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Carl H. Castore and J. Keith Murnighan

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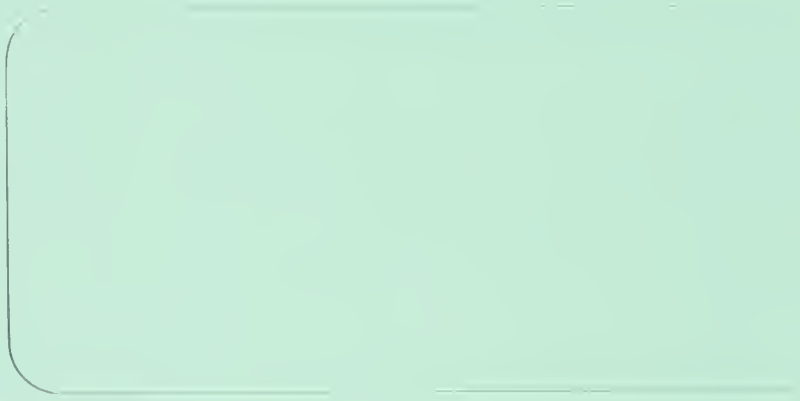

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Abstract

This research investigated the effects of four decision rules, majority rule, dictatorship, unanimity, and consensus, of the behavioral support and subjective reactions of the group members following that decision. The effects of two other variables, the amount of preference agreement among the group members and the individual similarity of group members' preferences to the group decision, were also investigated. The results for individuals' subjective reactions to the decision generally indicated that satisfaction with and commitment to the decision increased as agreement within the group increased and as an individual's preferences were more similar to his group's decision. Ratings of difficulty and changes in preferences were greatest for groups which reached unanimous decisions. The results for the behavioral support of the decision indicated that the greatest support was evidenced by groups with the greatest amounts of preference agreement and by group members whose individual preferences were most similar to the group decision. In addition, the unanimity and dictatorship groups showed remarkable similarities in the amount of behavioral support evidenced at each level of preference agreement. While the majority rule groups evidenced high behavioral support of the decision at all levels of preference agreement, the consensus groups evidenced increasing amounts of behavioral support as preference agreement increased.

THE BEHAVIORAL SUPPORT OF FOUR GROUP DECISION PROCESSES: AN EXPERIMENTAL STUDY OF INTRA-GROUP AGREEMENT AND INDIVIDUAL PREFERENCES

The present study investigated the effects of three variables (i.e., the decision rule, the degree of agreement among the group members, and the similarity of individual group member's preferences to the group decision) on the group members' subjective reactions to their decision and their behavioral support of that decision. While a major focus in the previous research on groups has been group problem-solving (Davis, 1969), the present study distinguished between problem-solving, where groups attempt to find a solution based on factual evidence, and decision-making, where groups attempt to resolve disparities in opinion between group members. Because decision-making groups often utilize facts, and problem-solving groups often utilize opinions, there is some overlap between problem-solving and decision-making. The present study, however, has considered a task which is almost completely based on opinion and therefore might be considered an investigation of "pure" decision-making.

Among the many variables which might affect both the decision which is reached and the effectiveness of that decision are the decision rule, the situation which the group faces, and the individual differences between the group members. Each of these three variables can have an impact on almost any group decision, and the present study investigated each of them.

Although research on group decision rules began prior to World War II, there are only a few studies in the literature. Lewin, Lippitt, and White's (1939) study comparing the effectiveness of majority rule, authoritarian, and laissez-faire decision processes suggested that the superiority shown by majority rule could be attributed to the increased participation and involvement by group members in making the decision. More recently,

Harnett (1967) has shown that individuals will only resort to decision processes other than strict majority rule when they cannot resolve their differences using majority rule. These results imply that majority rule is considered to be "fair", and that it is frequently the decision process which groups use.

The study of social welfare and social choice, however, implies that, under certain situations, majority rule may be clearly unfair. Research on social choice centers around Arrow's (1951) classic conclusion, the general possiblity theorem: Given five reasonable conditions[1] which one must find in any general decision process, no single decision process can be formulated to include all of the five conditions. There exists at least one situation where each decision role will yield an inequitable decision. This applies to the many forms of majority rule as well as other decision schemes.

Although the work of the social choice theorists has not dealt with effectiveness directly, the suspicion that a decision process which is inequitable will also be ineffective is unavoidable (Cartwright and Zander, 1968). Social choice theorists do imply, however, that decision processes become inequitable when substantial disagreement exists within the group (Black, 1958). Blake, Shepard, and Mouton (1964) support this point when they suggest that maximally effective group functioning can only be achieved when there is a total consensus among the group members on the group's goal priorities and the decisions related to these goals. In other words, as the diversity of members' preferences for different operationalizable goals (March and Simon, 1958) increases, a group's effectiveness will decrease. On the other hand, when the members of the

group hold similar opinions or similar preferences, whatever decision process a group uses will be equitable and the effectiveness of the group will be relatively high.

The implications from social choice theory, then, lead to the hypothesis that majority rule decision processes will be increasingly equitable and increasingly effective as preference agreement among the group members increases. In addition, the Lewin, et al.,(1939) study leads to a prediction that participative decision rules such as majority rule are more effective than non-participative decision rules. These two predictions can be combined into a single hypothesis: While the effectiveness of majority rule decisions will vary positively with increasing agreement, the effectiveness of non-participative decisions will remain unchanged as preference agreement increases, relative to the majority rule decisions.

The third variable which was considered in the present study focused on one of the individual differences between the members within each group. While personality differences, for instance, may vary for different groups, every group must deal with the fact that the individual preferences of different group members will not be identical to the decision which the group reaches. Indeed, group members whose own preferences are more similar to the group decision might be expected to be more supportive of that decision (Hackman and Morris, 1975). Coleman (1966) has also suggested that the support that an individual accords a group decision, given no coercion, is in large part dependent upon the correspondence between his personal goals and those of the group, as reflected in its decision. In addition, social comparison theory (Festinger, 1954) suggests that, to the extent than an individual views himself as a part of the dominant

majority within a group, he will be relatively satisfied with the outcomes of the group decision and will be relatively supportive of them. Alternatively, to the extent that an individual views himself as a relatively uninfluential member within a group, he will be relatively dissatisfied with the outcomes of the group decision process, regardless of the absolute level of satisfaction he feels.

A previous study (Castore, 1973) examined two of the variables investigated in the present research: the level of overall agreement on goal priorities within a group and the similarity between an individual's goals and the goal established by his group's decision. Four-person groups used the method of elimination (Black, 1958, p. 217), a form of majority rule, to make their decisions. The results showed that the level of overall agreement within the group significantly influenced all of the affective responses. As predicted, there were higher ratings of commitment, satisfaction and representativeness and lower ratings of difficulty with higher levels of agreement. In addition, the degree of preference agr ement within the group ignificantly influenced the behavioral support shown by group members: the least behavioral support for the group's decision was found in the two highest diversity conditions. The degree of relative similarity between an individual's goals and the goals established by the group decision also resulted in positive (and significant) effects on the individuals' ratings of satisfaction and their behavioral support of the group decision. It is interesting to note that post hoc analysis of the significant effect for behavioral support indicated that the individual whose preferences were most similar to the group decision showed less support than the individual whose preferences were the second

most similar to the group decision. The other group members showed significantly less support than either of these two sets of individuals.

The present study, then, extended this research to three other decision processes, increased the rather small sample size of the previous study, and utilized five-person rather than four-person groups to remove the possiblity of a stalemate between two pairs within the group.

Method

Subjects. The subjects in this study were 200 male volunteers enrolled in introductory psychology at a large midwestern university. All subjects appeared in response to an advertisement promising a free 33 1/3 LP record album and credit toward a course requirement of participating in experiments. It was made clear to all subjects prior to their actual participation that the exact LP album they would receive would depend upon the decisions reached by their particular group.

Task. The group decision task used in the first portion of the experiment was chosen to simulate conditions which are present when individuals in a group must reconcile conflicting priorities for alternative operationalizable goals. The decision task required the group members to rank a set of five LP record albums, using one of the four decision rules. The subjects were free to discuss their preferences as long as they wished. They were informed that the group ranking would (in part) determine the album each of them would receive for their participation, in the following manner: The group ranking would be used to establish a lottery such that the first choice of the group would have a 35% chance of being the album all received; the second choice, a 30% chance; the third choice, a 20% chance; the fourth choice, 15% chance; and the fifth choice, a 0% chance.

As a reminder to the subjects, these probabilities were posted on a blackboard on the wall of their group room.

Following the ranking, each group member completed four scales (0-100 graphic rating scales) describing his reactions to the group decision in terms of: (a) how satisfied he personally was with the ranking; (b) how fairly he thought it represented the preferences of the group as a whole; (c) how committed he would be to the group decision if he had to defend it; i.e., how strongly he would support it; and (d) how much difficulty he thought his group had experienced in reaching the decision. In addition, the subjects also indicated the proportion of influence they thought each of the members of their group, including themselves, had on the group decision. This latter question formed the basis of two variables in the analysis: (a) the average amount of influence on the group decision attributed to an individual by his associates in his group; and (b) the relative amount of influence an individual saw himself as having on the group decision process.

The second portion of the experiment was a bargaining situation. Each subject was placed in a situation where the possibility of coercive pressure from the other group members was minimal, allowing for measurement of the extent to which an individual independently supported his group's decision. Because two groups made their rankings of the same set of five record albums at the same time, each group member could be paired with a member of the other group. Individuals were instructed to act as a representative of their group in their negotiation with a member of the other group. The result of the five negotiations were

five rankings of the LP albums. Then, the subjects were informed that their negotiated solutions would be weighted as heavily as their group's decision in determining the lottery to select the LP album the group members would receive. An individual's behavioral support of his group's decision was assessed by calculating the similarity (Spearman Rho) between his negotiated ranking and his group's ranking of the LP albums.

Procedures. All potential subjects were given a number of five album sets of LP records to rank one week prior to their participation in the experiment. The rankings of the albums within each of these sets provided the basis for scheduling individuals into groups such that eight five-person groups were formed having indices of concordance (W) between .00 and .20, between .20 and .40, between .40 and .60, between .60 and .80, and between .80 and 1.00, for a total of 40 five-person groups (two groups under each decision rule at each level of concordance).

Upon arrival at the experiment, the group decision task and the lottery were explained to the subjects and any questions they had were answered. The group discussions were begun only after it was clear that all group members understood the mechanics of the lottery. After the group decision was reached, the group members were separated within their group rooms and administered the scales which were used to record their impressions of the group decisions and the relative influence that each had on the decision.

After the rating forms had been completed, the dyadic negotiations task was presented to the subjects. At this point, the manner in which their individual solutions would be added to their group's decision to make up the actual lottery was explained. The subjects' only instructions

for the negotiation task were "to act as a representative of your group." If there were any questions from the subjects about whether they were to act in their own interest or in their group's interest, the experimenters simply reiterated that they were to "act as a representative of your group." Following these instructions, the individuals were assigned at random to dyads and these dyads were seated in separate rooms to conduct their negotiations.

After the negotiations were completed, the lotteries were constructed and the drawings held to determine the record the group members would receive.

Design. The overall design for the experiment was a 5 (group concordance) X 4 (relative correspondence between an individual's goal preferences and the decision of his group) X 4 (decision schemes) factorial design. The level of overall group agreement on goal priorities was operationalized in terms of Kendall's Coefficient of Concordance, W (Kendall, 1943). The value of W was calculated for a group on the basis of the individuals' preference orderings of the available outcomes expressed prior to their participation in the actual experiment. Subjects were preselected and assigned into groups such that eight five-person groups were formed at each of five levels of concordance: (1) $.00 < W < .20$; (2) $.20 < W < .40$; (3) $.40 < W < .60$; (4) $.60 < W < .80$; and (5) $.80 < W < 1.00$. Within each of these levels the experimenters attempted to form groups with the lowest concordance values possible.

The relative correspondence between an individual's preferences and the decision reached by his group was operationalized by ranking the five persons in each group, one through five, in terms of the similarity between

their initial preference ranking of the alternatives and that arrived at by the group (calculated as a Spearman Rho rank correlation, Peatman, 1963).

Four different group decision schemes were used: majority rule, dictatorship, unanimity, and consensus. Subjects using majority rule were instructed to begin by choosing any pair of alternatives and, after discussion, to vote between them. The winning alternative was to be paired next with one of the remaining alternatives. Sequential pairings of this sort continued until one of the alternatives remained as the group's first choice. The remaining alternatives were selected, discussed, and voted upon in the same manner until the second, third, fourth, and fifth choices were determined. In the unanimity conditions, any group member could keep the discussion open as long as he desired until a decision which ranked the five alternatives was unanimously accepted. One subject in each dictatorship group was randomly designated as the "decision maker" for that group. The other group members were told that they could present arguments in favor of their own personal preferences, but the final decision depended solely upon the decision maker. In the consensus condition, subjects were told to discuss the five alternatives and arrive at a consensus about their ranking. They were given no formal procedure to arrive at their ranking.

Results

Eight dependent variables were considered within the framework of the present study. Four of these variables (i.e., rated satisfaction, commitment, difficulty, and representativeness) were taken from the

subjects' responses on the 100-point graphic rating scales. Two of the variables were derived from the proportion of influence the subjects attributed to the members of their group (including themselves). The seventh measure in the analysis was the extent to which the individual changed his preferences in the direction of the group decision. This was calculated as a proportion of the distance between the individual's initial preference and the group decision covered by any change in the individual's post decision preference ranking of the LP albums:

$$\text{Percentage Preference change} = \frac{\text{final} - \text{initial}}{1.00 - \text{initial}} \times 100$$

where final is the Spearman rank correlation between an individual's final preference ranking and his group's decision and initial is the corresponding correlation for an individual's preference ranking prior to the group discussion. The final variable in the analysis was the previously described measure of behavioral support of the group decision.

Decision Rules. Each dependent variable was analyzed in separate analyses of variance. The means for the main effects of decision rule for each of the dependent variables which showed significant differences are shown in Table 1. Rated satisfaction, rated representativeness, and the

Insert Table 1 about here

two influence measures did not evidence significant decision rule main effects. The results for rated difficulty and for preference change are not surprising; unanimity groups felt that it was more difficult to reach their decision than the other groups and members of these groups changed their preferences more than members of other groups.

The results for behavioral support generally agree with the predictions derived from group dynamics research: participative decision rules (majority rule, unanimity, and consensus) result in greater support than non-participative decision rules (e.g., dictatorship). However, the corresponding ratings of commitment, which were expected to closely parallel the behavioral support data (Fishbein and Ajzen, 1972), showed that members of the majority rule groups felt that they would be less committed than members of the other groups. This unexpected result may be explained by the fact that the members of the majority rule groups were constrained by a very formal decision process, one that resulted in very little group discussion. Instead of discussing their preferences, group members merely voted on each pair of alternatives as they were presented. As a result, there was little chance for the development of the group cohesiveness which the group dynamics literature indicates is crucial in participative decision processes. Participation, which in these groups meant merely voting, may not be sufficient by itself to generate commitment by group members. Participation through discussion may be the crucial determinant.

Preference Agreement. All four ratings (other than the influence ratings) revealed significant differences for overall agreement of preference within the group (see Table 2). The means for the four ratings

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Insert Table 2 about here

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and for behavioral support indicate that group members with the most overall

preference agreement reacted most positively to the decision and the decision process: (1) they rated themselves as the most committed to and the most satisfied with their decision; (2) they rated their decision as the most representative and least difficult; and (3) they showed the most behavioral support for their groups' decisions. However, the converse was not true for the groups with the least intra-group preference agreement. Rather, the members of the groups in the second lowest agreement level evidenced the least behavioral support, the lowest commitment, satisfaction, and representativeness ratings, and the highest difficulty ratings. Observations by the experimenters provided a possible explanation for these results. Many subjects in each of the conditions voiced an opinion prior to the group discussion that the experimenters would probably be making the decision as difficult as possible by constructing groups with members whose preferences were extremely diverse. In the lowest concordance groups many subjects found that this prediction was correct. Instead of engaging in verbal conflict, however, many of these individuals responded by attempting to avoid conflict. A spirit of compromise often became apparent. Because they recognized their plight, the subjects in the lowest concordance groups "made the best of it" and were not as frustrated as one might have expected. Members in the other groups, however, were not so fortunate. At the other concordance levels, each group member was generally able to find at least one other group member whose preferences resembled his own. However, particularly in the second lowest concordance groups, there were rarely more than two group members who held similar preferences. Thus, with only a minority of the group agreeing with each other, individuals in these groups became quite frustrated and responded with negative ratings and low behavioral support of their decision relative to the responses of the members of other groups.

Relative Similarity to the Group Decision. The means for the significant main effects for relative similarity to the group decision are shown in Table 3. Although the main effects for rated difficulty and rated representativeness were not significant, the findings for the

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Insert Table 3 about here

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other dependent variables indicate that the least similar group members rated themselves as less committed, less satisfied, and less influential than other group members. They also evidenced the most preference change and the least behavioral support of the group decision than other group members. Similarly, the most similar group members had the highest commitment, satisfaction, and influence ratings and evidenced the least amount of preference change and the most behavioral support. The expectations for the other group members were also supported: in general, the more similar an individual's preferences were to the group decision, relative to the other members of his group, the more positively he responded. The only exception to this pattern occurred for the two influence ratings. The means for these variables reveal that the second most similar group member received lower influence ratings than the third most similar group member. These differences, however, were not significant.

The Decision Rule - Preference Agreement Interaction. Of all the analyses which were conducted, only one resulted in a significant interaction, between the decision process and the overall preference agreement within the group for behavioral support of the group decision (see Table 4). Post hoc

analysis revealed that there were only minor, unsystematic changes in the

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Insert Table 4 about here

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behavioral support of majority rule decisions as a function of agreement within the group. However, there were systematic changes in the behavioral support of dictatorial, unanimous, and consensual decisions as a function of overall agreement. In particular, both unanimity and dictatorship groups evidenced extremely low behavioral support of the decisions reached in the second lowest concordance groups, while consensus groups evidenced increasing behavioral support of the group decision as overall agreement increased.

The Ubiquity of Majority Rule. The final analysis concerned the similarity of the groups' decisions in each of the conditions to a decision which would be predicted by the application of a majority rule decision model to the group member's individual preferences prior to their decision. The majority rule model which considers each possible pairing of the alternatives is the same process which the majority rule groups used to make their decision. However, instead of selecting two alternatives at random for the first vote, each of the possible pairings of the alternatives is considered. This technique will detect any cyclical majority (Arrow, 1951) which might be present, even though the groups themselves (even the majority rule groups) may not have been able to detect them.

A 4 (decision rules) by 5 (concordance levels) analysis of variance was conducted, then, for the Spearman rank correlation between the actual

group decision and the prediction of the majority rule model. The fact that groups was the unit of analysis and there were only two groups in each cell resulted in a small N, which in turn reduced the power of the test. The results, therefore, should be viewed with caution. The analysis did result in a significant effect for overall preference agreement within the group ($F(4,20) = 3.70$, $p < .021$). The main effect for decision rule and the interaction were not significant (the F-ratio was less than 1.00 in each case). The different decision processes, therefore, resulted in decisions which did not differ in their similarity to the predictions of the majority rule model. In addition, post hoc tests of the significant main effect revealed that there was less correspondence between the majority rule model's prediction and the actual group decision in the lowest agreement groups ($\bar{X} = .42$) than there was in the highest agreement groups ($\bar{X} = .90$). None of the other values were significantly different from one another.

Discussion

In general, these findings support the results reported earlier by Castore (1973). Higher levels of overall agreement and greater similarity to the group decision resulted in more positive affective and behavioral responses. The inclusion of four decision rules yielded several additional findings, indicating that certain participative decision rules resulted in greater behavioral support of group decisions and more positive affective responses than non-participative decision rules.

There were several surprising results within the pattern of results indicated by the interaction between decision rule and agreement within the group. Groups employing unanimity as a decision rule did not show a great deal of support for their decisions, especially in the second lowest agreement condition. Only in one condition for the dictatorship groups was there lower behavioral support. One observation that explains this result is that a group which must use unanimity as its decision rule proceeds not with a single dictator, as in the dictatorship groups, but with five dictators. Certainly, the results for the unanimity and dictatorship groups are surprisingly similar and give some support for this explanation.

The consensus groups exhibited the varying behavioral support which social choice theory predicted for the participative decision rules. As overall agreement increased, so did the behavioral support of the group members. The majority rule groups, on the other hand, exhibited the relatively constant, high behavioral support which was predicted by the Lewin, et al, (1939) research. This does not, however, correspond to Castore's (1973) findings, which showed that behavioral support increased as agreement increased. This discrepancy may be the direct result of the difference in group size between the present and Castore's study. Because there were an even number of group members ($n = 4$) in that study, the groups often faced situations where the vote was deadlocked, two against two. It is interesting to note that, with four-person groups, a simple majority becomes a three/fourths majority because three votes are needed to attain a majority. Thus, if the number

of members within the group is even, the probability of deadlocks increases, and groups using a formal majority rule decision process may have difficulty in reaching a majority. Given this dependence on whether the group size is odd or even, the findings from the groups in the Castore (1973) study might be expected to coincide with findings for a five-person group which must attain a four/fifths majority. Compared to the present study, the results might be expected to fall somewhere between the results of the majority rule and unanimity five-person groups. Because of the extreme nature of the results in the present unanimity groups, the exact correspondence of the two sets of data is impossible to ascertain. However, the data from the two studies do suggest that increases in the size of the majority necessary to reach a decision may result in corresponding decreases in behavioral support of the group decision when substantial disagreement within the group exists. Further research in this area is clearly indicated.

The interaction can be dissected even further. Blocking out the lowest agreement conditions from the data in Table 4 would tend to support the Lewin, et al (1939) prediction for the consensus groups as well as the majority rule groups and might lead one to classify unanimity in a category apart from these, closer to autocratic decision processes.

In addition, for the highest three agreement levels, the behavioral support evidenced by the group members, regardless of the decision rule they used, was relatively high. It seems, then, that when there is little difference of opinion, even a dictator may be able to expect support for his decisions.

The results for preference change also warrant some discussion. There were significant main effects for decision rule and for individual similarity to the group decision for the percentage change in the preference of

individuals from the beginning to the end of the experiment. Intervening between the two measures was a group decision process and a negotiation exercise for each individual. Both may have influenced the change. Nevertheless, the fact that the members of the unanimity groups evidenced more change in their preferences than groups using other decision rules leads to the proposition that more difficult decision processes may lead to increased preference change by the group members. The main effect which showed that the individuals whose preferences were least similar to the group changed their preferences most also supports the theory of social communication (Festinger, 1950), which states that communication will be directed toward those whose individual goals differ from the goals of the group.

An analysis of the similarity between the actual decision reached and a decision reached by a majority rule model (Murnighan, notes 1 and 2) showed that in all of the decision rule conditions the final decisions were quite close to the predictions of the majority rule model. In essence, then, the preferences of the members of each of the groups, regardless of the decision process they were instructed to use, were equally considered in arriving at the group decisions. Although in some cases the imposition of a different decision rule may have altered the group's final decision, this finding suggests that the alterations were relatively minor. The data also supports Harnett's finding, in that, regardless of the decision rule prescribed, the groups' decisions were a result of a process approximating majority rule. In addition, the conclusion that the decision itself has only a portion of the impact on the post-decision behavior of the group members is unavoidable. The group members' perceptions of their decision process seems to have a

decided impact on their affective responses toward that decision and the degree of their subsequent support for it.

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Footnote

1. Arrow's five conditions can be summarized as:

   (1) In groups with at least three individuals facing at least three alternatives, all individual orderings of the alternatives are permissible.

   (2) A social choice function which asserts that an alternative x is preferred to an alternative y will also assert a preference for x when, in any comparison between x and other alternatives, preferences for x remain unchanged or are modified in x's favor.

   (3) If a social choice function asserts that x is preferred to y, it will also assert that x is preferred to y if an additional alternative z is included in the choice function, even though z may or may not be preferred to x and/or y.

   (4) For each pair of alternatives x and y, there is some profile of individual orderings such that society prefers x to y.

   (5) There is no individual who can determine society's preferences, regardless of the orderings of the individuals in that society.

TABLE 1

A Summary of the Analyses and the Means for Each Dependent Variable Which Resulted in a Significant Main Effect for Decision Rule

Dependent Variable	Decision Rule: Majority Rule	Dictatorship	Unanimity	Consensus	F*	P<
Rated Commitment	70.9_{b}	77.4_{a}	79.1_{a}	79.0_{a}	2.90	.038
Rated Difficulty	15.4_{b}	21.7_{b}	34.0_{a}	18.9_{b}	6.40	.0008
Percentage Preference Change	26.8_{a}	27.2_{a}	43.8_{b}	29.0_{a}	2.62	.055
Behavioral Support	$.806_{a}$	$.558_{c}$	$.662_{b}$	$.730_{ab}$	9.92	.0001

*df = 3,100

Note: The effects for rated satisfaction, representativeness, and influence were not significant. Cells sharing a common subscript, within the levels of each dependent variable, are not significantly different from one another at the .05 level using the planned comparisons procedure (Winer, 1962).

TABLE 2

A Summary of the Analyses and the Means for Each Dependent Variable Which Resulted in a Significant Main Effect for Overall Agreement

Dependent Variable	Overall Agreement (Concordance) .00-.19	.20-.39	.40-.59	.60-.79	.80-1.00	F*	P<
Rated Commitment	74.02_{bc}	68.17_{c}	75.72_{b}	80.52_{ab}	84.62_{a}	6.07	.0004
Rated Difficulty	21.52_{bc}	34.17_{a}	22.67_{b}	21.70_{bc}	12.42_{c}	4.68	.002
Rated Satis-faction	74.25_{bc}	64.85_{d}	73.47_{cd}	82.95_{ab}	86.52_{a}	7.17	.0001
Rated Represent-ativeness	81.55_{a}	70.70_{b}	83.57_{a}	82.37_{a}	84.25_{a}	4.65	.003
Behavioral Support	$.630_{b}$	$.512_{c}$	$.715_{b}$	$.710_{b}$	$.877_{a}$	12.75	.00005

*df = 4,100

Note: The effects for influence and preference change were not significant. Cells sharing a common subscript, within the levels of each dependent variable, are not significantly different from one another at the .05 level using the planned comparisons procedure (Winer, 1962).

TABLE 3

A Summary of the Analyses and the Means for Each Dependent Variable Which Resulted in a Significant Main Effect for Relative Similarity to the Group Decision

Dependent Variable	Relative Similarity: Most Similar	2nd Most Similar	3rd Most Similar	4th Most Similar	Least Similar	F*	p<
Rated Commitment	85.85_{a}	79.25_{ab}	76.42_{b}	75.27_{b}	66.27_{c}	7.72	.0001
Rated Satisfaction	87.52_{a}	79.07_{ab}	81.40_{a}	71.07_{bc}	62.97_{c}	8.94	.00005
Ratings of One's Own Influence	21.72_{a}	19.27_{ab}	22.80_{a}	18.65_{ab}	16.62_{b}	2.27	.07
Others' Ratings of Influence	21.55_{ab}	19.52_{abc}	22.15_{a}	19.20_{bc}	18.47_{c}	2.74	.05
Percentage Preference Change	14.3_{c}	22.9_{bc}	38.5_{ab}	42.1_{a}	40.5_{a}	4.84	.002
Behavioral Support	$.757_{a}$	$.690_{ab}$	$.687_{ab}$	$.677_{ab}$	$.632_{b}$	1.43	.25

*df = 4,100

Note: The effects for rated difficulty and representativeness were not significant. Cells sharing a common subscript, within the levels of each dependent variable, are not significantly different from one another at the .05 level using the planned comparisons procedure (Winer, 1962).

TABLE 4

A Summary of the Analyses and the Means for the Significant ($F(12,100) = 4.73$, $P < .00005$) Interaction Between Decision Rule and Overall Agreement for Behavioral Support

	Overall Agreement (Concordance)						
Decision Rule	.00-.19	.20-.39	.40-.59	.60-.79	.80-1.00	F	P<
Majority Rule	$.780_{ab}$	$.850_{a}$	$.700_{b}$	$.880_{a}$	$.820_{ab}$	2.21	.09
Dictatorship	$.570_{b}$	$.160_{c}$	$.660_{ab}$	$.600_{ab}$	$.800_{a}$	8.99	.0001
Unanimity	$.730_{b}$	$.360_{c}$	$.680_{b}$	$.540_{bc}$	1.00_{a}	7.03	.0003
Consensus	$.440_{c}$	$.680_{b}$	$.820_{ab}$	$.820_{ab}$	$.890_{a}$	6.81	.0004

*The F values were calculated for each decision rule separately. Degrees of freedom in each case were 4 and 45.

Note: Cells sharing a common subscript within each decision rule are not significantly different from one another at the .05 level using the planned comparisons procedure (Winer, 1962).