6.

Table 13. Summary Table of the Two Factor Analysis of Variance of Ratings of Attractiveness at Time 2 in Experiment II

Source of variance	df.	MS	F	p
Choice (A)	1	3.56	.89	n.s.
Attractiveness of Alternatives (B)	1	26526.72	339.89	$<.01$
A/B	1	12.50	.16	n.s.
Error	68	78.04		

Hypothesis 7

Subjects in the Choice condition will be willing to spend less time listening to an interesting rejected group after selecting a boring group than subjects in a comparable No-choice condition.

The amount of time that the subjects indicated they would be willing to listen to the interesting rejected or unassigned group did not differ significantly in the Choice and No-choice conditions. Most subjects in both conditions did not listen to the entire tape recording before they indicated they had heard enough, so the lack of significant results cannot be attributed to this factor. The results of Experiment II, therefore, do not support Hypothesis 7.

Hypothesis 8

Subjects in the Choice condition will be willing to spend more time listening to a boring rejected group after selecting an interesting group than subjects in a comparable No-choice condition.

Experiment II revealed no significant difference in the amount of time that subjects in the Choice and No-choice conditions were willing to listen to the rejected or unassigned boring group. Most subjects in both conditions did not listen to the entire recordings, so the lack of significant results cannot be attributed to this possibility. Hypothesis 8, therefore, is not supported by the results of Experiment II.

Hypothesis 9

Subjects in the Choice conditions will less frequently express a desire to change groups when asked than subjects in the No-choice conditions.

Table 14 contains the frequency of subjects in each condition in Experiment II who expressed a desire to change groups when asked at the end of the experiment.

Table 14. Frequency of Subjects Expressing a Desire to Change Groups in Each Condition in Experiment II

Condition	N	Frequency
Choice - Interesting-Boring	18	0
Choice - Boring-Interesting	18	14
Total - Choice		14
No-choice - Interesting-Boring	18	3
No-choice - Boring-Interesting	18	16
Total - No-choice		19

Experiment II revealed no significant differences in the frequency of subjects who expressed a desire to change groups in the Choice and No-choice conditions. It might be noted that in Experiment II, a majority of subjects in both the Choice and No-choice conditions who either chose or were assigned to a boring group wanted to change groups after they had heard the interesting alternative. This fact provides further evidence that the attractiveness manipulations were successful in Experiment II.

Since there were no significant differences between the Choice and No-choice conditions in the number of subjects desiring to change groups, Hypothesis 9 is not supported.

Hypothesis 10 and 11

10. Subjects in the Choice condition who are placed in an interesting group will rate the experimenter more favorably at the end of the experiment than subjects who are placed in a boring group.

11. Subjects in the No-choice condition who are assigned to an interesting group will rate the experimenter more favorably than

than the subjects who are assigned to the boring group, but this difference will not be as great as in the Choice condition.

There were no significant differences between conditions in the rating of the experimenter in Experiment II, thus failing to support either hypothesis 10 or 11. All subjects tended to rate the experimenter quite favorably, with an average of about 5 on a 15 point scale, where a rating of 1 would indicate maximum favorability.

Hypothesis 12

Subjects in the Choice condition who are placed in a boring group will spend less time looking at the average ratings of the two groups than subjects who are placed in an interesting group.

An analysis of variance and critical difference test using the studentized range statistic failed to reveal any significant differences in the amount of time subjects spent looking at the average ratings of the groups in Experiment II. The data, consequently, fail to support the hypothesis.

CHAPTER III

CONCLUSIONS, DISCUSSION AND IMPLICATIONS FOR FURTHER RESEARCH

All conclusions and generalizations made in this chapter are limited to those choice and no-choice situations which very nearly approximate the conditions described in Chapter II. The nature of the choice situations, the groups involved, and the times at which the measurements were taken place restrictions on the generalizability of the findings. Because of the methodological weaknesses of Experiment I, the conclusions and discussion will be based primarily on the results of Experiment II.

Conclusions

It is obvious from the results of Experiment II that the Choice manipulation did not have a significant differential effect on subsequent evaluations of group attractiveness of the chosen or assigned and unchosen or unassigned groups. The relative Attractiveness the Alternatives did affect Ss' ratings of group attractiveness, but the effects observed do not follow from dissonance theory predictions. The following conclusions based on the results of this study can be made:

1. In a situation where Ss made a choice between groups on the basis of limited information concerning the relative attractiveness of alternatives involved, and where the members of the group were otherwise strangers to the Ss, subsequent ratings of the groups did not differ

from ratings of attractiveness made by Ss who were given the same information about the groups, but who were assigned to the groups without choice.

2. In both the Choice and No-choice conditions, Ss significantly increased their evaluation of an interesting chosen or assigned group after hearing a boring unchosen or unassigned group. There was no significant difference in the amount of increase between Choice and No-choice conditions.

3. In the No-choice condition, Ss significantly decreased their evaluation of a boring assigned group after hearing an interesting unassigned group.

4. In the Choice condition, Ss decreased their evaluation of a boring chosen group after hearing an interesting unchosen group, although the probability of the decrease occurring by chance ($p = <.10$) did not reach the required level of significance. The important finding relevant to this study was the lack of a significant difference in the amount of decrease between the Choice and No-choice conditions.

5. It was predicted that Ss would differ significantly in the amount of time that they would be willing to listen to the unchosen or unassigned groups. Specifically, it was predicted that Ss in the Choice condition would listen to the interesting unchosen group less and the boring unchosen group more than Ss in comparable No-choice conditions. The difference between Choice and No-choice conditions in the amount of time Ss listened to the unchosen or unassigned groups was not significant. In addition, Ss were willing to listen to a boring unassigned or unchosen group the same amount of time as to an interesting group.

6. It was predicted that the amount of time Ss in the Choice and No-choice conditions would look at the average ratings of the two alternatives following choice would differ depending on whether the information would be perceived by Ss in the Choice condition as reinforcing a wise choice or indicating an unwise choice. Regardless of Choice or No-choice, however, there was no significant difference in the amount of time Ss spent looking at this type of information.

7. It was predicted that subjects in the Choice condition who selected a boring group would evaluate the experimenter lower, and subjects who selected an interesting group would evaluate the experimenter higher than subjects in comparable No-choice conditions. However, Ss evaluated the experimenter equally favorably in all four conditions, regardless of Choice or Attractiveness of Alternatives.

Discussion

The rationales underlying the hypotheses of this study were based on Festinger's theory of cognitive dissonance and on the effects of secondary reinforcement. According to dissonance theory, a choice between two or more membership alternatives should arouse dissonance. The subsequent pressure to reduce dissonance should result in a more favorable evaluation of the chosen group and a less favorable evaluation of the unchosen group. In a no-choice situation, dissonance should not be present and no changes in evaluation of the groups should occur, except for those changes resulting from positive or negative reinforcement associated with being assigned to a desirable or undesirable group.

Contrary to predictions, however, there were no significant

differences in the ratings of the chosen or assigned and unchosen or unassigned groups in the Choice and No-choice conditions. The predictions, based on dissonance theory and reinforcement theory, were predicted upon the following assumptions: (1) the effects of reinforcement would not wash out the effects of choice and subsequent dissonance; and (2) no other variables would interfere with the dissonance arousal resulting from the choice between groups. The following discussion will focus on these two assumptions.

First of all, a simple reinforcement theory could account for the obtained ratings of group attractiveness. Those subjects who were rewarded by being placed in an interesting group, regardless of whether they did or did not choose the group, rated the group even higher after hearing the boring group. Subjects who were punished by being placed in a boring group rated the group even lower after hearing the interesting group. Subjects evidently evaluated their rewards and punishments on the basis of the relative merits of the groups available at the time. In other words, when the subjects found that they had been placed in a less desirable of the two groups, they responded to this relative deprivation by rating their own group as even less desirable than it was rated before information about the other group was known. On the other hand, subjects who found that they had been placed in a relatively desirable group responded to this rewarding information by evaluating their own group even higher in desirability than before.

A simple reinforcement theory could also account for the lack of differences in the amount of time spent listening to punishing or rewarding information concerning the unchosen or unassigned alternative.

Subjects in the "punishment" condition listened to the interesting unavailable alternative, which emphasized the undesirability of the subjects' own group, the same amount of time as subjects in the "reward" condition listened to the boring unavailable group, which reinforced the desirability of the group to which they belonged. One would naturally expect an individual to listen to an interesting group for a longer period of time than he would listen to a boring group, if no membership was involved. The fact that the subjects in this experiment did listen to the interesting and boring groups the same amount of time could possibly be interpreted as lending support to the reinforcement hypothesis, since it could indicate that Ss were listening less to the interesting unchosen group, and more to the boring unchosen group, than would ordinarily be expected. Because this interpretation involves utilizing null results to posit differential effects, however, it must be considered highly tentative and speculative.

Although the effects of secondary reinforcement can account for the observed ratings of group attractiveness, reinforcement theory alone cannot explain the failure to obtain differential effects between the Choice and No-choice conditions. This failure may possibly be accounted for by the effects of what Brehm (1966) calls "Psychological reactance," which he describes as the attempt of an individual to restore freedom of choice in a situation where one or more of the alternatives normally available to an individual are eliminated. Brehm defines psychological reactance as follows:

> Given that a person has a set of free behaviors, he will experience reactance whenever any of those behaviors is eliminated or threatened with elimination. That is, if a person felt free to engage in behaviors A, B and C, and then

> learned that he could not engage in, for example, A, he would experience reactance. (p. 4)

Brehm further states that "the magnitude of reactance is a direct function of (1) the importance of the free behaviors which are eliminated or threatened, (2) the proportion of free behaviors eliminated or threatened, and (3) where there is only a threat of elimination of free behaviors, the magnitude of that threat." (Brehm, 1966, p. 4)

When the eliminated alternative is the most desirable one available, psychological reactance should be most pronounced. In the present study, the alternative of not participating in either group discussion and leaving the experiment was eliminated. In order to make the choice between the groups important, the subjects were given the impression that the discussions would be held over some period of time. While the fact that the subjects would be joining "on-going" groups was mentioned in recruiting subjects, it was apparent that many of them did not realize that they would be expected to meet several times until they received instructions individually at the beginning of the experiment. Some subjects expressed concern about the amount of time that would be required for the additional meetings. It may have been that the alternative of not participating in the experiment became quite salient and important to them, and the forced choice between the remaining alternatives produced little dissonance because of psychological reactance to the lack of freedom to choose neither group and leave the experiment.

According to Brehm's theory, the eliminated alternative becomes more attractive after it has been eliminated from the alternatives available, and the remaining alternatives become less important to the

individual. The amount of reactance, as mentioned above, is partially a function of the relative desirability of the eliminated alternative when compared to the remaining alternatives available. In other words, as the attractiveness of the eliminated alternative increases, the subject will react more strongly to the loss of freedom and will evaluate the eliminated alternative more highly. In the present study, one means of reestablishing freedom would have been to quit the experiment. In the typical experimental situation, however, the social pressure is extremely great and would usually be sufficient to keep the individual from leaving. It is this kind of situation that Brehm refers to when he states that "where the magnitude of reactance is less than the pressure to comply, the individual will do what is suggested but less enthusiastically than if no reactance were experienced." (Brehm, 1966, p. 14) Moreover, subjects in this study may also have felt that they could somehow avoid the future group meetings and thereby reestablish their freedom, even though the alternative of quitting the experiment was eliminated in the immediate situation. Consequently, the subjects may have gone through the motions of making a choice, but without much enthusiasm or interest in the outcome of their decision. If this were the case, psychological reactance would wash out that aspect of the situation which would arouse dissonance, the feeling of freedom of choice.

The lack of significant differences between the Choice and No-choice conditions in the amount of time spent listening to the unchosen or unassigned groups could also be accounted for in terms of psychological reactance resulting from being forced to participate

in the assigned group or forced to choose between two relatively unimportant alternatives. The lack of interest in the unchosen or unassigned groups, indicated by the short amount of time spent listening by Experiment II subjects, may have been a general reflection of the lack of enthusiasm resulting from the reactance described above.[1]

Psychological reactance could also account for the lack of differences in the amount of time spent looking at the average rating sheets. The fact that the subjects spent, on the average, less than forty-five seconds looking at the rating sheets of the two groups may indicate a lack of enthusiasm or interest in the two groups.

Finally, the favorable ratings of the experimenter by the subjects can probably be accounted for by the fact that the subjects made their evaluations in the presence of the experimenter, and consequently were under some pressure to give a favorable response. Psychological reactance resulting from the forced choice situation would eliminated any differences between the choice and no-choice conditions in the ratings.

The findings in this study, then, can be partially accounted for in terms of simple reinforcement predictions and partially in terms of psychological reactance resulting from elimination of the choice not to participate in the discussions and to leave the experiment. While this explanation must be considered highly tentative, psychological reactance theory does seem to offer some promise for explaining certain kinds of behavior which formerly could not be

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[1]The difference in the amount of time Ss in Experiment I and Ss in Experiment II were willing to listen to the rejected group can be accounted for in terms of the increased maturity and conscientiousness of the older Ss participating in Experiment I.

accounted for in choice situations where dissonance predictions did not hold.

The present study does indicate that dissonance theory cannot adequately account for post-decision ratings of alternatives in certain types of complex choice situations. Chapanis and Chapanis' criticism of dissonance theory as being too simplistic to accurately reflect human cognitive behavior may be somewhat justified. The confounding effects of secondary reinforcement and psychological reactance can evidently substantially reduce or eliminate the arousal of dissonance in some choice situations.

Implications for further research

This study does suggest several new aspects related to choice and group behavior which could profitably be explored in future research. These include:

1. A study of the effects of choice between groups, where the groups could be made more attractive or important than the alternative of not participating in the experiment. Perhaps certain rewards could be used to make group participation more desirable. The present study offered no rewards for participating in the group discussions, except for the possible rewards which subjects might have perceived they could obtain from interacting with the individuals. A study employing more important or valuable groups would reduce the effects of psychological reactance, and the effects of choice and dissonance could be observed.

2. A study utilizing different values of group attractiveness. The present study utilized only a relatively interesting and a relatively uninteresting group. It might be expected that a choice between two relatively interesting groups, or two boring groups, would yield different results, assuming that the effects of psychological reactance could be controlled.
3. A series of studies to test specifically the effects of psychological reactance in the small group situation. The elimination of differing types of groups as alternatives in a choice situation could be systematically manipulated, and the effects of this manipulation on subsequent behavior to restore freedom of choice could be observed. Also, the subjects' perceptions about participation in the experiment could be measured in order to determine the importance of the alternative of leaving the experiment.
4. A study to determine the amount of information about alternatives necessary for the situation to be perceived as a choice situation and not simply as a matter of chance or luck. In Experiment I, many subjects indicated that since they didn't know anything about the groups involved in the choice, the choice was unimportant or irrelevant. In Experiment II, however, subjects were willing to make a choice on the basis of only a limited amount of information. Their perceptions of the choice situation may have changed, however, when they heard the chosen and unchosen groups. Choice resulted in little commitment to

the chosen group, as indicated by the fact that the majority of subjects choosing a boring group readily expressed a desire to change groups.

The present study indicates that under the conditions described in this experiment, dissonance theory is not adequate to predict or explain the ratings of groups following choice. New theories and explanations are needed to understand the complexity of human behavior in the small group context. Psychological reactance is only one of many theories w ich might eventually prove useful in explaining certain types of behavior in a choice situation.

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APPENDIX A

DISCUSSION SCRIPTS FOR EXPERIMENT I

BORING DISCUSSION SCRIPT - EXPERIMENT I

1. You know, going back to our last discussion, and the major point we felt we made, uh....that of socio-economic mobility and the break-up of the family structure as the major causes of homosexuality here in the United States....Well, I went to the library, and found evidence both ways, pro and con....[1]

2. I didn't hit the library too hard....but I did look into a few of the journals, and I think I've got some evidence too; although it really doesn't apply to the questions we raised last time, and to some of the answers we gave....Why don't you start off with what you found, and I'll break in if I have anything that either agrees or disagrees with what you have....

1. Okay....I worte down some of the figures that were given, so I think I'll offer them first. In an article by Kraatz and Safran, they actually used social mobility as a kind of guideline or framework to compare their findings based on actual interviews with known or professed homosexuals. Kraatz and Safran defined "socio-economic mobility" as changes in income, location....let's see,....oh, yeh, actual physical moves from one area to another, and the location itself, as far as being a move upwards or downwards, was based on the assessed evaluation of the property.... Along with changes in income and location, they used the separation of family ties, and this too was considered part of the location bit, in that if a person moved quite a way from his family group, either temporarily or permanently, this was weighted more as a cause than if a person moved, say, just down the block or around the corner....this type of of thing. The actual statistics were.... uh, with over five moves within the first ten years of childhood, a male had a 7.43 per cent better chance of becoming a homosexual, or of having homosexual relationships....If the father, or head of the family, moved downward from a plus three position at least two status scale units, the child had a 9.55 per cent greater chance of becoming, or rather, engaging in homosexual activities.

2. Was anything said about the break-down of the....uh....primary family group as a cause?

1. Yeh,....indirectly....This was considered as part of the whole social mobility package....I mean, if a person moved quite often, it would follow that there was probably some family trouble involved....that is, if the family broke up, then they would move away, and this would be included in location figures....

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[1]Four dots are used in the discussion scripts to indicate pauses.

BORING SCRIPT - cont.

2. One of the journals I read dealt with the break up of the family group as one of the major causes of homosexuality. I can't remember who the authors were, but they said that as the family group broke down, the males, who normally went to live with the mother, lost an image to model themselves after....at least if it happened before they were around ten or so. With this the case then....they didn't have anyone to relay the norms of society to them, and so wouldn't....uh....be so likely to adapt successfully to the institutionalized norms of society as well as someone from an unbroken family....

1. I'm not sure I follow you....

2. Well, if there isn't anyone to pass on the institutionalized norms of society, then it becomes a kind of hit and miss type of thing, and the child, as he grows up, makes a lot of unnecessary bad choices that he wouldn't make if there was....uh.... someone to model himself after, and to pass on the sexual mores of society....

1. Uh....I see....I think we read one thing in common more or less.... and that's the loss of control over children when the family breaks up, they lose control over the members of the family.... you know....the older the child, then, the less control that could be exercised over him....

2. Yeh, that follows....The whole thing, or question, of homosexuality is boiled down into a kind of undermining of society as I see it. These people aren't productive, and don't add anything to the society as a whole....so society is going to suffer as long as they allow these people to be a part of it.... I mean, they're just going to these people to be a part of it....I mean, they're just going to corrupt others, and pretty soon, more and more people are homosexuals....

1. Yeh, but they run out of contacts pretty soon, don't you think....

2. Well....

1. I mean, you reach a point of no return, pretty soon you've exhausted all those that have any leaning that way at all, and then it's a matter of going back to others like you....rather than finding others to add....don't you agree....

2. I guess so....I heard....or rather read....a couple of references to a study made by Gerbner....did you run across anything by him?....

1. No, not that I know of....what did he do?

BORING SCRIPT - cont.

2. Well, he investigated role playing in children as a key to masculine or feminine....ah....well....he looked at the games children engage in, and tried to find out what they'd be like as far as being either masculine or feminine as they got older.

1. What did he find?

2. Well....I don't know....I mean, he was referred to quite often in the journals, but I didn't see anything at all....uh.... either way as far as a definite article by him was concerned.

1. I didn't see him mentioned at all....I could see where he could get a lot of information, though....All he'd have to do would be to look at a bunch of kids as they play over a few years, and then rate them, and then wait until they got older and see what they were like....as far as masculinity or femininity was concerned.

2. That wouldn't be too hard, would it?

1. No....I'm surprised no one has done it....although maybe someone has, and we haven't read about it....

2. That could be....

1. Uh....Did you do any more thinking about the type of problem homosexuality is?....I mean,....remember last time, when we talked about whether it should be treated as a medical problem, moral problem, or as a legal problem?....I know what we said, but I wondered if you had read anything about it anywhere since last time....

2. No....

1. Well, I didn't read anything about it either, but I think that maybe it's partly a little of each....you know....each way of looking at the problem will give you a little different view, but that doesn't mean that one way is necessarily the right way....I think we could look at the legal aspect, and maybe if we had more laws, or stronger laws, it might help the problem....

2. ....yeh....Then you think that if the laws were made even more harsh, there'd be a decrease in homosexuality....

1. Well, sure....I mean, if you were to get thrown in jail for a couple of years for the first offense, I don't think you'd go back and do the same thing all over again....do you?

BORING SCRIPT - cont.

2. I don't know....I think I read somewhere that about 80 per cent of the people in prisons were two or three time losers, and if that's true, then the laws themselves aren't any deter.... the laws aren't stopping people from doing things that are against the laws....

1. ....Yeh, I see....I guess you're right....

2. I think a lot of it is a moral problem....you know, when the laws can't do anything about it, then the churches can and should....A lot of people think it all boils down to a sense of right and wrong, and this sense of right and wrong is passed down from the elders to the children, or from the institutions of society to the children or members of the institutions....I mean, some of the small town types probably have never seen a homosexual, and some of the people in these towns probably haven't heard of the type of problems that exist....if they really are problems....I mean, we think they're problems, but we don't know....

1. I see what you mean....You mean that the churches and schools.... uh....should take a more active part in educating their members to the dangers and pitfalls of engaging in certain activities, right?....

2. Yes, that's what I mean....Of course, I don't know if I'd go as far as some people, you know....those who say that it's wrong, no matter what the circumstances....but then again, they may be right....Maybe it would help, though, if the church did take a more active role in this problem, but I think that it's getting harder and harder for them to do much....People don't listen to them as much as they use to....

1. Well, maybe it's because they've been wrong about things a few times in the past....

2. Well....maybe so, but yet it seems that if more people would follow the religious teachings a little more closely, there wouldn't be so many problems....I think that many people tend to rationalize their actions, maybe even with this problem of homosexuality, so that no matter what they do, they can....uh....justify what they have done. Some sociologists, I know, think that people tend to blame the institutions for what the people themselves lack in some way....

1. I think we'd better get off the subject for a while....I don't really see any answer....as far as a universal cure.... do you?....

BORING SCRIPT - cont.

2. Well, not a universal cure....but I think that those who want to be....can be cured....

1. Well....I think maybe we should try to talk to some people.... here on campus....and see what they feel about it....

CUT

INTERESTING DISCUSSION SCRIPT - EXPERIMENT I

1. Well, do you have anything we could start on? I mean, a general topic, pet peeve, or maybe some specific knowledge that could get us started?

2. Well, I have read the Kinsey reports, and I can't think of a better reference as far as homosexuality is concerned. The biggest single thing, as far as I'm concerned anyway, that came out of the study by Kinsey was that people were doing things just a little differently in real life than the churches and most of the social scientists said they were. Kinsey knew this before he even began the research that generated the reports....I mean, he didn't really know it, but his hypothesis was that he would find results or occurences that were contrary to what people just assumed to be the case.

1. Wasn't this all based on his "fruit-fly" studies? They were fruit-flies weren't they?

2. Some variety of them, anyway. Yeh, he worked as a biologist for years, and he noticed that there were hundreds of different deviations from the sexual mean, you might call it, so he decided to investigate the American people to see if they varied as much in what they did as a lower species did.

1. Yeh, it sure shook some people up to find out what everyone was really doing.

2. Remember how the papers were filled with Kinsey for months. Then everything kind of died down--at least the heterosexual comments did, and then people started investigating some of the more bizarre aspects of the reports.

1. As long as we're discussing homosexuality, do you recall any of the statistics that Kinsey used?--or rather, the figures he gave?

2. I read through Kinsey since we last met, but before I get into that, though, I think I should define Kinsey's use of the term "homosexual" or "homosexual experience". When Kinsey says "homosexual experience", he is talking solely about experience to orgasm.--not the approach, not the "imagined" approach, but actual sexual experience that resulted in orgasm. This itself may not seem like much, but when the figures are given, it really makes you wonder how much of this type activity goes on. Kinsey said that four per cent of the American males were exclusively homosexual. Four per cent doesn't sound like an awful lot, but when you figure that this is about....what?....three and a half or

INTERESTING SCRIPT - cont.

four million men that are exclusively homosexual, the complexion changes a little.

1. I guess it does. Some of the percentages were fantastic that Kinsey gave....

2. Well, for example, of all men over 35 in this country right now that are single--either unmarried, divorced, or widowed, about forty to fifty per cent of them are having regular homosexual experiences. Taking the male population as a whole, one of every two men has had a homosexual contact--and this is experience to orgasm, don't forget.

1. Who said homosexuality wasn't a problem? You know, that's almost unbelievable, isn't it?

2. It sure is. He doesn't say how many of these cases are forced, or how many are "experimental", but the fact remains that they did occur!

1. What you just said--about the cases--this strikes me as kind of funny....Have you ever heard anyone come right out and say that they'd had a contact--a la Kinsey--with a queer? It always happened to a "guy they know", or someone like that, but never to the person that's talking about it.

2. Well, I've really wondered about that when I hear someone talking about queers. Sometimes I think they're talking about themselves....you know, people don't go around telling others they're queers.

1. I don't want to put you on the spot or anything, but have you ever had any kind of experiences with queers?

2. Thanks, buddy--you beat me to the punch. That was my next question for you. But I'll tell you something, from about the time I was eighteen until I was twenty-one, I thought I was really queer-bait. I couldn't turn around without someone making a pass. It got so bad that I started imagining approaches. But I'll tell you about one that sure as hell wasn't imagined....At one of the football games in my Freshman year, some cat started to get "pleasant". This guy behind me kept nudging me with his foot. Everytime I'd look back at him, he was just sitting there with a kind of vacant smile on his face, like he didn't know what was coming off. This went on for about the whole first half--about every thirty seconds or so, I'd feel the foot. Well, I told my buddy about it, and the next time I felt the foot, my friend turned around and slugged him....end of trouble.

INTERESTING SCRIPT - cont.

1. Do you take your friend to all the games?

2. I did for a year, I'll admit it--safety in numbers, you know.

1. I had a little experience during football season last year--at a big open house--when I happened in on a couple of guys "in the act", so to speak. I always felt that I'm pretty mature and able to maintain my composure, but this time I lost it in a hurry.

2. I think I heard about that little escapade.

1. I'm surprised that it didn't hit the papers....everyone on campus heard about it--not that I saw it, but everybody saw it.

2. There's always that old "love must be expressed" argument though.

1. Love, hell, these guys hadn't known each other for over three weeks.

2. This reminds me of another incident that happened a couple of years ago. I remember reading of something that happened on a college campus--I don't recall the details--but, anyway, there was this article about a suicide on the campus--standard line, so-and-so, age, address, took his life, despondent about school work, money, etc.--anyway, I found out that he was having a little affair with another fellow, and the other guy left town, so he committed suicide, and that was that. I guess everyone around school knew about it, on the paper I mean, but they got the word not to mention it.

1. That's understandable. But, then again, you might think that being an advocate of freedom, as colleges and universitites are, they'd "publish and be damned."

2. You might suppose so, but the colleges are just as conservative as the people that send their kids there.

1. Well, part of the answer is probably that a lot of colleges, just like everyplace else, are still pretty puritanistic in their way of thinking.

2. You know, right there, I think we've hit the nail on the head, and that is, the people or institutions that should be doing something about the problem refuse to even admit that it exists.

INTERESTING SCRIPT - cont.

1. If just this much came out of our discussion, I think we've accomplished something....and I think we did get at that....

2. Why don't we leave it at that for now and start from here next time.

CUT

APPENDIX B

GROUP ATTRACTIVENESS QUESTIONNAIRE

GROUP BEHAVIOR QUESTIONNAIRE

Name _____

Class (circle one) Freshman Soph.
Junior Senior Grad.

Age _____ Date _____

GROUP BEHAVIOR QUESTIONNAIRE

I N S T R U C T I O N S

Please Read Carefully

In this questionnaire, you will find an aspect of the specified group given at the top of the page. Following this, there will be a series of scales with adjectives which have been used to describe groups at the ends of the scales. You are to judge the group listed in relation to the adjectives on each scale, and place a check mark in a space to indicate to what extent you think the adjective describes the group.

Here is an example:

"Please rate the quality of the recording on the following scales:"

Good:								Bad
	3	2	1	0	-1	-2	-3	

If you think that the quality of the recording was extremely good, you would place a check mark in space number 3. If you think that the quality was quite good, you would place a mark in space number 2. If you think that the quality was slightly good, you would place a mark in space number 1. If you think that it was neither good nor bad, you would place a mark in 0. If you think that the quality was slightly bad, you would check -1; if quite bad, -2; if extremely bad, -3. In this way, you indicate whether you think the quality was good or bad, and also the extent to which you think the quality was good or bad.

The "0" or neutral space on the scale may also be used for "I don't know," or "I don't think this scale applies."

IMPORTANT:

(1) Do not skip any scales.

(2) Place only one check mark on a single scale.

(3) Place the check marks in the middle of the spaces, not on the boundaries.

(4) Do not look back and forth as you mark the scales; make each scale a separate and independent judgment.

(5) Again we want your first impression; the immediate "feelings" about the group aspect is important.

GROUP BEHAVIOR QUESTIONNAIRE - I

ASSIGNED GROUP

Please rate the members of the group you were assigned on the following scales:

friendly:____:____:____:____:____:____:____:unfriendly

wise:____:____:____:____:____:____:____:foolish

expert:____:____:____:____:____:____:____:ignorant

strong:____:____:____:____:____:____:____:weak

important:____:____:____:____:____:____:____:unimportant

active:____:____:____:____:____:____:____:passive

efficient:____:____:____:____:____:____:____:inefficient

fast:____:____:____:____:____:____:____:slow

interesting:____:____:____:____:____:____:____:uninteresting

successful:____:____:____:____:____:____:____:unsuccessful

knowledgaeble:____:____:____:____:____:____:____:unknowledgeable

realistic:____:____:____:____:____:____:____:unrealistic

APPENDIX C

FICTITIOUS DESCRIPTIONS OF GROUP MEMBERS USED IN EXPERIMENT II

FICTITIOUS DESCRIPTIONS OF GROUP C-3 MEMBERS

Member 1

Discussion group no. C-3

Name Bill Meyers Age 18

Class _____ Major speech

Hobbies or interests golf, swimming,

Occupational plans Teacher

What magazines do you read? Time, Life

Member 2

Discussion group no. C-3

Name Charles Harker Age 19

Class sophomore Major Math

Hobbies or interests swimming, boating,

rock collecting

Occupational plans to work in business

What magazines do you read? Life, Reader's Digest

FICTITIOUS DESCRIPTIONS OF GROUP H-5 MEMBERS

Member 1

Discussion group no. H-5

Name Roger Garrett Age 18

Class sophomore Major sociology

Hobbies or interests swimming, bowling

Occupational plans social worker

What magazines do you read? Newsweek

Member 2

Discussion group no. H-5

Name John Fleming Age 18

Class Freshman Major English

Hobbies or interests reading, writing

painting

Occupational plans Teach in high school

What magazines do you read? U.S. News and World Report, Time, Look

APPENDIX D

DISCUSSION SCRIPTS FOR EXPERIMENT II

BORING DISCUSSION SCRIPT - EXPERIMENT II

1. Well, what did you find out about the problem of mental health since the....uh....last time?

2. Uh....well....not very much, did you?

1. Not really....I mean, nothin' very important anyway....

2. Well....uh....what do you think that we....uh....ought to talk about?....

1. I don't know....well, is it really such a big problem?.... I mean, it looks like everybody seems to get along pretty well, doesn't it?

2. Yeh, that's true....I guess some have problems, though.... you know....maybe they're not real serious, or anything, but maybe there's something we can talk about.

1. What....uh....kinds of mental problems do you think there are? Uh....I guess we never did quite get around to that question last time....

2. Well, I guess we....could include in mental problems, the, uh....personality problems some people have....you know, the students who can't get along with their roommates, or other people, for that matter....

1. I don't know if you could really call that a mental problem.... unless....I mean....what could you do about them anyway?....

2. Well, uh....how about the kids who quit school? Would they have, uh, mental problems?

1. I don't think we should include them....I don't know.... what do you think?

2. I suppose some of them have problems....but then, maybe they just want to get out of school....But, what's wrong with dropping out of school....

1. Well, if that's what they want to do, I don't see anything wrong with it....

2. I think that in some cases it's even good for the students to get out awhile....uh....see what the world's like....I mean....why hang around school if it doesn't agree with you....

BORING SCRIPT - cont.

1. Well, for some, I guess the loss of time....and this might cause some problems, and I suppose that this is related to mental health....you know, they might feel that they are failures or something....

2. Yeh, I suppose....

1. Well....uh....what else can we discuss about this problem?....

2. I don't know....uh....I think we've hit some of the important things....

1. Yeh....I think so....Flunking out is probably pretty important....What else....I mean, what can you do once you've flunked out....

2. Oh, you can always get a job....or maybe get the army bit out of the way....There's always something to do....

1. ....How about what you think of yourself, though....Well, uh....if you can't succeed at college, what then....uh, how about your prestige....you know, what other people think about it....or what your folks think about you....

2. Yeh, I know what you mean....I guess, well....everybody is a little concerned about what others think of them, or something like that....but I don't know if you'd call it a mental problem....you know, something serious....

1. Yeh, I suppose so....We can't really say, because we don't have the facts....Like I said before, uh....everybody gets along pretty well....don't you think? Maybe we should just concentrate, uh, on the main problems....

2. What kind of problems do you mean?....

1. Well, I'm not sure, but I remember seeing someplace that, uh....there are a lot of, uh....well, some students who have nervous breakdowns....

2. That might be, but, well, there are a lot of people who aren't students who have breakdowns, too....You know, maybe....uh.... well, they might have the breakdowns if they had been anywhere.... I don't think you have to be in college to have a breakdown.... or, uh, I don't think we can really say that being in college caused it....It might be something else....

BORING SCRIPT - cont.

1. That might be true....but then again, maybe it was something in school....well, take exams for example....I mean, nobody likes exams, but maybe some people just can't bear up under the strain....I've seen guys just sort of fall apart....or take pills or something....

2. Well, I'd be all for abolishing exams....

1. It might help....well, if the exams weren't there to....uh, if you didn't have to worry about the exams, I mean....you might not have so much a chance of breaking up, or doing something like dropping out of school....you know....

2. Well....that's probably right....

1. Well....what else do you think we....uh....ought to include?

2. I don't know....Uh, how about dating problems....

1. No, I don't think so....

2. I guess you're right....well, how about classes that are too tough?

1. Well, I suppose that, uh....what we said about exams would apply here too, don't you?

2. Yeh, I guess so....You know,....it looks like most of the problems could be related to the grade problem....If you do all right in the classes, everything else, uh, seems to, uh go along with it....

1. Yeh,....well, uh....is there anything that you think could be done about the problem, then?....

2. Uh, I don't know....I mean, what could we suggest that would work....

CUT

INTERESTING DISCUSSION SCRIPT - EXPERIMENT II

1. Well, I guess that maybe the best way to start would be to review the points we covered last time, o.k.?

2. That sounds good....Let's see, I made a list here. We decided to limit the discussions to the problems of mental health of the college student, what some of the causes of the problem might be, and if we had a chance, to talk about some possible solutions to the problem. Let's see, now, was there anything else we talked about?

1. No, I think that pretty well covers it. We spent most of the time on the causes, and I was wondering, uh, how extensive, or how big, mental health problems are. Did you find anything on this?

2. Well, I did some looking around, and found that some psychologists think that almost every student, at one time or another during college, is affected by these pressures we've been talking about. For example, they cite the stages of depression which students experience because of grades or one thing or another, and it's been estimated that, well, roughly, one out of every ten students needs some serious psychological help. These are the ones who try to commit suicide, or just give up and don't try, and things like that.

1. Well, I think that even for those who don't actually do anything as violent as attempting suicide, that they have problems serious enough that we ought to be concerned about them. Now, we may not even realize at the time that they're having problems, but may just call it laziness, or spring fever, or something, and not even bother about it.

2. Well, laziness itself might be an indication of some kind of mental problem, or mental attitude, you know, and that could be helped--

1. Yes, I think so. The suicides we read about may be more spectacular,--

2. Well, for all of the suicides we read about, there are probably dozens of suicide attempts that we don't read about. A friend of mine worked in the campus hospital for awhile, and he was amazed at the number of patients they got who had tried to kill themselves.

1. How come....I mean, why did they want to do it?

INTERESTING SCRIPT - cont.

2. Well, they had a whole bunch of reasons--grades, girl friends or boy friends, and I guess sometimes it was a general kind of "fed up with the world" feeling.--some just wanted attention--

1. It sounds like a dangerous way of getting attention....

2. Well, a lot of times, the kids would take aspirin, or sleeping pills, and then let their roommate or friend know, and sometimes they would even call the hospital themselves. And a lot of times, the amount of pills they had taken was not nearly enough to be fatal, but it was just enough to get a little attention. One sorority girl I knew took an overdose fourteen times....They finally kicked her out of school.

1. That's too bad--Did they find out what was wrong with her?

2. They think it was the result of a boy friend ditching her.. At first, she tried to make them believe she was pregnant, and that didn't work, so she tried the phony suicide.

1. Yeh, that's another example of our American views on sex leading to mental problems.

2. Well, that works both ways....You have problems if you have experience and get caught, and you have problems if you don't have experiences, and think that there's something wrong with you....

1. Yes, I think that's generally true....

2. You know, another thing that causes some problems is breaking the strings with the home....I mean, I think that the family can still put pressure on the students.

1. Yeh, I know of one case of a fellow in pre-med who is almost flunking out, and his dad is a doctor and wants him to stay in his field.

2. Well, the family ties can cause problems in other ways, too. You know, when the student comes from a family where the values were never questioned before, and then he finds some new ways of doing things, or new values, it can be quite a shock....

1. Do you think that more could be done to solve these problems.... I mean, we have counseling of some kind now, but maybe something else could be done to catch some of these problems before they really develop.

INTERESTING SCRIPT - cont.

2. Well, one thing I've read about is small group counseling, where students get together and discuss their problems in kind of informal surroundings ever so often....

1. How does that work out?....Does it work?

2. From what I've read about it, it seems to work pretty good. For one thing, just finding out that other students have some of the same problems seems to help some, uh, so that they don't feel like they're alone in the world.

1. I think that's probably ture....

CUT