

PREFERENCES, INFORMATION, AND GROUP DECISION MAKING

A Thesis

by

ALEJANDRO ESPINOZA

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

August 2008

Major Subject: Political Science

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## ABSTRACT

Preferences, Information, and Group Decision Making.

(August 2008)

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This study will examine how the structure of preferences of group members in a decision-making group, as well as the information they have, affects the collection and the processing of information by individual members of a decision making group. Structure of preferences in this study will represent each individual group members' preference towards a particular course of action. Using an experimental method of analysis, this study will examine how the preference structure of a group affects what and how much information a group member will analyze before making a decision. I hypothesize that the structure of the group members' preferences should affect the subjects' search and process of information. This study aims to answer the following questions; do group preferences affect the search and processing of information? Do group members thoroughly survey the objectives and alternatives in the decision making process?

## TABLE OF CONTENTS

	Page
ABSTRACT .....	iii
TABLE OF CONTENTS .....	iv
LIST OF FIGURES.....	vi
INTRODUCTION.....	1
GROUP DECISION MAKING .....	5
From Theory to Experimentation.....	9
EXPERIMENT 1: COLLECTION AND ANALYSIS OF INFORMATION.....	11
Hypotheses .....	11
EXPERIMENT 1: METHODOLOGY .....	15
Variables.....	15
Experiment Procedure .....	16
EXPERIMENT 1: RESULTS.....	22
Vote/Choice.....	22
Confidence .....	23
Time .....	24
Recall.....	25
Conclusion.....	28
EXPERIMENT 2: ANALYZING ALL THE INFORMATION .....	30
EXPERIMENT 2: METHODOLOGY .....	34
Variables.....	35
EXPERIMENT 2: RESULTS .....	37
Vote/Choice.....	37

	Page
Confidence .....	37
Time .....	38
Recall.....	38
CONCLUSION .....	40
REFERENCES .....	43
APPENDIX A .....	45
APPENDIX B .....	48
VITA .....	53

## LIST OF FIGURES

FIGURE		Page
1	Preference Structure of Each Group/Condition .....	11
2	Split Vote Group Member Preferences .....	19
3	Majority Vote Group Member Preferences.....	19
4	Item of Information Sample Screen .....	20
5	Returning to Member Preferences.....	20
6	Voting Screen.....	21
7	Distribution of Mean for Vote/Choice .....	23
8	Distribution of Means for Confidence .....	24
9	Distribution of Mean Time.....	25
10	Mean Distribution of Recalled Items .....	26
11	Preference and Information Structure of Each Group/Condition.....	30
12	Preference and Information Structure of Each Group/Condition.....	34
13	Distribution of means for Vote/Choice for Each Group .....	37

## INTRODUCTION

Decision-making and information processing in foreign policy are usually not the affairs of only one person but are a collective enterprise. These activities are usually undertaken by professional organizations or small groups composed of politicians and top bureaucrats, like cabinet members and their advisors. Examples of situations in which the members of a group interact with one another in order to arrive at a decision are quite common. For example, Legislative committees, cabinets, military juntas, politburos of ruling parties, and executive councils. The operation of many government ministries and agencies suggest that groups are also frequently at the core of the bureaucratic process. Therefore collective decision-making is viewed as a social act unlike the task facing the solitary decision-makers. In this context important questions arise concerning the dynamics of group decision-making. For example, questions regarding how organizational processes, the interactions among individuals in the decision-making group, as well as interactions between that group and other information-processing organizations and individuals (1) affect the search and selection and evaluation of information, (2) the degree of openness to inconsistent information, and (3) the process of adaptation to new incoming information (Vertzberger 1990, pg. 192).

This study aims at examining the effects of group preferences and information in group decision making. First, this study will examine how the structure of preferences of group members in a decision-making group affects the collection and the processing

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This thesis follows the style of *Political Psychology*.

of information by individual members of the group; and second, examine how information influences a group members' decision when controlling for group preferences.

By group decision making I mean an entity of two or more people all whom interact directly with one another and collectively reach a decision. No definite boundaries are proposed with respect to the upper limit of group size. Thus, the group may be as small as two or three people or as large as a parliament of hundreds, so long as there is a collective, interactive decision process in which all the members who are needed to make authoritative comments participate (Hermann et.al., 2001). In practice, however, it is not uncommon for many large groups to subdivide into committees, coalitions, or other subsets to conduct much of their decision making.

Another component to the group is the power to execute decisions. A groups' power or authority to execute decisions varies. For example, in many situations groups may come to a decision on a particular problem but do not have the authority to execute the decision. At times, group decisions may simply be recommendations to be expressed to the person or persons having the authority to make the final decision. For a group to be authoritative, it must have the definitive ability to commit or withhold the relevant governmental resources on the subject matter of the decision even if the entity is ad hoc or not part of an established institutional structure. The ability to commit or withhold resources does not mean that group members themselves will actually implement the decision, leaving open potential discrepancies between choice and action (Hermann et.al., 2001).



In differentiating a single group from the predominant leader and coalition decision units, the literature recognizes several boundary issues. When a strong leader operates with a group of advisers, we may have difficulty determining whether the unit is a predominant leader or a single group. As long as the leader alone has the power to commit the regime's resources and does not delegate formally or tacitly that decision to advisers, the unit is a predominant leader. Another potential ambiguity arises when, for example, a parliamentary government consists of a multiparty coalition cabinet. In this case, the distinction must be made between the single group and coalition of autonomous actors whose representatives might meet together. When individual cabinet members are bound to specific positions taken elsewhere, by their political party, and they are not free to act independently, then the authoritative decision unit is a coalition. If however, the cabinet officers can form or change their positions on a problem without outside consultation, then the unit is a single group (Hermann et.al., 2001).

Groups in this study will consist of five members and will not have one central leader. The group does not have the ability to commit or withhold the relevant governmental resources on the subject matter of the decision. The group will merely recommend the best option to best deal with the hypothetical Foreign Policy Scenario.

To reiterate, this study will examine how the structure of preferences of group members in a decision-making group, as well as the information they have, affects the collection and the processing of information by individual members of a group. Structure of preferences in this study will represent each individual group members' preference towards a particular course of action. Using an experimental method of

analysis, this study will examine how the preference structure of a group affects what and how much information a subject will analyze before making a decision. I hypothesize that the structure of the group members' preferences should affect the subjects' search and process of information. This study aims to answer the following questions; do group preferences affect the search and processing of information? Do group members thoroughly survey the objectives and alternatives in the decision making process? Although the hypothetical scenario that serves as the context for decision in this study takes place in the realm of Foreign Policy, this study has implications that cross other disciplines where group decision is prevalent.

## GROUP DECISION MAKING

The study of group decision making suggest two major categories of activities essential to choice, the processing of information and the management of options. The actual performances of group information and option management are intertwined. For analytical purposes, however, it is useful to distinguish between them. Information management concerns the array of issues associated with the nature, structuring, and dissemination of information within a group. Option management concerns the development, advocacy, assessment, and selection of an option or alternative. An option or alternative is an expressed means of treating or coping with a recognized problem including as one possibility doing nothing (Hermann et.al., 2001).

To reach a group decision, subjects in a group engage in three information processing activities simultaneously; (1) information exchange (giving or receiving information), (2) information processing (assessing the cognitive and social implications of the information and storing it in memory), and (3) information recall (either from memory or notes (Briggs, 1995). Humans have a limited amount of cognitive resources to spread across these three activities (Ball and Zuckerman, 1992; Norman, 1976). Most people can engage in only one activity at one time, so that engaging in any one activity limits the ability to engage in the other two (Dennis, 1996).

Groups are of different sizes, importance, and functions in the decision-making process. Yet all groups have a number of attributes in common, members interact continually, members share a basic set of shared values, attitudes, and beliefs. Members also divide formal and informal roles among themselves (DeLamater, 1974). These

attributes generate the core context for the behavior of decision-makers acting as information processors within a small group setting.

Group effects on the quality of information processing are complex. Decision-makers operating in a group are more likely to be exposed to new information and interpretations because of the various points of view and interpretations of the information made available by each member of the group. Subjects typically have a host of information about alternatives. This information shapes subjects' pre-discussion preferences and, as subjects communicate information during discussion, shapes the group's decision. The information that subjects hold can be distributed in a variety of ways. Information can be, (1) Common, known to all subjects before group discussion, (2) Unique, known to only one participant before group discussion, and (3) Partially Shared, known to some but not all subjects before group discussion (Dennis, 1996 pg. 434). For example, the group exposes the individual to arguments over the information the individual might not have been aware of as an independent decision-maker. Both the exposure and diverse interpretations of information affects the quality of group member's problem solving and learning. In theory the group decision making provide individual decision makers with a larger scope for learning and a broader and more complex approach to the analysis of information.

There are also limitations that are associated with group decision making, for example, groupthink and group polarization. Groupthink refers to the most extreme case of group conformity, which arises from concurrence seeking and reflects the collective defensive avoidance of dissonant information (Janis, 1982; Janis and Mann 1977). The

occurrence of groupthink depends on a number of antecedent conditions, which will be discussed later.

Argumentation is another important process in group decision-making because it clarifies ambiguities and inconsistencies caused by disseminating information and alternative perspectives, which can illuminate weaknesses in the logical structure of accumulated knowledge and beliefs, particularly with regard to complex problems and for group members who show a moderate to high cognitive complexity (Davis, 1978; Stein and Tanter, 1980). Some scholars argue that group decision-making can have a de-biasing effect causing individual members to rethink and reconsider their judgments by exposing their biases, particularly their motivational biases, in the process of group discussion (Vertzberger, 1990 pg. 223). Hoffman argues that this potential often remains unfulfilled because other attributes and pathologies of the group act to narrow the scope. The complexity of information processing operations encourages parochialism and conformity, which reinforce existing biases. In order for a group to work cooperatively and effectively it must have a diversity of viewpoints, accompanied by a tolerance for differences of opinion (1978). If the diverse opinions are not welcomed by the group then this may prevent individual group members from contributing different view points and cause group members to agree to the status quo.

On the other hand, a large number of alternative interpretations can cause information overload, increasing ambiguity and thereby making errors, or encouraging the avoidance of decisions altogether. Groups develop procedural norms for information processing that reflects their experience. Groups successful in processing large amounts

of information are better prepared to attend to most available information and those that fail foster procedures to avoid information. In both cases, if a problem is perceived as having an obvious solution, group members tend to avoid investing resources in collecting and analyzing information and risking intra-group dissent by in-depth discussion (Burnstein and Berbaum, 1983).

After processing all the available information the members of a decision making group must choose one alternative from among two or more alternatives. Individual group members typically have preferences among the various alternatives, and these preferences often differ from individual to individual. One person would like the group to choose one alternative, while another person would like the group to choose a different alternative. A problem thus arises as to how the preferences of the different individuals are to be combined into a group decision. This problem is frequently resolved through the use of some formal decision rule, such as majority rule or unanimity. Even in the absence of a formal or explicit decision rule, a group decision can often be regarded as stemming from the application of some informal or implicit rule (Miller, 1985).

This study consists of two experiments to examine how the preference structure of a group affects what and how much information a subject will analyze before making a decision and whether the information itself offsets the bias of the groups preference toward a foreign policy scenario. Subjects are assigned to a group with four hypothetical members. Subjects will know the group members preference towards a Foreign Policy

scenario prior to voting on a course of action. The assignment into one of the groups should affect the subjects' search and process of information.

### ***From Theory to Experimentation***

The move from theory to research is not a simple one in Foreign Policy decision-making. There are no large n-data and the reliance on a thorough case study is difficult because records, if they exist, do not necessarily conform to variables that are central to theory. Therefore, in line with numerous studies in social psychology and a few in Foreign Policy, I embark on an experimental/simulation route.

The central goal of the experimental simulation method is that it will be possible to maintain control of the experimental environment. The more control one has over the experimental environment, the more one can ensure that all the variables other than the critical independent variables are held constant, thereby decreasing or eliminating the possibility of extraneous or confounding variables having a causal role in producing the observed effects. This means increased confidence in the internal validity of experimental findings. However, experimental control usually comes at the cost of increased artificiality of the experimental environment. This means decreased external validity or generalizability of any observed cause and effect relationships. On the other hand, the closer the experimental environment is to a real world setting, the more likely that any experimental result will be valid in the real world situation.

For the purpose of this study, groups were developed which contained group members with specific views towards a foreign policy scenario. This prevents from having to assign roles to a group of five subjects, otherwise making it difficult to control

for the subjects personal feelings about their assigned role, which may bias the results. The use of hypothetical group members ensures that the group members are providing the subject with the exact information developed for this experiment. Otherwise, if I had decided to assign roles live group members, I would not be able to control their personal biases concerning the role that they are portraying. In sum, using hypothetical allows for more controls in how the information is disseminated to the initial subject.



## EXPERIMENT 1: COLLECTION AND ANALYSIS OF INFORMATION

The objective in Experiment 1 is to examine how the preference structure of the group affects the collection and analysis of information by individual group members. Experiment 1 consists of three conditions. Subjects will be assigned to either a Split vote (2 to 2) group or one of the two Majority vote (3 to 1) groups. One of the Majority vote groups' distribution favors option A and in the other Majority vote groups' distribution favors option B. Figure 1 shows the preference structure of each of the three groups/conditions.

Condition 1	Condition 2	Condition 3
Split Vote Group	Majority Vote Group	Majority Vote Group
2A to 2B	3A to 1B	3B to 1A

Figure 1: Preference Structure of Each Group/Condition

Each hypothetical group member will provide five pieces of information that supports his/hers preference. Subjects in the Split vote (2 to 2) group are provided with evenly balanced information concerning both options on the Foreign Policy scenario, whereas subjects in the Majority vote groups get more information concerning the preferred option.

### ***Hypotheses***

Groupthink refers to the most extreme case of group conformity, which arises from concurrence seeking and reflects the collective defensive avoidance of dissonant

information (Janis, 1982; Janis and Mann 1977). The occurrence of groupthink depends on a number of antecedent conditions. One major condition of groupthink is cohesiveness, or the desire of personal acceptance of group members by other group members. Groupthink is more probable where most members of a cohesive group feel insecure (Flowers, 1977; Longley and Pruitt, 1980).

The Majority vote (3 to 1) groups addresses the effects of groupthink. Because the majority of the group members in the Majority vote groups favor one option over the other, this scenario will help examine the influence of the other group members' preferences on the vote/choice and the information collected by the subject. Hypothesis 1 tests Burnstein and Berbaum's claim that, "... if a problem is perceived as having an obvious solution, group members tend to avoid investing resources in collecting and analyzing information and risking intra-group dissent by in-depth discussion (1983)."

*H1: In experiment 1, subjects in the Majority vote (3 to 1) groups will vote in line with the majority of the group compared to subjects in the Split vote (2 to 2) group.*

The way in which information is processed may also change depending on whether subjects are aware of the other group members' preferences. When faced by a group majority whose preferences are different from theirs, subjects assume the majority to be correct and focus on comparing their preferences to that of the majority (Moscovici, 1980). In contrast, when faced by a minority with a different preference, subjects are motivated to assume that minority subjects are incorrect and initially dismiss them (Maass and Clark 1984; Nemeth 1986). On the other hand, according to Harkins and Petty, information from minority subjects may be more thoroughly processed than

information from the majority because minority subjects are perceived to be more independent or more dissimilar from one another than are members of the majority (1987). These two conceptualizations, minority and majority, can lead to two different predictions and this study will address this by documenting whether subjects are gathering information from the majority or minority.

According to Moscovici (1980) subjects in the Majority vote groups will perceive the majority as correct, and because the subject votes in line with the majority, the subject in the Majority vote group should report a higher confidence level on their final vote/choice. Subjects in the Split vote group, on the other hand, are the deciding vote and therefore may be less confident of their vote/choice because the ultimate outcome is due to their vote.

*H2: In experiment 1, subjects in the Majority vote Groups will report a higher level of confidence than subjects in the Split vote Group.*

Subjects in the Split vote group have a higher incentive than subjects in the Majority vote groups to consider all arguments carefully before making a decision because they are the deciding vote. If the information provided is critically analyzed than the subject should be able to recall more pieces of information than subjects that were assigned to either of the two Majority vote groups. This brings us to Hypothesis 3

*H3: In experiment 1, individuals in the Split vote (2 to 2) group will recall more pieces of information than subjects in the Majority vote (3 to 1) groups.*

Preference structure should also have an affect of time. Because subjects in the Split vote group are essentially the deciding vote, they will be analyzing more information, therefore taking longer a longer amount of time analyzing the items of

information. If subjects in the Majority vote group are voting in line with the majority then they have little incentive to look at as much information possible, therefore making their vote quicker. Hypothesis 4:

*H4: In experiment 1, subjects in the Split vote (2 to 2) group will take a longer time making a choice than subjects in the Majority vote (3 to 1) groups.*

## EXPERIMENT 1: METHODOLOGY

In this experiment, subjects decide what and how much information will be viewed before making a decision. Subjects will read a hypothetical Foreign Policy scenario, gather and analyze information, and finally make a choice on the option to deal with the dilemma in the scenario. Subjects will be randomly assigned to either the Split vote (2 to 2) group or one of the two Majority vote (3 to 1) groups, where the majority of the group is favoring one course of action over the other. There are two versions of the Majority vote (3 to 1) group, subjects will be assigned to the Majority vote (3 to 1) group favoring option A or the Majority vote (3 to 1) group favoring option B. Experiment 1 consists of 59 subjects. Twenty subjects were randomly assigned to the Split vote (2 to 2) group, 19 subjects were assigned to the Majority vote (3 to 1) group favoring option A, and 20 subjects were assigned to the Majority vote (3 to 1) group favoring option B. All subjects were recruited from undergraduate Political Science courses at Texas A&M University.

### *Variables*

Experiment 1 consists of one independent variable, the preference structure of the group. Subjects will be assigned to one of three groups, each containing a different preference structure, the Split vote (2 to 2) group, or one of the two Majority vote (3 to 1) groups, one Majority vote group favors option A and the other favors option B. There are four dependent variables. The first dependent variable is time. The computer keeps track of how long it takes subjects to make a vote/choice. Time is measured in seconds. The second dependent variable is vote/choice, Intervene or Do Nothing. Vote/choice is

coded as “1” for intervene and “0” for Do Nothing. The third dependent variable is the number of recalled items of information. In a post-experiment questionnaire subjects had the opportunity to list all the items of information they remember receiving from the four hypothetical group members. There are a total of twenty items of information. Finally, the fourth dependent variable is confidence. In the post-experiment questionnaire the subject will be asked, “How confident are you on your vote? Please rate on a scale of “0” to “10”, “0” being not confident and “10” being very confident.

### ***Experiment Procedure***

The experiment is computer based. The subject read a hypothetical Foreign Policy scenario, analyze information, and cast a vote on their preferred course of action, **Intervene** (option A) or **Do Nothing** (option B). The hypothetical Foreign Policy scenario is the same for all subjects regardless of what group they are randomly assigned to.

*After the subject reads the hypothetical Foreign Policy scenario, the subject is introduced to his four hypothetical group members. At this point the subject will also learn the preferences of each group member. The subject will then be able to ‘click’ on the individual group member and view information provided by that member, one piece of information at a time. The information provided by the hypothetical group member is congruent with that group members vote. None of the hypothetical group members will provide information that is incongruent with their individual vote. The subject does not have any time restrains. The subject is free to cast their vote on option A or option B at any time.*

### **Step 1: Instructions**

Subjects sit in front of computers. Each subject has a paper copy of instructions, while the investigator reads instructions aloud. After instructions have been read, the investigator will answer any questions that the subjects have.

#### *Instructions*

*This experiment is seeking information on group decision-making. All of your responses will be anonymous. You will be presented with a hypothetical Foreign Policy scenario that provides a description of a humanitarian scenario in another country. After you finished reading the scenario you will be introduced to the members of your committee, who have already voted. The other members of the committee have started analyzing the scenario earlier and each of the four committee members have voted. You will be able to click on each committee member and access a piece of information that supports that committee members' individual vote. After viewing a piece of information from one of the committee members, you will have the option to view additional information or cast your vote. You will not be able to view the same information more than once so please pay close attention. Please cast your vote carefully*

### **Step 2: Read Scenario Intro**

After reading the instructions subjects read the hypothetical Foreign Policy scenario presented to them in the next screen. After the subjects read the following scenario the subjects were presented with the vote distribution of their four fellow committee members. Each of the four hypothetical committee members had already voted on a preferred course, **Intervene** or **Do Nothing**.

#### *Scenario*

*You are a member of a five member citizen committee chosen to vote and recommend whether the United States should intervene in a humanitarian effort in Burundi. Burundi's first democratically elected president was assassinated in October 1993 after only four months in office. Since then, some 2,000,000 Burundians have perished in widespread, intense ethnic violence between Hutu and Tutsi factions. Hundreds of thousands have been internally displaced or have become refugees in neighboring countries. Burundi troops have been deployed to deal with upsurges in rebel activity, but have been unable to maintain peace due to high levels of casualties. While the*

*Government of Burundi signed a cease-fire agreement in December 2002 with three of Burundi's four Hutu rebel groups, implementation of the agreement has been problematic and one rebel group refuses to sign on and localized violence continues despite UN peacekeeping efforts, clouding prospects for sustainable peace. The UN has pleaded the United States and other countries to intervene in helping Burundi troops keep peace, provide much needed food, and medical supplies.*

*You must vote to:*

*Option A*

*Intervene*

*Send Troops, Food, Medical, and other Military Supplies.*

*Option B*

*Do Nothing*

### **Step 3: Group Member Vote**

The subjects are told that the other four members of the committee have started analyzing the scenario earlier and each of the four committee members have already voted. After reading the scenario, subjects were presented with the votes of the four committee members. Figure 2 shows a sample screen for a subject in the Split vote (2 to 2) group.

Members **Alex** and **Bob** vote to **Intervene**; Carl and Dave vote to **Do Nothing**

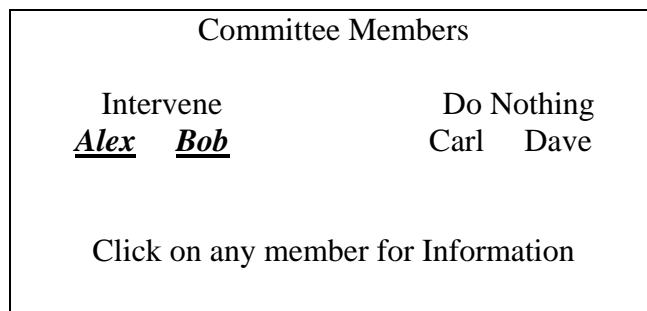


Figure 2: Split Vote Group Member Preferences



Figure 3 shows a Sample Screen for a subject in the Majority vote (3 to 1) group: Members Alex, Bob, and Carl vote to Intervene  
Dave votes to Do Nothing

Committee Members	
Intervene <u>Alex</u> <u>Bob</u> <u>Carl</u>	Do Nothing Dave
Click on any member for Information	

Figure 3: Majority Vote Group Member Preferences

The subject is able to “click” on each group member and read a piece of information that supports that group members’ vote. Appendix A lists the complete listing of information provided by each hypothetical group members in Experiment 1 for each of the three groups, the Split vote group and both Majority vote groups. Figure 4 shows a sample screen for how an item of information will be displayed.

<u>Alex</u>	
There will be minimal risk for U.S. troops in Burundi	
Additional Information	Vote

Figure 4: Item of Information Sample Screen

None of the four hypothetical group members will provide incongruent information. The hypothetical group members will only provide information supporting their individual vote on a preferred course of action. After viewing the piece of information, the subjects can choose to look at additional information or cast their vote. The subject can cast a vote at any time. If the subject chooses to view additional information the subject will return to the Committee Members' screen. Figure 5 shows the sample screen.

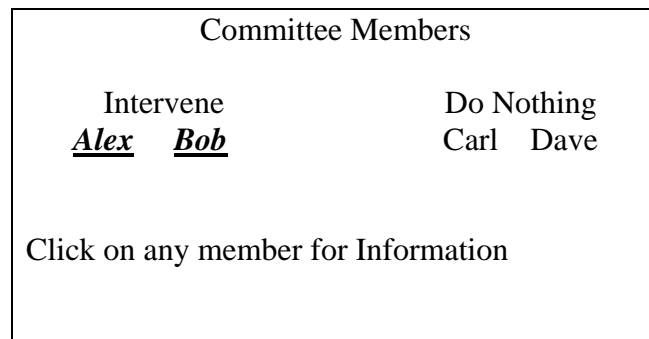


Figure 5: Returning to Member Preferences

Subjects will only be able to look at a piece of information once.

#### **Step 4: Vote**

Once the subject is ready to cast their vote, the subject will come to a screen where they are able to 'click' on their desired course of action. Figure 6 shows the voting screen.

Option A

Intervene

Send Troops, Food, Medical, and other Military Supplies.

Option B

Do Nothing

VOTE	
Intervene	Do Nothing

Figure 6: Voting Screen

### **Step 5: Questionnaire**

After the subject voted on their preferred course of action, the subject will fill-out a post-experiment questionnaire. The subject is asked, “How confident are you on your vote? Please rate on a scale of “0” to “10”, “0” being not confident and “10” being very confident. Next, the subject is presented with a “recall distracter” questionnaire before the subjects is asked to recall information from the experiment. The “recall distracter” questionnaire asked the subject to list the capital of 20 countries. The subject is asked to fill-in as many capitols as they can. After completing the “recall distracter” questionnaire, the subject is then asked to recall as many pieces of information they can remember. The question is as follows, “Following the initial crisis scenario and prior to making your decision, you have reviewed different items of information. In the next few minutes, try to recall as many of the items of information you have seen before making your decision. The order in which you recall the information items is not important. Write each item of information in a separate block. When you are done please ‘click’ on ‘Finished’.

## EXPERIMENT 1: RESULTS

### *Vote/Choice*

I hypothesized that subjects in the Majority vote groups would vote congruent to the groups' preference. Subjects either voted for "1" Intervene or "0" Do Nothing. The results of the ANOVA analysis confirmed my hypothesis. The structure of the group had a statistically significant effect on vote/choice ( $F(2,56) = 4.12, p < 0.05$ ). Figure 7 shows the distribution of means for vote/choice by each group. Subjects in the Split vote group overwhelmingly chose option A, Intervene ( $M = .75$ ). Subjects in the Majority vote group favoring option A also chose option A significantly more often ( $M = .84$ ). Subjects in the Majority vote group favoring option B were less likely to vote for option A, ( $M = .45$ ), but not by much, it was just about a half and half split. Subjects in both Majority vote groups were more likely to vote congruent with the preferences of the hypothetical group members which supports my hypothesis. The Scheffe post-hoc contrast analysis shows that such effect is only significant for the difference between both Majority vote groups, ( $p < 0.05$ ).

The results also show that option A (Intervene) seemed like the preferred choice for the majority of subjects. Seventy-five percent of subjects in the Split vote group chose option A, which shows this option to be more appealing to subjects. For example, subjects in the Majority vote group favoring option B voted in line with the Majority, but it was not by much, only 55% percent of these subjects voted for option B.

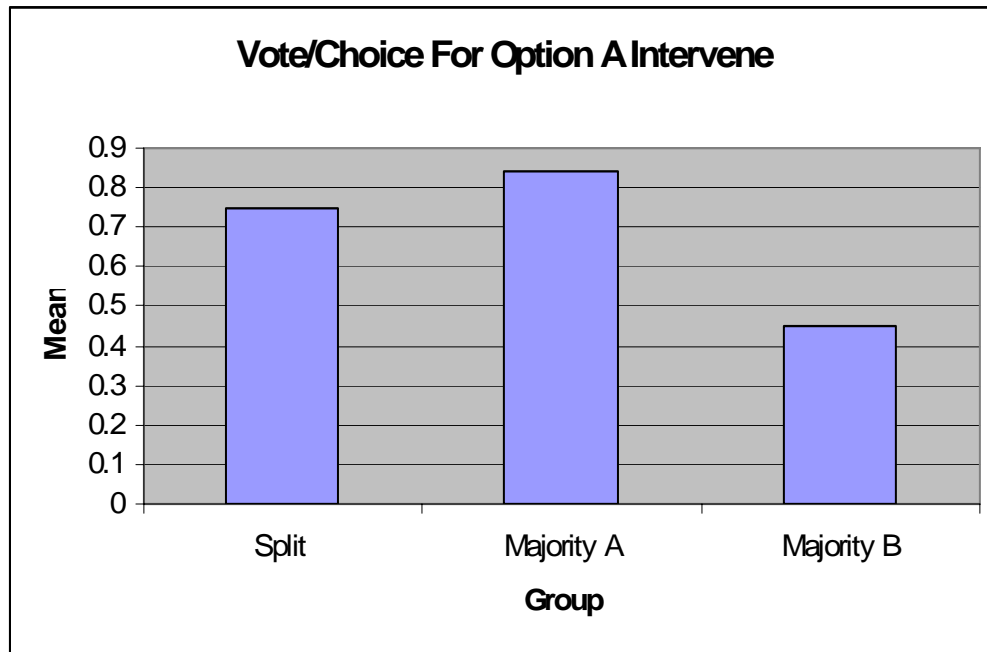


Figure 7: Distribution of Mean for Vote/Choice

### *Confidence*

Structure also had statistically significant effect on confidence, ( $F(2,56)=7.54$ ,  $p<0.02$ ). Figure 8 shows the distribution of means for confidence by group. Subjects in the in Split vote group were less confident of their choice, ( $M=4.35$ ), which is in line with my hypothesis. The subjects in both majority vote groups were more confident in their choice. Subjects in the Majority vote group favoring option A reported a confidence level of ( $M= 6.05$ ) and subjects in the Majority vote group favoring option B reported a confidence level of ( $M=7.05$ ). The results of the Majority vote group favoring option B are interesting. This group reported a higher level of confidence. This group had a higher proportion compared to the other two groups of going against the Majority. Subjects in the Majority vote group favoring option B reported a higher level

of confidence on their vote/choice, but also had a higher proportion of subjects voting against the majority. In order to vote against the group I suspect that subjects had a higher level of confidence that they are correct and the majority of the group is wrong. The Scheffe post-hoc contrast analysis shows that such effect is only significant for the difference between the Majority vote group favoring option B and the Split vote group, ( $p < 0.05$ ).

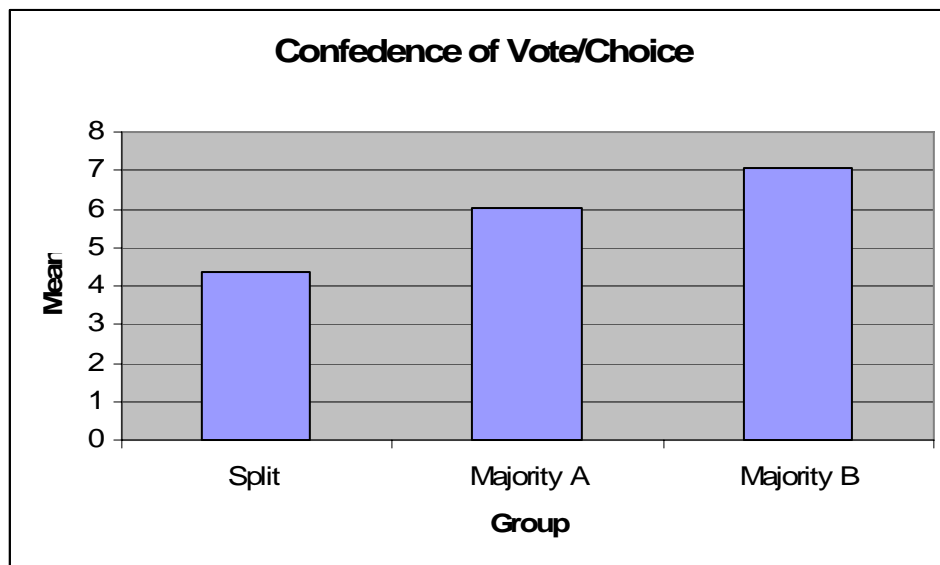


Figure 8: Distribution of Means for Confidence

### *Time*

Structure had a statistically significant effect on time at the  $p < .10$  significance level, ( $F(2,56)=2.79, p < .07$ ). Figure 9 shows the distribution of mean time for each group. The subjects in the Split vote group took a longer time than subjects in both Majority vote groups. The subjects in the Split vote group had a mean time of  $M=70.85$

(seconds). Subjects in the Majority vote group favoring option B had a mean time of  $M=57.5$  (seconds) and subjects in the Majority vote group favoring option A had a mean time of  $M=53.42$  (seconds).

The results are in line with the hypothesis. Subjects in the Split vote group took a longer time analyzing the information because they were the deciding vote. Because these subjects are the deciding vote, therefore may feel compelled to analyze as much information prior to making the vote/choice.

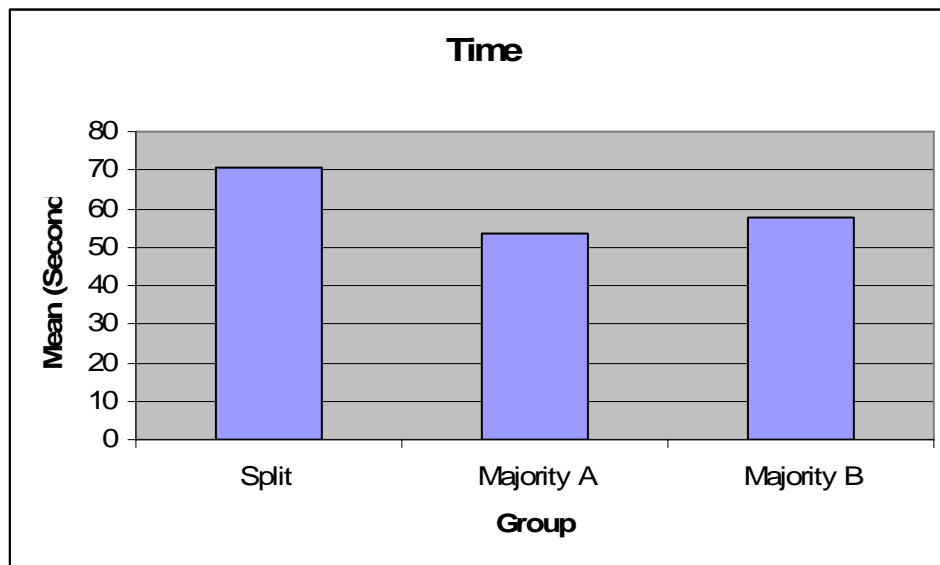


Figure 9: Distribution of Mean Time

### ***Recall***

Finally, structure also had a statistical effect on recall at the  $p<.05$  significance level, ( $F(2,56)=4.73$ ,  $p<0.01$ ). Figure 10 shows the mean distribution of the amount of

recalled items by each group. Subjects in the Split vote group recalled more pieces of information than subjects in both Majority vote groups, which is in line with my hypothesis. Subjects in the Split vote group recalled (M=4.55) pieces of information and subjects in the Majority vote groups favoring option A and option B recalled (M=2.63) and (M=2.7) pieces of information, respectively. I then recoded recall to analyze whether structure had an effect on the type of information subjects recalled, whether subjects recalled more information concerning option A or option B.

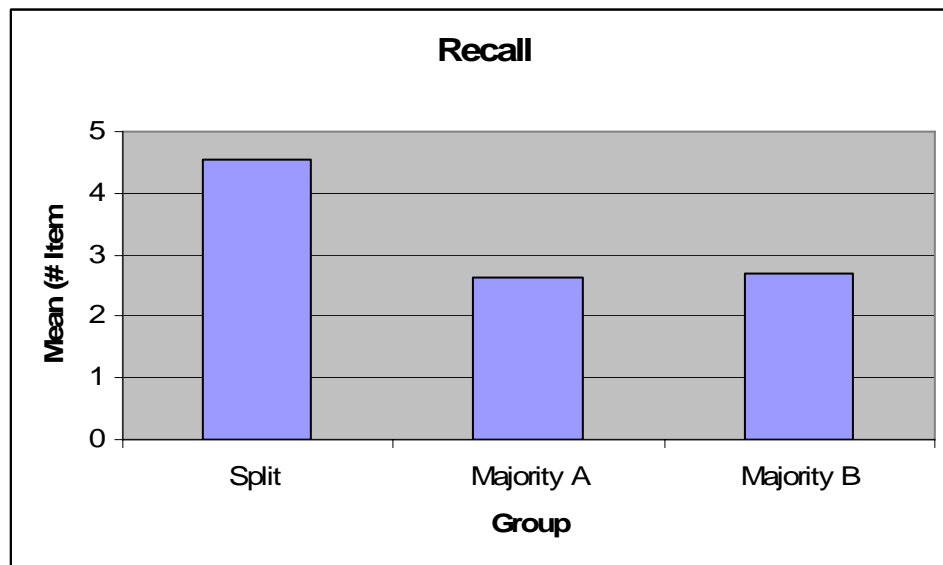


Figure 10: Mean Distribution of Recalled Items

Structure had a statistically significant effect on the amount of information recalled for option A ( $F(2,56)=4.47$ ,  $p<0.01$ ). Groups recalled different amounts of information concerning each option. Subjects in the Split group level recalled more information concerning option A, (M= 3.3). Subjects in the Majority vote group favoring option A



and subjects in the Majority vote group favoring option B remembered ( $M=2.15$ ) and ( $M=1.95$ ) pieces of information concerning option A, respectively.

Structure also had a statistically significant effect on the amount of information recalled for option B, ( $F(2,56)= 2.73, p<.07$ ). Subjects did not recall as much information for option B as they did for option B. Subjects in the Split vote group recalled the most pieces of information concerning option B, ( $M=1.25$ ). Subjects in the Majority vote group favoring option A recalled ( $M=.474$ ) for option B and subjects in the Majority vote group favoring option B recalled ( $M=.75$ ) for option B. Subjects remembered more information concerning option A than option B. The Scheffe post-hoc contrast analysis shows that such effect is only significant for the difference between each Majority vote group and the Split vote group, ( $p < 0.05$ ). There is no statistically significant difference between the Majority vote groups.

According to Moscovici, when individuals in a group are faced by a group majority whose preferences are different from theirs, subjects assume the majority to be correct and focus on comparing their preferences to that of the majority (1980). In contrast, when faced by a minority with a different preference, subjects are motivated to assume that minority subjects are incorrect and initially dismiss them (Maass and Clark 1984; Nemeth 1986). According to Harkins and Petty, information from minority subjects may be more thoroughly processed than information from the majority because minority subjects are perceived to be more independent or more dissimilar from one another than are members of the majority (1987). Only subjects in the Majority vote group favoring option B looked at more information from group members with minority

preferences. One reason for this may be that option A was the more favorable option for subjects. Subjects in the Majority vote group favoring option A recalled less pieces of information concerning option B ( $M=.474$ ) than subjects in the Majority vote group favoring option B recalled pieces of information concerning option A ( $M=1.95$ ).

### ***Conclusion***

The results for experiment 1 are interesting. Structure had a statistically significant effect on all four dependent variables, vote/choice, confidence, time, and recall. The key dependent variable in this experiment was vote/choice. One important note is that subjects in the Split vote overwhelmingly chose option A (Intervene) as their vote/choice ( $M= .75$ ), which tells me that option A was the preferred option by subjects. Subjects in the Majority vote group favoring option A chose option A the majority of the time ( $M= .842$ ). Subjects in the Majority vote group favoring option B, on the other hand, only voted congruent with the groups' preference 55% of the time. Although the results show that option A was the preferred choice of all the subjects in the experiment, 55% of subjects in Majority vote group favoring option B did manage to be influence by the groups' preferences and voted congruent with the groups' preferences.

Subjects in the Majority vote groups showed a higher level of confidence compared to subjects in the Split vote group. Subjects in the Majority vote group favoring option B expressed the highest level of confidence with their vote. This could be due to the fact the almost half (45%) went against group preference and chose option A, which is interesting. This may be due to the fact that in order to go against group preference, one must exude a high level of confidence that they are correct and the group

is wrong. Subjects in the Split vote group showed the least amount of confidence for their vote/choice. This may be due to the fact that these subjects are the deciding vote and the fact that there was no consensus towards a particular course of action may have inhibited the subjects' confidence on their vote/choice.

Subjects in the Split vote group took a longer time on the experiment than subjects in both Majority vote groups. The subjects in the Split vote group also had a higher level of recall. This means that subjects in the Split vote groups either took a longer time analyzing the information more carefully, by studying each item more carefully, or analyzed more pieces of information. Because subjects in Experiment 1 had the discretion to look at as much information as they feel warranted to make a vote/choice, it unfortunately does not tell us if the information itself had an affect on vote/choice. It is possible that group preferences could have affected the amount of information the subject analyzed and it is impossible to measure the effect of the information without ensuring that the subjects read all the information prior to making their vote/choice.

In order to examine whether the information has an affect on group decision making, the following experiment will examine the affect of both preference structure and information. In experiment 2 subjects must view all the information available before making a vote/choice.

## EXPERIMENT 2: ANALYZING ALL THE INFORMATION

In experiment 2, subjects must analyze all the information provided by each hypothetical group member prior to making a vote/choice on a hypothetical Foreign Policy scenario. Similar to experiment 1, subjects are assigned to one of two Split vote groups or one of two Majority vote groups. In addition to structure, the balance of information is manipulated. By balance of information I mean that subjects may receive more information by their group members supporting one option over the other. Regardless of the groups' preferences, the information is either balanced or un-balanced. Each subject must analyze 20 pieces of information prior to making a vote/choice. The information is balanced when the subject is presented with 10 items of information supporting one option and 10 items of information supporting the other option. If the information is unbalanced then the subject is presented with 13 items supporting one option and 7 items supporting the other. Figure 11 shows the four conditions of this 2x2 experiment.

	Balanced Info	Unbalanced Info
Majority Vote	3A to 1B <b>Condition 1</b>	3A to 1B Info favoring A <b>Condition 2</b>
Split Vote	2A to 2B <b>Condition 3</b>	2A to 2B Info favoring A <b>Condition 4</b>

Figure 11: Preference and Information Structure of Each Group/Condition

Once information is exchanged, subjects must actually process it before it can affect decisions. There are two 'routes' by which information is processed (Petty and Cacioppo, 1986). The first is the "central route," in which subjects actively assess the information and its quality and integrate it into their overall understanding of the situation and their preferences. This process of opinion formation is also called "persuasive arguments" or "information influence". The second route is the "peripheral route," in which subjects preferences are shaped more by peripheral cues such as the attractiveness or number of people arguing for a position, rather than the quality of the information itself.

Information influence theory holds that changes in preferences occur when subjects cognitively process key factual information (Shaw 1981). When subjects learn new information from others, they consider this information in light of their existing information (Burnstein and Vinokur, 1973). Once subjects begin to analyze the information, this new information should be given consideration apart from the groups' preferences. This reconsideration may result in a change in preference. The key point is that under information influence theory, the information itself, not the preferences of others, causes the reconsideration and change in preferences. Experiments have found that changes in preferences in cases where subjects' ability to communicate was restricted to objective information, (no information about others' preferences), providing evidence that information influence is present in group interaction (Burnstein and Vinokur, 1973; Dennis, 1996).

To test the influence theory (Shaw, 1981) subjects in both condition 2 and condition 4, are given the preferences of their fellow group members and are provided with an unbalanced set of information, where the amount of information favors one course of action aside from the groups' preferences. Condition 2 is a Majority vote group and condition 4 is a Split Vote group. The information provided to the subjects by the hypothetical group members favors one course of action over the other, which if influence theory holds the subjects will vote for the option that is supported by the information regardless of the preferences of the individual group members. This brings us to hypothesis 1:

*H1: In experiment 2, subjects in the un-balanced information groups will vote congruent with the information after analyzing all of the information provided.*

The way in which information is processed may also change depending on whether subjects are aware of the others' preferences. When faced by a group majority whose preferences are different from theirs, subjects assume the majority to be correct and focus on comparing their preferences to that of the majority (Moscovici, 1980). In contrast, when faced by a minority with a different preference, subjects are motivated to assume that minority subjects are incorrect and initially dismiss them (Maass and Clark 1984; Nemeth 1986). According to Harkins and Petty, information from minority subjects may be more thoroughly processed than information from the majority because minority subjects are perceived to be more independent or more dissimilar from one another than are members of the majority (1987).

According to Moscovici (1980) subjects in the Majority vote groups will perceive that the majority as correct, and the fact that the subject votes in line with the Majority, then the subject should report a high confidence on their final vote/choice, similar to the results from experiment 1. Subjects in the Split vote group on the other hand are the deciding vote and therefore may be less confident on their vote/choice.

*H2 In experiment 2, subjects in the Majority vote Groups should report being more confident than subjects in the Split vote Groups.*

If information affects group decision making then subjects should be able to recall more pieces of information, but if the subjects are influenced by the initial group preferences, which in some cases favors one course of action over the other, subjects may be inclined to vote congruent with the groups' preferences and pay little attention to the information. If group preferences affect group decision making then we should see that subjects in the Majority vote groups recall less items of information than subjects in the Split vote group:

*H3: In experiment 2, subjects in the Split vote Groups should recall more items of information than subjects in the Majority vote Groups.*

Because subjects in the Majority vote groups are paying less attention to the information, we should also see that the subjects in the Split vote groups taking a longer time analyzing the information and casting their vote.

*H4: In experiment 2, subjects in the Split vote groups will spend a longer time analyzing the information and making their vote/choice.*

## EXPERIMENT 2: METHODOLOGY

In experiment 2, the procedure is similar to experiment 1. However, subjects in experiment 2 must view all the information available prior to casting their vote. In experiment 1 subjects were free to cast their vote at any time, these subjects had the discretion to view as much or as little information as they felt warranted. In experiment 2 however, subjects must view all the information prior to making their vote/choice. Appendix B lists all of the information provided by each hypothetical group member in each of the four groups. This experiment consists of four conditions and each condition has two components, structure and information distribution. Figure 12 shows the four conditions of this 2x2 experiment.

	Balanced Info	Unbalanced Info
Majority Vote	3A to 1B <b>Condition 1</b>	3A to 1B Info favoring A <b>Condition 2</b>
Split Vote	2A to 2B <b>Condition 3</b>	2A to 2B Info favoring A <b>Condition 4</b>

Figure 12: Preference and Information Structure of Each Group/Condition

Experiment 2 is a 2x2 experiment and consists of 71 subjects. All subjects were randomly assigned to one of four condition groups. There were 19 subjects randomly assigned to condition 1, 21 subjects assigned to condition 2, 18 subjects assigned to condition 3, and 13 subjects assigned to condition 4. Subjects were recruited from the



undergraduate Political Science population of Texas A&M University. Subjects were randomly assigned to one of four conditions.

### *Variables*

Experiment 2 consists of two independent variables, structure and information. Structure represents the preferences of the group. Subjects will be assigned to one of four groups, one of two Split vote (2 to 2) groups, or one of the two Majority vote (3 to 1) groups. For the descriptions of the four groups refer back to figure 12. Information is measured as balanced or un-balanced. Subjects are presented with 20 items of information, if the items are equally supporting both options then the information is balanced, 10 items supporting option A and 10 items supporting option B. If the information is un-balanced then there is 13 items supporting option A and 7 items supporting option B. A complete listing of information items provided by each hypothetical group member is listed in Appendix B.

There are four dependent variables. The first dependent variable is time. The computer keeps track of how long it takes subjects to make a choice on a preferred course of action. Time is measured in seconds. The second dependent variable is vote/choice, Intervene or Do Nothing. Vote/choice is coded as “1” for intervene and “0” for Do Nothing. The third dependent variable is the number of recalled items of information. Subjects will list all the items of information they remember receiving from the four hypothetical group members. There are a total of twenty items of information. Finally, the fourth dependent variable is confidence. The subject is asked,

“How confident are you on your vote? Please rate on a scale of “0” to “10”, “0” being not confident and “10” being very confident.

## EXPERIMENT 2: RESULTS

### *Vote/Choice*

Information influence theory holds that changes in preferences occur when subjects cognitively process key factual information (Shaw 1981). I hypothesized that subjects in the un-balanced Majority vote group (Condition 2) and subjects in the un-balanced Split vote group (Condition 4) would vote congruent with the option favored by the information. Neither structure nor information had a statistically significant affect on vote. Subjects in the un-balanced Majority vote group (Condition 2) only voted congruent with the information half the time ( $M = .524$ ) and subjects in the un-balanced Split vote group (Condition 4) also voted congruent with the information less than half the time ( $M = .462$ ). Figure 13 shows the means for vote/choice by each group.

	Balanced Info	Unbalanced Info
Majority Vote	3A to 1B Condition 1 ( $M = .63$ )	3A to 1B Info favoring A Condition 2 ( $M = .52$ )
Split Vote	2A to 2B Condition 3 ( $M = .55$ )	2A to 2B Info favoring A Condition 4 ( $M = .46$ )

Figure 13: Distribution of means for vote/choice for each group

### *Confidence*

Structure had a statistically significant effect on the confidence of subjects vote ( $F(2, 67) = 3.85, p < 0.05$ ). Subjects in the Majority vote groups reported being less

confident on their vote than subjects in the Split vote groups, which differs from the results of experiment 1. Subjects in the Majority vote groups reported a mean confidence level of ( $M=4.3$ ) and subjects in the Split vote groups had a mean confidence level of ( $M=5.5$ ), respectively. Information was not statistically significant and the results show that there was little difference in confidence between subjects who were provided with balanced or un-balanced amounts of information. Subjects in the balanced information groups reported a confidence level of ( $M= 4.9$ ), while subjects in un-balanced information groups reported a confidence level of ( $M= 4.6$ ).

### ***Time***

Structure and information did not have a statistically significant affect on the amount of time subjects took in analyzing the information. Subjects in the balanced Majority vote group (Condition 1) had a mean time of ( $M=144.21$ ) seconds and subjects in the un-balanced Majority vote group (Condition 2) had a mean time ( $M=164.14$ ) seconds, respectively. Subjects in the balanced Split vote group (Condition 3) had a mean time of ( $M=140.278$ ) seconds, while subjects in the un-balanced Split vote group (Condition 4) had a mean time of ( $M= 153.46$ ) seconds.

### ***Recall***

Structure had a statistically significant effect on recall, ( $F(2, 67)= 5.371$ ,  $p<.0235$ ). I hypothesized that subjects in the Majority vote groups would recall less information than subjects in the Split vote groups. Subjects in the Majority vote groups recalled ( $M=3.025$ ) and subjects in the Split vote groups recalled ( $M=4.484$ ). Again the fact that subjects in the Split vote groups recalled more pieces of information may be due

to the fact that they were the deciding vote and therefore more critically analyzed the information, although it is only a small difference in recall. Information again had no statistically significant effect on recall.

## CONCLUSION

The purpose of this study was to examine in experiment 1 how the preference structure of a decision making group affects the collection and processing of information and in experiment 2 how the information itself affects the vote/choice. In experiment 1, subjects were assigned to either a Split vote group or one of the two Majority vote groups, where the group favors one course of action over the other. In experiment 2 subjects' were required to analyze all the information prior to making their vote/choice.

The results in experiment 1 showed that the preference structure had an affect on the amount of time subjects spent analyzing the information and making their vote/choice. Subjects in the Split vote spent longer periods of time analyzing the information than subjects in both Majority vote groups. This may be due to the fact that subjects in the Split vote group had an incentive to look more carefully at the information because they were the deciding vote. Whereas subjects in the Majority vote group had less of an incentive to look at all the information because if the subject went against the groups' preference, their vote, in essence, would not count.

Groupthink refers to the most extreme case of group conformity, which arises from concurrence seeking and reflects the collective defensive avoidance of dissonant information (Janis, 1982; Janis and Mann 1977). The occurrence of groupthink depends on a number of antecedent conditions. One major condition of groupthink is cohesiveness, or the desire of personal acceptance of group members by other group members. Groupthink is more probable where most members of a cohesive group feel insecure (Flowers, 1977; Longley and Pruitt, 1980). The results for experiment 1

showed support for groupthink. Subjects in both Majority vote groups voted congruent with the groups' preferences. This may have resulted out of the fact that subjects in the Majority vote groups did not want to go against the group and wanted to maintain group cohesiveness. Another factor is the insecurity towards choosing an option, subjects may have not been confident to make an independent choice and therefore may have defaulted to voting in-line with the groups preferences.

Forty-five subjects out of fifty-nine subjects in experiment 1 chose option A over option B. Although structure did have a statistically significant affect on vote/choice, only about half, 55% of the subjects assigned to the Majority vote group favoring option B did actually vote congruent with the groups' preference, option B. The fact that the majority of subjects tended to vote for option A may have affected the results. The results for recall confirm these speculations.

Subjects in the Split vote group recalled more information than subjects in both Majority vote groups, which confirmed my hypothesis. After breaking recall down, subjects recalled twice as many pieces of information concerning option A, which is another indication that option A was the more favorable option for subjects. Out of all 59 subjects in experiment 1, subjects recalled less than one piece of information, .74, concerning option B, but recalled 2.5 pieces of information concerning option A. Again this is evidence that the favorability for option A may have affected the results and further research is needed.

Experiment 2 followed the same procedure as experiment 1. Both structure and information were manipulated in experiment 2. Results were not as promising for

experiment 2. Structure had a statistically significant affect of recall and confidence, but information had no statistically significant affect on any of the four dependent variables. Again similar to experiment 1, the fact that Option A was more favorable may have affected the results. Also, because subjects in experiment 2 had to go through all the information before casting their vote does not ensure that the subject is reading or analyzing every piece of information.

The results show that the preference structure of the group have an affect on how group members vote and the way they collect and analyze information. The subjects were affected by the preference structure of their group. These results have implications that transcend the study modern day politics and elections. In very competitive elections where every states election matters, people may be more inclined to collect and analyze more information prior to voting than if the election was not as competitive because either a front runner has been identified or the apathy of voters who live in states that are heavily democratic or republican feel their vote will not count. For example, states that are heavily republican may cause democratic voters not to vote, put little effort in researching the candidate, or voting with the majority because they feel their vote does not count. Further research is needed to better understand these implications.



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## APPENDIX A

**Experiment 1****Information provided by each Group-member****Split Vote Group**

Your committee is split even (2 for Option A & 2 for Option B)

**Group members voting option A****Group member #1**

- As the strongest country in the world, the U.S. has the responsibility to assist other countries in need.
- Other countries are sending troops and supplies, therefore the United States should also send its share of troops
- Sending troops and supplies along with other countries will minimize the time and resources that the U.S. needs to contribute
- If the U.S does not intervene, more civilians will die and will be displaced
- 2,000,000 civilians have died because of the lack of aid and intervention by other countries

**Group member #2**

- There will be minimal risk for U.S. troops in Burundi
- U.S. troops will not engage in offensive missions or search and destroy missions
- More countries involved in sending troops and supplies would maximize the chances of success
- Burundi has suffered without aid from other countries for 14 years
- Helping Burundi is a great opportunity in developing an ally in Africa for the U.S.

**Group members voting option B****Group member #3**

- U.S. troops may get injured or be killed, it is impossible to anticipate attacks by rebels
- Sending in U.S. troops to Burundi may cause violence to escalate
- Other past U.S. peace keeping efforts have failed, like in Mogadishu, Somalia
- If mission fails, Burundi rebel forces may blame the U.S. for interfering
- Mission failure may result in retaliation against the U.S.

**Group member #4**

- It will be another Iraq
- It is unsure how long the troops may be in Burundi
- The U.S and other countries have already pledge to send 4 billion dollars in relief to Afghanistan within the next 5 years
- The resources could be needed elsewhere
- The U.S needs to focus on rebuilding New Orleans and help the displaced people due to Katrina

### **Majority Vote Group**

Your Committee is in favor of Option B (3B to 1A)

#### **Group members voting for option A**

##### **Group member #1**

- It is the responsibility of the strongest country in the world to assist other countries in need.
- Other countries are sending troops, therefore the United States should also send its share of troops
- Sending troops along with other countries will minimize the time the United States will be involved in Burundi
- If the U.S. does not intervene more civilians will die and be displaced
- 2,000,000 Burundi civilians have already died because of the lack of aid and intervention by other countries

#### **Group members voting option B**

##### **Group member #2**

- It will be another Iraq
- It is unsure how long the U.S. troops may be in Burundi
- The U.S and other countries have already pledge to send 4 billion dollars in relief to Afghanistan within the next 5 years
- The U.S needs to focus on rebuilding New Orleans and help the displaced people due to Katrina
- This is not our fight

##### **Group member #3**

- U.S. troops may get injured or be killed in Burundi
- By sending troops to Burundi, more violence may escalate
- Other past U.S peace keeping efforts have failed, like in Mogadishu, Somalia
- If peace mission in Burundi fails, rebel forces may blame the U.S. for interfering
- It is their problem and they should deal with it

##### **Group member #4**

- Other countries are presently intervening
- The U.S should wait and see if the situation in Burundi gets worst
- Peace mission failure in Burundi may result in retaliation against the U.S
- The resources could be needed elsewhere
- We won't have to send troops

## **Majority Vote Group**

Your Committee is in favor of Option A (3A to 1B)

### **Group members voting option A**

#### **Group member #1**

- It is the responsibility of the strongest country in the world to assist other countries in need.
- The United States will get criticized by other countries for not intervening
- Sending troops along with other countries will minimize the time the United States will be involved in Burundi
- If we do not intervene in Burundi more civilians will die and be displaced
- 2,000,000 of Burundi civilians have already died because of the lack of aid and intervention by other countries

#### **Group member #2**

- There will be minimal risk for our troops
- The troops will not engage in offensive missions, search and destroy missions
- The more countries involved in sending troops would maximize the chances of success
- Burundi has suffered without aid from other countries for 14 years
- Helping Burundi is a great opportunity in developing an ally in Africa

#### **Group member #3**

- The troops will be responsible in building hospitals and helping displaced people return to their land
- If the U.S. do not intervene, hundreds of thousands of people will be displaced into other countries, possibly to the United States
- By assisting Burundi, the country will be able to develop like other modern democratic countries
- Intelligence reports indicate that a number of high-ranking rebels have fled Burundi and are receiving safe haven from neighboring countries, where they send thousands of reinforcements
- If the U.S. does not intervene now, the situation in Burundi may get worst

### **Group members favoring option B**

#### **Group member #4**

- The U.S and other countries have already pledge to send 4 billion dollars in relief to Afghanistan within the next 5 years
- U.S. troops may get injured or be killed
- Mission failure may result in retaliation against the U.S
- By sending troops more violence may escalate
- It is unsure how long U.S. troops may be in Burundi

## APPENDIX B

**Experiment 2**  
**Information by each Group-member**

**Split Vote Group**

The information is Balanced

Your committee is split even (2 for Option A & 2 for Option B)

**Group members voting option A**

**Group member #1**

- As the strongest country in the world, the U.S. has the responsibility to assist other countries in need.
- Other countries are sending troops, therefore the United States should also send its share of troops
- Sending troops along with other countries will minimize the time the United States will be involved in Burundi
- If we do not intervene more civilians will die and will be displaced
- 2,000,000 have already died because of the lack of aid and intervention by other countries

**Group member #2**

- There will be minimal risk for U.S. troops
- U.S. troops will not engage in offensive missions or search and destroy missions
- More countries involved in sending troops would maximize the chances of success
- Burundi has suffered without aid from other countries for 14 years
- Helping Burundi is a great opportunity in developing an ally in Africa

**Group members voting option B**

**Group member #3**

- U.S. troops may get injured or be killed, it is impossible to anticipate attacks by rebels
- Sending in U.S. troops may cause violence to escalate
- Other past peace keeping efforts have failed, like in Mogadishu, Somalia
- If this mission fails, rebel forces may blame the U.S. for interfering
- Mission failure may result in retaliation against the U.S.

**Group member #4**

- It will be another Iraq
- It is unsure how long the troops may be in Burundi
- The U.S and other countries have already pledge to send 4 billion dollars in relief to Afghanistan within the next 5 years
- The resources could be needed elsewhere
- The U.S needs to focus on rebuilding New Orleans and help the displaced people due to Katrina

**Split Vote Group****Un-Balanced Information**

Your committee is split even (2 for Option A & 2 for Option B)

*Although the vote is split, the items of information are favoring one course of action over the other, the items of information will favor option B.*

**Group members voting option A****Group member #1**

- As the strongest country in the world, the U.S. has the responsibility to assist other countries in need.
- Other countries are sending troops, therefore the United States should also send its share of troops
- Sending troops along with other countries will minimize the time the United States will be involved in Burundi
- If we do not intervene more civilians will die and will be displaced
- 2,000,000 have already died because of the lack of aid and intervention by other countries

**Group member #2**

- There will be minimal risk for U.S. troops
- U.S. troops will not engage in offensive missions or search and destroy missions
- More countries involved in sending troops would maximize the chances of success
- Burundi has suffered without aid from other countries for 14 years
- Helping Burundi is a great opportunity in developing an ally in Africa

**Group members voting option B****Group member #3**

- U.S. troops may get injured or be killed, it is impossible to anticipate attacks by rebels
- Sending in U.S. troops may cause violence to escalate
- Other past peace keeping efforts have failed, like in Mogadishu, Somalia
- If this mission fails, rebel forces may blame the U.S. for interfering
- Mission failure may result in retaliation against the U.S.

**Group member #4**

- It will be another Iraq
- It is unsure how long the troops may be in Burundi
- The U.S and other countries have already pledge to send 4 billion dollars in relief to Afghanistan within the next 5 years
- The resources could be needed elsewhere
- The U.S needs to focus on rebuilding New Orleans and help the displaced people due to Katrina

## Majority Vote Group

### Balanced

Majority vote (3A to 1B) group

*The group is favoring one option over the other, but the items of information are evenly supporting both options.* The following example is a (3 to 1) vote distribution favoring option A, the underlined information favors A.

### Group member voting for option A

#### Group member #1

- The U.S. should intervene in Burundi because it is the responsibility of the strongest country in the world to assist other countries in need.
- Other countries are sending troops and supplies to Burundi, therefore the United States should also send its share of troops and supplies
- Sending troops along with other countries will minimize the time the United States will be involved in Burundi
- If the U.S. does not intervene in Burundi more civilians will die and be displaced
- The U.S needs to focus on domestic issues like rebuilding New Orleans and help the displaced people due to Katrina

#### Group member #2

- It will be another Iraq
- It is unsure how long the U.S. troops may be in Burundi
- The U.S and other countries have already pledge to send 4 billion dollars in relief to Afghanistan within the next 5 years
- The U.S. needs to intervene because Burundi has suffered without aid from other countries for 14 years
- 2,000,000 Burundi civilians have already died because of the lack of aid and intervention by other countries

### Group members voting for option B

#### Group member #3

- If the U.S. intervenes, troops may get injured or be killed
- The U.S needs to intervene because Burundi has suffered without aid from other countries for 14 years
- Helping Burundi is a great opportunity in developing an ally in Africa
- The U.S should not intervene because other past peace keeping efforts have failed, like in Mogadishu, Somalia
- If the peace mission in Burundi fails, rebel forces may blame the U.S. for interfering

#### Group member #4

- Other countries are presently intervening in Burundi
- The U.S. should wait and see if the situation in Burundi gets worst
- If efforts to bring peace in Burundi fail, there may be retaliation against the U.S
- There will be minimal risk for U.S. troops sent to Burundi
- U.S. troops will not engage in offensive missions or search and destroy missions



## **Majority Vote Group**

### **Un-Balanced Information**

Your Committee is in favor of Option B (3B to 1A)

*The vote distribution is favoring one course of action over the other, but the items of information are favoring the least favored option. In the following example the vote distribution is favoring option B, but the number of items of information is favoring option A.*

### **Group members voting option B**

The underlined information will favor B

#### **Group member #1**

- It is the responsibility of the strongest country in the world to assist other countries in need.
- The United States will get criticized by other countries for not intervening
- Sending troops and supplies along with other countries will minimize the time the United States will be involved in Burundi and will maximize a peaceful resolution
- The U.S. should intervene in Burundi because it is the responsibility of the strongest country in the world to assist other countries in need.
- Other countries are sending troops and supplies to Burundi, therefore the United States should also send its share of troops and supplies

#### **Group member #2**

- Burundi has suffered without aid from other countries for 14 years
- Helping Burundi is a great opportunity in developing an ally in Africa
- Sending troops along with other countries will minimize the time the United States will be involved in Burundi
- If the U.S. does not intervene in Burundi more civilians will die and be displaced
- The U.S and other countries have already pledge to send 4 billion dollars in relief to Afghanistan within the next 5 years

#### **Group member #3**

- The U.S needs to intervene because intelligence reports indicate that a number of high-ranking rebels have fled Burundi and are receiving safe haven from neighboring countries, where they send thousands of reinforcements
- The U.S should not intervene because other past peace keeping efforts have failed, like in Mogadishu, Somalia
- If the U.S. intervenes, troops may get injured or be killed
- If the peace mission in Burundi fails, rebel forces may blame the U.S. for interfering
- The U.S needs to focus on domestic issues like rebuilding New Orleans and help the displaced people due to Katrina

### **Group members voting option A**

#### **Group member #4**

- The U.S can not intervene in Burundi because the U.S. and other countries have already pledge to send 4 billion dollars in relief to Afghanistan within the next 5 years
- Mission failure in Burundi may result in retaliation against the U.S
- 2,000,000 Burundi civilians have already died because of the lack of aid and intervention by other countries
- Helping Burundi is a great opportunity in developing an ally in Africa
- The U.S. should intervene because 2,000,000 of Burundi civilians have already died because of the lack of aid and intervention by other countries

## VITA

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EDUCATION

- |  |             |
|--|-------------|
| Texas A & M University                     | August 2008 |
| • M.A. Political Science                   |             |
| University of California, Irvine           | June 2005   |
| • B.A. Chicano/ Latino Studies & Sociology |             |

EMPLOYMENT

- |   |                          |
|---|--------------------------|
| Texas A & M University  | August 2006- present     |
| • <i>Research Assistant</i>   |                          |
| CLAIM JUMPER  | August 2005-July 2006    |
| • <i>Waiter</i>   |                          |
| Research Assistant  | September 2004- May 2005 |
| • <i>Graduate School of Management University of California, Irvine</i> |                          |
| Center for Talented Youth   | Summer 2004              |
| • <i>Student Resident Advisor</i>                                       |                          |
| Academic Senate   | January 2003 – June 2005 |
| • <i>Administrative Assistant</i>                                       |                          |
| Beachy Street Elementary  | February 2001- July 2002 |
| • <i>Teacher Assistant/ Computer Lab</i>                                |                          |

SPECIAL SKILLS

COMPUTER: Proficient with Word, Excel, Power Point, SPSS, STATA

LANGUAGE: Bilingual- English and Spanish

LEADERSHIP/SERVICE

- |  |                                |
|--|--------------------------------|
| Habitat for Humanity                         | September 2006 – February 2008 |
| Latino Business Student Association (LBSA)   | April 2003 – June 2005         |
| 1 <sup>st</sup> Annual LBSA Youth Conference | April 2005                     |
| American Education Fund                      | December 2004 - March 2005     |
| Camino De Amistad                            | Fall 2003                      |
| Share Tutorial Volunteer Program             | September 2002 - June 2005     |