A Descriptive Study of the Groupthink Phenomenon As It Relates to the Decision Making Process of a City Commission

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A DESCRIPTIVE STUDY OF THE GROUPTHINK PHENOMENON AS IT RELATES TO THE DECISION-MAKING PROCESS OF A CITY COMMISSION

BY

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THESIS

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INTRODUCTION

Any group, regardless of the number or composition of that particular group, has shortcomings. An organizational body is capable of rendering either positive or negative decisions depending upon how the individual group members interact and cooperate with one another.

The members of any policy-making group are subject to various types of pressures, and it is pertinent to consider how these constraints influence the decision-making process. Irving Janis (1972) asserted that intense social pressures toward uniformity and in-group loyalty within decision-making groups can build to the point where they seriously interfere with both cognitive efficiency and moral judgment. Janis termed this phenomenon "Groupthink" and postulated initially that groupthink occurs:

1. When independent critical analysis of the problem facing the group assumes second place to the group members' motivation to maintain the solidarity of the group, and
2. When group members avoid creating any possible disunity (by hesitating to express unpopular doubts or opinions which may serve to undermine the workings of the group).

In several case studies of major foreign policy decisions executed by the United States government, Janis strived to trace
the social pressures toward groupthink on decision-making. In addition to describing the components of groupthink relevant to each foreign policy decision, Janis suggested possible preventive techniques to forestall or eliminate groupthink.

Janis wrote, "To understand the predispositions conducive to groupthink, we need studies of groups that meet weekly and work together on decisions to which each member will be committed" (1983, p. 242). Phillip Tetlock (1979) similarly stated the following regarding further research on groupthink: "Draw upon case studies in historical and/or political science literature to identify a much larger sample of probable groupthink and non-groupthink decisions" (p. 1323). Tetlock continued, "There is a need for research that analyzes verbatim records of actual group deliberations. A more conclusive test of the groupthink analysis awaits the declassification of such documents" (1979, p. 1324).

Background Research

Group conformity and group polarization are two facets of group research which are similar in many respects to groupthink. Several theorists have researched these topics and consequently have proposed different explanations for particular dimensions and interactions of group decision-making. Many of these theories have overlapping parameters of commonality, and it is these aspects of group decision-making and group dynamics in general which will be discussed.
Conformity refers to going along with group pressures, and it is implicit in the way that psychologists use the term that the individual, if left entirely alone, would behave in some other way. The line between conformity and conventionality is quite a fragile one, and possibly a meaningful way to distinguish between the two is to consider the situation and the effect of the behavior on the individual. However, it is not possible to distinguish between conventionality and conformity without knowing about the individual and the situation.

Numerous researchers have attempted to explain conformity. Festinger (1954) proposed a social comparison theory and asserted that there is a basic drive within each of us to evaluate our own abilities and opinions. The social comparison theory states that the opinions of others also provide a social reality for the validation of those opinions. Festinger concluded that more individual conformity will result when an individual responds in public rather than in a private setting. In other words, individuals do not wish to feel differently from or to disagree with, those individuals whom they perceive as similar to them.

Asch was interested in some of the conditions that induce individuals to yield to group or social pressures or to remain independent when those pressures are contrary to fact. Research such as that performed by Asch (1956) suggests that the tendency for an individual to accept others' opinions when these contradict
the testimony of one's own senses is stronger the more closely certain conditions are met. These conditions include: (1) The quality of the evidence presented by others must be compelling, (2) The stimulus being judged is ambiguous, (3) The subject's confidence in the correctness of his/her own perception is low, (4) The discrepancy between one's own opinion and the opinions of others is large (but not dramatically large), and (5) The subject knows that others are aware that his/her opinion differs from their own.

Richard Crutchfield (1955) refined the study of conformity advanced earlier by Asch. Using different experimental conditions, Crutchfield approached the conformity issue more methodically. He showed that individuals will yield to group pressure even on opinion or attitude items that were of high social relevance to them. For example, in a sample of 50 military officers, when questioned privately, not one of them agreed with the statement, "I doubt whether I would make a good leader." However, under group pressure, 37% of the officers agreed with the statement. Crutchfield discovered that there was more yielding on difficult items (ones in which the individual is initially uncertain) than on easy ones. Crutchfield found, as did Asch, that there are extremely large individual differences in yielding.

Asch and Crutchfield were both studying conformity behavior. These two researchers both had several people gather together, and
the subjects in both experiments received feedback that unanimously contradicted their perception(s). But the two situations were not identical. Asch's subjects faced the majority and heard them reveal their judgments, whereas Crutchfield's subjects could not see the other individuals and received their judgments via a lighted panel. Deutsch and Gerard (1955) and Levy (1960) have shown that when the types of items are identical, there is more yielding in the Asch situation than in the one developed by Crutchfield.

In psychological areas, interest in group standards was probably first stimulated by Sherif (1967). Sherif's approach was basically to restrict laboratory work to small, carefully designed studies of perceptual differences as they related to group interaction. Festinger (1952) experimented and wrote a subsequent article titled, "Some consequences of de-individuation in a group." His experiment differed from the experiments of Sherif in the respect that Festinger attempted to include several more groups (23 groups ranging in size from four to seven), and Festinger's purpose was to answer a more global question. Festinger was more concerned with examining when and why individuals seem to behave differently by themselves as opposed to when they were placed in group situations. Numerous other experimental designs were proposed and conducted in the 1950s. However, the decade beginning with 1960 introduced new experimental research questions to be explored.
Levy (1960) conducted an experiment titled "Studies in Conformity Behavior: A Methodological Note." Levy attempted to answer the following research question: "Are subjects who give answers verbally, face-to-face with a group, exposed to the same degree of pressure to conform as those placed in a semi-anonymous booth?" Although his conclusions did not reflect what was originally proposed, the results were nevertheless informative and instructive to fellow researchers. Levy concluded that the laboratory situation created by Crutchfield was far less effective than the original face-to-face situation created by Asch. Levy cited three reasons for this conclusion. The first concerned the drop in conformity responses (a reduction previously noted by Deutsch and Gerard); the second reason was that a large number of subjects uniformly expressed some suspicion that the experimental situation was rigged; and finally, the tendency to conform was not found to be a stable effect in Levy's study.

Gerard (1964) replicated Asch's 1956 experiment and investigated the question of whether or not an individual who asserts his or her independence at the outset (in the face of successive disagreement with others), tends to remain independent over time. Gerard concluded that there was both greater adamance and greater yielding with public confrontation.
There was greater commitment to the behavior in a public situation whether due to yielding or independence.

Schulman (1967) studied Asch's prior experiments and subsequently designed his study as a recheck of some of the variables utilized by Asch. Two main points in Schulman's study were of particular interest to group conformity researchers. Schulman's findings: (1) Re-emphasized again the need for considering the effect of the subject-experimenter relationship in experimental designs, and (2) Suggested the need for re-interpreting the large number of studies that had sought to relate variables such as status and personality to conformity to the group, using the rate of conformity responses in the Asch situation as the dependent measure. Schulman also found that "in contrast to previous interpretations, the data indicate that behavior in the Asch situation is a function of three types of influence: informational conformity, normative conformity to the group, and normative conformity to the experimenter."

In 1968, researchers Julian, Regula, and Hollander investigated the relationship between an individual's conformity to the judgments of others in a group and the prior agreement or support which these others have shown him or her in making similar judgments. The major conclusion of the experiment was that prior support or agreement from others will increase the likelihood of the individual's subsequent agreement or conformity.
to the group. "This tendency to reciprocate support is also implied in the widely-accepted relationship between group cohesiveness and conformity" (Back, 1951; Schachter, 1951).

Moscovici and Zavalloni (1969) compared opinion and judgment ratings of subjects in individual and collective situations. They reiterated that a number of research findings tended to support the notions that "(a) individuals in a social situation avoid expressing extreme opinions or judgments, and (b) the consensus represents an averaging, a compromise among individual positions on opinion . . . " Moscovici and Zavalloni quoted the conclusion of Kelley and Thibaut (1954) who stated that, "While reacting with other persons, the person reacts to them . . . by tempering his judgments so as to avoid the possibility of being extremely different from others." (p. 769)

Researchers Moscivici and Zavalloni (1969) elaborated upon the "risky shift" activity as originally proposed by Stoner (1961). This discovery by Stoner demonstrated that when discussing problems concerning loss of money, prestige, or self satisfaction, groups tend to prefer a riskier alternative than one which would have resulted from a compromise between the choices of the individuals comprising these groups. In other terms, groups accept higher levels of risk than do the individuals who make up the group. The results of the Moscivici and Zavalloni study were: (a) group discussion to consensus results in a polarization of responses, (b) the polarization effect will be greater when the group must
commit itself to a given position, than when it is asked to express an "objective" judgment, and (c) the opinions and judgments expressed by the group consensus will often be adopted by the individuals as their personal opinions.

The phenomenon of polarization has been studied in the context of clinical psychology and of cognitive response style (Hamilton, 1968; O'Donovan, 1965).

As Sherif and Sherif (1967) noted, "Extremity of position is frequently identified by psychologists in this country as a sign of pathology." (p. 119)

Since the introduction by Stoner (1961) of "risky shift," much controversy has evolved as to what extent this is a group decision-making process and to what extent riskier decisions are in fact made by individuals. Dean Pruitt (1971) in his discussion of choice shifts maintained that "in view of the evidence that shifts toward caution occur reliably in group discussions of certain issues, the earlier notion that groups always take more risk than individuals must be abandoned." (p. 339) In view of this revelation, theories which have particular relevancy when discussing "choice shifts" must be identified. Several of these theories and their components will therefore be enumerated in alphabetical order.
Diffusion-of-Responsibility Theory - Group experience will reduce anxiety about the possible negative consequences of making the riskier decision. This reduction in anxiety makes it possible to accept the risky alternatives at a lower probability of success.

Familiarization Theory - Increased familiarity with the items and/or subject matter should make people more willing to take risks on these items (because of a general reduction in areas of uncertainty).

Leadership Theory - Attributes the risky-shift to a sensation of greater confidence and assertiveness on the part of the high risk taker. The group will therefore shift toward its most confident member. Another tenet of this theory postulates that higher risk takers are more persuasive in group discussions that produce a risky shift.

Pluralistic-Ignorance Theory - On risk-oriented items, individuals are in conflict between an ideal of risk and a cautious assumed group standard. Cautious behavior, not risky behavior, is attributed to an assumed group norm. This theory attributes the group-induced shift to a revised perception of where others stand on the item in question and assume that decisions will always, on the average, be somewhat in the valued direction of where others are perceived to stand.

Release Theory - The individual will follow the group consensus in those conditions where the consensus favors the value orientation of the item or subject matter. The "release mechanism" should reinforce the pressure of group consensus (in those conditions where the consensus favors the value orientation of the item).

Relevant-Arguments Theory - Considerable evidence exists to support this particular choice-shift theory. A major explanation for this theory holds that arguments produce utility changes which produce shifts in risk taking. One aspect of this theory is that when arguments are written down by the individual while working alone - these particular arguments will significantly influence his/her subsequent opinion in the matter.
Risky-Shift Phenomenon - A positive correlation exists between group cohesiveness and the size of the risky-shift. Also, emotional bonds among group members encourage the risky shift. However, evidence has been gathered to discount some of these findings, i.e., 'Much of the evidence for the existence of a risky shift involves hypothetical dilemma problems. Since these problems do not entail real outcomes, it is hard to see how the capacity to shift responsibility for these outcomes onto the shoulders of others can have any effect on behavior.' (Lamm, 1967)

Social Comparison Theory - Includes the following four propositions: (a) Perceptions of the decisions made by others shift toward risk on risk-oriented items and toward caution on caution-oriented items, (b) After discussion, others are seen as more cautious than oneself on risk-oriented items, (c) Shifts in the perception of where others may stand are larger and more reliable than shifts in personal preference, and (d) Group members who start out at a lower level of risk, shift further on risk-oriented items and less on cautious-oriented items. (Groups converge as they shift and therefore all such shifts provide support for any choice shift theory).

Utility Decision Theory - Arguments heard in a group discussion will produce utility changes which, in turn, produce shifts. (This is a version of the 'relevant-arguments' theory). Research studies have provided evidence that: '(a) Decisions on choice-dilemma items, both before and after discussion, can be predicted from knowledge of the utilities assigned to the outcomes, (b) group-induced shifts in individual risk taking can be predicted from changes in utilities, and (c) group discussions about how to rate the utilities of the outcomes induce shifts that are comparable in direction and size to those produced by conventional discussions of what level of risk to take.' (Burnstein, et al., 1969)

Values Theories - Groups shift in a direction toward which most members of the group are already attracted as individuals. 'The conception of the shift as a change in attitude seems compatible with all existing theories of this phenomenon.' (Pruitt, 1971, p. 345). Five theories are included under the 'Values Theory' dimension: (1) Social Comparison, (2) Pluralistic-Ignorance, (3) Release, (4) Relevant-Arguments, and
(5) Commitment. The following explanations will correspond to the theories as numbered previously. (1) 'Riskiness' is a culturally-prescribed value or ego ideal which causes the typical American to want to be at least as risky in his behavior as other people similar to him. (2) Relates to a situation in which the members of a group embrace one attitude but believe that others embrace another. (3) Relates to the attitude or belief that most group members will assume this 'risky-shift' - after they've discovered a single group member (the model) who endorses high risk-taking; and thereby releases the more cautious group members from the assumed social constraints that are holding them back from risk taking. (4) Relates to the notion that the dominant value or values in a decision problem elicit persuasive arguments in group discussion that convince group members to move further in the direction of these values. (5) In the commitment dimension, the following occurs: 'In the course of handling the information, as he interacts with real or imaginary interlocutors, he chooses alternatives, binds himself to the choice, and thus commits himself to the work he is doing. Such a commitment is assumed to move the individual further in the direction of his initial decision, that is, toward risk in the case of risk-oriented items and toward caution in the case of caution-oriented items.' (Pruitt, 1971)

Beginning in the mid 1960s, researchers who were continuing to investigate group decision-making processes altered the manner in which they perceived group dynamics. The "risky shift" occurrence gradually was viewed differently, and the term "group polarization" became the designation which described processes involved when groups attempted to reach decisions. The term "group polarization" originated from the writings of Serge Moscovici and his colleagues (Moscovici and Zavalloni, 1969).
The group polarization hypothesis was stated thusly by Moscovici, "The average postgroup response will tend to be more extreme in the same direction as the average of the pregroup responses." (p. 128) Polarization refers to an increase in the extremity of the average response of the subject polarization and this use of "polarization" is a somewhat specialized one. Moscovici reiterated the importance of distinguishing polarization from extremization. Whereas polarization refers to shifts toward the already preferred pole, extremization refers to movement away from neutrality, regardless of the direction. Since all instances of group polarization are instances of extremization, but not vice versa, extremization is occasionally easier to demonstrate than polarization. It should also be noted that conclusions about group polarization need not necessarily apply to individuals. The conclusion offered by Roseborough (1953) regarding the state of knowledge regarding groups and their problem-solving dynamics seems appropriate even in this decade: "We need not be further persuaded that group discussion processes have an effect on individual performance even though there is a selective process occurring in the reporting of studies. This proof has only opened up new and troublesome problems concerning the mechanism by which this influence is achieved and the conditions under which such an empirical observation holds." (p. 279)
The goal then is to ascertain and understand polarization in such a way that will account for the known conditions under which such group polarization occurred. Much of the subsequent research involved choice-dilemmas research. In general, they suggested that a subject changes when he discovers that others share similar inclinations more than he would have supposed. (Either because the group norm is discovered to be more in the direction which was originally preferred, or because the subject is released to more strongly act out his preference after observing someone else who models it more extremely than himself).

Prior to reporting several findings regarding group polarization, the following statement by McGuire (1969) elucidates quite well certain reasons to investigate this area of group process. McGuire noted, "It is clear that any impact that the mass media have on opinion is less than that produced by informal face-to-face communication, of the person with his primary groups, his family, friends, co-workers, and neighbors. In social interaction the target person is motivated to present himself favorably, and he is engaged in active cognitive rehearsal and verbal commitment. Thus, it is not surprising that, in Western culture, group discussions seem increasingly integral to our social and organizational existence." (p. 231)

At this interval, the term "Groupthink" will be introduced and explained. Both group polarization and the concept of
groupthink have overlapping qualities which significantly affect
group decision-making procedures. A detailed description of
groupthink will follow.

"Groupthink" is the process that occurs when decision-making
bodies agree for the sake of agreeing and consequently abandon
their critical judgment. As defined by Janis (1982), groupthink
is a mode of thinking "that people engage in when they are deeply
involved in a cohesive in-group, when the members' strivings for
unanimity override their motivation to realistically appraise
alternative courses of action." Groupthink refers to the
deterioration of the mental efficiency, of reality testing of
alternatives, and moral judgment that results directly from the
in-group pressures.

Janis (1983) lists the following eight symptoms which
characterize groupthink or "concurrence-seeking" tendencies:

1. An illusion of invulnerability, shared by most or
   all of the members, which creates excessive optimism
   and encourages taking extreme risks;

2. Collective efforts to rationalize in order to
discount warnings which might lead the members
to reconsider their assumptions before they
commit themselves to their past policy decisions.

3. An unquestioned belief in the group's inherent
   morality, inclining the members to ignore the
   ethical or moral consequences of their decisions;

4. Stereotyped views of rivals and enemies as too
   evil to warrant genuine attempts to negotiate, or
   as too stupid to counter whatever risky attempts
   are made to defeat their purposes;
5. Direct pressure on any member who expresses strong arguments against any of the group's stereotypes, illusions, or commitments, making clear that such dissent is contrary to what is expected of all loyal members;

6. Self-censorship of deviations from the apparent group consensus, reflecting each member's inclination to minimize to himself the importance of his doubts and counterarguments;

7. A shared illusion of unanimity, partly resulting from this self-censorship and augmented by the false assumption that silence implies consent;

8. The emergence of self-appointed "mindguards" - members who protect the group from adverse information that might shatter their shared complacency about the effectiveness and morality of their decisions.

Janis (1982) further delineates seven major defects in decision-making which further contribute to failures to solve problems adequately. These include: (1) The group's discussions are limited to a few alternative courses of action (often only two) without a survey of the full range of alternatives; (2) The group does not survey the objectives to be fulfilled and the values implicated by the choice; (3) The group fails to reexamine the course of action initially preferred by the majority of members; (4) The members neglect courses of action initially evaluated as unsatisfactory by the majority of the group (they spend little or no time discussing whether or not they have overlooked possible alternatives); (5) The members make little or no attempt to obtain information from experts who can supply sound estimates of losses and gains to be expected from alternative courses of
action; (6) Selective bias is shown in the way that the group reacts to factual information and relevant judgments from experts, the mass media, and other outside critics; and (7) The members spend little time deliberating about how the chosen policy might be hindered by bureaucratic inertia, sabotaged by political opponents, or temporarily derailed by the common accidents that happen to the best of well-conceived plans.

Dorwin Cartwright (1968) summarized the research of social psychologists who investigated the effects that cohesiveness exerts upon a decision-making group. Cartwright concluded that, "Other things being equal, as cohesiveness increases there is an increase in a group's capacity to retain members and in the degree of participation by members in group activities. The greater a group's cohesiveness, the more power it has to bring about conformity to its norms and to gain acceptance of its goals and assignment to tasks and roles. Finally, highly cohesive groups provide a source of security for members which serves to reduce anxiety and to heighten self-esteem."

In concurrence with Cartwright, Janis (1982) stated that the central theme of his groupthink phenomenon could be summarized thusly: "The more amiability and esprit de corps among the members of a policy-making in-group, the greater is the danger that independent critical thinking will be replaced by groupthink, which is likely to result in irrational and dehumanizing actions directed toward out-groups."
Suedfeld and Tetlock (1977) researched international crises in the context of how decision-makers processed information prior to and during the particular crisis. They discovered that prolonged stress decreased the complexity of information processing. Also, decision makers became concerned with short-range solutions and saw their freedom of action being increasingly restricted while that of their adversaries appeared to be increasingly wider. Their main conclusions regarding the information processing and the complexity of such information discussed among policy makers were that: (1) International crises that resulted in war were characterized by lower levels of communicative complexity than those that were resolved peacefully; and (2) Changes in complexity as the climax approached showed a decrease prior to the outbreak of war and an increase prior to a peaceful solution being obtained.

Burnstein and Vinokur (1977) investigated the merits of the "persuasive-arguments" theory. One of their premises was that polarization will be maximal when a person begins to rethink the issue, and many arguments remain that have not yet come to mind, or when several individuals discuss the issue with each other and not all of them have thought of the same arguments. They mentioned that when a series of arguments is learned prior to discussion, recall of a particular argument will depend on its position in the series. Furthermore, polarization and convergence occur simultaneously and the typical finding was that during discussion the most extreme member moves to a relatively moderate position, while the next
extreme member hardly changes at all. According to the persuasive-arguments theory, attitude polarization is fundamentally an informational phenomenon. Their findings suggested that:

(1) social comparison does little to enhance or sustain polarization,
(2) polarization depends upon a capacity to generate persuasive arguments, and (3) that this capacity is diminished when the person either is presented with an issue about which he has little knowledge or is prevented from thinking about the issue.

John Courtright (1978) studied the groupthink circumstance in a laboratory setting. His results agreed with Janis' groupthink concepts and supported the groupthink theory. Courtright concluded that highly cohesive groups have significantly less disagreement than low-cohesive groups. Perhaps more importantly, this study indicated that the presence or absence of disagreement (conflict, hostility) among group members may be the best discriminator between groupthink and non-groupthink groups.

Allen and Wilder (1980) mentioned that previous discussions of conformity had focused primarily on the role of motivational and social factors. They proposed that group consensus produces conformity in an indirect manner by modifying the meaning of the stimulus itself. Stated more generally, they asserted that the meaning attributed to a stimulus is influenced by the context in which it appears. The conclusion was that a change in the meaning of the stimuli was, in fact, responsible for a shift in
opinion. A person therefore would reinterpret the meaning of the stimulus object when faced with unpopular responses from a unanimous group, and this change in meaning would lead to a shift toward the position of the group.

Bray and Chilstrom (1982) reevaluated an earlier study performed by Hollander (1964) in which Hollander proposed that "a group member holding a minority position must conform initially to the majority position and show competence before being allowed not to conform to majority beliefs later." The essence of Hollander's model was that deviant opinions or actions would be most likely to be accepted by members of the majority when the holder of the deviant opinion(s) attained sufficient status in the group. Bray and Chilstrom then compared Hollander's findings with those of the Moscovici study (1972), where Moscovici suggested that the minority member must consistently and resolutely not conform from the outset. Conclusions were mixed. For males, results showed that Hollander's model produced significantly greater influence. But for females, both the Moscovici and Hollander models proved equally effective, regardless of competence.

Insko, Drenan, et al. (1982) explored conformity as a function of positive self-evaluation with being liked and being right. Their results indicated that conformity is a joint function of the concern with being liked and the concern with being right. Subjects conformed more with public than with private responding,
and also when they were led to believe that the relationships between objects were objectively determined rather than undetermined.

Mackie and Cooper (1984) investigated the effect of group membership on attitude polarization. In their study they quoted Wetherell and Turner (1979) who suggested that, "Individuals who become aware of their group membership search via information exchange and social comparison for the definitional or criterial traits and norms that distinguish their group from others." The norms that individuals perceive as "group-definitional" tend to become polarized to the extreme. Consistent with this idea, Doise (1969) has shown that identification with the group enhances both occurrence and magnitude of polarization. The main conclusion of the Mackie and Cooper (1984) study was that group membership exerted more control over polarization than informational exchange per se. Polarization occurred when subjects listened to what they believed to be their own group, regardless of similarity with the other members.

Wilder (1984) explored the concept of intergroup contact and cited evidence in literature that face-to-face contact can be effective in improving intergroup relationships if the contact occurs under cooperative conditions. Wilder produced a mixed finding regarding the evaluation of an out-group member by the members of an in-group.
Members of a negatively evaluated out-group are in a bind. On the one hand, information that strengthens their association with their group should also strengthen the favorable impact of successful contact on evaluations of their group as a whole. But to the extent they appear to be typical of the out-group, they risk confirming unfavorable stereotypes about the out-group, thereby jeopardizing evaluations of themselves as individuals. On the other hand, information that weakens their association with the out-group may encourage more favorable evaluations of themselves as individuals. But to the extent that they appear to be atypical of their group, successful contact should have less impact on evaluations of their group.

Stasser and Titus (1985) proposed that decision-making groups can potentially benefit from pooling members' information, particularly when members individually have partial and biased information (but collectively can compose an unbiased impression of the possible alternatives). Several theoretical perspectives have emphasized the role of information exchange in guiding the developing of a consensus while modifying members' preferences during group discussion (e.g., Anderson and Graesser, 1976; Hoffman and Maier, 1964; Kaplan, 1977; Stasser and Davis, 1981). Unique arguments are considered particularly instrumental in producing preference shifts. In these researchers' findings, Stasser and Titus discovered that the unshared information will tend to be omitted from discussion and, therefore, will have
little effect on members' preferences during group discussion. Furthermore, discussion did not increase the recall of unshared information.

Moreland (1985) stated that recent research on intergroup relations had shown that categorizing subjects into social groups was often enough to produce strong in-group, out-group biases (Brewer, 1979; Tajfel, 1978; Wilder, 1981). Moreland preferred to examine how new group members are assimilated into the decision-making process. Newcomers in real groups are usually eager to be accepted by oldtimers, so they avoid behaving in ways that might inhibit their assimilation into the group (Ziller, 1964). Many groups have explicit norms regarding the acceptance of new group members. Conclusions ascertained included that real newcomers often interacted more frequently and positively with one another than they did with oldtimers; conflict within a group can be facilitated simply by making differences among the members of that group more salient; and members of a minority clique are more likely to favor one another over other group members when their clique is fairly small and hence distinctive.

Giammarino and Wright (1986) investigated social status in small groups utilizing personality traits or features of the individual. Although the study employed school-age subjects, some of the conclusions have implications for other age segments. Most appropriate was the finding that measures of traits such as
honesty, aggression, and conscientiousness displayed less consistency than expected. Many studies, for example, have demonstrated a positive relationship between popularity and social competencies but the negative behaviors (e.g., aggression) and unpopularity have not been illustrated as consistently.

Although citing the need for further research prior to claiming absolute predictibility, Janis (1983) proposed the following prescriptions for preventing groupthink:

1. The leader of a policy-making group should assign the role of critical evaluator to each member, encouraging the group to give high priority to airing objections and doubts.

2. The leaders in an organizations' hierarchy, when assigning a policy-planning mission to a group, should be impartial instead of stating preferences and expectations at the outset.

3. The organization should routinely follow the administrative practice of setting up several independent policy-planning and evaluation groups to work on the same policy question, each carrying out its deliberations under a different leader.

4. Throughout the period when the feasibility and effectiveness of policy alternatives are being surveyed, the policy-making group should from time to time divide into two or more subgroups to meet separately, under different chairpersons, and then come together to hammer out differences.

5. Each member of the policy-making group should discuss periodically the group's deliberations with trusted associates in his or her own unit of the organization and report back to their reactions.

6. One or more outside experts or qualified colleagues within the organization who are not core members of the policy-making group should be invited to each
meeting on a staggered basis and should be encouraged to challenge the views of core members.

7. At every meeting devoted to evaluating policy alternatives, at least one member should be assigned the role of devil's advocate.

8. Whenever the policy issue involves relations with the rival organization, a sizable block of time should be spent surveying all warning signals from the rivals and constructing alternative scenarios of the rivals' intentions.

9. After reaching a preliminary consensus, the group should hold a "second chance" meeting at which the members are expected to express as vividly as they can all doubts and to rethink the entire issue before making a definitive choice.

Justification

Research involving groupthink and whether or not a decision-making body was engaging in groupthink strategy is an extremely new area of group research. Prior to the 1980s and prior to Janis' identification and explanation of groupthink, research in this particular area of group communication was practically nonexistent. While it is apparent from the review of group research that numerous studies have explored the dynamics of how groups and individual group members attain prestige and arrive at decisions, it is nonetheless true that one particular area was seldom researched. This is the phenomenon of how groups are persuaded to render faulty and even grossly dangerous and costly decisions. The most recent example of such a disastrous consequence occurred in January 1986 when the
space shuttle Challenger exploded 73 seconds after lift-off (Kruglanski, 1986). It is currently being debated and discussed by government officials and NASA whether or not hasty decisions were made immediately prior to that fateful morning. In a less dramatic manner, this study will similarly attempt to investigate one decision-making governmental body to ascertain whether or not a groupthink mode of thinking prevailed. This study was undertaken with the expressed intention to add to and thereby increase the body of research involving groupthink. This and other groupthink studies will hopefully assist in understanding one aspect of how individuals respond in a group dynamic environment.

**Hypothesis**

This study is an investigation to determine whether or not a decision-making group rendered final decisions as a result of a groupthink approach to decision-making. The main hypothesis is stated below:

\[ H_1: \text{Groups that reach decisions which are contrary to the majority of the general public's viewpoint, will demonstrate a lower level of integrative complexity in their decision-making process, than groups that reach decisions which are in agreement with the majority of the general public's viewpoint.} \]
In addition, the following research questions will be specifically explored:

Q₁: Does the degree of importance assigned to an issue by a group member (or other individual), significantly affect that individual's conceptual level of integrative-complexity?

Q₂: Can the 7-point integrative-complexity rating scale be utilized as a predictor of possible groupthink approaches in the decision-making process?
PROCEDURE

Transcriptions of the Daytona Beach City Commission meetings were researched and 12 issues of unanimous agreement were extracted from these transcriptions. After recording the topics of these 12 issues, a telephone survey was initiated. The purpose of the telephone survey was to ascertain whether or not the general public agreed with or disagreed with the decisions made by the city commissioners, and to measure the degree of importance each respondent assigned each of the 12 issues. Following the telephone survey, the two most important issues and the two least important issues (according to the respondents) were identified. The 12 issues extracted from the transcriptions of the city council meetings are detailed below:

1. Ban the consumption of all alcoholic beverages on the beaches within the city limits of Daytona Beach.

2. Ban the operation and driving of any and all motor vehicles from the beaches within the city limits of Daytona Beach between the hours of one hour after sunset to one hour before sunrise.

3. Ban all pets and other animals from the beaches within the city limits of Daytona Beach at all times of the day and night.
4. Charge daily ramp tolls at every approach to the beaches within the city limits of Daytona Beach.

5. Annex and incorporate all surrounding municipalities into one greater Daytona Beach Area.

6. Permit Halifax Cable Television, Inc., to provide pay television services and further permit Halifax Cable to increase customer rates accordingly.

7. Permit the demolition of a 120-year-old hotel located within the city limits of Daytona Beach.

8. Enact an ordinance the would permit current beach concession operators to sell their businesses only to the city of Daytona Beach (if the owners intended to sell their concession operations at a future time).

9. Limit new building heights on all newly-constructed buildings, when erected immediately on the oceanfront property in Daytona Beach.

10. Close Main Street permanently to vehicular traffic and construct an outdoor shopping area in this location.

11. Permit the temporary closing of City Island Park to vehicular traffic during the hours that the Saturday Farmer's Market is in operation.

12. Permit the use of city funds to establish and support the position and office of a full-time city liaison officer whose main purpose will be to promote television and film production within the greater Daytona Beach area.

A total of 100 completed telephone surveys was obtained. The sample for the telephone survey was selected using a random digit dialing method currently employed by many marketing research organizations. The interviewer began at a randomly
selected point in the greater Daytona Beach area telephone directory and added the number 10 to the last two digits of the phone number. The interviewer continued down the list of numbers, always adding 10 to the last two digits of each phone number listed until an interview was completed. Upon completion of an interview, the interviewer would count three columns forward in the phone book and resume random digit dialing in the same manner. This method, while it samples many disconnected or otherwise unoperating numbers, allows the researcher to survey those with unlisted numbers as well as new listings. This method additionally has the benefit of being free from ordered effects which might have otherwise resulted.

All completed interviews were prefaced with the interviewer inquiring as to whether or not the respondent was at least 18 years of age. In the event that the respondent was not 18 years of age, he or she was thanked and another randomly placed call initiated. All respondents were initially informed of the purpose of the phone survey (completion of university coursework) and were further advised that their cooperation was appreciated. The interviewer also stressed the point that if a telephone respondent would rather not participate in the brief survey, he or she should not hesitate to state this choice. It was also mentioned by the interviewer that the survey would take approximately five minutes to conduct. Only upon receiving
positive answers to the previously-mentioned inquiries would an actual survey be conducted and completed.

In order to be utilized as a "complete phone survey" each respondent was asked and had to respond to the following two questions:

(1) How important, on a rating scale of 1 to 10, 1 being the least important and 10 being the most important, are the following issues to you?

(2) Do you agree with, disagree with, or have no opinion regarding the decision made on this issue by the Daytona Beach City Commission?

Each telephone respondent's answers were recorded according to which issues were agreed upon, disagreed upon, had no opinion upon and the degree of importance each individual issue held for the respondents.

Following the completion of 100 telephone survey calls, the results were tabulated and the two most important issues and the two least important issues identified. These four issues were judged either least important or most important by adding the number of telephone responses which indicated this preference. The four issues and whether or not the majority of the 100 respondents agreed with or disagreed with the decision(s) made by the city commission are itemized below:

A1B1: IMPORTANT AND AGREED WITH THE CITY COUNCIL'S DECISION:
"Limit new building heights on all newly-constructed buildings, when erected immediately on the oceanfront property in Daytona Beach."
A2B1: IMPORTANT AND DISAGREED WITH THE CITY COUNCIL'S DECISION:
"Ban the operation and driving of any and all motor vehicle(s) from the beaches within the city limits of Daytona Beach from one hour after sunset to one hour before sunrise."

A1B2: UNIMPORTANT AND AGREED WITH THE CITY COUNCIL'S DECISION:
"Permit Halifax Cable Television, Inc., to provide pay television services and further permit Halifax Cable to increase customer rates accordingly."

A2B2: UNIMPORTANT AND DISAGREED WITH THE CITY COUNCIL'S DECISION:
"Permit the demolition of a 100-year-old hotel located within the city limits of Daytona Beach."

Having identified by the telephone survey which were the two least important and which were the two most important issues, the research into the minutes of the city commission meetings continued. The aforementioned four issues were examined to determine on what date(s) each of the issues was discussed by the commission members. Upon locating the appropriate time and date interval in the meeting's transcriptions, each individual issue was read and scrutinized by the researcher. The researcher commenced by counting how many statements in total were verbalized by the group members on each particular issue. In this context, a statement was defined as: an opinion, thought, or idea which was spoken until either the speaker concluded the thought or until someone else interrupted. The four issues and their respective total number of statements are listed accordingly:
A1B1: IMPORTANT AND AGREED - 485 statements  
A2B1: IMPORTANT AND DISAGREED - 422 statements  
A1B2: UNIMPORTANT AND AGREED - 508 statements  
A2B2: UNIMPORTANT AND DISAGREED - 228 statements

Utilizing random number tables (Glass and Stanley, 1970; Leedy, 1980; and Winer, 1962), 100 statements were selected from the total number of statements for each issue. Each of these 100 randomly selected statements was copied exactly as it appeared in the transcriptions. The researcher carefully proofread each of these 100 statements after recording them from the official minutes of the group meetings to ensure authenticity and accuracy. This same procedure was followed for every one of the four issues. Eventually, the researcher compiled 400 randomly selected verbatim statements made by the city commission members.

Each 100 statements pertaining to one of the four issues was then coded to ascertain the degree of integrative-complexity evident within. Three coders who had been previously trained by the researcher in the utilization and technique of the integrative-complexity measuring instrument were employed. All three coders were blind regarding the research questions, intent of the research, and the sources of the research material. Each of the three coders was also a state-certified instructor
and had attained at least the Master's Degree level in his or her professional career of teacher education.

Each of the 400 statements was coded utilizing the 7-point integrative-complexity scale developed by Driver, Schroder and Streufert (1977). The integrative-complexity scale has been successfully utilized in previous research studies to determine the manner in which individuals reach decisions in a group situation. Statements made by the group members (of the Daytona Beach City Commission) were rated according to this scale to determine how members were processing information and how their subsequent statements reflected this processing behavior and outlook (Suedfeld and Tetlock, 1977; Suedfeld, Tetlock, and Ramirez, 1977; and Tetlock, 1979).

According to Driver et al. (1977), integrative-complexity reflects the information-processing capabilities of the individual. The concept stems from a general position that problem-solving, decision-making, and similar cognitive processes vary across individuals and across discussion situations.

Integrative-complexity is a dimension of information-processing characterized at one pole (low end of the scale) by simple responses, gross distinctions, rigidity, and restricted information usage; and at the other pole (high end of the scale) by complexity, fine distinctions, flexibility, the entertaining of alternative suggestions, and more extensive information search and usage.
Further indicators of decreased integrative-complexity include: a lessened likelihood of accurately distinguishing between relevant and irrelevant information; a reduced search for new information; the suppression of ignoring of unpleasant inputs; long-term plans tend to be ignored in favor of stimulus-bound reactions; and responses and attitudes become increasingly stereotyped (Suedfeld and Tetlock, 1977).

At the lower end of the scale, statements and decisions are characterized by anchoring around a few salient reference points; the perception of only one side of an argument or problem; the ignoring of differences or similarities among points of view; the perceiving of other members or participants, courses of action and other possibilities as being either totally good or totally bad; and a search for rapid and absolute solutions in order to achieve a group consensus with little or no uncertainty. At the higher (complex) end of the scale, there exists a flexible and open method of information-seeking and processing with others; the ability to consider multiple points of view simultaneously and then to incorporate these ideas and respond flexibly to them; and the notion that positive group decision-making is frequently a time-consuming and exhaustive process.

According to Tetlock (1979), measurements derived from the integrative-complexity scale will:
(1) Tend to become less integrative (lower range) as the group assumes a groupthink posture; and

(2) Tend to become more integrative (higher range) as the group displays openness and explores alternatives. Consequently, such a group would not be subject to groupthink behavior.

The three independent coders read, evaluated and then coded each of the 40 statements (100 statements for each of the four issues) with a number from one to seven according to the 7-point integrative-complexity scale. The figure below illustrates the scale used for measuring verbal responses during a group discussion situation.

```
1 2 3 4 5 6 7
Low Medium Low Medium High High
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Figure 1. Scale Used for Scoring Verbal Responses

The scale represents a continuum from low to high levels of integrative complexity. At the present level of knowledge regarding integrative-complexity responses, this study attempted to define four gross points along this scale (1, 3, 5, and 7) and provide for a point of transition between each (2, 4, and 6). The major requirement of reliable and valid scoring was a thorough understanding of each gross point of the scale and the ability of each of the three coders to discern which of the gross points
aligned with the statements made by the group members. A brief description of each of the gross points (1, 3, 5, and 7) follows:

Low integration index (scale value 1): To assign a score of 1, the rater must decide that the response could be generated by a single fixed rule, and that no alternative interpretations were considered or solicited. Specific indications of a low integration index include: (a) viewing conflict, uncertainty, or ambiguity as unpleasant or a flaw or a weakness in people or functions; (b) seeking fast closure or resolution; (c) offering a specific guide or rule to reduce conflict; (d) implying that an absolute solution can be found; and (e) presenting only one side of a problem while ignoring differences and similarities with other viewpoints.

Medium low integration index (scale value 3): To assign a score of 3, the statement must clearly represent the availability of alternative ways of dealing with the issue being discussed. Specific operations include: (a) the mentioning of similarities and differences between views without considering relationships; (b) the specification of at least two different interpretations of the issue in the statement being examined; (c) the presence of "either-or" type of responses; (d) probability statements about the occurrence of different views or outcomes; (e) reactions against any absolute statements when aired by other group members; and (f) the considering and availability of alternative solutions to solving the problem being discussed.

The very fact of generating alternatives is related to a negativistic outlook by some individuals. However, in this context and in this measurement purpose; a score of 3 implies the presence of alternative interpretations regardless of the positivity or negativity of the statement.

Medium high integration index (scale value 5): For a statement to be rated at the third level along the integrative-complexity scale, it must give evidence not only of alternative interpretations but also of the use of comparison rules for considering the joint application of these alternatives. Specific indications include: (a) the integration of two conflicting or differing interpretations so as to preserve and not "ward off" the conflict; (b) evidence that the statement
implies the ability to take another person's intentions (or perspectives) into account and to relate different perceptions of different people (group members); (c) the implication that one's behavior is affected by the way another behaves, as in a give-and-take strategy game; (d) a view of social relationships as anchored in mutual responsibility (as opposed to fixed beliefs or rules), in which each person can "place himself or herself in the other person's shoes"; and (e) the consideration of alternate reasons for similarities and differences between views.

High integration index (scale value 7): Statements are given a rating of 7 on this scale when they not only state or imply alternative ways of dealing with an issue but also consider the possible outcomes of these alternatives. Such statements are relativistic rather than absolutistic and occur rather infrequently in group discussions involving issues which are unique to this study. It has been stated in the manual of the integrative-complexity scale that perhaps very few individuals use such complex rules of information processing outside the realm of science or philosophy. Responses that indicate the simultaneous operation of alternatives and give some evidence of the consideration of functional relations between them are given a score of 6. Specific references must usually be inferred because group members seldom relate all steps in such complex thought processes.

Therefore, to be assigned a rating of 7, a statement would have to include: (a) conflicting alternatives that are viewed as leading to new organizations and information; (b) utilization of alternatives through exploratory action in order to gain new information; (c) the consideration of relationships among similarities and differences between the sides of a problem or question, and development of relationships between alternate reasons as to why these differences and similarities exist; and (d) the production of more "connectedness" between alternatives by theorizing as to why these reasons exist.

**Inter-rater Reliability**

In all instances, three coders scored each of the 400 statements. It was imperative, in the interest of validity,
that all three coders understood the theoretical variables previously explained. The main question which all three coders had to continuously ask themselves during the coding process was basically, "Regardless of what the statement says or implies, what complexity (scale point 1, 3, 5, or 7) would be required to generate such a statement or response from this group member?"

The following table illustrates how statements and/or responses to the stimulus word "Rules . . ." would be coded depending upon the way the individual completed the statement.

### TABLE 1

**EXAMPLES OF RESPONSES TO THE STIMULUS WORD "RULES . . ." CODED AT POINTS ALONG THE INTEGRATION INDEX SCALE**

<table>
<thead>
<tr>
<th>SCALE POINT</th>
<th>RESPONSES</th>
</tr>
</thead>
</table>
| 1           | (a) "are made to be followed. They give direction to a project or life or anything. They should not be broken except in extreme circumstances."  
(b) "are absolutely ridiculous. Rules are restraining the human being who should be free and thinking for himself or herself. Persons who make rules want to be masters and make others followers." |
| 2           | (a) "are made to be obeyed in most cases. They are made for a reason after all. If a rule doesn't seem adequate any longer, it can be broken. Since human beings make rules, the rules are fallible also." |
(b) "When I am unable to see the importance for the reason behind the rule, I'd like to disregard it but can't because of the consequences. I try to understand why a rule or law is, but sometimes I can't."

3

(a) "People seem to forget that rules are not ends in themselves. They were made by us, not created by their own will, for our benefit. People, for the most part, often don't see beyond the point of the rules, don't look for the underlying reasons."

(b) "are usually made with the intention of doing someone or society some good. Often, over time, they become distorted and meaningless and too few people are helped by them. Then, if it cannot be be easily enforced, it is virtually disregarded."

4

(a) "can be irritating when they interfere with one's life. But it's important to remember that they have been carefully thought out. They are in no sense absolute, but can provide a relative measure of security from others bent on their own interests as well as order."

(b) "are sometimes to be taken with a grain of salt. Many are undoubtedly wise and should not be broken just for the sake of nonconformity. Society must continually examine its rules, however, to ensure that none are unjust or obsolete."

5

(a) "must be inspected before they are obeyed blindly. Obeying a 'bad' rule ('bad' - morally, socially, etc.), he or she gives it strength. Rules should be examined by society and changed, if necessary, by the process of law or obsolescence or enough people refusing to obey them publicly."
(b) "are necessary for a society to function well. However, rules should not be so strictly adhered to that they cannot be modified when circumstances alter. The purpose or effects of rules are more important than the rules themselves."

6

(a) "represent one type of mechanism by which man tries to regulate his society. These rules differ according to different environmental and sociological factors and are in an endless process of change, within the same group and from group to group."

(b) "are means which mankind attempts to 'come to grips' with factors which influence his/her world daily. Often these rules must be altered as the process of living in a modern society dictates."

7

(a) "serve mankind and should be interpreted in terms of their ends, not their letter 'of the law'. They have a purpose both for the governed (keeping order) and for those who govern (order, maintaining status quo, etc.). This purpose can and perhaps should, change from time and place and, hopefully, lead to a better, broader basis of understanding humans and making rules."

(b) "are made for everyone but are interpreted in many ways. It depends on the point of view of the interpreter. It is in this very process of interpretation that a society stays dynamic and changes and grows."

(Driver, Schroder, and Streufert, 1977).

The following table will further demonstrate how each of the statements would be categorized along the dimensions of the

<table>
<thead>
<tr>
<th>SCALE POINT</th>
<th>RESPONSES</th>
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<tbody>
<tr>
<td>6</td>
<td>&quot;represent one type of mechanism by which man tries to regulate his society. These rules differ according to different environmental and sociological factors and are in an endless process of change, within the same group and from group to group.&quot;</td>
</tr>
<tr>
<td>7</td>
<td>&quot;serve mankind and should be interpreted in terms of their ends, not their letter 'of the law'. They have a purpose both for the governed (keeping order) and for those who govern (order, maintaining status quo, etc.). This purpose can and perhaps should, change from time and place and, hopefully, lead to a better, broader basis of understanding humans and making rules.&quot;</td>
</tr>
</tbody>
</table>

(Driver, Schroder, and Streufert, 1977).
integrative-complexity scale if group members were asked to complete the thought beginning with the words, "When I am in doubt . . ."

**TABLE 2**

EXAMPLES OF RESPONSES TO THE STIMULUS WORDS "WHEN I AM IN DOUBT . . ." CODED AT POINTS ALONG THE INTEGRATION INDEX SCALE

<table>
<thead>
<tr>
<th>SCALE POINT</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(a) &quot;I make a rapid, and I hope (!), sound decision. Doubts can make for a very troubled and unhappy life if one permits them to.&quot;</td>
</tr>
<tr>
<td></td>
<td>(b) &quot;I try to weigh things carefully, but it really comes down to following my hunch or acting on impulse. I'd rather follow impulse than do nothing at all.&quot;</td>
</tr>
<tr>
<td>2</td>
<td>(a) &quot;I do my best to assess all relevant data. Then I see if I feel strongly any way as intuition is sometimes more reliable than reason. If I have no definite feelings, I think the problem out and make a 'rational' decision based upon probability.&quot;</td>
</tr>
<tr>
<td></td>
<td>(b) &quot;I think through what is puzzling me and try to find my feelings and thoughts about it. I will use reference works if the problem is academic or just ponder if it is a moral issue.&quot;</td>
</tr>
<tr>
<td>3</td>
<td>(a) &quot;I find that it often comes because I thought I knew the full details about something and then a surprising occurrence showed that I didn't know&quot;</td>
</tr>
<tr>
<td>SCALE POINT</td>
<td>RESPONSES</td>
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</table>
| 3           | (a) continued all the answers after all. We should try to get as much information as possible in order to form tentative conclusions but remember that they aren't the final ones."
|             | (b) I oftentimes ask someone who I think should know. By doing this, you can often understand your problem better. However, sometimes it is better to work it out yourself." |
| 4           | (a) "I talk to other people about the problem and think about it for a while. There are problems where there is an objective answer. Other problems have several solutions, and I try to choose the most advantageous one." |
|             | (b) "I think about it and sometimes also consult the feelings of others. I then take these impressions from others and use them to supplement or modify my own. By this means, I am often able to make a decision. |
| 5           | (a) "I think the problem through first by myself. I may also seek advice from those more familiar with the subject. I try to get as many viewpoints as possible so that my thoughts will have another direction." |
|             | (b) "I generally back off from the situation to re-examine the whole problem. Often this re-examination discloses new avenues--and often opens me up for criticism for my vacillating methods!" |
(a) "I try to find out what others think. Then I usually develop my own point of view out of those I've discussed with others. I rather enjoy doubt; it forces me to change my opinions so that I can understand things better."

(b) "I try to figure out a reasonable answer, considering all the available evidence. I usually still have doubts (even new ones!) after this, and I consult other people in order to consider their opinions. The result is hardly a final solution, but it usually serves as a springboard for further considerations."

(a) "I don't know, as a rule, of any standard method for alleviating the doubt. It usually seems best to meditate upon it rather than plan an immediate course of action, because often under the influence and goal of a doubt, one comes up with ideas and thoughts about it that he never had before--and even this can lead to new ideas."

(b) "I think about it in some detail. It almost always means that I start re-evaluating things. Often I find I change what I believe in if it no longer seems to fit a new situation--it all depends on how useful the old and new ways of thinking are."

(Driver, Schroder, and Streufert, 1977).

As a final illustration of how statements are coded according to the 7-point integrative-complexity scale, the following table
summarizes the scale points used for assessing the conceptual levels of statements made by the individual group participants.

**TABLE 3**

**SCALE POINTS USED FOR ASSESSING THE CONCEPTUAL LEVEL OF STATEMENTS MADE BY GROUP MEMBERS OF A DECISION-MAKING BODY; ACCORDING TO THE DEGREE OF INTEGRATIVE-COMPLEXITY**

<table>
<thead>
<tr>
<th>SCALE POINT</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>Presents only one side of a problem. Ignores differences, similarities, and gradations.</td>
</tr>
<tr>
<td>2</td>
<td>One side of the problem presented and supported much more fully than the other. Opposing views perceived as compartmentalized or negative. No interrelationships considered.</td>
</tr>
<tr>
<td>3</td>
<td>Two or more views clearly differentiated. Similarities and differences implied or presented. One view can be opposed, but it is still understood.</td>
</tr>
<tr>
<td>4</td>
<td>Includes all involved under scale point 3 but begins to &quot;consider&quot; the similarities and differences between viewpoints. At this level, consideration is expressed . . . as qualifications of each . . . (for example, &quot;similar, but . . .&quot;).</td>
</tr>
<tr>
<td>5</td>
<td>Considers alternate and conflicting reasons for perceived similarities and differences between views in verbalizing the statement.</td>
</tr>
<tr>
<td>6</td>
<td>Begins to consider relationships, not only among direct similarities and differences between sides of the issue, but also relationships between alternate reasons as to why the differences and similarities occur.</td>
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</table>
TABLE 7 - CONTINUED

<table>
<thead>
<tr>
<th>SCALE POINT</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>7</td>
<td>The consideration of ideas and suggestions which include relational linkages between alternate views. Such ideas and suggestions (either expressed negatively or positively) are encouraged and solicited in the perception that additional input can only assist in the decision-rendering process.</td>
</tr>
</tbody>
</table>

Following the coding process, the researcher tallied all three individual rating scores. For any statement, then 3 would be the lowest possible score and 21 would be the highest possible rating score. Each of the 400 statements was tallied in this manner to yield a composite rating score for each statement. The integrative-complexity ratings were then analyzed with a 2 (agreement/disagreement) X 2 (topic importance/unimportance) analysis of variance.
RESULTS

The purpose of this study was to investigate whether or not a decision-making group rendered final decisions as a result of a groupthink approach to decision-making.

H₁ stated that: "Groups that reach decisions which are contrary to the majority of the general public's viewpoint will demonstrate a lower level of integrative complexity in their decision-making process than groups that reach decisions which are in agreement with the majority of the general public's viewpoint."

Research question number one asked the following:

"Does the degree of importance assigned to an issue by a group member (or other individual), significantly affect that individual's conceptual level of integrative-complexity?"

The range for the integrative-complexity rating scale was 21.

Group means for the four categories are as follows:

A1B1: Important and Agreed - 8.79
A2B1: Important and Disagreed - 8.12
A1B2: Unimportant and Agreed - 8.82
A2B2: Unimportant and Disagreed - 8.49

Table 4 demonstrates the ANOVA summary for the effects of agreement and importance as they related to integrative-complexity of discussion.

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The results shown in Table 4 indicate that $H_1$ was not supported in respect to the agreement variable. Additionally, research question one must be answered in the negative response. According to the statistical results, the degree of importance assigned to an issue by a group member did not significantly affect that individual's conceptual level of integrative-complexity. The results illustrate that neither main effect (Importance of topic or Agreement) produced significance. That is, integrative-complexity was not affected by either variable. Also, the AB interaction (Importance/Agreement) was non-significant.

Research question number two asked the following:

"Can the 7-point integrative-complexity rating scale be utilized as a predictor of possible groupthink approaches in the decision-making process?"
This question specifically involved the examination of ratings utilized on the integrative-complexity scale. The main premise was that certain groups could be undergoing communicative behavior changes according to how they scored on the integrative-complexity scale. More exactly, lower ratings were thought to indicate a rigid and more elementary approach to problem-solving situations. Table 5 illustrates how the four groups were rated by the three coders according to the seven dimensions used on the integrative-complexity scale. This table lists the number of times (and the percentage of the overall total) each of the seven rating dimensions was marked by the coders. Each of the four categories included 100 statements made by the city commissioners during meeting situations. Since there were three coders performing the task, there are 300 total statements included for each of the four categories.
TABLE 5

FREQUENCY AND PERCENTAGE EACH OF THE SEVEN POINTS ON THE INTEGRATIVE-COMPLEXITY SCALE WERE SELECTED BY THE CODERS

<table>
<thead>
<tr>
<th>CATEGORY (GROUP)</th>
<th>RATING POINT</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important and Agreed</td>
<td>1</td>
<td>64</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>97</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>36</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>49</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>28</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>21</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td>Important and Disagreed</td>
<td>1</td>
<td>72</td>
<td>24%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>105</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>26</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>54</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>29</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>13</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>1</td>
<td>.3%</td>
</tr>
<tr>
<td>Unimportant and Agreed</td>
<td>1</td>
<td>67</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>92</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>23</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>52</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>37</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>24</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td>Unimportant and Disagreed</td>
<td>1</td>
<td>46</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>101</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>59</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>56</td>
<td>19%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>24</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>10</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>4</td>
<td>1%</td>
</tr>
</tbody>
</table>
According to Table 5, rating point two was used more frequently than any of the other six rating points. In every category except the "Unimportant and Disagreed" category, rating point number one was the next most popular rating for the three coders. As was noted earlier, rating point one is indicative of a low level of integrative-complexity and is characterized by a rigid, unquestioning and generally-closed view of group interaction and participation. At the higher levels of the scale (rating points four through seven), the frequency with which these dimensions were used by the coders decreased substantially.

Table 6 illustrates the percentage of the time (according to the four categories), that the three coders were in total agreement, two-thirds agreement, or no agreement whatsoever.

| TABLE 6 |
| PERCENTAGE OF THE TIME IN WHICH THE THREE CODERS WERE IN TOTAL AGREEMENT, TWO-THIRDS AGREEMENT, OR NO AGREEMENT |

<table>
<thead>
<tr>
<th>CATEGORY (GROUP)</th>
<th>TOTAL AGREEMENT</th>
<th>TWO-THIRDS AGREEMENT</th>
<th>NO AGREEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important and Agreed</td>
<td>-</td>
<td>51%</td>
<td>37%</td>
</tr>
<tr>
<td>Important and Disagreed</td>
<td>-</td>
<td>35%</td>
<td>64%</td>
</tr>
<tr>
<td>Unimportant and Agreed</td>
<td>-</td>
<td>44%</td>
<td>50%</td>
</tr>
<tr>
<td>Unimportant and Disagreed</td>
<td>-</td>
<td>20%</td>
<td>67%</td>
</tr>
</tbody>
</table>
Table 6 demonstrates that the greatest percentage of total agreement among the three coders occurred during the codings for the "Important and Agreed" category. The lowest level of total agreement among the three coders occurred in the "Unimportant and Disagreed" category. In this category also ("Unimportant and Disagreed"), the three coders disagreed among themselves more (13%) than in any of the other categories. When all the four categories are compressed to yield an average percentage (for levels of agreement among the three coders), the figures are as follows:

<table>
<thead>
<tr>
<th>Average Total Agreement</th>
<th>-</th>
<th>37.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average 2/3's Agreement</td>
<td>-</td>
<td>54.5%</td>
</tr>
<tr>
<td>Average; No Agreement</td>
<td>-</td>
<td>8.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>
DISCUSSION

This descriptive study was an investigation to determine whether or not a city governmental body rendered unanimous decisions due to a groupthink approach to decision-making. Such a groupthink approach was examined by researching the transcriptions of city meetings and coding the statements which pertained to selected issues. Statements were coded to determine whether lower levels of integrative-complexity were deciding factors in whether or not a group would indeed be characterized by the groupthink phenomenon.

The group which was examined was the Daytona Beach City Commission; comprised of six city commissioners and the Mayor of Daytona Beach. All statements utilized in this study were obtained from transcriptions of these city commission meetings. Each one of the 400 statements was therefore spoken (and recorded verbatim) by one of these seven members of the Daytona Beach City Commission.

$H_1$ stated: Groups that reach decisions which are contrary to the majority of the general public's viewpoint, will demonstrate a lower level of integrative complexity in their decision-making process, than groups that reach decisions which are in agreement with the majority of the general public's viewpoint.
The two research questions were:

Q₁: Does the degree of importance assigned to an issue by a group member (or other individual), significantly affect that individual's conceptual level of integrative-complexity?

Q₂: Can the 7-point integrative-complexity rating scale be utilized as a predictor of possible groupthink approaches in the decision-making process?

Of the 12 issues utilized in the phone survey responses, it was not surprising that the issue pertaining to the ban on night-time beach driving received the most opposition and vigorous debate. The majority of the telephone respondents indicated that they considered this the most important issue of the 12. Although initial discussion of this issue during the city commission meetings produced several instances of dissension among the commissioners, they nevertheless decided to enact this restriction unanimously. Interestingly, the three independent coders rated the statements on the integrative-complexity scale as mostly toward the lower end of the scale. However, groupthink was not indicated when these rating scores were statistically compared with the other categories. A possible explanation could be that the three coders rated the statements from a personal definition instead of a more objective interpretation of the rating dimensions.

The category which generated the most statements was category A1B2: Unimportant and Agreed. There were 86 fewer statements verbalized during the discussion of the night beach driving
restriction than were generated during the process of discussing the cable television issue. This abbreviated group discussion was one of the symptoms that Janis (1983) identified as a possible indication that groupthink was present (or at least more likely to occur). It could also be surmised that group members were under time deadlines to finalize discussion on these issues. It is obvious when reviewing the meeting transcriptions that certain group members expressed impatience with the pace of the proceedings. Perhaps the mayor (or other city officials) had previously imposed deadlines for the cessation of discussion on these issues. Whether or not certain time pressures were evident is unknown to the researcher. However, if group members did sense an urgency to conclude stating their opinions on certain issues, these opinions would quite naturally be verbalized in a concise manner. Consequently, these brief and rather blunt statements would be rated on the lower end of the integrative-complexity scale.

In theory, low integrative-complexity should indicate groupthink. The integrative-complexity scale was utilized successfully to predict behavior in other group settings. Tetlock and Ramirez (1977) and Tetlock (1979) both demonstrated that lower levels of integrative-complexity results prior to groups rendering rapidly-formulated decisions. However, in both of these studies, the issues investigated were substantially more dramatic than the issues discussed in the Daytona Beach City Commission meetings. This
may have been one of the main reasons that this study found little relationship between lower rating scores and possible groupthink development.

Driver (1977) explained that "integrative-complexity reflects the information-processing capabilities of the individual." p. 240 In the meetings which this researcher investigated, there seemed to be an urgency to complete the proceedings as quickly as possible. As mentioned previously, several members seemed to become impatient with the meeting format and discussion. As a result, if one's interest is waning, one's level of "processing information" will similarly diminish. This may also have accounted for little difference among four groups when the data were analyzed.

Another factor which could have possibly influenced the results of this study concerned the personalities and biases of the three independent coders. Although the three coders were thoroughly trained and tested for their degree of accuracy prior to coding the statements, human error in judgment was obviously present. In the 8% of the statements, all three coders rated the statements differently, although usually only one or two rating points away from the other. But even a small variation of one or two rating dimensions could have had an impact on the final outcomes of the study. Unfortunately, in this type of coding process, human biases will be present and must be
acknowledged. Until the time when some different measuring device is established for predicting certain indicators of groupthink formation, the human-bias factor will continue to have an influence on results. The coder had to be cognizant that he/she was not evaluating the meaning of the statement but only the degree of "integrative-complexity" contained within that statement. Careful consideration had to be undertaken in each of the 400 rating procedures if statistically reliable data were to be gathered. Unavoidable misinterpretations may have resulted due to this rather complex rating instrument.

The "Important and Disagreed" category received the most rating points on the first and second rating dimensions as indicated by Table 5. This was the "ban on night-time beach driving" issue and, as evident in the transcriptions, many of the statements were rigidly promoted and/or defended. Nevertheless, the group eventually voted unanimously against the majority on this particular issue. What is interesting is that for the "Important and Agreed" category, the percentages were quite similar. Although both of the issues were opposite in respect to agreement and disagreement, the percentages of statements which were rated accordingly on the integrative-complexity scale remained consistently low. The data suggest that whether a commissioner was supporting or disagreeing with an issue mattered little in the final rating process. In either situation, lower ranges of integrative-complexity and lower
levels of information processing techniques were documented. It can only be conjectured as to the reasons for such lower levels of information processing by the city commissioners. A possible explanation may have been the (unknown) constraints previously mentioned. Once again, extraneous variables which may have had an influence upon the results of this study remain elusive.

Analysis of variance performed on the data did not reveal a significant degree (at the .05 level) for any of the four categories. Differences were slight for all of the statistical comparisons performed among the four categories. It was evident, however, that the majority of the rating points were coded as either one, two, or three by each of the independent coders. It may be that this is the most revealing indication as to why significance was not obtained. If the city commissioners, for example, had verbalized more statements which indicated more complex information-processing, then the rating points would have been coded higher on the overall scale.

A suggestion for future research would be to elicit more complete (and possibly more complex) thoughts from the individuals involved in the decision-making process. Instead of extracting only one complete statement, future studies might incorporate all statements which are similar into one complete thought pattern and then code this "thought pattern." In this way, perhaps a more accurate indication of the degree of information-processing could be acquired before analyzing the data.
The results listed on Table 5 illustrate that the three coders were rather consistent in their judgments. In almost every instance, the lower three rating points received the most "codings," and the higher three rating points received the fewest number of "codings."

The matter of whether or not the perceived degree of "importance" affected results also did not achieve any measure of significance. It was obvious that the telephone survey respondents made definite distinctions between what they considered important and unimportant issues. But the city commissioners did not seem to assign particular characteristics to either category. As stated previously, no degree of significance was obtained for statements relative to important versus unimportant issues. Levels of integrative-complexity and levels of information processing accompanying such statements were essentially static.

Implications for Future Research

Descriptive studies of groupthink similar to the one herein presented can only contribute further to our knowledge of the groupthink phenomenon. Future research should attempt to develop precise techniques which could be utilized to more accurately gauge degrees and severity of groupthink. It is imperative that research continue to examine the underlying reasons for groupthink behavior(s) in the interest of preventing major political as well as social upheavals.
There are other elements of groupthink that have as yet been unexplored. In addition to the spoken statements, non-verbal cues could also be influencing the levels of groupthink in a decision-making association. Leadership role assignment should also be examined in future studies of groupthink. Additionally, male and female inter-relationships, and the general group dynamics of gender differences in group situations, would seem appropriate research concerns in groupthink studies. Thus far, research in the area of groupthink behavior(s) has mainly examined only males in group decision-making situations. Females should be studied; both separately and jointly with males in group decision-making circumstances to discern patterns of similarities and differences.

One suggestion for a study which involves use of the integrative-complexity scale would be to somehow simplify the rating point definitions. In general, the scale seemed quite useful as a possible predictor of groupthink behavior. But the level of sophistication required to effectively implement the instrument is rather acute. If a simpler version of the integrative-complexity scale could be devised, future research studies of groupthink would seemingly benefit.
The phenomenon referred to as groupthink behavior remains an under-researched area of communication study. An enormous amount of communication research has considered the dynamics of groups and how groups interact. Few group research studies however, have examined the pressures which group members undergo in the decision-rendering process. This study did attempt to identify possible influences and other predictors of groupthink behavior. While groupthink behavior was not observed, insights into the process of possible groupthink behavior formation were brought forth as a result of this study. An underlying theme was that groups cannot be easily categorized or identified. Groups need to be scrutinized attentively to ascertain more accurately the causes of their behavior(s). It is only through close examination and further research that we will finally begin to understand reasons behind group decisions. We must continue to explore ways to produce the most positive outcomes from group decisions. It is imperative to our co-existence as members of the "global village."
APPENDICES
APPENDIX A

Theoretical Analysis of Groupthink
Theroretical Analysis of Groupthink

**ANTICIPATORY CONDITIONS**

A
Decision Makers Constitute a Cohesive Group

B-1
Structural Faults of the Organization
1. Inadequacy of the Group
2. Lack of Traditions of Informed Leadership
3. Lack of Proven Reasoning Methodological Procedures
4. Homeostasis of Members' Social Background and Ideology
   Etc.

B-2
Promotive Situational Context
1. High Stress from External Threats with High Hope of a Better Solution than the Leader's
2. Low Self-Apparent Temporary Induced by
   a. Recent Failure that Make Members' Undiscernable Senses
   b. Extreme Difficulties on Current Decision-Making Tasks that Lower Each Member's Sense of Self-Efficacy
   c. Moral Dishonorable Apparent
   d. Lack of Feasible Alternatives
   Etc.

**OBSERVABLE CONSEQUENCES**

C
Symptoms of Groupthink
Type I
Overwhelming of the Group
1. Illusion of Invulnerability
2. Belief in Inherent Morality of the Group
Type II
Clinched Mindedness
3. Collective Rationalizations
4. Stereotypes of the Enemy
Type III
Passion Toward Uniformity
1. Self-Compassion
2. Illusion of Unanimity
3. Group Pressure on Dissension
4. Self-Absorbed Mindlessness

D
Symptoms of Defective Decision-Making
1. Incomplete Survey of Alternatives
2. Incomplete Survey of Alternatives
Failure to Examine Risks of Preferred Choice
4. Failure to Respond Incapacitated Rejected Alternatives
5. Poor Information Search
6. Selective Bias in Processing Information in Mind
7. Failure to Work Out Contingency Plan

E
Low Probabilities of Successful Outcome
APPENDIX B

Information Regarding The Statements
And the Respective Coding Values
Information Regarding the Statements
And the Respective Coding Values

All statements utilized in this study are on file at the Department of Communication, University of Central Florida, Orlando. The individual coding values pertaining to each of these statements are also on file at the same location.
REFERENCES


