THE EFFECTS OF FULFILLING AND VIOLATING GROUP MEMBERS' EXPECTATIONS ABOUT LEADERSHIP STYLE

Thesis for the Degree of Ph. D.
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ABSTRACT

THE EFFECTS OF FULFILLING AND VIOLATING GROUP MEMBERS' EXPECTATIONS ABOUT LEADERSHIP STYLE

Ву

Mario Peter Scontrino

One of the unanswered questions regarding participative management is what effect does management's failure to use participative management have on employees who have been led to believe that participative management will be used. In this study the effects of fulfilling and violating group members' expectations about leadership style were studied.

Twelve groups with five <u>S</u>s per group were used in the study. In Conditions I and II six groups were told that their leader would be participative. In Condition I three of the groups received a participative leader. In Condition II three of the groups received an authoritarian leader.

In Conditions III and IV six groups were told that their leader would be authoritarian. In Condition III three groups received an authoritarian leader. In Condition IV three groups received a participative leader.

All groups solved Maier's New Truck Dilemma. Upon completion of the problem solving, \underline{S} s' attitudes towards the group leader, the leader-member interaction, the decision, and membership in the discussion group were measured using the semantic differential.

In every case participative leadership resulted in attitudes that were more positive than the attitudes resulting from authoritarian leadership regardless of whether expectations were fulfilled or violated. Violated participative expectations resulted in less-positive attitudes than fulfilled authoritarian expectations even though the same leadership style was used in both cases. Violated authoritarian expectations resulted in more-positive attitudes than fulfilled participative expectations even though the same leadership style was used in both cases.

The results indicate that failure to fulfill expectations that participation will be used leads to less positive attitudes than if the employees had expected that participation would not be used. Management should be completely aware of both the difficulties and possible side effects of participative management before they attempt to use it.

THE EFFECTS OF FULFILLING AND VIOLATING GROUP MEMBERS' EXPECTATIONS ABOUT LEADERSHIP STYLE

Ву

Mario Peter Scontrino

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Once upon a time there was a dashing young man who aspired to knighthood. To become a knight he knew that he must slay a dragon, so he sought a dragon to slay. Unfortunately, he was ill-equipped for dragon slaying. His armor was rusty, his sword was bent, his helmet squeaked, and he didn't even know what a dragon looked like. But luck was on his side. Four knights of the round table and a princess of the court knew of the young man's aspirations and pledged to help him. The four knights taught the young man the intricacies of dragon slaying. They taught him armor-fixing and sword-straightening and dragon-slaying. They oiled his helmet. The princess gave the dashing young man the power to carry on. With this winning combination the young man could not lose. He slew the dragon, became a knight, and lived happily ever after with the princess.

Castı

Four Knights: Dr. John Wakeley

Dr. William Crano

Dr. Hiram Fitzgerald

Dr. Eugene Jacobson

Princess: Connie

Dashing Young Man: M.P.S.

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INTRODUCTION

There is great concern for freedom in the United States today as evidenced by the civil rights movement, voting rights bills, and various liberation movements. The freedom movement has made an impression not only in the social arena but also in the market place, specifically in the area of labor-management relations (McGregor, 1960).

The freedom movement in industry, as it is expressed in the human relations movement, is nothing new--it dates from the 1940's. What is new is: (a) the current emphasis on the freedom of the individual employee and (b) the achievements of organizations that have increased their employees' freedom through some form of participative management.

Participative management (PM) refers to managerial styles wherein employees are encouraged to become involved in the decision-making process. Proponents of PM such as Likert (1961) and Davis (1957) have publicized the benefits that accrue from participation, e.g., PM: (a) encourages better decisions, (b) uses the employees' creativity, (c) restores human dignity, (d) encourages people to accept responsibility, (e) improves morale and teamwork, and (f) encourages acceptance of change. Marrow, Bowers, &

Seashore (1967), Lesieur (1958), and Coch & French (1948) have demonstrated that participation is correlated with at least some of the above benefits. However, little mention is made of the liabilities of participation, either because they are unknown or are unpopular to conjecture about. those critical of participation have done little more than raise questions about the generality of PM or have attempted to delineate the possible dysfunctional aspects of participation. For example, Strauss (1963) mentions four possible dysfunctional aspects of PM: (a) individuals whose opinions have been rejected by the group may become alienated from the group, (b) participation may lead to greater cohesion, but the cohesion may be against management, (c) participation may set up expectations of continued participation which management may not be able or willing to satisfy, (d) participation can be frustrating to those involved and frequently results in "watered-down" solutions.

The resultant situation is as follows: institutions are being pressured to increase the personal freedom of their employees; many organizations are responding to this pressure and are searching for methods of increasing freedom on the job; PM appears to be an easy solution to the problem.

At first glance PM does seem to be the inexpensive panacea that many managers have been searching for. But participation is not a panacea, and it does not come cheap (e.g., Lesieur, 1958). More time and effort must be expended to make participation successful than appears to be

the case. On the surface participation seems to involve little more than structural changes aimed at the utilization of two-way communication channels in order that the human resources of the organization may be used more effectively. In reality participation is a philosophy of management founded on trust between labor and management. The structural changes in the organization can be made overnight; the establishment of trust can not occur overnight. Trust can be established only through the dedicated use of the new system of decision making (Likert, 1961).

What happens when participation is not really understood by management, when management establishes a system that is conducive to PM but does not use the system properly? The purpose of this study is to answer the specific question of what effect will the failure to use participative methods of decision making have on employees who have been led to believe that participation will be used.

In the section below participative management is defined and the relevant research on expectations is summatized. From these reviews the problem and specific hypotheses this study investigates were derived.

Participation Defined

Participative management refers to managerial styles wherein employees are encouraged to become involved in the decision making process. Participation refers to the actual involvement of the employees in making decisions.

Davis (1957), Lowin (1968), French (1960), Strauss

(1963), and Tannenbaum & Massarik (1950) have all defined participation. Their definitions make four key points;

(a) participation is psychological involvement, not just token involvement or simple task involvement; (b) participation occurs in a group setting and is therefore susceptible to any factors that affect the functioning of groups;

(c) the outcomes of participation must affect the participants in some way and the participants must know this; and

(d) the participants must consider it proper for themselves to engage in the decision making process.

Participation-Expectation Literature

Although there is no literature that addresses itself directly to this problem, one can get some insights into the participation-expectation relationship from the theory underlying participation.

Participative management is a philosophy of managing that holds that every individual in the organization has the potential to make significant contributions to the organization. This potential can be realized if there exists:

(a) open communication among all levels of the organization,

(b) an atmosphere of trust, and (c) some reason for the employees to participate. Point (b) is of special importance here since we are concerned with the individual employee's expectations. If employees' expectations are set by management and are subsequently violated by management, mistrust and doubt will replace the trust that is so necessary for participation (Bavelas & Strauss, 1961). Moreover, without

this trust participation is defeated before it even starts (Vroom, 1964).

Expectation Literature

Expectation is a term denoting one's belief about what will occur in the future (Locke, 1969). More precisely, an expectation refers to that which the person has come to anticipate as the most probable occurrence from a class of possible events (Harvey & Clapp, 1965).

Expectations may either be confirmed or not confirmed. McClelland, Atkinson, Clark, & Lowell (1953) theorized that confirmed expectations are of little psychological importance. Nor is the direction of the discrepancy for non-confirmed expectations important. What is of importance is the magnitude of the discrepancy.

Discrepancies of equal magnitude should have comparable effects with the smaller deviations both toward and away from hope producing positive affect and with the larger discrepancies producing negative affect and related behavior consequences (McClelland et al., 1953).

An example of this phenomenon, which is referred to as the butterfly effect or the butterfly curve, can be found in Haber's study. Haber used a situation in which Ss adapted their hands to a given water temperature. When Ss immersed their hands into water baths of other temperatures, they reported positive or pleasant affect when the second water temperature deviated from the first by small amounts. They reported negative affect when the temperature difference was large (Haber, 1958).

Harvey & Clapp (1965) tested this butterfly effect to

determine if directionality as well as magnitude of discrepancy is an important determinant of the effects of deviations from expectation. Seventy-nine undergraduate college students rated themselves and another person on fifteen characteristics. Next they indicated how they expected to be rated by the person rating them. Finally, they completed a scale on self-esteem. Following exposure to fictitious ratings from the other person, Ss repeated the above ratings and completed a positivity-negativity toward self scale and a scale concerned with the degree of pleasure-disappointment produced by the feedback. alent deviations from expectancy produced different effects depending on the deviations' relationship to the desired outcome. Significant differences were found between the ratings of the groups whose feedback did not meet their expectations by being more positive than expected and those whose feedback did not meet their expectations by being less positive than expected.

The groups whose feedback was more positive than expected were rated higher on desirable characteristics than they thought they would be. In these groups large discrepancies resulted in more positive responses than did smaller deviations. The groups whose feedback was less positive than expected were rated lower on desirable characteristics than they thought they would be. In these groups small negative discrepancies produced more negative reactions than large negative discrepancies. These results indicate

that directionality is a factor which should be considered.

In a series of similar studies Verinis, Brandsma, & Cofer (1968) supported Harvey & Clapp's findings for positive discrepancies. In contrast to Harvey & Clapp, Verinis et al. found that small negative discrepancies produced less negative affect than large negative discrepancies. The different findings for negative discrepancies may have been due to Ss' rejection of large negative ratings as unrealistic in Harvey & Clapp's study. In Verinis et al. large negative discrepancies were grades that Ss had received on an examination. In this case Ss could not as easily reject the discrepancy as unrealistic.

Verinis et al. point out that the butterfly curve may accurately describe the outcomes in simple situations, such as Haber's (1958) water-bath study, that have little meaning-fulness for Ss. But directionality plays an important role in complex situations which are ego-involving and meaningful to Ss (Verinis et al., 1968).

that the confirmation of expectations is one of the central motivating forces in human behavior. According to these researchers, people may perform in unusual ways to achieve consistency between expectations and outcomes. Aronson goes on to assume that the confirmation of expectations results in a state of pleasantness which generalizes to other objects in the environment that are involved in the confirmation. The disconfirmation of expectations results

in a state of unpleasantness which also generalizes to other objects in the environment that are involved in the disconfirmation.

In a test of the hypothesis that disconfirmed expectations will be perceived as unpleasant, Carlsmith & Aronson (1963) gave Ss either a bitter solution (quinine sulfate and water) or a sweet solution (saccharine and water). Subjects, who had expectations regarding the sweetness or bitterness of the solutions, tasted solutions that either confirmed or failed to confirm Ss' expectations. In accordance with Carlsmith & Aronson's hypothesis, when Ss' expectations were not confirmed, Ss rated the bitter solution as more bitter and the sweet solution as less sweet.

In a 1965 replication of the Carlsmith & Aronson study Sampson & Sibley confirmed the earlier finding on sweetness but did not confirm the findings on bitterness. They explained the difference in results in this way: the disconfirmation of one's expectations about an event is affectively unpleasant only when it involves an event which is desired. When the event itself is undesirable, the further increment of unpleasantness produced by having one's expectations about it disconfirmed makes little or no difference.

If one based his predictions on either Carlsmith & Aronson's results or on Sampson & Sibley's results, one would predict the opposite of what he would predict using Harvey & Clapp's results or the results of Verinis et al.

Once again the difference may be due to the ego-involving

nature of the task used by the latter investigators. difference may be due to some physiological change that accompanies the expectation of bitter taste and causes sweet solutions to taste less sweet.

The preceding discussion indicates that at least two variables affect the outcome of disconfirmed expectations: the direction, or valence, of the discrepancy and the amount of discrepancy. The relationship between these variables found by the theorists already discussed is presented in Table 1. These variables have been combined under the concept of value in expectancy-value theories by Vroom (1964), Atkinson (1964), and others. However, a discussion of these theories would not contribute any new information to the present discussion of expectations for the following reason: the theorists mentioned above assume that expectations have already been established and simply relate these established expectations to motivation. The present study deals with the establishment of expectations and the consequences of disconfirmed expectations. The results of this study, however, could be placed in an expectancy-value framework.

Problem and Hypotheses

Trust is essential for participative management to be effective (Likert, 1961). This is especially true during the period of uncertainty when an organization begins to use PM. The question to which this study addressed itself was what will happen to the attitudes of the organization members if their trust in management is violated by management's

اب The effects of direction and magnitude of deviation from expectation on affect.

lable 1. Ine errects or	direction and magnitude of	deviation from expectation on affect.
Theorist	Direction of Deviation	Magnitude of Deviation and Affect
McClelland et al.	Not important	Small: positive affect Large: negative affect
Haber	Not important	Small: positive affect Large: negative affect
Harvey & Clapp	*Important for both + and -	Positive correlation between + and positive affect; negative correlation between - and negative affect
Verinis <u>et al</u> .	Important for both + and -	Positive correlation between + and positive affect; positive correlation between - and negative affect
Carlsmith and Aronson	Important for both + and -	Didn't say
Sampson & Sibley	Important for + Not important for -	Didn't say

* + refers to positive deviations, i.e., deviations towards hope or that which is desired - refers to negative deviations, i.e., deviations away from hope

failure to fulfill members' expectations that participation will be used to reach a decision. Specifically, how will this violation of trust affect the members' attitudes toward their group leader, the leader-member interaction, the decision, and membership in the group?

Both leadership style of decision making (Likert, 1967;
Lowin, 1968) and members' expectations (Likert, 1961) have
been shown to be important components of the participative
decision making process. In this study the members' expectations about leadership style of decision making were
manipulated. The following abbreviations are used:

PF (participation fulfilled): fulfillment of members'
expectations that participation will be used to reach
decisions. Participation used and leader participative.

- PN (participation not fulfilled): violation of members'
 expectations that participation will be used to reach
 decisions. Participation not used and leader authoritarian.
- AF (authoritarian fulfilled): fulfillment of members'
 expectations that participation will not be used to
 reach decisions. Participation not used and leader
 authoritarian.
- AN (authoritarian not fulfilled): violation of members*
 expectations that participation will not be used to
 reach decisions. Participation used and leader
 participative.

This study was not concerned with the results of violating authoritarian expectations by becoming more authoritarian or with violating participative expectations by becoming more participative.

Participation has been hypothesized to be a method of decision making that is highly valued by most individuals (Patchen, 1964; argyris, 1964). If participation is valued more highly than non-participation, then the PF and AN conditions should result in attitudes that are more positive than the attitudes resulting from the PN and AF conditions. This is the first hypothesis.

Harvey & Clapp (1965) demonstrated that a violation of expectations in a negative direction from a desired outcome produces much more disappointment than the violation of expectations in a positive direction from a less-desired outcome. The second hypothesis is that the difference between the PF and PN conditions will be greater than the difference between the AN and AF conditions.

If participation is highly desirable and if non-participation is undesirable, then the violation of expectations that participation will not be used (with participation replacing non-participation) should not have any adverse affects on the members' attitudes. Both Harvey & Clapp and Verinis et al. demonstrated that the disconfirmation of unpleasant expectations results in positive affect. The third hypothesis is that the AN condition will result in attitudes not significantly different from the PF condition.

If non-participation is undesirable, then the confirmation of this unpleasant expectation (AF) should have little or no affect on the unpleasantness of the situation. However, the violation of expectations that participation will be used (PN) should result in less positive attitudes than the AF condition (Verinis et al., 1968). The PN condition should result in unpleasantness caused by both the authoritarian leader and the violation of expectations. Therefore, the fourth hypothesis is that the AF condition will result in attitudes that are more positive than the PN condition. Summary of Hypotheses

Hypothesis One: The PF and AN conditions should result in attitudes that are more positive than the attitudes

resulting from the PN and AF conditions.

Hypothesis Two: The difference between the PF and PN conditions will be greater than the difference between the AN and AF conditions.

Hypothesis Three: The AN condition will result in attitudes not significantly different from the PF condition.

Hypothesis Four: The AF condition will result in attitudes that are more positive than the PN condition.

METHOD

Subjects

Sixty undergraduate college students recruited from lower division psychology courses served as <u>S</u>s. Thirty-three <u>S</u>s were male; twenty-seven were female. Each <u>S</u> served in one of twelve groups of five <u>S</u>s. Subjects selected the time during which they could serve as <u>S</u>s. Therefore, assignment of <u>S</u>s to groups was not random. However, the twelves groups were randomly assigned to one of four conditions. This assignment procedure created no systematic differences between groups.

Apparatus

A Singer 20/20 camera, an Ampex VR 6000 videotape recorder, and a Cohu Mark VI-A special effects generator and sync generator were used to videotape all discussions. The videotaping equipment was located behind a one-way mirror. Design and Procedure

The experiment involved four conditions: PF, PN, AF, and AN. The PF (participative expectations fulfilled) condition consisted of setting the group's expectations that they would participate in decision making and fulfilling this expectation. The PN (participative expectations not fulfilled) condition involved setting the group's

expectations that they would participate in decision making and violating this expectation. The AF (authoritarian expectation fulfilled) condition consisted of setting the group's expectations that they would not participate in decision making and fulfilling this expectation. The AN (authoritarian expectations not fulfilled) condition involved setting the group's expectations that they would not participate in decision making and violating this expectation. The four conditions are presented in Figure 1.

EXPECTED LEADERSHIP STYLE Participative Authoritarian Not fulfilled groups groups EXPECTATIONS ΑF Fulfilled

Figure 1. Four conditions comprising the experiment.

Each group solved Maier's New Truck Dilemma (Maier, 1952) (See Appendix A). This task involves deciding who among five employees should receive a new truck. Each of the five employees differs on: seniority, accident record, age of truck, and amount of driving done in performance of the job.

This task was selected because: (a) it is adaptable to the PM model, (b) it allows the participants to become quite involved in reaching a decision, and (c) it requires a group. To allow the outcomes of the decision making to affect the participants, the best solutions of the task were linked to monetary rewards for the participants.

Before the discussion began, each group of five $\underline{S}s$ examined the videotape equipment, cameras, and microphones. Any questions $\underline{S}s$ had about the laboratory were answered at this time.

Upon completion of this brief orientation, $\underline{S}s$ were seated around a table and were told by $\underline{E}_{:}$ (a) that they would be solving a group problem and (b) that they were competing for a \$25.00 prize with three other groups. They then received one of two sets of instructions (See Appendix B).

Instructions to Participative Expectation Groups: Six groups were told that the discussion would be open, that the leader would serve only as moderator of the discussion, and that the group decision was what counted. In three of these groups the leader was participative; he encouraged discussion and accepted the decision reached by the group. These groups comprised the PF condition. In the three other groups the

leader was authoritarian; he discouraged discussion and imposed his predetermined decision on the group. These groups comprised the PN condition.

Instructions to Authoritarian Expectation Groups: Six groups were told that their group leader would make all decisions, that the group members would serve only as consultants, and that group members might be asked for opinions. In three of these groups the leader was authoritarian; these groups comprised the AF condition. In the other three groups the leader was participative; these groups comprised the AN condition.

After the instructions were read to a group, each \underline{S} received the problem summary and his specific role in the problem. Subjects were allowed two minutes to study the problem and their roles.

The group leader entered the room and began the discussion after the two minute study period. When the leader entered the room, \underline{E} began videotaping. All groups were allowed twenty minutes to reach their decisions. Upon completion of the discussion, \underline{S} s completed four attitude questionnaires.

After all twelve groups had participated in the experiment, \underline{S} s were sent a letter explaining the experiment (See Appendix C). In addition, each \underline{S} received the \$5.00 prize for the best group solution.

Two leaders, who were student actors, led the group discussions. Each group had only one leader. The leaders

were randomly assigned to the groups. They received detailed instructions regarding how they should behave when being participative or authoritarian (See Appendix D). The leaders did not know the purpose of the experiment, nor did they know each group's expectations. Prior to this experiment each leader conducted two practice group discussions followed by a review of his videotaped performance.

<u>Instruments</u>

Four measures were used to assess attitudes towards: the group leader, the leader-member interaction, the decision, and membership in the discussion group. All attitudes were measured using the semantic differential (See Appendix E).

Each semantic differential consisted of fifteen pairs of adjectives: eight pairs loaded on the evaluative scale, four pairs loaded on the activity scale, and three pairs loaded on the potency scale. The adjective scales were identical for each of the four concepts. The pairs were selected on the basis of prior work with the semantic differential on the same population (Crano & Bettinghaus, 1970). Only the scores from the evaluative scale were used in the data analysis since Osgood, Suci, & Tannenbaum (1957) found that the evaluative scale was a more accurate measure of attitude than either the activity or potency scales. The activity and potency scales were included to obscure the purpose of the measurement.

For purposes of scoring, the unfavorable poles of the

evaluative scale were assigned the score of one and the favorable poles the score of seven. To score each concept the scores for the evaluative scale were summed.

Tannenbaum (1953) obtained test-retest reliabilities of r=.87 to r=.93 with a mean r=.91 for the evaluative scale.

Osquod et al. (1957) have obtained similarly high r's.

The evaluative scale has been used with the Thurstone and Guttman scales to measure identical concepts and thereby establish construct validity. The correlations between the evaluative scale and the Thurstone ranged from r=.74 to r=.87. The correlation between the evaluative scale and the Guttman scale was rho=.78.

A modified form of the Bales Interaction Analysis
(Bales, 1950) was used to categorize the behavior of the
group leaders to determine if they were behaving in a similar manner under each leadership style. The analysis included the following areas: (a) task area--questions,
(b) task area--answers, (c) social-emotional area-- positive
reactions, and (d) social-emotional area--negative reactions.

RESULTS AND DISCUSSION

The means and variances for the four conditions are presented in Table 2. Since Ss interacted with each other, their attitude scores were not independent. Therefore, all analyses used average score per group within each measurement condition.

Because of heterogeneity of variance within the experimental conditions, square root transformations were performed on the averaged per group scores. Bartlett's test for homogeneity of variance showed that none of the transformed score variances departed significantly from homogeneity.

A two-way factorial analysis of variance with two levels of expectation (fulfilled versus not fulfilled) and two levels of expected leadership style (participative versus authoritarian) was used to analyze each of the attitude measures (See Appendix F). There were no main effects for any of the measures. There were significant interaction effects for: attitude towards the leader ($F_{1,8}$ =6.73;p<.05), attitude towards the leader—member interaction ($F_{1,8}$ =8.67; p<.05), and attitude towards the decision ($F_{1,8}$ =6.62;p<.05). There were no significant interaction effects for attitude towards membership in the group.

Simple effects analyses (Winer, 1962) for the significant interactions are presented in Table 3. These analyses indicate that the effect of leadership style under violated expectations was significant or marginally significant for all three attitude measures.

Planned comparisons testing the first, third, and fourth hypotheses are presented in Table 4. Although the hypotheses tested are a priori hypotheses, McNemar's test for a posteriori hypotheses was used to provide a more stringent test of the hypotheses (McNemar, 1962).

Analysis of the Interaction Analysis data using multiple t-tests yielded no significant differences between the two leaders for any condition. Therefore, any differences between groups may be attributed to causes other than some idiosyncratic behavior of the leaders.

Although only three groups were run under each condition, the results were quite stable across the four attitude measures. The attitudes towards both the leader and the leader-member interaction showed a consistent pattern across the conditions of the study. On these measures the most favorable attitudes occurred in the AN condition with less favorable attitudes in the PF and AF conditions and the least favorable attitudes in the PN condition (Table 2). The rank order of attitudes on the other two attitude measures differed only slightly from the AN-PF-AF-PN pattern. In the decision measure the AN and PF groups were reversed, but the difference between them was only .005 units. In

the membership measure the PF and AF groups were reversed, but the difference between them was only .002 units. Except for the PF-AF reversal in the membership measure, the participative leadership conditions, i.e., the AN and PF conditions, consistently yielded more positive attitudes and less variability of attitudes than did the authoritarian leadership conditions, AF and PN.

A summary of all the comparisons used to test the hypotheses is presented in Table 5. Since Table 5 refers the reader to the appropriate table for tests of specific hypotheses, all references below are to Table 5.

The first hypothesis was that the PF and AN conditions would result in attitudes that were more positive than the attitudes resulting from the PN and AF conditions. This hypothesis was tested by the (PF+AN)-(AF+PN) (line 1) comparison in Table 5. In all four cases the use of participative decision making led to more positive attitudes regardless of whether expectations were fulfilled or were violated. The differences were significant for the leader. the interaction, and the decision measures. However, the differences did not reach significance for the membership measure. The attitudes that were associated with participation were more positive than those associated with non-participation. finding supports Patchen's (1964) contention that participation is more highly valued than less democratic methods of decision making.

The second hypothesis was that the difference between

Table 2. Cell means and variances for all attitude measures.

ď	,	Attitude towards leader	towards	Attitude towards interaction	towards tion	Attitude towards decision	towards	Attitude towards membership	towards ship
o c	97.1	l×	52	×	s ²	×	s ²	×	s ²
1.	AN	5,555	600•	695*5	.019	5,328	.027	5.249	.023
2.	PF	5.331	.035	5.219	.005	5,333	900•	5.174	.011
ъ.	AFI	4.929	.197	5.047	.102	4.930	.228	5.176	.078
4.	S	4.853	.143	4.816	.087	4.741	• 056	5.027	.014

AN--authoritarian expectations not fulfilled

PF--participative expectations fulfilled

AF--authoritarian expectations fulfilled

PN--participative expectations not fulfilled

Simple effects analyses of variance for significant interactions. Table 3.

Source df MS F p														
AN-AF 1 .589 4.33 <.07 1 .410 5.54 <.05 1 .237 2.14 PN-PF 1 .342 2.51 <.15 1 .244 3.29 <.11 1 .525 4.73 AN-PN 1 .739 5.43 <.05 1 .850 11.48 <.01 1 .517 4.66 AF-PF 1 .243 1.79 >.20 1 .045 .60 >.20 1 .243 2.19 Within Cell 2 8 .136 8 .074		9		ttitu 1	de tow eader	ards		ittitu inte	de towi ractio	ards n	٩	ttitu dec	de tow ision	e b u d
AN-AF 1 .589 4.33 <.07		3001 CB	d۴	MS	L.	d	đ	S W	L.	a.	d.	as S	L	a
AN-PF 1 .342 2.51 <.15 1 .244 3.29 <.11 1 .525 4.73 AN-PN 1 .739 5.43 <.05 1 .850 11.48 <.01 1 .517 4.66 AF-PF 1 .243 1.79 >.20 1 .045 .60 >.20 1 .243 2.19 Within Cell 8 .136 8 .074 8 .111	1.	AN-AF	1	.589	4.33	<.07	-	.410	5.54		-	.237	2.14	<.18
AN-PN 1 .739 5.43 <.05 1 .850 11.48 <.01 1 .517 4.66 AF-PF 1 .243 1.79 >.20 1 .045 .60 >.20 1 .243 2.19 Within Cell 8 .136 8 .074 8 .111	2.	PN-PF	<u></u>	.342	2.51	<.15	-			×.11	~	.525	4.73	** 00
AF-PF 1 .243 1.79 >.20 1 .045 .60 >.20 1 .243 2.19 Within Cell 8 .136 8 .074	3.	AN-PN	-		5.43	<.05		.850	11.48	<.01	-	.517	4.66	<.07
Within Cell 8 .136 8 .074 8	4	AF-PF	_	.243	1.79	>.20	-	.045	.60	>.20	-	.243		6.18
	5.	Within Cell		.136			ω	.074			6 0	.111		

AN--authoritarian expectations not fulfilled

PF--participative expectations fulfilled

AF--authoritarian expectations fulfilled

PN--participative expectations not fulfilled



Table 4. Planned comparisons between group means.

	. (Attit	itude towards leader	vards	Attit	Attitude towards interaction	ards	Atti	Attitude towards decision	uards
	2001	۵۱	t.	ď	10	4	a	10	4	۵
- :	AN-PF	. 225	1.05	>.20	.350	2.23	<.10	005	.03	>.20
2.	AF-PN	.076	• 36	>.20	.231	1.47	<.20	.189	.98	>.20
ب	(PF+AN)- (AF+PN)	. 552	3.68	<.01	.463	4.20	< . 01	.495	4.12	<.01

AN--authoritarian expectations not fulfilled

PF--participative expectations fulfilled

AF--authoritarian expectations fulfilled

PN--participative expectations not fulfilled

Summary of differences between means for all attitude measures. Table 5.

	9	Attitude lea	towards	Attitude towa interaction	Attitude towards interaction	Attitude towards decision	towards	Attitude towards membership	towards
	3601.08	0	d	۵	р	10	d	10	д
1.1	(PF+AN)- (AF+DN)	799	<.01	.463	<.01	• 495	<.01	.110	>.20
2. 2	(PF-PN)-	.148	>.20	.092	>.20	194	>.20	• 026	>.20
ι. Γ	AN-PF	.224	>.20	.350	<.10	005	>.20	.075	>.20
4.	AF-PN	•076	>.20	. 231	<.20	.189	>.20	.149	>.20
5. 3.	3pF-AF	.402	>.20	.172	>.20	.403	<.18	.002	>.20
6.3	AN-PN	.702	<.05	.753	<. 01	.587	<.07	.222	>.20
7. 3	3pF-PN	.478	<.15	.430	×.11	.592	> 06	.147	>.20
8.3	AN-AF	.626	<.07	.522	<.05	.398	<.18	.173	>.20

analyses of variance in Appendix simple effects analyses in Table planned comparisons in Table 4. not fulfilled expectations not fulfilled PF--participative expectations fulfilled AF--authoritarian expectations fulfilled expectations p-value based on 2p-value based on 3p-value based on AN--authoritarian PF--participative PN--participative

the PF-PN conditions would be greater than the difference between the AN-AF conditions. This hypothesis was tested by the (PF-PN)-(AN-AF) (line 2) comparisons in Table 5. None of the differences were significant. In fact, the largest difference was in a direction opposite to that predicted ($\overline{D}_{=-}.194$). These results indicate that the relationship between the magnitude of deviation and attitude is similar for both positive and negative deviations. For example, a deviation five units in a negative direction results in negative affect of the same absolute value as a deviation five units in a positive direction. Verinis et al. (1968) reached a similar conclusion, i.e., positive discrepancies of a given size are as pleasant as negative discrepancies of the same size are unpleasant. This conclusion receives further support from the results related to the third and fourth hypotheses.

The third hypothesis was that the AN condition would result in attitudes not significantly different from the PF condition. This hypothesis was tested by the AN-PF (line 3) comparisons in Table 5. All four comparisons failed to reach significance. These results indicate that the disconfirmation of expectations does not always have a negative effect on attitudes. In fact, the AN condition led to attitudes that were more positive, although not significant, than the the PF condition three out of four times. According to both Sampson & Sibley (1965) and Carlsmith & Aronson (1963) the PF condition should have

resulted in more positive attitudes than the AN condition since the PF condition did not involve violated expectations. More light is shed upon this relationship by the results pertaining to the fourth hypothesis.

The fourth hypothesis was that the AF condition would result in attitudes that were more positive than the PN condition. This hypothesis was tested by the AF-PN (line 4) comparisons in Table 5. In every case the AF condition resulted in more favorable attitudes than the PN condition although none of the differences reached significance.

These results fail to support Sampson & Sibley's (1965) finding that the disconfirmation of expectations is unpleasant only when the disconfirmation involves an event which is desired. Moreover, the average AF-PN difference of .161 is the same as the average AN-PF difference. This finding also contrasts with Sampson & Sibley's conclusion that the violation of negative expectations in a positive direction (AN) leads to attitudes that are less positive than the fulfillment of positive expectations (PF).

The most plausible explanation for these findings is based on the contrast resulting from the juxtaposition of the two leadership decision making styles. When Ss expected an authoritarian leader, the valence of this expectation was less positive than when Ss expected a participative leader since the participative leader is the more preferred of the two. As a result, when Ss expected an authoritarian leader and received a participative leader

(AN), the participative leader was rated more positively than he would have been if <u>S</u>s expected and received a participative leader (PF). Because of this contrast effect, violated expectations appeared to have a positive effect on attitudes.

The opposite occurred when <u>Ss</u> expected a participative leader and received an authoritarian leader. In this case (PN) the authoritarian leader was rated less positively than when <u>Ss</u> expected and received an authoritarian leader (AF). When <u>Ss</u> were set for a pleasant experience (the participative leader), the unpleasant experience of the authoritarian leader seemed even more unpleasant when juxtaposed with <u>Ss'</u> expectations. In this instance violated expectations had a negative effect on attitudes.

The strength of this contrast can be seen by comparing the PF-AF differences with the AN-PN differences. If contrast were not operative, the differences between the PF-AF conditions (Table 5, line 5) should be comparable to the AN-PN (Table 5, line 6) differences. This is not the case. The AN-PN difference was 111 times as large as the PF-AF difference in the membership measure; 4.37 times as large in the interaction measure; 1.74 times as large in the leader measure; 1.45 times as large in the decision measure.

Based on this study one may conclude that discrepancies of equal size from expectation lead to similar attitudinal changes. Direction of the discrepancy is important in that it tells one whether the discrepancy will result in positive

or negative changes in attitude. These results are in general agreement with Verinis et al. (1968).

It is difficult to draw any firm conclusions about the shape of the relationship between positive or negative attitudinal changes and magnitude of discrepancy from expectations since only two points of the curve were measured in this study. But the results do indicate that attitude and deviation from expectation are related in the manner shown in Figure 2.

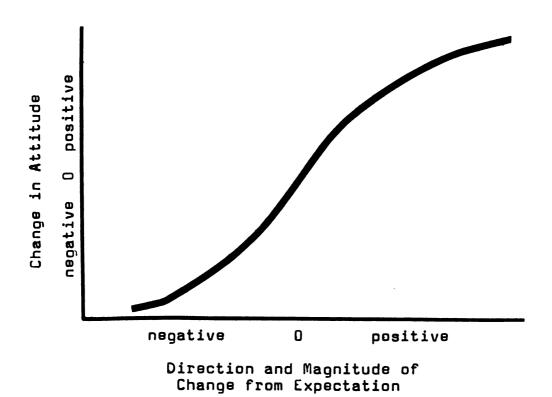


Figure 2. Relationship between attitude and deviation from expectations.

In general the leader, interaction, and decision measures yielded the same results. This similarity could have been predicted since all three measures measured

leadership style. The authoritarian leader stifled interaction, made the decisions, and received less positive ratings than the participative leader who facilitated interaction and accepted the group's decision. The leader did not control membership with the result that the leader's behavior did not affect the membership measure to the same extent as the other measures.

The analysis of the attitude measure for membership showed that the manipulation of expectations did not seem to affect the value group members placed on group membership. Neutral membership attitudes existed with both positive and negative leader attitudes. This result does not contradict either the other results of this study or the theory underlying PM.

Argyris (1964), Likert (1967), McGregor (1960), and Roethlisberger & Dickson (1939) have all cited instances of the group serving as a source of satisfaction for the employees especially when the managerial techniques of the organization are inimical to the psychological health and the satisfaction of the employees.

In this situation the discussion group members appear to have valued group membership even when they disliked the group leader's style and/or the violation of their expectations. In addition, the members had the opportunity to rate the leader and the group membership separately, thereby enabling \underline{S} s to see the leader as apart from the group.

Another factor contributing to the different findings

for group membership is that group membership was almost incidental to the study. The five group members, if the five <u>S</u>s can even be called a group, did not interact with each other outside of the fifteen to twenty minutes they spent with the leader. If this is not enough time to form a group, then there is no reason to expect differential attitudes for the membership measure.

One of the assumptions upon which this study is based is that participation is more desirable than non-participation. Many researchers, beginning with Lewin, Lippit, & White, have demonstrated that in most cases democratic leaders elicit more favorable responses from their groups than do authoritarian leaders (White & Lippit, 1960). This study supports those findings. In addition the results of this study indicate that it should be easier to predict the reactions of a group to a democratic leader than to an authoritarian leader—in every case the responses to the authoritarian leaders were more variable than were the responses to the participative leaders.

If an individual does not value participation, the results of this study would be reversed. An appropriate question, therefore, is do all individuals place the same value on participative and authoritarian leaders. Do all people like participative leaders and dislike authoritarian leaders? Can the results of this study be generalized to all groups? As one might expect, the answer to both questions is no. Vroom (1959), McCurdy & Eber (1953), and Haythorn, Haefner,

Couch, & Carter (1956) have investigated the relationship between different leadership styles and groups. The results of their studies indicate that individuals who have a strong need for independence and low F-scale scores perform better under participative leaders. Those individuals who have a weak need for independence and high F-scale scores function better under authoritarian leaders. If one can classify the members of a group as strong need for independence, low F-scalers, the results of this study should be applicable.

The decision making style of any leader at any given time can be placed on a continuum ranging from highly authoritarian to complete delegation and participation. implication is that decision making styles are not discrete categories; they do, in fact, overlap. Moreover, leaders may utilize different styles in different situations. For example, a leader may delegate control over one area of an employee's job to that employee while reserving control over other areas for himself. This study did not attempt to combine decision making styles. The leaders used in this study displayed behavior that corresponded to either authoritarian or participative styles. While the leaders' behavior was representative of a particular style, it would be difficult to say how authoritarian or how participative these styles actually were. All that can be said about the leaders' behavior is that each leader's participative style was different from his authoritarian style and that their behaviors were different enough to be representative of

different styles of decision making.

As was pointed out earlier, <u>E</u> set the members' expectations via a short statement about the experiment. This seemingly mild manipulation was strong enough to establish expectations. In most instances when an organization adopts some form of participative management, the organization accompanies the introduction of PM with a campaign stressing the purposes and goals of PM. It is conceivable that in the latter situation expectations are much stronger than in this experiment and the consequent violation of expectations could have a much stronger negative effect.

CONCLUSIONS

When expectations are violated with either a pleasant outcome replacing an expected unpleasant outcome or an unpleasant outcome replacing an expected pleasant outcome, the violated expectations result in a contrast effect. If an unexpected pleasant outcome replaces an expected unpleasant outcome, attitudes are more positive than they would be if the pleasant outcome had been expected all the time. The reverse is true when an unexpected unpleasant outcome replaces an expected pleasant outcome. Attitudes are less positive than they would have been if the unpleasant outcome had been expected.

The implications for participative management are clear. If participation is valued by a group of employees, then the failure to use participation when the employees expect participation to be used will result in attitudes that are more negative than if the status quo had been maintained.

The results seem to indicate that the optimum situation for positive group member attitudes is when unpleasant expectations are not fulfilled since this condition resulted in attitudes that were more positive than the fulfillment of pleasant expectations. It must be remembered

that this violation of expectations in itself establishes expectations about the reliability of the sources of information. Once the group members begin to doubt their sources of communication, it will be difficult to establish any expectations that differ from past behavior.

In this study $\underline{S}s$ ' expectations were established rather easily since $\underline{S}s$ had nothing besides \underline{E} 's description of the experiment on which to base their expectations. Still unknown, however, is the difficulty of changing expectations based on many experiences. This problem becomes important when one attempts to change an organization from an authoritarian mode of operating to a more participative style of managing. According to Vroom (1964) the probability that expectations will be changed is quite low. Along a similar vein is the question of how difficult is the reestablishment of expectations once those expectations have been violated.

To answer some of the above questions in the laboratory would require the establishment of a real group rather than an aggregate role-playing a group. If one created a situation where <u>S</u>s would meet over a period of time, he could solve the group problem in addition to having the ability to manipulate expectations and thereby answer some of the questions posed above.

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APPENDICES

APPENDIX A

New Truck Problem

General Instructions for the Crew: You are repairmen for a large company and drive to various locations in the city to do repair work. Each of you drives a small truck, and you take pride in keeping it looking good. You have a possessive feeling about your trucks and like to keep them in good running order. Naturally, you like to have new trucks, too, because a new truck gives you a feeling of pride.

Here are some facts about the trucks and the men in the crew that report to Walt Marshall, the supervisor of repairs: George, 17 years with the company, has a 2 year old Ford truck; Bill, 11 years with the company, has a 5 year old Dodge truck; John, 10 years with the company, has a 4 year old Ford truck; Charlie, 5 years with the company, has a 3 year old Ford truck; Hank, 3 years with the company, has a 5 year old Chevie truck.

Most of you do all your driving in the city, but John and Charlie cover the jobs in the suburbs.

In acting your part, accept the facts as given and assume the attitude supplied in your specific role. From this point on let your feelings develop in accordance with the events that transpire. When facts or events arise which are not covered by the roles, make up things which are consistent with the way it might be in a real life situation.

Instructions for Walt, the foreman of the repair crew;
You are the foreman of a crew of repairmen, each of whom
drives a small service truck to and from his various jobs.
Every so often you get a new truck to exchange for an old
one, and you have the problem of deciding to which of your
men you should give the new truck. Often there are hard
feelings because each man seems to feel he is entitled to
the new truck, so that you have a tough time being fair.
As a matter of fact, it usually turns out that, whatever
you decide, most of the men consider it to be wrong. You
now have to face the issue again because you have a new
Chevie truck. Here are some brief facts about the situation:

George, 17 years with the company, has a 2 year old Ford truck. Bill, 11 years with the company, has a 5 year old Dodge truck. John, 10 years with the company, has a 4 year old Ford truck. Charlie, 5 years with the company, has a 3 year old Ford truck. Hank, 3 years with the company, has a 5 year old Chevie truck.

All the men do city driving, making fairly short trips, except John and Charlie who cover the suburbs.

Instructions for George, a member of the crew:

When a new Chevie truck becomes available, you think you should get it because you have most seniority and don't like your present truck. Your own car is a Chevie, and you prefer a Chevie truck such as you drove before you got the Ford.

Instructions for Bill, a member of the crew:

You feel you deserve a new truck. Your present truck is old, and, since the more senior man has a fairly new truck, you should get the next one. You have taken excellent care of your present Dodge and have kept it looking like new. A man deserves to be rewarded if he treats a company truck like his own.

Instructions for John, a member of the crew:

You have to do more driving than most of the other men

because you work in the suburbs. You have a fairly old

truck and feel that you should have a new one because

you do so much driving.

Instructions for Charlie, a member of the crew:

The heater in your present truck is inadequate. Since Hank backed into the door of your truck, it has never been repaired to fit right. The door lets in too much cold air, and you attribute your frequent colds to this. You want a warm truck since you have a good deal of driving to do. As long as it has good tires, brakes, and is comfortable, you don't care about its make.

Appendix A - concluded

Instructions for Hank, a member of the crew:

You have the poorest truck in the crew. It is 5 years old, and before you got it, it had been in a bad wreck. It has never been good, and you've put up with it for 3 years.

It's about time you got a good truck to drive, and you feel the next one should be yours. You have a good accident record. The only accident you had was when you sprung the door of Charlie's truck when he opened it as you backed out of the garage. You hope the new truck is a Ford, since you prefer to drive one.

APPENDIX B

Instructions Read to Groups

INSTRUCTIONS READ TO THE AUTHORITARIAN EXPECTATION GROUPS:

You will be involved in a group problem solving situation. You will be competing with three other groups. The group that attains the best solution to the problem will get a \$25.00 prize. Each of you will be assigned a specific role to play in the group. In addition to your specific role, you will also act as subordinate advisors to the group leader who is your foreman. He is responsible for the group, and he will decide what the solution to the problem will be. However, each of you will probably have something to contribute to the discussion, and you should attempt to be as influential as possible. Each of you will be given a summary of the problem and a description of your role. Study the problem and write what you think is a good solution to the problem below the summary of the problem. The role you are to assume is written at the top of the page. Are there any questions?

INSTRUCTIONS READ TO THE PARTICIPATIVE EXPECTATION GROUPS:

You will be involved in a group problem solving situation. You will be competing with three other groups. The group that attains the best solution to the problem will get a \$25.00 prize. Each of you will be assigned a specific role to play in the group. The leader of the group is your fore-Although there will be a leader, the quality of the decision will depend on your contributions. Each of you knows things that the leader doesn't know, so as a group you should be able to achieve the best possible solution. The decision will be only as good as each of you makes it. It is your responsibility to decide what the solution to the problem will be. You will all be given a summary of the problem. Study the problem and write what you think is a good solution to the problem below the summary of the problem. Your role is written at the top of the page. Are there any questions?

APPENDIX C

Letter Sent to Subjects

<u>PURPOSE</u>: The purpose of the experiment was to test the following hypotheses:

- a) violation of expectations that participation will be used to reach decisions will result in negative attitudes to-ward the group, the leader, and the decision.
- b) violation of expectations that participation will not be used to reach decisions will have no adverse effects.
- c) fulfillment of expectations that participation will be used will result in positive attitudes towards the group process, the leader, and the decision.
- d) fulfillment of expectations that participation will not be used will result in negative attitudes towards the group, the leader, and the decision.

PROCEDURE: Six groups were told that the discussion would be open, that the leader would serve only as moderator of the discussion, and that the group decision was what really counted. In 3 of these groups the leader was democratic; in 3 of these groups the leader was autocratic. Six groups were told that their group leader would make all decisions, that the group members would serve only as consultants, and that group members might be asked for their opinions. In 3 of these groups the leader was autocratic; in 3 of these groups the leader was democratic. The group leaders were actors hired to lead the discussions.

REWARD: Since my manipulations directly affected the type of solution that was reached by each group, all <u>S</u>s who participated in the group discussions will receive the \$5.00 reward.

RESULTS: The data has not been completely analyzed, but preliminary analyses seem to support the 4 hypotheses.

OTHER INFORMATION: The 2 questionnaires you completed were:
a) a conservatism scale and b) an independence scale. The information from these questionnaires will be used in a later study which will investigate the relationship between group participation and these 2 variables. If you have any questions that I haven't answered, give me a call and I'll try to answer them. My home phone is 355-1062.

Thank you for participating in this study.

APPENDIX D

Instructions to Leaders

Behavior of Authoritarian Leader:

- 1) Leader defines the problem: "Our task is to decide who gets the new truck."
- 2) Leader controls discussion; he asks each individual who should get the new truck and why. Throughout this period the leader is highly evaluative of all suggestions. He praises those that agree with his predetermined solution and he ignores those that disagree with his solution.
- 3) After all individuals have made their suggestions, leader again asks each individual who should get the new truck.
- 4) If group members begin to interact with each other, leader will ask them to direct their comments to himself.
- 5) Leader tells the group what his decision is.

Behavior of Participative Leader:

- 1) Leader asks the group: "What is the problem?"
- 2) Leader is moderator of discussion rather than controller. He solicits responses or opinions from those who are not participating. He assures that nobody dominates the discussion. He calls the group's attention to any facts that he thinks they have overlooked. He also makes suggestions.
- 3) As a group the leader and members evaluate the alternatives and reach a decision.

APPENDIX E

Attitude Toward Group Questionnaire

The purpose of this test is to measure your reactions to certain things pertaining to the group discussion by having you judge them against a series of descriptive scales. In taking this test, please make your judgments on the basis of what these things mean to you. On each page of the booklet you will find a different concept to be judged and beneath it a set of scales. You are to rate the concept on each of these scales.

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Here is how you are to use these scales:
If you feel that the concept at the top of the page is very closely related to one end of the scale, you should place your check-mark as follows: fair_x:::::::unfair
or
fair:::::x_unfair
If you feel that the concept is quite closely related to one or the other end of the scale, you should place your check-mark as follows:
strong x weak
or
strong::::_x:weak
If the concept seems only slightly related to one side as opposed to the other side (but is not really neutral), then you should check as follows:
activepassive
or
active:::_x:passive
The direction toward which you check, of course, depends upon which of the two ends of the scale seem most characteristic of the thing you're judging.

If you consider the concept to be neutral on the scale, i.e., both sides of the scale equally associated with the concept, or if the scale is completely irrelevant or unrelated

middle spac	e:	then you should place your check-mark in the
IMPORTANT:	(1)	place your check-marks in the middle of the spaces, not on the colons;
	(2)	be sure that you check every scale for every concept; do not omit any;
	(3)	never put more than one check-mark on a single scale.

Do not try to remember how you checked similar items earlier in the test. Make each item a separate and independent judgment. Work at fairly high speed through this test. Do not worry or puzzle over individual items. It is your first impressions, your immediate feelings about the items, that we want.

CONCEPT: GROUP DECISION

skillful	!	1	1	'	'	'_	bungling
distasteful	1	1	!	:		:	tasty
good	1	'	:	1	'	1	bad
fair		'	:	:		1	unfair
sharp		'	1	;		!	dull
passive	1	'	:	1	'	;	active
strong	1	;	1	1	:	:	weak
thin	1	'	;	1	;	:	thick
slow	!		1	'			fast
worthless	1	!	1		1	'	valuable
pleasant		!	:		:	:	unpleasant
clean	1	1	:	1	1	1	dirty
hot	:	1	:	1	1	:	cold
large			1	1	;		small
nice	1	1	1	•		•	awful

CONCEPT: MEMBERSHIP IN THE DISCUSSION GROUP

skillful		'		1	'	1	bungling
distasteful	1	'	:				tasty
good		1	1	'	;	1	bad
fair	!	1	;	!	:	'	unfair
sharp	1	1	1	;	!	:	dull
passive	}		1	;	!		active
strong	;	:	:	'_			weak
thin		:	:	'	!		thick
slow	1	!	!		'		fast
worthless		1	1	1		'_	valuable
pleasant	'	1	t	1	;	;	unpleasant
clean	1	1	1	1	1	;	dirty
hot					1		cold
large	11	1		1	1	8	small

CONCEPT: GROUP LEADER

skillful		ı		'	:		bungling
distasteful	1	:		;	:	1	tasty
good	;		:	1	¹		bad
fair	!		t			1	unfair
sharp	'		¹	'	1	'	dull
passive		:	1	;	1	1	active
strong	1	'	1	1	1	1	weak
thin	1	'	1	1	1	1	thick
slow	1	1	t	1	1	1	fast
worthless	;	1	1	1	1		valuable
pleasant	!	:	1	:			unpleasant
clean	1	'				1	dirty
hot		1	1	1		1	cold
large	'	!	1	1	1	1	small
nice	•	•	•	•	•	•	ລພະເປ

Appendix E - concluded

CONCEPT: LEADER-MEMBER INTERACTION

skillful_	1	:	1	1		'	bungling
distasteful_	'		1	1		!	tasty
good_	:		:			'	bad
fair_	1						unfair
sharp_	1	:	:	:	'		dull
passive_	1	t	;	;	1		active
strong_	1		;	;	1	;	weak
thin_	1	'	!	1		1	thick
slow_		'	1	1	1	1	fast
worthless_	t	:	1	!	1	1	valuable
pleasant_		'		1			unpleasant
clean_	t	1			1	1	dirty
hot_	1		!	1	1	1	cold
large_		1	!	1	!		small
nice	•	•	•	•	•	•	awful

APPENDIX F Summary Table of Analyses of Variance

Table 6. Analyses of variance for all attitude measures.

Attitude Towards	Source	df	MS	<u>F</u>	£
Leader	A B A X B Error	1 1 1 8	.017 .067 .915 .136	.125 .492 6.727	ns ns <. 05
Interaction	A B A X B Error	1 1 1 8	.010 .252 .642 .074	.135 3.405 6.727	ns ns <• 05
Decision	A B A X B Error	1 1 1 8	.028 .025 .735 .111	.252 .225 6.621	ns ns <.05
Membership	A B A X B Error	1 1 1 8	.004 .037 .036 .044	.090 .840 .818	ns ns ns

A--Expectations fulfilled versus not fulfilled

B--Expected participative leader versus expected authoritarian leader

A X B--Interaction between A and B