

DEVELOP AN ASSESSMENT PROCESS FOR DETERMINING IF GROUPTHINK
CHARACTERISTICS ARE PRESENT IN A MILITARY UNIT

BY

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ABSTRACT

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Develop an assessment process for determining if groupthink characteristics are present (Title) in a military unit			
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No area of organizational life is more vulnerable to failure than group decision-making. There are numerous articles, books, and management courses with procedures that promise to somehow indemnify the success of group decisions. Unfortunately, such attempts often fail because they overlook an essential truth, that decision-making remains a very human process and as such is subject to human error. The groupthink theory addresses these underlying psychological factors that can break a successful group decision.

This study will use a process theory to determine if groupthink characteristics are present. Four different survey instruments will be used to look at all of the variables of the groupthink phenomenon. Military units, which have been identified as having a cohesive group structure, will be surveyed. The results of the surveys will be analyzed,

along with observations from external observers, as to whether the symptoms of groupthink exist in that military unit.

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Chapter 1: Introduction

Introduction to Groupthink Phenomenon

In 1961 a special advisory committee to President John F. Kennedy planned and implemented a covert invasion of Cuba at the Bay of Pigs. Even though the group spent hundreds of hours working out the details of the attack, the invasion was a total disaster. The entire attacking force was killed or captured within days, and the U.S. government had to send food and supplies to Cuba to ransom them back (Janis, 1982).

Why, Irving Janis wondered, would a group of top military and government leaders make such a terrible decision? Intrigued by this infamous failure, Janis initiated a series of extensive case studies of various decision-making groups. Each of these military or governmental groups included top-quality personnel; most had been picked for their intelligence, their dedication, and their outstanding decision-making skills. Yet when they gathered together in a group, something happened. To paraphrase Carl Jung, the individually clever heads became one big nincompoop (“Decision making in groups,” 2000).

Janis concluded that the members of these groups experienced groupthink, a distorted style of thinking that renders group members incapable of making a rational decision. Janis (1982, p.9) made several statements that could be considered as definitions of groupthink: (a) It is “a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members striving for unanimity override their motivations to realistically appraise alternative courses of action”; (b) “a deterioration of mental efficiency, reality testing, and moral judgment that results from

in-group pressure”; and (c) “a concurrence seeking tendency.” To Janis, groupthink is a disease that infects healthy groups, rendering them inefficient and unproductive.

The basic idea is that small, highly cohesive decision-making groups could unconsciously undermine their basic mission of problem solving in order to preserve the cohesive social structure of the group. That is, the human resource maintenance task is favored over the performance task. Such displacement results in the group’s failure to follow good decision-making procedures, making success unlikely. Janis argued that groupthink was caused by three antecedents: (a) group cohesiveness; (b) structural faults, such as the insulation of the group and lack of impartial leadership; and (c) provocative situational context characterized by high task stress and temporary low self-esteem and self-efficacy. Although the second and third antecedents are neither necessary nor sufficient to cause groupthink, group cohesion is necessary but not sufficient (Mohamed & Wiede, 1996).

Janis (1982) attempts to explain why groupthink occurs by referring to one of the antecedents: stress. As group members realize that extensive external and internal threats accompany their consequential task, the level of stress rises. The desire to reduce stress motivates concurrence-seeking behavior. Although feelings of internal and external threats lead to the same outcome, the psychological process for each source of threat is different. External threats caused by inter-group rivalry call for intra-group solidarity, which requires members to comply with whatever norms the group shares. These norms will include the least objectionable decision alternative or the one being advocated by the leader. Internal threats caused by the existence of a moral dilemma or fear of recurring failures lower self-esteem. Members cope by “trying to reassure themselves ... that ‘you

can't make an omelet without breaking some eggs' ” (Janis, 1982, p. 255). This reassurance is referred to as internalization. When internal conflict or stress distorts decision making in individuals, the process is referred to as defensive avoidance; when it occurs in groups, it is called groupthink (Janis & Mann, 1977).

As to the question of who is susceptible to groupthink, Janis (1982) adopts the assumption that all policy makers are vulnerable, irrespective of their personality characteristics and predisposition on the situation; therefore, the person is not the determinant of the groupthink syndrome. Consequently, Janis argues that groupthink cuts across national boundaries and economic sectors; it is not an American or government phenomenon.

Statement of the Problem

To develop a reliable assessment process for determining if groupthink characteristics are present in a military unit.

Purpose of this Research

The importance of understanding this phenomenon and the justification of interest in this matter are that many important political and business decisions are currently made in groups. Many organizational decisions are made under high-pressure conditions that could result in serious consequences if a faulty solution is derived. In other words, these are decisions in which groupthink could be a contamination factor and could lead to disastrous consequences for organizations. Currently, no survey instrument exists that can effectively gauge whether a group suffers from the groupthink phenomenon. Two surveys do exist, that have used questionnaires to assess the symptoms of groupthink, but each asked the subject to assess the group as a whole. Esser (1998) finds fault in these survey

instruments, because the subject cannot know what the other group members believe and cannot observe another group member's private behavior.

Research Objectives

The objectives of this research are to:

1. Determine the method needed to establish a valid and reliable instrument.
2. Develop tools that will identify groupthink characteristics in a group.
3. Measure the validity / reliability of the Groupthink tools used.
4. Measure the reliability of the Groupthink Survey instrument.
5. Develop recommendations to improve the process used in this study to identify groupthink characteristics.

Limitations of this research

1. The survey was administered to military units that conducted their Annual Training at Fort McCoy, WI, during training year 2001. This was done to assure that the populations surveyed were of similar geographic, cultural and social backgrounds.
2. Time and money available did not allow for any long term, in depth study of these organizations.

Definitions

Groupthink — A mode of thinking that persons engage in when concurrence-seeking becomes so dominant in a cohesive in-group that it tends to override realistic appraisal of alternative courses of action. The term refers to deterioration in mental efficiency, reality testing, and moral judgments as a result of group pressures (Janis, 1971)

TAM — The Training Assessment Model (TAM) is a management tool that provides unit leaders a framework for planning, supporting, and assessing training readiness. It reflects the current training readiness status and the results of external evaluations (FORSCOM Regulations 220-3).

Lane Training — A process for training company-size (approximately 100 soldiers) and smaller units on collective tasks (prerequisite soldiers and leader individual tasks and battle drills) supporting a unit's wartime mission (Training Circular 25-10).

OC/T — An Observer Controller / Trainer (OC/T) is a soldier of equal rank or greater who facilitates a unit's training by providing feed back on the training. OC/T's are able to perform tasks that are being trained and are knowledgeable on current U.S. Army doctrine (Field Manual 25-101).

Branch — An arm or service of the U.S. Army (Field Manual 101-5-1)

Collective Tasks — A clearly defined and measurable activity accomplished by units. Task are specific activities which contribute to the accomplishment of encompassing missions or other requirements. Collective tasks make up collective training. (Field Manual 25-101).

Course of action (COA) — A plan that would accomplish, or is related to, the accomplishment of a mission. The scheme adopted to accomplish a task or mission (Field Manual 101-5-1).

Chapter 2: Review of Literature

Review of Groupthink Research

Janis's original analysis of four cases of policy decisions that resulted in fiascoes provided the raw material for Janis's (1971) development of groupthink theory. These cases included (1) the decision in 1941 by Admiral Kimmel and his advisors to focus on training rather than on the defense of Pearl Harbor despite warnings of a possible surprise attack by the Japanese, (2) the decision in 1950 by President Truman and his advisors to escalate the Korean War by crossing the 38th parallel into North Korea, (3) the decision in 1960 by President Kennedy and his advisors to authorize the invasion of Cuba at the bay of Pigs, and (4) a series of decisions by President Johnson and his advisors to escalate the Viet Nam War during 1964-1967.

Janis determined the identifying symptoms of groupthink and some of its antecedents and consequences by contrasting these cases with two historical cases, which produced good policy decisions. The two cases used were the development of the Marshall Plan to avert economic collapse in post-war Europe and the handling of the Cuban missile crisis in 1962.

Subsequently, Janis (1982) analyzed the series of decisions by President Nixon and his advisors to cover up the involvement of the Nixon White House in the burglary of the Democratic Party headquarters in the Watergate building. This case study was the first by Janis designed to test the generality of groupthink theory. Therefore, he conducted this case analysis more systematically than the previous cases, assessing the antecedents of groupthink and the symptoms of a defective decision-making process, as well as the symptoms of groupthink. Janis concluded that groupthink played a major role

in the Watergate cover-up. Indeed, he considered the Watergate cover-up to be his best example of groupthink. From the Watergate case he inferred two antecedents of groupthink, which had not been included in his earlier (Janis, 1972) presentation of the theory. The two additional antecedents that were added were – homogeneity of members' ideology and high stress from external threats. Janis's groupthink model is summarized in Appendix A.

In 1974 B.H. Raven also analyzed the Watergate cover-up and found good support for most of the antecedents and symptoms of groupthink. However, his sociometric analysis of the Nixon case indicated that it was not a highly cohesive group, characterized by *esprit de corps* or mutual attraction. Nevertheless, Raven viewed the Nixon group as cohesive in the sense that the members strongly desired to belong to the group and were bound to it by their loyalty to Nixon, the leader. In his own analysis of the Watergate cover-up, Janis (1982) acknowledged Raven's work, but challenged Raven's determination that the group was not cohesive (did not possess *esprit de corps*). Janis argued that the primary decision-making group was composed of five persons – Nixon, Haldeman, Ehrlichman, Dean, and Colson – rather than 12 persons as Raven had suggested, and that during the period of time when crucial cover-up decisions were made, Dean had a positive relationship with Haldeman and Ehrlichman, rather than a negative relationship as Raven had indicated (Esser, 1998).

Groupthink Studies

The chief proposal of Janis's (1982) framework is that when a group is moderately or highly cohesive, the presence of specific antecedent conditions (in addition to cohesiveness) increases the chances of the development of groupthink symptoms

(Janis, 1982). Additionally, whenever a group displays most of the symptoms of groupthink, the group should exhibit specific, observable decision-making defects, which result in a low probability of a successful outcome, i.e., a low probability of unanticipated setbacks not occurring and obtaining the decision-maker's objectives (Janis, 1982).

Researchers from several disciplines have studied groupthink. These studies used the distinct patterns of case analysis and empirical analysis to complete their research. Case analysis involves a retrospective application of decision fiascoes to the groupthink model. Empirical analysis deals with laboratory tests of various aspects of Janis's framework. The results of these analyses were only partially consistent with Janis's groupthink model (Neck & Moorhead, 1995).

Considering the popularity of the concept, the scarcity of research examining its propositions is startling. It appears that the efforts to explain why groupthink occurs and how to prevent it remain in the early stages. As a result of this slow progress, our knowledge of groupthink and its useful applications remains somewhat limited.

One explanation for this slow progress is that factors other than those specified in Janis's model may be needed to complement his framework in order to explain the occurrence of defective decision making. Past studies have veered away from the original groupthink model to suggest that additional factors are needed to explain why groupthink occurs within small groups. Some of the variables that have been suggested to complement Janis's original framework were group composition, group polarization, individual dominance, and group cognitions (Neck & Moorhead, 1995). However, the presence of these factors does not necessarily help to explain why groupthink occurs because as Janis states:

. . . groupthink is not simply a matter of fixed attributes of a group, nor is it a question of the types of personalities that happen to be dominant within the group. If the same committee members show groupthink in making decisions at one time and not at another, the determining factors must lie in the circumstances of their deliberations, not in the fixed attributes of the individuals who make up the group. The determining factors seem to be variables that can be changed and lead to more and productive norms . . . (Janis, 1982, p. 158)

Case Analytic Studies

Case analyses of groupthink primarily involve a retrospective application of Janis's groupthink model to decision fiascoes in which the author(s) show how the fiascoes contained the major elements of groupthink framework – antecedent conditions, symptoms of groupthink, and decision-making defects. The literature review by Neck and Moorhead (1995) revealed four such analyses: S. Smith's 1984 analysis of the Iran Hostage Rescue Mission; T. R. Hensley's and G. W. Griffin's 1986 study of the Kent State Gym Controversy; and G. Moorhead's, R. Ference's, and C. P. Neck's study in 1991 of the Space Shuttle Disaster. Additionally, one case study conducted in 1992, by C.P. Neck and Gregory Moorhead utilized the groupthink framework to analyze the jury deliberations in the trial of U.S. v. John Delorean – a situation in which groupthink did not occur in spite of the occurrence of groupthink antecedent conditions. Table 2.1 provides a summary of these groupthink case analyses (Esser, 1998).

Table 2.1 — Case Studies of Groupthink

Author, date Case Study	Evidence	Comment
<u>Smith, 1984</u> Hostage rescue attempt in Iran	Narrative description. All eight symptoms of groupthink were present.	No consideration of antecedents or decision process defeats.
<u>Hensley & Griffin, 1986</u> Kent State gymnasium controversy	Narrative description. All seven antecedents, seven groupthink symptoms (all except unanimity), and four symptoms of poor decision-making process were present	Suggested three new symptoms of poor decision-making process: failure to maintain contact with opposition, lack of cooperation with mediators, and failure to extend deadlines.

Table 2.1 — *Continued*

Author, date Case Study	Evidence	Comment
<u>Moorhead, Ference, & Neck, 1991</u> Challenger	Three antecedents (cohesiveness, promotional leadership, insulation), all eight groupthink symptoms, and five symptoms of a poor decision process (all except incomplete survey of objectives and failure to consider risks) were present.	Proposed that time and leadership style be considered moderators of the group characteristics-groupthink symptoms relationship.
<u>Neck & Moorhead, 1992</u> DeLorean trial	Five antecedents (all except promotional leadership and methodical procedures) were present, but no groupthink symptoms or symptoms of a poor decision process were present.	Concluded that groupthink was avoided. Argued that the presence of methodical decision-making procedures was the primary reason that groupthink was avoided.

Although the case study approach yields a large amount of information and provides fascinating reading, the accuracy and applicability of these results in explaining the groupthink phenomenon can be questioned. The possibilities of truly unique and non-representative groups, of researcher bias, and of inaccuracies in retrospective descriptions of group deliberations can reduce the robustness of case analysis conclusions (Neck & Moorhead, 1995). Case analytic findings are useful for general anecdotal support but not as primary evidence of the occurrence of groupthink. Consequently, the use of these decision fiasco case studies as primary evidence towards proving the occurrence of groupthink is debatable.

Empirical Studies

The empirical studies found in the groupthink literature utilized laboratory tests of various aspects of Janis's framework. Neck and Moorhead (1995) found that many researchers have attempted to empirically validate the occurrence of groupthink in a laboratory setting. For example, in the earliest study of this type, M. L. Flowers in 1977 explored the suggestion that leadership style (open vs. closed) and cohesiveness should

interact so that groupthink in the decision process is most likely to occur under conditions of high group cohesiveness and closed leadership. She found that groups with an open leadership style produced significantly more suggested solutions and use of available facts than a closed leadership style, regardless of the cohesion level.

Along the same lines, C. R. Leana tested in 1985 the effect of group cohesiveness and leader behavior on Janis's symptoms of defective decision-making. Her results, consistent with those of Flowers's earlier study, suggested that groups with directive leaders proposed and discussed fewer alternative solutions to the problem than did groups with leaders who encouraged more member participation.

Although the empirical groupthink studies seemed to provide at least some degree of support for the existence of groupthink, the utility of this support in terms of the occurrence of groupthink is questionable because of these studies' errors of omission (Moorhead & Montanari, 1986). These empirical studies also failed to test Janis's entire theoretical framework; each of these studies only analyzed parts of the model. No attempts were made to assess the entire framework – the antecedent conditions, the symptoms, the decision-making defects, and the decision outcomes.

Moorhead and Montanari (1986), however, attempted to empirically investigate Janis's groupthink model in a comprehensive manner. The results provided limited support for the symptoms and defects postulated by Janis and for the causal sequence specified in the model. Additionally, they found that the relationship between groupthink- induced decision defects and outcomes were not as strong as Janis stated. Due to their findings, the authors were prompted to suggest that many intervening and/or moderation factors not included in Janis's framework might influence decision outcomes.

In other words, additional variables may need to be incorporated in Janis's original framework to explain the occurrence of groupthink. Table 2.2 provides a summary of these groupthink empirical studies (Esser, 1998).

Table 2.2 — Empirical Studies of Groupthink

Author, date	Independent variable	Dependent variable	Results
Flowers, 1977	Cohesiveness (C) (low/high) Leadership (L) (nondirective/directive)	No. of proposed solutions No. of facts mentioned	2 L main effects: more solutions and more facts with nondirective leadership
Leana, 1985	Cohesiveness (cohesive/non-cohesive) Leadership (directive/nondirective)	<ul style="list-style-type: none"> ◆ No. of facts mentioned ◆ No. of facts mentioned before and after the decision ◆ No. of solutions proposed ◆ No. of solutions discussed ◆ No. of discussions of risks ◆ No. of additional solutions proposed after the decision 	<ul style="list-style-type: none"> ◆ 1C main effect: fewer facts were mentioned in non-cohesive groups ◆ 4 L main effects: groups with directive leaders proposed and discussed fewer solutions and accepted the leader's solution; however, members expressed less private agreement with the directive leader's solution
Moorhead & Montanari 1986	Path analysis with three antecedents (cohesiveness, insulation, leadership), four groupthink symptoms (invulnerability, morality, self-censorship, dissent), two decision process symptoms (alternatives, experts), and decision quality rating		<ul style="list-style-type: none"> ◆ High C led to less self-censorship, less dissent, and more alternatives discussed ◆ Insulation led to less invulnerability, more use of experts, fewer alternatives discussed, and poor quality decisions ◆ Promotional leadership led to feelings of morality, less dissent & more alternatives discussed

In sum, although a moderate amount of groupthink research exists, little progress has really been made toward explaining why groupthink occurs in decision-making groups. The enhanced groupthink model of Neck and Moorhead (1995) attempts to integrate the findings of the research to date and provide a better explanation of the conditions under which groupthink does or does not occur or can be prevented.

Overview of Groupthink

Groupthink refers to a restrictive mode of thinking pursued by a group that emphasizes consensus rather than a careful analysis of options. When dealing with complex and unstructured problems, this mode of thinking results in defective decision-making behaviors that increase the risk of a poor group decision. The fundamental problem underlying groupthink is the pressure to concede and conform. Conformity in itself is not harmful. However, when it subdues the meaningful discussion of the issues and opinions directly related to the task at hand, conformity could produce disastrous results. When group members agree with one another to preserve a spirit of camaraderie or with blind faith in the others' judgment, the resulting decision is likely to be a poor one. This view was the basis of Janis's (1982) groupthink proposition (Miranda, 1994).

Janis defined groupthink as "a deterioration of mental efficiency, reality testing, and moral judgment that results from in-group pressures" (Janis 1982). Groupthink has been also operationally defined by Moorhead and Montnari (1986) as a set of antecedent conditions leading to certain defective procedures that, in turn, are believed to promote poorer decisions. These procedural conditions increase the probability of a faulty decision. The following sections reflect this view of groupthink and address groupthink as four categories of variables: antecedent conditions, symptoms of groupthink, decision making defects, and decision outcomes. Appendix A shows the Groupthink Model by Irving L. Janis.

Antecedent conditions

Janis posits that the occurrence of groupthink is dependent on situational and structural conditions surrounding the group. The primary condition necessary for groupthink is high group cohesiveness. Secondary conditions are the insulation of the

group from outsiders, the presence of a leader promoting his/her own preferred solution, the nature of the task requiring systematic analysis procedures, and group homogeneity (Moorhead & Montanari, 1989). A summary of Janis and Mann's (1977) five groupthink antecedents and their possible remedies are listed in Table 2.3.

Table 2.3 — Summary of groupthink antecedents and their remedies

Antecedent Conditions	Possible Remedies
High cohesiveness	Task focus
Group insulation	Use of external information
Directive leadership	Equal participation and influence
Group homogeneity	Group conflict
Nature of task	Optimistic problem formulation

1. Group Cohesiveness. Janis (1982) indicated that a high level of group cohesiveness would make the group more susceptible to pressures toward conformity and predispose the occurrence of groupthink. Not all empirical research has supported this position, while others have only cautioned that extremely high levels of cohesiveness could be detrimental to group interactions (Miranda, 1994). This relationship between level of cohesiveness and success in decision-making is borne out by research conducted by Callaway and Esser in 1984 (Miranda, 1994). These researchers found that groups with intermediate levels of cohesiveness produced the highest quality decisions.

Moorhead and Montanari (1986) found that cohesiveness decreased self-censorship, reduced conflict, and enhanced alternative generations and evaluation. Thus the consequences of cohesiveness are not uniformly negative. Keller, who in 1986 reported that cohesive groups were more productive, reinforces this positive potential of cohesiveness (Miranda, 1994).

While influencing the level of group cohesiveness may not be desirable or even possible, facilitating productive meeting behaviors irrespective of the level of group cohesiveness is possible. A critical consequence of cohesiveness appears to be reduced conflict as a result of the group members' desire not to "rock the boat." Separating ideas from the persons generating them will permit group members to evaluate the ideas successfully, while not interfering with the cohesiveness of the group. This belief is supported by Bernthal and Insko who in 1993 found that groups with high social cohesiveness were more likely to experience groupthink than were groups high in task-oriented cohesiveness (Miranda, 1994). Thus, promoting a task focus during the meeting, rather than a focus on social behaviors alone can diffuse the danger of groupthink with highly cohesive groups.

2. Group Insulation. According to Janis (1982), groups whose members have weak ties and awareness of external groups are vulnerable to groupthink. He indicated that insulated groups experienced a feeling of invulnerability and tended to consult less frequently with external experts. McCauley's research in 1989 empirically examined the effect of group insulation on groupthink. He established that group insulation does predict the occurrence of groupthink (Miranda, 1994). On the other hand, Moorhead and Montanari (1986) found that insulation decreased members' perceptions of invulnerability and led them to refer more frequently to experts. However, insulation also resulted in the production of fewer alternatives. These results suggest that the effects of group insulation may be mediated by the group's awareness of the problem and constructive actions to avail themselves of richer information and opinions. Identifying deficiencies in the group's knowledge and skills and seeking information or advice from

experts to supplement group knowledge can help counteract the effects of group insulation.

3. Directive Leadership. Janis (1982) indicated that the group leader could play a strong role in inducing groupthink. He suggested that a directive leadership style, where leaders actively advocate the adoption of their favored solution, is conducive to the development of groupthink.

Empirical work indicates that the presence of a directive leader indeed increases the probability of groupthink and the risk of a poor decision (Miranda, 1994). Promoting equal participation and influence during a group meeting can counteract the presence of a directive leader.

4. Group Homogeneity. Groups composed of persons similar in backgrounds and ideologies are more prone to groupthink (Janis, 1982). Such homogeneity leads to the production of fewer solutions and a narrow group focus while examining issues of concern and evaluating solutions. Empirical work appears to support the proposition that homogeneity of ideas and vision predisposes groupthink. Tetlock performed a content analysis of statements made by leading national decision makers in 1979. He concluded that decision makers who were susceptible to groupthink displayed less ideological complexity than did non-groupthink groups. These groupthink groups also evaluated political groups with similar ideologies more favorably than did non-groupthink groups. Using conflict initiation strategies such as devil's advocacy or dialectical inquiry to foster disagreement may help overcome the tendency to think alike engendered by similarity of members' backgrounds (Miranda, 1994).

5. Nature of the Task. Groups involved in solving problems associated with a crisis situation are more likely to be victims of groupthink. Further, judgmental or cognitive conflict tasks are far more prone to elicit groupthink (Janis 1982). These tasks require decision makers to rely on their opinions and judgments in addition to the information provided. This tendency often detracts attention from important information, as decision makers' biases and perceptions emerge. Further, decision makers involved with such tasks may ignore opinions other than their own. This may spell disaster when the decision needs to be implemented and affects people with an opinion different from the decision maker's. When performing intellectual tasks with a single correct solution, one must be as objective as possible. Then differences in opinions and judgments will rarely be raised.

The manner in which the problem is presented to the group by the leader or an influential group member sets the frame for the group's perception of the problem. When a group perceives that it is required to choose between a series of unfavorable options, it may invest more in the solution than it can afford to or than a rational solution would permit (Miranda, 1994). Therefore, the phrasing of a problem as a lose-lose scenario, where the objective is to choose among unfavorable alternatives, results in riskier decisions. Framing a problem in a more positive fashion is less likely to result in overly risky decisions (Miranda, 1994).

Groupthink Symptoms

Eight symptoms, outlined by Janis and Mann (1977), signal the working of the antecedents and the development of groupthink. They are divided into three main categories: (a) overestimation of the group's power and morality; (b) closed mindedness;

and (c) pressures toward uniformity (Mohamed & Wiede, 1996). These symptoms include both attitudes and behaviors that have a psychological and social function. Overestimation of the group's abilities and position provides members with confidence that is necessary to dismiss fears and doubts about the group's position. Closed mindedness tends to reinforce whatever negative perspective the group may hold for the out-group or the environment. Pressures toward uniformity guarantee that no group members will "rock the boat" by introducing ideas that challenge the group's position.

Collectively, these symptoms operate to maintain the "togetherness" feeling and combat the negative effects caused by low self-esteem and low self-efficacy. When a policy-making group displays most or all of the symptoms in each of the three categories, the members perform their collective task ineffectively and are likely to fail to attain their collective objectives as a result of concurrence-seeking (Janis, 1982). This is to say that the symptoms of groupthink give rise to symptoms of defective decision making, which include (a) incomplete survey of objectives; (b) poor information search; and (c) selective bias in processing information that has been collected. Janis and other researchers have repeatedly shown that the more these symptoms are present in any decision-making group, the higher the probability that the group will develop groupthink. Therefore, it is more likely the group will arrive at a decision that will be unsuccessful, possibly even catastrophic (Groupthink – Leaders Guide, 1992).

Symptom 1: Illusion of Invulnerability. A feeling of power and authority is important to any decision-making group. It gives group members confidence that they will be able to carry through on any decision reached. However, if the group comes to

believe that they can do no wrong, and that every decision they reach will be successful, then the group has become prey to an illusion of invulnerability.

Symptom 2: Belief in Inherent Morality of the Group. All of us, whether a part of decision-making groups or not, need to believe in the rightness of our actions. If groups have this symptom, there is never a question in their minds that the group is not doing the right thing. In the extreme, this leads to exhortations that “God is on our side.” This illusion relieves the group of the responsibility for justifying decisions according to rational procedures.

Symptom 3: Collective Rationalization. In finalizing any decision process, it is normal and natural to downplay the drawbacks of a chosen course. The problem in a group arises when they see no fault to their plans, even if there is considerable evidence as to the folly of their chosen course of action. Also, any legitimate objections that may exist are completely overshadowed by the perceived negative reaction that anyone voicing objection would receive.

Symptom 4: Out-group Stereotypes. Many of us have experienced this symptom as we were growing up. We and our group of friends thought we were “cool” and made fun of the “not cool” cliques. Basically, we formed stereotypes against individuals who were not part of the group. As adults, this symptom continues where we stereotype our views on our enemy leaders as weak or incompetent.

President Truman and his advisors fell victim to this temptation of falsely characterizing enemy groups in 1950 with the decision to cross the 38th parallel, a line drawn by the Chinese Communists as a “line in the sand” between North and South Korea. The decision was made despite repeated warnings from Communist China that to

do so would be a declaration of war by the U.S. upon China. The decision was based upon a false stereotype of the Chinese Communists as weak and dominated by Russia; obviously the stereotype proved false (Groupthink – leaders guide, 1992).

Symptom 5: Self-Censorship. Groupthink, in general, yields harmony amongst group members. Therefore, with the symptom of self-censorship, we can assume that an individual group member does not want to disrupt harmony. But, in reality, the fact is that the most common form of censorship is that which we commit upon ourselves under the guise of group loyalty, team spirit, or adherence to higher policy. In theory, this symptom tends to lead members toward silence in their possible differences, therefore yielding to consistency.

Symptom 6: Illusion of Unanimity. Finally, all the rationalizations and psychological pressures have had their effect; the group now unites around a decision. Drawbacks are downplayed; the certainty of the final course is reinforced. Doubting group members may even feel that they have adequately put their own fears to rest. This symptom explains how individual opinions within groups are overshadowed by the group's agreement to display a uniform opinion or standpoint.

Symptom 7: Direct Pressure on Dissenters. Group members are conditioned to keep rebel views to themselves. Also, they are conditioned not to believe such rebellious views themselves, because to do so puts them at odds with the group. The theory is that dissent or argument against the group's presumed agreement is somehow counter to the group's interests, even an act of disloyalty. Group members may resort to sarcasm or ridicule of dissenting argument. Often such ridicule will have as its basis an outlandish projection of what taking the opposition seriously could mean.

Symptom 8: Self-appointed Mind Guards. A bodyguard is someone charged with the protection of another's physical well-being. In groupthink, a corollary entity may surface to protect us from disturbing thoughts and ideas, a mind guard. Interestingly, such mind guards are typically self-appointed and perform their function not within the group itself, but rather far from the confines of group discussion. Data, facts, and opinions which might bear directly upon the group are deliberately kept out of their purview. Generally this is done with a variety of justifiable intentions, such as the time factor, believing it is not pertinent, and lastly, deeming that the group has already made up its mind.

Groupthink Remodeled

Additional Antecedent Conditions

In addition to the situational and structural antecedent conditions defined by Janis, researchers have added procedural conditions that need to be added to the groupthink model. These researchers on groupthink, Janis, Moorhead, Montanari, and Whyte, have identified several procedural conditions that preclude effective problem solving. These procedural conditions include lack of methodical procedures, examination of few alternatives, discouragement of dissent, perception of invulnerability, and lack of expert advice. These conditions, which increase the probability of the occurrence of groupthink, are discussed below (Miranda, 1994).

1. Lack of Methodical Procedures

A lack of methodical procedures makes choosing a solution without awareness of its implications or of competing alternatives easier for meeting participants. Callaway

and Esser in 1984 report that when highly cohesive groups used inadequate decision procedures, they made poorer decisions (Miranda, 1994).

2. Few Alternatives Examined

The success of creative processes hinges on exploring many options. An early limitation of alternatives to be discussed is symptomatic of defective decision-making that increases the chance of groupthink (Moorhead & Montanari, 1986). Shyness, the presence of authority figures, or time constraints contribute to self-censorship during meetings. Examination of a larger number of alternatives improves the probability of a successful decision.

3. Discouragement of Dissent

Courtwright in 1978 reported that the absence of disagreement was the strongest determinant of groupthink (Miranda, 1994). A meeting environment that fosters the freedom to disagree among group members will, therefore, improve the probability of a good decision.

4. Perceptions of Invulnerability

Insulated groups that are unaware of opposing evidence and opinions are more likely to believe themselves invincible. Callaway and Esser in 1984 report that groups that succumbed to groupthink were significantly more confident with their decisions than were other groups (Miranda, 1994). When presented with evidence that contradicts their assumptions, such groups may reconsider their position, thus alleviating the groupthink problem.

5. Lack of Expert Advice

Janis (1982) suggests that one or more experts external to the decision-making group be consulted and invited to challenge the group's opinions during meetings.

Advice from knowledgeable persons can counteract group insulation. When access to such advice is restricted, the perception of invulnerability is compounded. Providing groups with such access is an important step in combating groupthink.

Antecedents Conditions Remolded

Mark Schafer (1996) reports on a quantitative study on Janis's original specifications of the groupthink model. The study was built directly on the previous work done by Herek, Janis, and Huth in 1987. The study reinvestigated the same 19 cold-war crisis situations and used the same bibliographic sources identified by their outside experts as being reliable and of high quality. In this research study, however, they investigated whether 10 different antecedent conditions—factors anticipated by Janis as causes of defective decision-making—were present in each case. Their hypothesis, following the lead of Janis, is that certain antecedent conditions in the decision-making process (group structure, leadership style, and situational variables) result in the information-processing errors identified in 1997 by Herek, Janis, and Huth (Schafer, 1996). The ten antecedent conditions used in this quantitative study are shown in table 2.4.

Table 2.4 — Mark Schafer's remolded ten antecedent conditions

Group insulation	Perceived short time constraint
Lack of tradition of impartial leadership	Low self-esteem
Lack of tradition of methodical procedures	High personal stress
Group homogeneity	Overestimation of the group
Closed mindedness	Pressures toward uniformity

The data from this study suggest that some of Janis's antecedent conditions are less problematic for decision-making than originally suspected. Situational factors—a short time constraint, high personal stress, and a recent failure—did not seem to factor into faulty decision-making. Homogeneous groups did not produce more defective decision-making than did non-homogeneous groups. Group insulation occurred so rarely that they were unable to assess its contribution to faulty decision-making.

The factors that did seem problematic for group decision-making fall into three areas: leadership style, traditional group procedures, and patterns of group behavior. These factors are clear and strong predictors not only of information-processing error but also of unfavorable outcomes. Groups who wish to structure themselves to avoid faulty decision making are well advised to have impartial leadership and methodical procedures while they avoid overestimation of the group, closed mindedness, and pressures toward conformity.

The results from the study are encouraging from a prescriptive point of view regarding decision-making. Policies can be adopted by the leader and the decision-making group specifically to address the faulty decision-making patterns that we identify, whereas the factors over which leaders and groups have no control, namely the situational variables, are not detrimental to the decision-making process.

The conclusions from this study have important implications for Janis's groupthink model. Some of Janis's original antecedent conditions now seem to be less of a concern. The studies' data suggest a more simplistic version of Janis's model. Rather than being concerned with all three steps (antecedent conditions, information processing,

and outcomes), the data suggests that the key is to focus on the antecedent conditions – leadership style and pattern of group conduct (Schafer, 1996).

Alternative Groupthink Model

Christopher Neck and Gregory Moorhead (1995) reviewed the research on groupthink and analyzed the results and identified areas of inconsistency. Based on these analyses and the integration of research on the effects of time pressure on group decision-making, they revised the groupthink framework. They altered the role of the leader, adjusted the linkages between groupthink antecedents and symptoms, and focused attention on the importance of time pressure and methodical decision-making procedures on the prevention of groupthink. Their revised framework attempts to correct a fundamental flaw of Janis's (1983) model – that is, to explain why within the same group, groupthink can occur during one decision-making situation and not another.

The model Neck and Moorhead (1995) revised, differs from Janis's model in several ways. They included additional antecedent conditions and modified the relationship between the antecedent conditions and groupthink symptoms. They also inserted the moderating effect of methodical decision-making procedures and the addition of the moderator variable, closed leadership style. Their enhancements were based on empirical research in both the groupthink and group processes literature, as well as Janis's original case study analysis of decision fiascos.

Antecedent conditions Type A and B-1 (as shown in 3.1) are the same as described by Janis (1982). The enhanced model developed by Neck and Moorhead includes two secondary antecedent conditions of the provocative situational context (B-2)

type. These include (1) a highly consequential decision, and (2) pressure due to constraints of time.

A highly consequential decision is defined as one in which the outcome of the decision greatly impacts the members of the group as well as other outside parties. Additionally, a highly consequential decision usually is associated with unexpectedness and a sense of urgency, which erodes the opportunity for a truly informed group decision. Neck and Moorhead included this element in their enhanced model because all the decision fiascoes that Janis studied as a basis for his theory were highly consequential decisions.

Pressures due to time constraints are a perceptual condition in which members of the group feel they have a very limited amount of time in which to make a decision. Janis included this indirectly as a function of the antecedent condition, group cohesion. In the enhanced model, time constraint is included as a separate antecedent condition for several reasons. First, Janis's case study of the Vietnam policy-making decisions and G. Moorhead's, R. Ference's, and C. P. Neck's 1991 case study of the space shuttle Challenger decision showed that groupthink was partially induced by time pressure. Second, research to date on the effects of time pressure on group decision making indicates this condition critically impacts the effectiveness / ineffectiveness of decisions made by small groups.

Other studies cited by Neck and Moorhead (1995) also suggest that high time pressure leads to poor quality decisions by the group. Since the final outcome of the groupthink framework is a low probability of successful (high quality) decision, this research seems to support time pressure as an additional antecedent condition.

Conclusion

The review of the published groupthink research has revealed that the original framework proposed by Janis is an incomplete explanation of the occurrence of groupthink in small groups. Neck and Moorhead (1995) proposed an alternative groupthink model to explain why groupthink could contaminate the same group at one time and not at another. See Figure 2.0 for Neck and Moorhead's alternative groupthink model. In this paper we have expanded their model to include the procedural antecedent conditions as proposed by Miranda's (1994) and Mark Schafer's (1996) antecedent conditions remodeled. As a result, an enhanced alternative groupthink model is proposed in Figure 2.1.

The review of the published groupthink research has also revealed problems with past testing methodology – case studies and experimental studies. To date, the theory has neither been proven nor supported by any past research methodology. This leads to a dilemma of whether the theory is valid or is being tested improperly, or is a little of both. Case studies start with the outcomes of poor decision-making and then move backwards toward the antecedents. Case studies by their nature emphasize events (historical) and a sequence development. Experimental studies, on the other hand, start by manipulation of the antecedents and then measure the outcomes. For example, researchers would manipulate cohesion and then investigate whether the quality of the decision-making was affected. The shortcoming of experimental studies on groupthink is that it focuses on the variables and often ignores the dynamics of the phenomenon.

Case studies on groupthink have also dealt with the phenomenon as a process theory, whereas experimental studies have treated it as a variance theory. Several signs

indicate that Janis (1982) intended to present a process and not a variance theory. For example, the main theme of Janis's work was to explain how groupthink developed. Also Janis never intended to relate a single variable to different levels of groupthink, as would be expected in a variance model. Therefore, the methodology used in chapter three will be based on a process model of groupthink.

Groupthink in the military

A military officer's confidence and knowledge are increased with every school he/she attends, Officer Candidate School through Army War College. Similarly every promotion and every assignment from platoon leader through division commander increases the professional competence and awareness of that competence. Ultimately, as an officer climbs the promotion ladder and is selected above his/her peers for a major command, he/she will be treated with a higher degree of respect and courtesy. Such a process would give any mortal considerable faith in his/her judgment (Cantrell, 2000).

No officer commands alone, but surrounds him/her with staff officers who think as he/she does. If these staff officers don't agree with the commanding officer, they can be quickly brought in line with the threat of a negative evaluation report. Therefore, the staff endeavors to please the commander, feeds him/her information that supports his/her position. Subordinates expect him/her to dictate policy and be brilliant, so the commander dictates policy and usually is brilliant. However, sometimes the commander, like the best humans, will act emotionally or without all the key facts. This can be especially true when units are in combat or training scenarios that simulate combat conditions (stress). The staff / subordinates, who are also under stressful conditions, will duly execute the commander's wishes. They will produce estimates, briefing charts, and

operations orders in support of those wishes. Some subordinates, perhaps with the benefit of fewer preconceived notions or perhaps having facts unknown to the commander, might see folly in his/her plan. However, the commander may be too senior and intimidating or the subordinates may be too junior or too cautious to approach him/her.

The commander might find it difficult to admit, even to him/her, that he is wrong. Although the commander would be solely responsible, in such a case, he/her would not have fouled up alone. Really big blunders often take teamwork. In this case, the commander's misstep went uncorrected because of staff groupthink. This is where subordinates are too timid to speak up, an executive officer unwilling to trouble the boss with dissent, and an institution, has failed to prepare them all for this situation.

Since we can never completely eliminate misjudgments, we should create an environment where subordinates are more likely to identify and draw the commander's attention to those misjudgments. This will require effort by all three parties to the problem – subordinates, seniors, and the institution that trained them. To assist the above parties to avoid groupthink, we endeavor in this thesis to develop a model with assessment tools that identify whether a military unit is engaged in the groupthink phenomenon.

Figure 2.0 Alternative Groupthink Model (Neck and Moorhead, 1995)

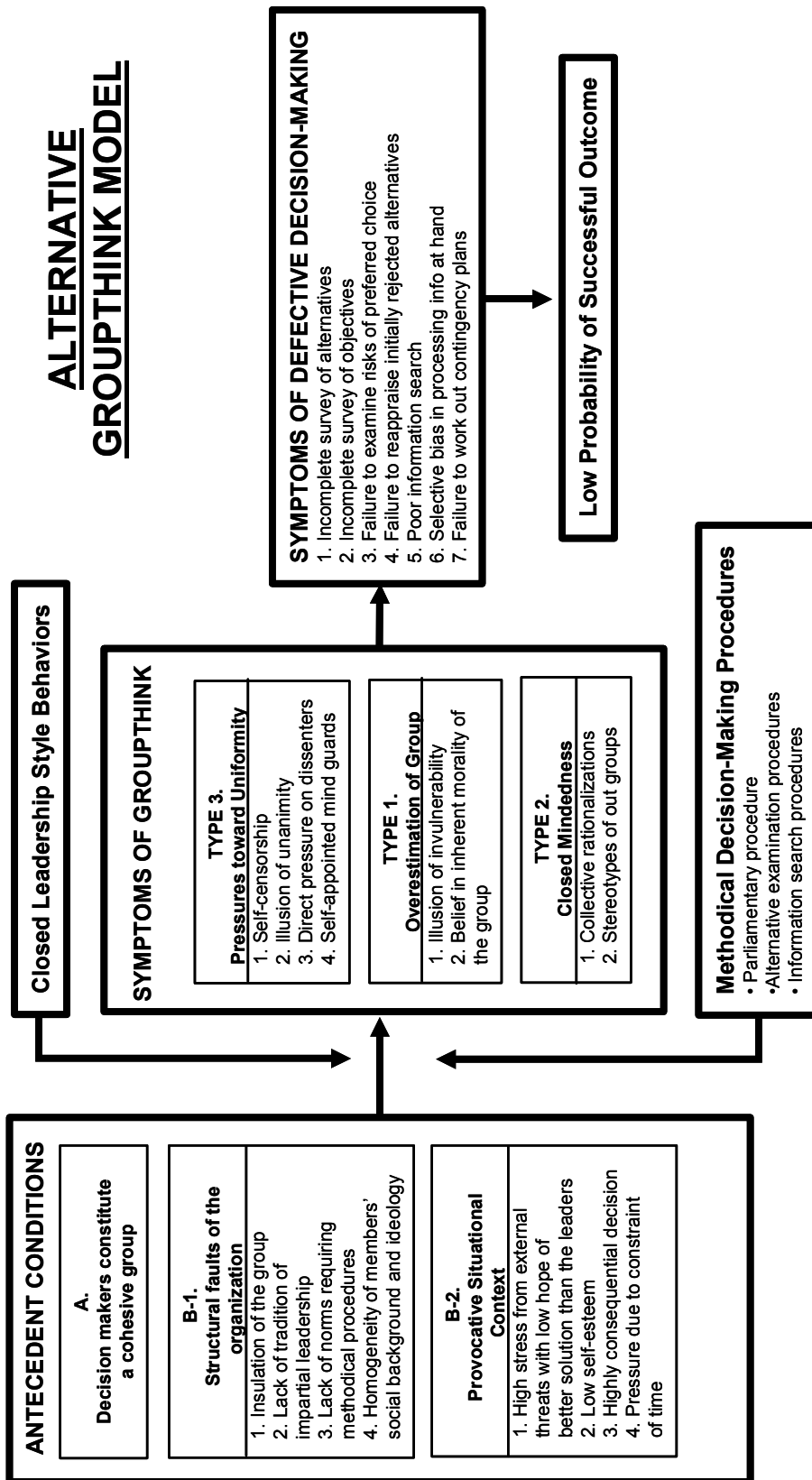
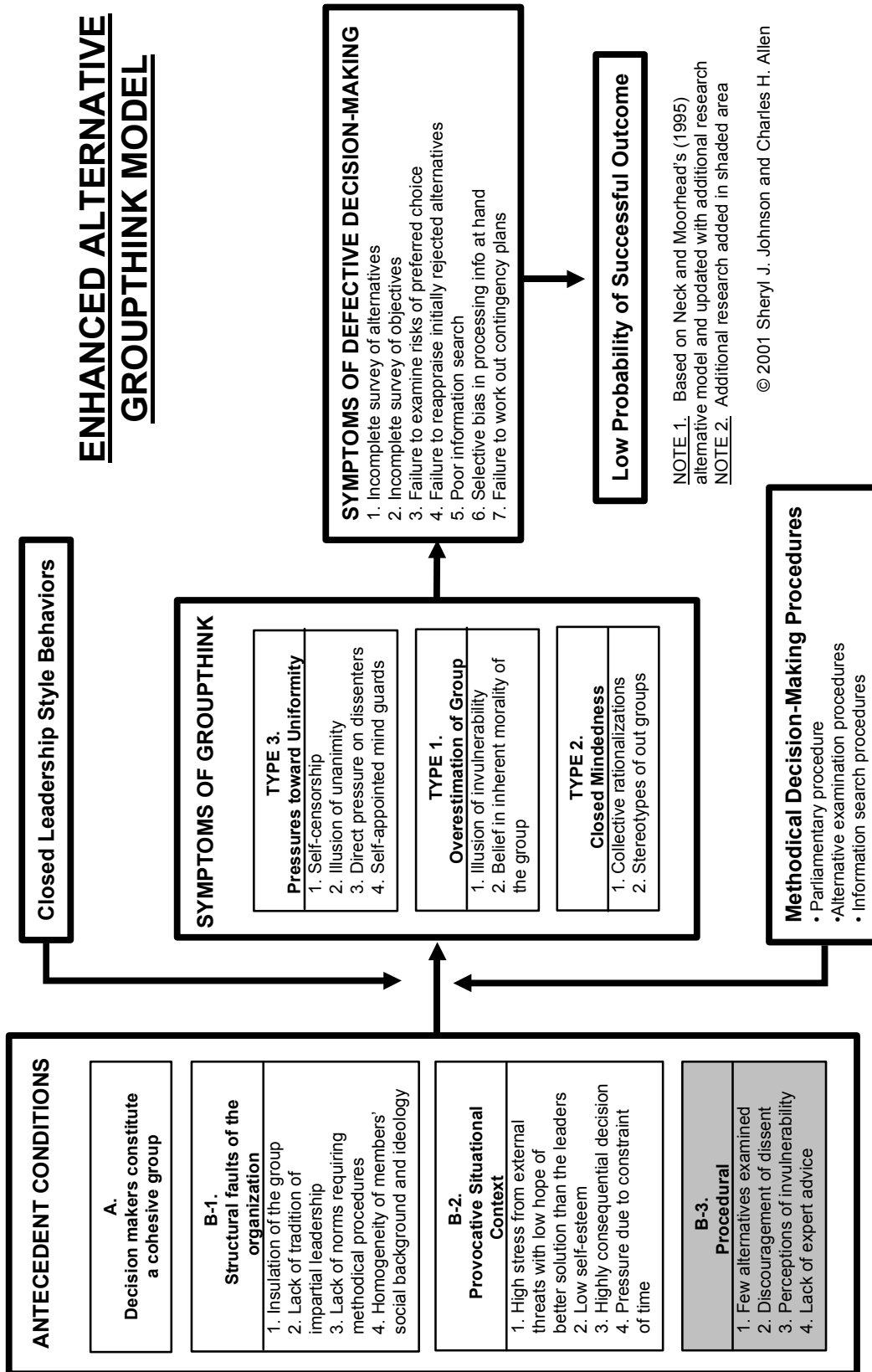


Figure 2.1 Enhanced Alternative groupthink Model



Chapter 3: Methodology of Procedures

Current assessments and critiques

To date only two studies have used questionnaires to assess the full set of the eight symptoms of groupthink (Esser, 1998). The first such study was by Moorhead and Montanari (1986), which assessed the full set of eight symptoms of groupthink using a 24-items questionnaire, which they had developed earlier. The questionnaire is composed of three items for each symptom, except the illusion of invulnerability (four items) and collective rationalization (two items).

In a second, more recent study done by Richardson in 1994, all eight symptoms of groupthink were assessed using the Groupthink Index (Esser, 1998). The Groupthink Index is a commercially available questionnaire designed for use in management training (Glaser, 1993). The Groupthink Index is a 40-item questionnaire composed of five items for each of the eight groupthink symptoms. The Groupthink Index yields a total groupthink score and subscale scores for each of the eight-groupthink symptoms.

Esser's (1998) critique of these two studies indicates that the eight symptoms of groupthink proposed by Janis (1972) are difficult to assess using the available questionnaires. Esser states that the symptoms may not be conceptually distinct. It is also possible that the questionnaires, themselves, are to blame. All questions on the Groupthink Index ask the subject to assess the members of the group, while the Moorhead and Montanari questionnaire includes some questions about the subject, some questions about one or more members of the group, and some questions about the group as a whole.

According to Esser (1998), when the questions ask the subject to assess the other members of the group, the subject is put in a position similar to that of an outside observer. The subject still cannot know what the other group members believe, for example, questions on invulnerability or morality. Also the subject cannot observe another group member's private behavior, for example, self-censorship.

Therefore, in building our assessment survey on groupthink symptoms, we created questions that would focus on the behaviors or attitudes of the subject. The assessment of whether the group exhibits groupthink symptoms should be based on the sum of these self-assessments by the individual group members.

Process Theory

The nature of the groupthink model directly affects how it should be tested (Mohamed & Wiebe, 1996). As demonstrated in the previous chapter, groupthink is best tested as a process theory, not a variance theory. Process models tell a story of how a specific phenomenon occurs. The focus is on the necessary events that lead to the development of the phenomenon. Because process models tell a story of how the phenomenon develops, the temporal order of the events is important. For example, process models are similar to movies that tell a story, not just single snapshots.

It is crucial that the new research findings, outlined in chapter two, be incorporated into the process model used for this paper. The process model methodology was based on Christopher Neck's and Gregory Moorhead's (1995) alternative groupthink model. The main aspects that will be tested from their model are the moderating effects of methodical decision-making procedures and variables of leadership style (open or closed). The procedural antecedent conditions as outlined by Miranda (1994) have been

added into Neck's and Moorhead's alternative groupthink model. Mark Schafer's (1996) antecedent conditions remodeled have also been reconfirmed as being incorporated into their model. This will insure that the model's antecedent conditions are tested in the framework of procedural, situational, and structural aspects. Therefore, the model used in this research will be an enhanced alternative groupthink model, as shown in Figure 3.1.

Neck and Moorhead (1995) developed three propositions that could be tested using their alternative groupthink model. These propositions were revised for this thesis. The enhanced alternative groupthink model will use these three propositions to provide a framework when determining if groupthink characteristics exist. The three propositions used are as follows:

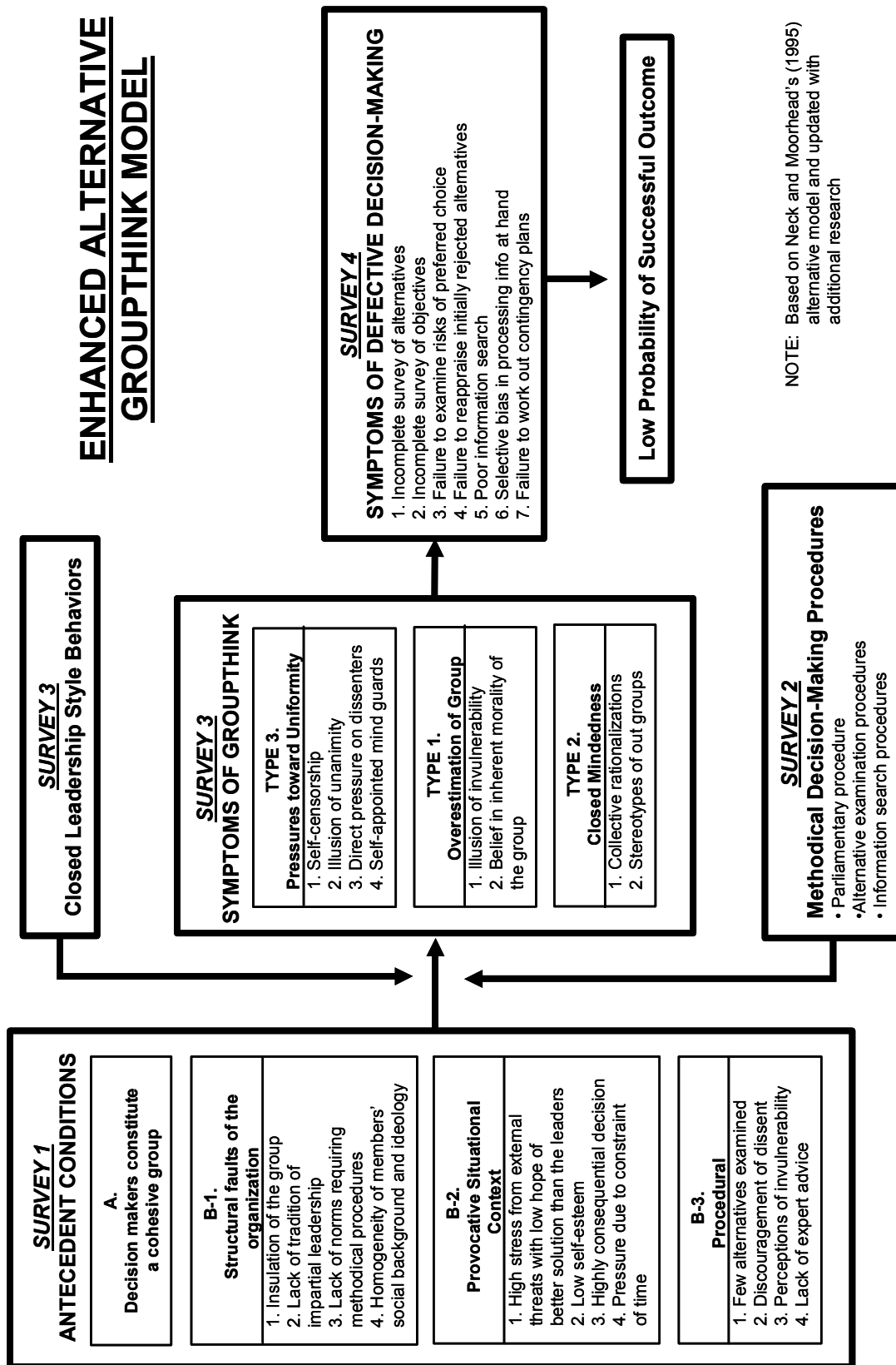
Proposition 1: Groups that evidence a low degree of antecedent conditions *will not* exhibit groupthink symptoms in the presence of a closed style leader and /or when the group does not establish methodical decision-making procedures.

Proposition 2: Groups that evidence a high degree of antecedent conditions *will* exhibit groupthink symptoms in the presence of a leader portraying closed leader style behaviors and / or when the group does not use established methodical decision-making procedures.

Proposition 3: Groups that evidence a high degree of antecedent conditions *will not* exhibit groupthink symptoms in the presence of an open style leader and /or when the group establishes methodical decision-making procedures.

Propositions one through three will serve to test the moderating impact of leadership behaviors and methodical decision-making procedures between antecedent conditions and groupthink symptoms.

Figure 3.1 Enhanced Alternative groupthink Model



To test the enhanced alternative groupthink model, a series of four survey instruments (tools) was designed for this study to determine if groupthink characteristics are present in a military unit. Figure 3.2 outlines the four process model survey instruments used during this research. The first survey determined which, if any, of the antecedent's conditions were present in the unit and to what degree. The core decision-making group members completed this survey within the first four days of their Annual Training. Members of this group were from the company chain of command and included the following personnel: Company Commander, First Sergeant, all platoon leaders, all platoon sergeants, and any attached element senior leaders.

Figure 3.2 Process Model Survey Instruments

Survey 1	Survey 2	Survey 3	Survey 4
Pre-Inventory of Antecedents <i>Method</i> Group Survey	Methodical Decision Making Process <i>Method</i> OC/T Survey	a. Symptoms of Groupthink b. Leader Style <i>Method</i> OC/T & Group Survey	Symptoms of Defective Decision-Making <i>Method</i> OC/T survey

The second survey, completed by the Observer Controller / Trainer (OC/T), checked the unit's use of the U.S. Army's decision-making process, called "Estimate of the Situation" (FM 7-10, 1990). The estimate is a continuous process that leaders are taught in U.S. Army schools to use for every tactical decision (FM 7-10, 1990). Therefore, the intent of this survey was to check the moderating variable of methodical decision-making procedures. The survey had several questions crafted to each of the five steps of the estimate process. The OC/T was chosen to do this survey because it is their responsibility to observe the unit's actions as they conduct training and then coach them on any doctrinal aspects that needs work.

The third survey had two components: symptoms of groupthink and leadership style behaviors (open versus closed). The core decision-making group took the symptoms of the groupthink portion of the survey during the end of the second week of the unit's Annual Training. This allowed enough time for the group to undergo several decision-making events. The intent of the survey was to determine which, if any, of the symptoms of groupthink were present in the group. The OC/T and the core decision-making group took the leader style portion of the survey also during the end of the second week. The intent of the survey was to determine if the leadership style behavior was open or closed.

The fourth survey in the process determined if the group displayed any of the consequences of suffering from groupthink symptoms. Janis (1971) explains that when a group displays most or all of the groupthink symptoms, a detailed study of their deliberations is likely to reveal a number of immediate consequences. These consequences are, in-effect, products of poor decision-making practices because they lead to inadequate solutions to the problem under discussion. Several questions were crafted for each of the seven variables of defective decision-making. This survey was completed by the units assigned OC/T near the end of the second week of Annual Training. The OC/T, through his observations, would be able to observe these variables of defective decision-making if they occurred.

Selection of Subjects

Company size military units were chosen as the appropriate level of command to conduct this research for several reasons. First, U.S. Army Reserve and National Guard units at company and below are established cohesive units. These units often conduct

realistic collective training at platoon and company level, which builds a very cohesive group. Second, in the National Guard and Army Reserves, this collective training is planned, prepared, and executed at platoon and company level. An established core decision group (chain of command) makes decisions throughout the training events. Third, the core decision-making participants at company level through the appropriate level of military education would have received training on the “Estimate of the Situation” process. This process is taught at all senior non-commissioned officer schools and all officer basic courses, thus they should be using a standard decision-making procedure, which would be designed to eliminate groupthink. The “Estimate of the Situation” process is a single, established, and proven analytical process. The “Estimate of the Situation” is an adaptation of the Army’s analytical approach to problem solving (FM 101-5, 1997)

Four company size units were selected for this research. To ensure an even testing of Army units, each of the four units was selected from a different branch. The units came from the following branches: artillery, engineer, infantry, and chemical.

Field Procedures / Data Collection

A unit’s Annual Training normally lasts two weeks with about ten days spent in the field conducting collective tactical training. But before a unit arrives at Annual Training, they would have drilled two days a month for a year. During these drill periods the antecedents of groupthink may have materialized. Therefore, the first survey that checks for the presence of antecedents was completed by the core decision-making group during the first few days of Annual Training.

The second survey determined if the unit was using the U.S. Army's methodical decision-making procedures or some variation. This survey was completed by the unit's assigned OC/T during the second week of Annual Training. By then the unit would have completed a large portion of their collective training in the field environment. The OC/T during this time would have observed several tactical scenarios, which caused the unit's decision-making group to make some decisions.

The third survey attempts to determine which symptoms of groupthink were present and the leadership style behaviors (open vs. closed) that were present. The core decision-making group completed this survey during the latter half of the second week. The tactical scenarios were the means that would have exposed the group to these variables.

The fourth survey concluded whether as a result of the group decisions, there were any symptoms of defective decision-making. The OC/T would complete this survey at the end of the two-week Annual Training, thereby allowing all of the unit's decisions to come to resolution.

Content Validity

Content validity, usually judgmental, refers to the extent that the survey instrument provides adequate coverage of the topic under study. This type of validity was approached in two ways. First, a review of the literature was done to evaluate the research on groupthink, analyze the results, and identify areas of inconsistency. Based on these analyses and integration of research on the effects, an enhanced alternative groupthink model was developed. Second, the survey was given to an expert, Dr. Sheryl J. Johnson, who assessed the content of the survey instrument, in terms of whether it

accurately identified characteristics of groupthink. Adjustments were made and the changes were reviewed with this professional to make sure the changes were accurate. Third, the surveys were pre-tested with military personnel who were of equal rank as the individuals who would be tested. This assessed whether the research subjects clearly understood the questions as they were crafted.

Survey Instruments

Surveys one through four were comprised of various numbers of questions with several statements focused on a specific variable of groupthink. Each of the four surveys gave the respondents five options for rating each statement, ranging from five — meaning this is always true of our organization, to one — never true of our organization. The scale is listed in table 3.3. Surveys one and three, which were given to the group, had four questions which requested demographic information, including rank, gender, time in current position, and attendance at appropriate school for position currently held. A sample of each of the four surveys is found in Appendix A thru D.

Table 3.1 Scale used on the survey instruments for responses

- 5 – Always True
- 4
- 3 – Sometimes True
- 2
- 1 – Not True

Data Processing and Analysis

The process theory during this research used four different surveys to gather data. Each survey gathered data on a different aspect of the groupthink syndrome. During analysis a score of 70% or better was used to determine whether specific variables or

conditions of groupthink existed. This is the U.S. Army's standard used when administering tests.

Survey one, completed by the unit's core decision-making group, determined which of the antecedents of groupthink were present. The antecedents found by the survey were listed for that particular unit. In Esser's (1998) review of groupthink research, he provides evidence on Janis's original cases that were characterized as having groupthink and as having four antecedents each. Therefore, in this study, identifying four or more of the seventeen conditions would evidence a high degree of antecedent conditions.

Survey two, completed by the OC/T, determined if the unit was using a methodical decision making procedure. The OC/T's responses to the survey were averaged out. The unit received a "yes" for using methodical decision-making procedures if a 70% or better score was received.

Survey three was broken down into two parts. Part I, completed by one the unit's core decision-making group, determined if the unit exhibited the symptoms of groupthink. Part II, completed by both the OC/T and the unit's core decision-making group, and determined whether the unit exhibited a closed leadership style. The scores of all the surveys were averaged out. The unit receiving a score of 70% or better on Part I, determined whether the unit was suffering from the symptoms of groupthink. The unit receiving a score of 70% or better on Part II determined the type of leadership style behaviors (open or closed).

Survey four, completed by the OC/T, determined if the unit exhibited any of the symptoms of defective decision-making. The OC/T's responses to the survey were

averaged out. The unit received a “yes” for this condition if the score was 30% or above. The standard for the scoring was changed from 70% to 30 % for survey four, because we wanted our groups to arrive at the right solution to their decisions (70% of the time), instead of only 30% of the time.

After processing all of the survey data, receiving back briefs from the unit’s assigned OC/T, and completing the analysis using the four propositions, it was determined whether groupthink was present or not present in the unit. A flow chart depicting how the surveys were integrated and processed is in Figure 3.3.

Methodical Assumptions

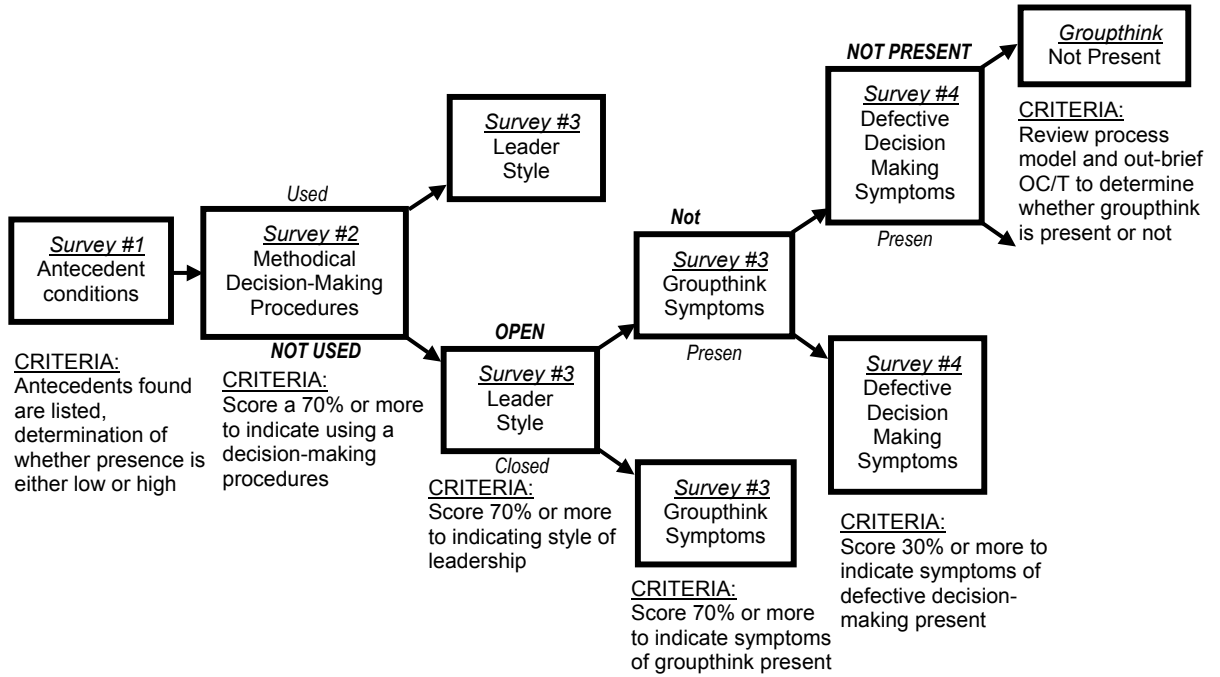
The research assumes the following:

1. That people answered the survey honestly.
2. That the respondents were able to read and understand the statements on the survey.
3. That the chain of command did not place undue stress or consequences associated with the survey.
4. That the OC/T, who is evaluating the unit, did not preempt any of the survey questions.
5. That the respondent either had the appropriate level of military schooling or training to understand the Army’s decision-making process.

Limitations of Methodology or Procedures

1. The OC/T may be called upon to coach / teach the unit on the U.S. Army’s “Estimate of the Situation” decision-making process. This may cloud his perception on how well the unit is using the process, as the OC/T becomes less objective in his observations.
2. The assigned OC/T was different for each unit, so surveys two and four will be based on his skills and personal experience when answering questions on the decision-making process.

Figure 3.3. Process Model Example

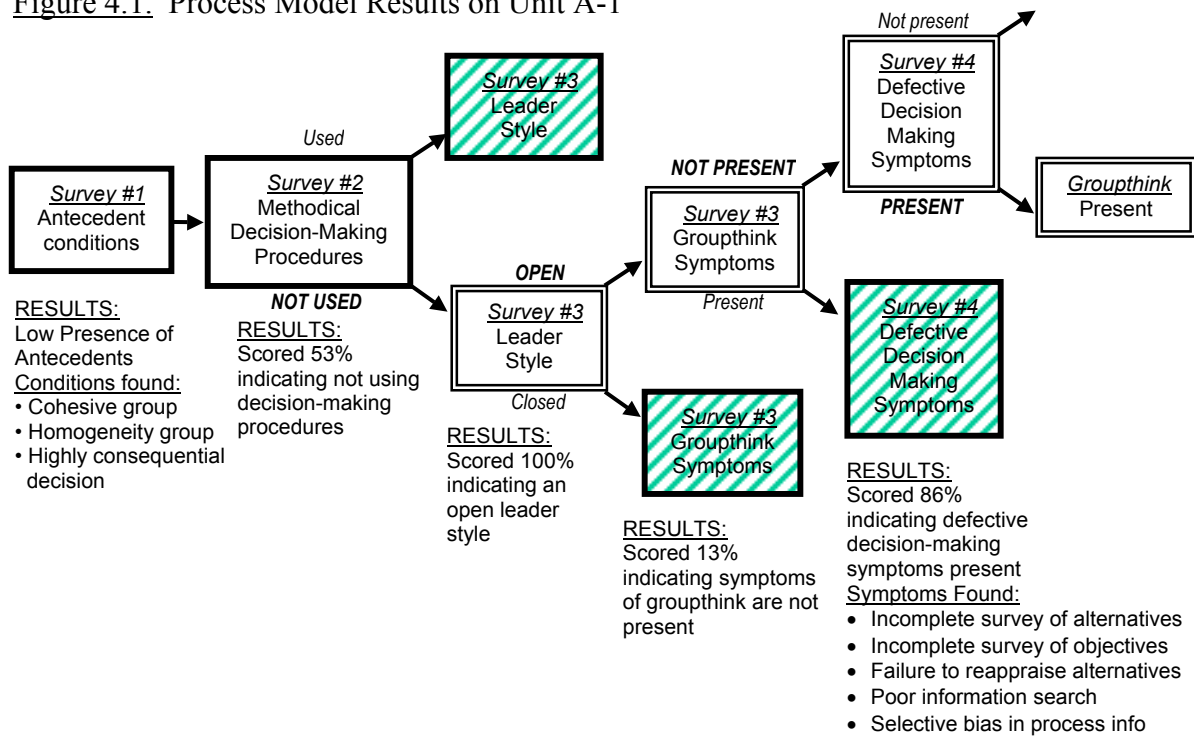


Chapter 4: Findings and Analysis of Results

This chapter contains the process model results of three of the four surveys conducted for this research. The results are shown in Figures 4.1, 4.2, 4.3. An interpretation of the results follows the factual information.

The OC/T assigned to the fourth unit decided against having the unit participate in the testing. Early observations by the OC/T led him to determine that there were severe leadership problems in the unit. The OC/T believed that subjecting the soldiers of the unit to surveys that asked leadership and group dynamics questions would hamper his overall effort in addressing these issues with the unit.

Figure 4.1. Process Model Results on Unit A-1

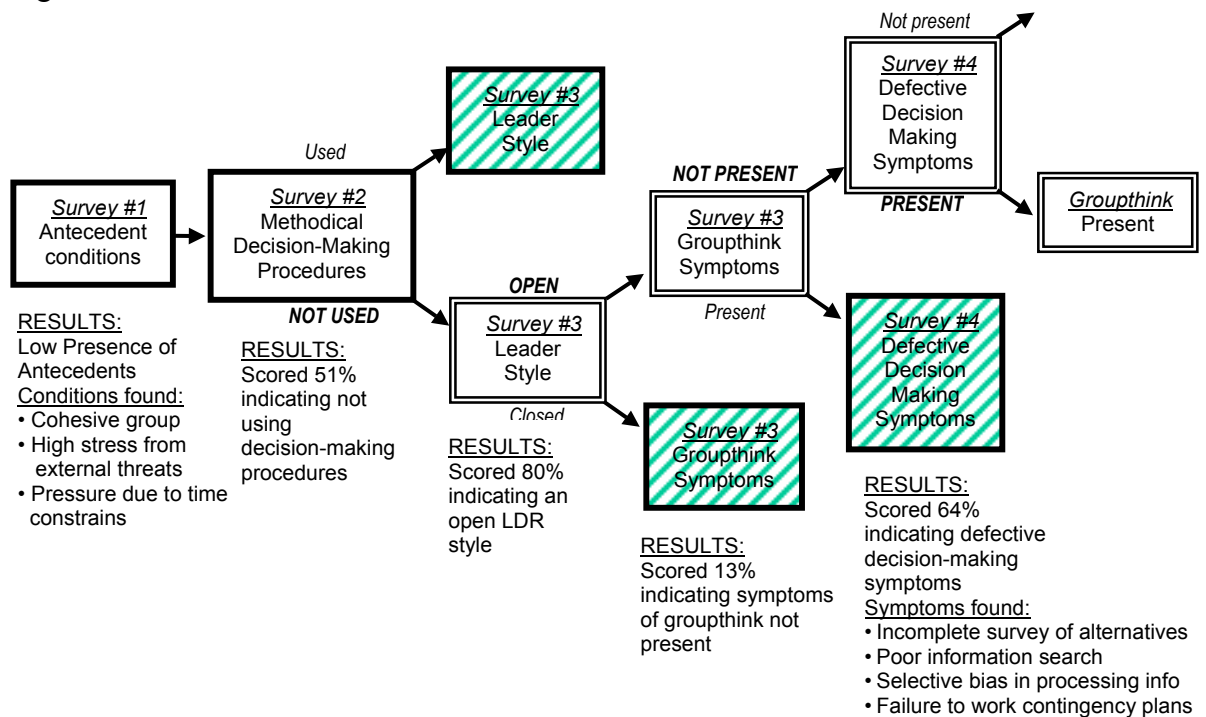


Unit A-1 Results and Interpretations

Unit A-1 had a low presence of antecedents, with the following ones found: cohesive group, homogeneous group, highly consequential decision. The OC/T found

that they were not using methodical decision-making procedures, as they scored only 53% on survey two. The unit clearly had an open leader style, as they scored 100% on survey three. The unit scored very low (13%) on survey three, indicating groupthink symptoms not present, but scored very high (86%) on survey four, indicating defective decision-making symptoms were present. Surveys three and four results don't correlate as one shows no groupthink characteristics present, but the other reflects that defective decision-making symptoms were present. In reviewing Unit A-1's process model and receiving an out brief from their OC/T, it was determined that the unit suffers from groupthink characteristics.

Figure 4.2. Process Model results on Unit A-2

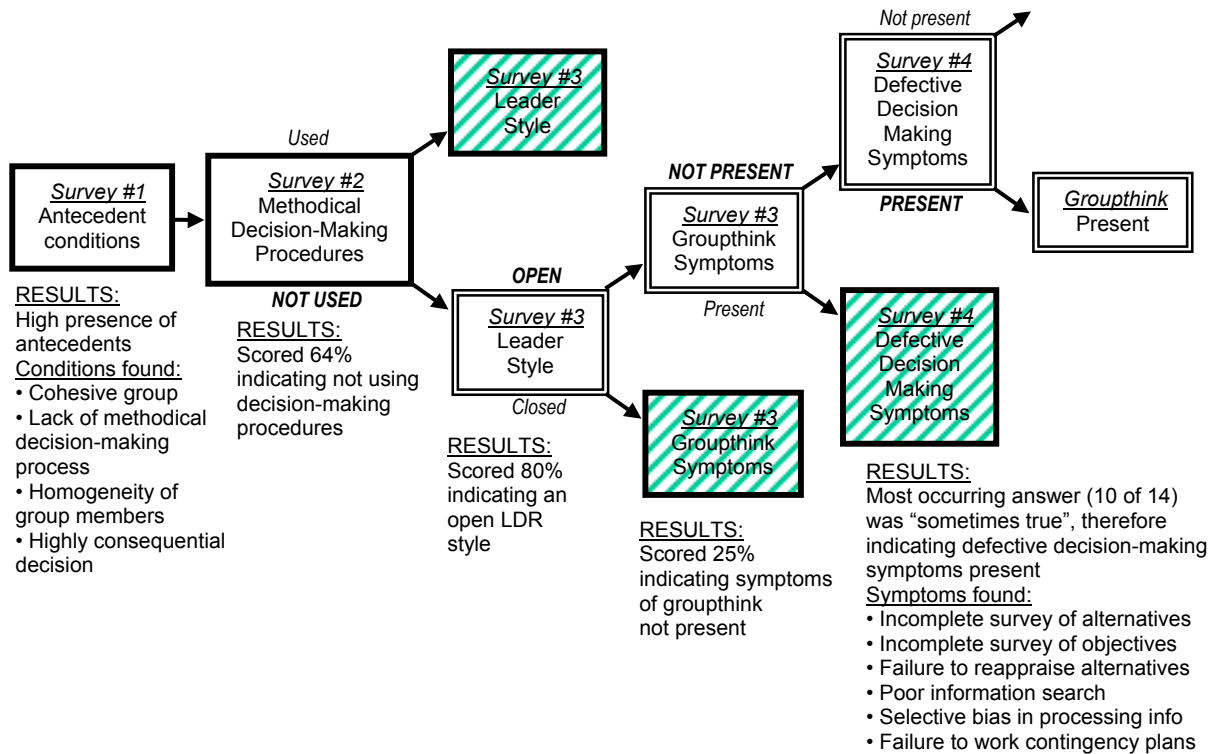


Unit A-2 Results and Interpretations

Unit A-2 had a low presence of antecedents, with the following ones found: cohesive group, high stress from external threats, pressure due to time constraints. The

OC/T found that they were not using methodical decision-making procedures, as they scored only 51% on survey two. The unit has an open leader style, as they scored 80% on survey three. The unit scored very low (13%) on survey three indicating groupthink symptoms not present, but scored (64%) on survey four, reflecting that they suffer from symptoms of defective decision-making. Again surveys three and four results don't correlate as one shows no groupthink characteristics present, but the other reflects that defective decision-making symptoms were present. In reviewing Unit A-2's process model and receiving an out brief from their OC/T, it was determined that the unit suffers from groupthink characteristics.

Figure 4.3. Process Model Results on Unit A-3



Unit A-3 Results and Interpretations

Unit A-3 had a high presence of antecedents, with the following ones found: cohesive group, lack of methodical decisions-making process, and homogeneity of group members, highly consequential decision. The OC/T found that they were not using methodical decision-making procedures, as they scored only 64% on survey two. The unit clearly had an open leader style, as they scored 80% on survey three. The unit scored very low (25%) on groupthink symptoms, but scored very high (10 of 14 questions indicating presence) on defective decision-making symptoms. Again surveys three and four results don't correlate as one shows no groupthink characteristics present, but the other reflects that defective decision-making symptoms were present. In reviewing unit A-3's process model and receiving an out-brief from their OC/T, it was determined that the unit suffers from groupthink characteristics.

Comparison of Units A1 & A2 Against A3

In Units A1 and A2, low antecedents were found to be present as compared to A3 where antecedents were found to be high. Overall this was the major difference between all units. The evidence found in Unit A1 and A2 does not support Proposition #1. Even with low antecedents and an open leader style in each unit, they were found to have characteristics of groupthink. This seems to be mainly due to not using methodical decision-making procedures. Even when there is an open leader style, the unit can not overcome faulty decision making procedures. The evidence would also suggest that methodical decision-making procedures carry more weight than an open leader style.

Comparison of Units A1, A2, and A3

All three units surveyed with the enhanced alternative groupthink model reflected that groupthink characteristics were present in all of the units. All units did have indicators that if considered alone, could have led to different conclusions as to whether groupthink was present or not. But, when considering the whole process of surveys and receiving an out-brief from the unit's OC/T, a different conclusion was determined.

Proposition two was determined to be true by the results found in unit A-3's surveys. Two units (A1 and A2) had low evidence of antecedent conditions, had an open leader style, suffered from not using a methodical decision making system, but did have groupthink characteristics present. These results run against proposition one, and may indicate that methodical decision-making procedures are more important than an open leader style.

All units' scores on the decision-making survey indicated that they were not using methodical procedures. Unit A3 even indicated one of their antecedents as being a "lack of methodical decision-making process." All of the above data indicates that National Guard and Reserve units generally have problems with applying the Army's methodical decision-making process.

National Guard and Reserve units have problems with the decision-making process for several reasons. First, units only have 39 days a year to train, and these days fill up quickly with administrative tasks. This leaves little time for units to learn / practice / utilize the Army's decision-making process. Secondly, military education systems for the National Guard and Reserves are correspondence (paper based) programs. On the other hand, their active duty counterparts attend residence programs, where they

receive a hands-on application to the decision-making process. To close the educational gap between the two systems, the Army is moving to more of the following training: web based, CD-ROM based, and video streaming type training.

All three units had the same basic trends: presents of the “cohesive group” antecedent condition; groups did not see themselves as having groupthink symptoms; groups felt their leader used an open style of leadership. In contrast, all OC/T found the consequences of groups that suffer from groupthink symptoms to be present and found that none of the groups used a methodical decision making procedure. The evidence suggests that groups that are very cohesive can not objectively assess themselves in terms of the groupthink phenomena.

Comparison of Low Groupthink Symptoms against High Defective Decision-Making Symptoms

All unit surveys indicate that the eight symptoms of groupthink proposed by Janis (1972) are difficult to assess using questionnaires. Especially noted in Unit A3 when antecedents were high, unit lacked using a methodical decision-making process, and scored high on defective decision-making symptoms; therefore, groupthink symptoms scores should have been high, but instead were low. This evidence supports Esser’s (1998) review of groupthink research, where he also found that symptoms of groupthink were difficult to assess. Esser’s (1998) review found fault in Glaser’s (1993) *Groupthink Index* questionnaire as the questions asked the subject to assess the members of the group. Esser (1998) continues to find fault in Moorhead and Montanari’s (1996) questionnaire because it, too, asked questions about the group as a whole. The survey questions developed for our study tried to correct this fault by focusing the questions on behaviors and attitudes of the subject.

Since all three groups evidence a high degree of defective decision-making consequences, but a low degree of groupthink symptoms, indications seem to point that another problem is at work. It may be that when groups are so trapped within the symptoms of groupthink, that they are unable to assess themselves properly. The measurement of groupthink symptoms by outside observers may not be the obvious solution either. As research conducted by W. Parks in 1990 pointed out, the symptoms of groupthink cannot be assessed easily by outside observers (Esser, 1998).

So are we left with no real appropriate way to measure groupthink symptoms, by either a subject questionnaire or outside observer? The evidence supports the reason why we developed a process model to determine if groupthink characteristics were present in the unit. The model needs additional refinement in the type of measurement technique used, such as using a subject interview technique on surveys one and three.

Analysis of Results

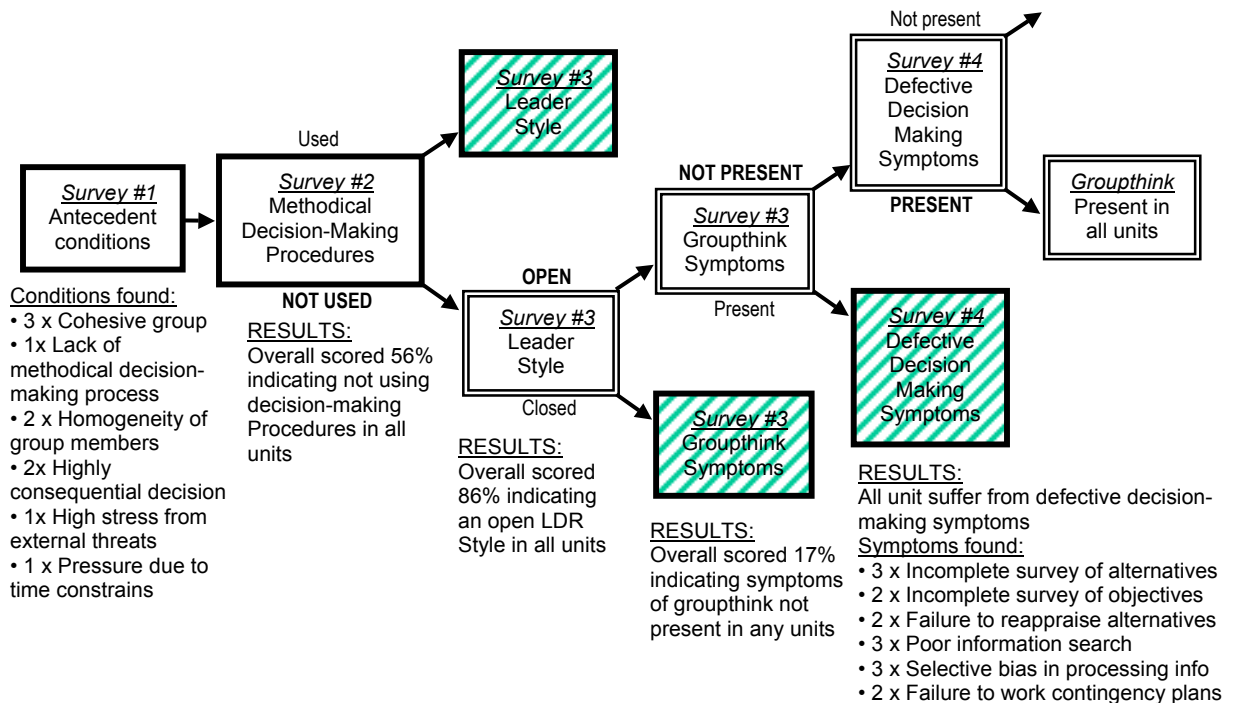
Individual surveys of groupthink symptoms, antecedents, or defective decision-making could lead to different conclusions as to whether the characteristics were present or not. The process of surveying all aspects of groupthink and out briefing external observers proved to be very valuable in making a determination. Our model provides an in-depth look at all aspects of groupthink and allows determination to be made then.

The combined results of all surveys, as shown in figure 4.4 reflect that there is a conflict between the groups' survey results concerning groupthink symptoms and the OC/T determining that the consequences of defective decision-making symptoms were present. The results support Esser's (1998) research review where he noted that the groupthink symptoms were difficult to assess using subject questionnaires. To really

assess the symptoms of groupthink, a combination of research techniques may need to be employed, such as external observations, interviews with subjects, and subject questionnaires.

The results also indicate that not using methodical decision-making procedures had more effect on the overall process than having an open leader style. An open leader style is an important goal for decision-making, but leaders may allow it to go too far over the concern of maintaining a “cohesive group.” This would have a negative effect on decision-making, thereby increasing the importance of using a standard set of procedures for decision-making. Then when combined with an open leader style, groups would have the best decision-making scenario possible.

Figure 4.4. Summary of results from all process models in this study



Chapter 5: Summary and Recommendations

Summary of the Project

In 1989, Gregory Moorhead and John R. Montanari developed a groupthink assessment inventory to conduct an empirical investigation of the groupthink framework. Later, Organization Design and Development Incorporated (1993) also developed a groupthink inventory. These two inventories along with Christopher P. Neck's and Greg Moorhead's alternative groupthink model formed the basis for this research.

The purpose of this paper was to develop a reliable assessment process for determining if groupthink characteristics were present in a military unit. Christopher Neck's and Gregory Moorhead's alternative groupthink theory was updated with recent research, creating an enhanced alternative groupthink model. To test this new groupthink model, a process theory consisting of four surveys was developed.

In June of 2001, three company size reserve military units completed the process model's surveys. The military units were of the following types of branches: artillery, engineer, and chemical. The survey results were compiled, then analyzed within the framework of the process model. Each unit's process model was compared to the other models to determine correlations.

OC/T's were interviewed after the results of their unit's surveys were compiled. They were asked how the process theory's findings compared to their assessment of the unit, as to whether groupthink characteristics were present in the unit. Each time, the OC/T's survey results did not correlate with the survey results the unit members completed.

Conclusions

Group problem solving is a complex and challenging phenomenon. Comprehensive models are needed to guide researchers in dealing with this phenomenon. Irving Janis' groupthink model has served a valuable role in generating interest in group problem-solving processes. However, the model has not incorporated three decades of theory and research, has received limited empirical support, and is restrictive in scope. Recent theory and research, as well as critical evaluation of the model, have suggested the need for an expanded, integrative groupthink model.

Building in part on Janis' original groupthink model, this thesis offers the enhanced alternative groupthink model as such a framework. By incorporating prior theory and research, this new model is intended for a broad range of problem situations. The enhanced alternative groupthink model relaxes restrictive assumptions of groupthink and recasts certain groupthink variables. Furthermore, this model explicitly recognizes the roles that leadership and decision-making procedures can play in group problem solving.

This thesis presents the enhanced alternative groupthink model as a foundation for further testing and refinement. Researchers should recognize the complex, dynamic nature of group problem solving, but use a broad range of methodologies when conducting research. As such, the enhanced alternative groupthink model has been consistent with the spirit of the groupthink model and serves to maintain its key elements and themes.

Recommendations

The enhanced alternative groupthink model should serve as a catalyst for the modification of future empirical groupthink research. This would ensure comprehensive coverage of the model, as opposed to testing only parts of the framework.

The focus of future research could be to examine the differentiating features of the enhanced model. The moderating effects of a closed leadership style behavior on the relation between groupthink antecedent conditions and symptoms could be examined. Additionally, the focus of future research should encompass the moderating impact of using a methodical decision-making procedure between antecedents and symptoms of groupthink.

If the enhanced alternative groupthink model is supported by empirical work, it will be the catalyst towards developing better prescriptions for training managers and group members to avoid groupthink in decision-making situations. Prescriptions could be in the form of : (1) suggestions for when a leader might alter his/her leadership behaviors which may depend on the nature of the group and the presence or absence of the antecedent conditions, and (2) establishment of methodical decision-making procedures such as the Army “Estimate of the situation.”

In summary, the enhanced alternative groupthink model is only the initial step of progress toward shaping our understanding of groupthink into a useful tool for building successful decision-making groups. This model is the first step toward increasing groupthink’s applicability to “real world” decision-making groups. Subsequent steps should be empirical tests of this model, followed by additional theory development. The

final improvement for this area of study should be training programs for leaders and group members on how to avoid groupthink in decision-making situations.

Appendix A - Antecedent Survey (Decision Making – Unit Survey #1)

DIRECTIONS:

◆ Read and understand the following consent statement.
 I understand that by returning this questionnaire, I am giving my informed consent as a participating volunteer in this study. I understand the basic nature of the study and agree that any potential risks are exceedingly small. I also understand the potential benefits that might be realized from the successful completion of this study. I am aware that the information is being sought in a specific manner so that no identifiers are needed and so that confidentiality is guaranteed. I realize that I have the right to refuse to participate and that my right to withdraw from participation at any time during the study will be respected with no coercion or prejudice.

◆ Read each of the items carefully. Decide to what extent you believe each statement is true of your organization today. ◆ Rate each statement on a scale of 1-5. ◆ Circle the number that best describes your organization as it exists today.	Not True 1	2	Sometimes True 3	4	Always True 5
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In your opinion

1. I feel there is a sense of trust among the members of our group.	1.	1	2	3	4	5
2. Our group never considers seeking advice from experts on solving problems.	2.	1	2	3	4	5
3. The leader of the group encourages everyone to discuss and examine all possible solutions to the problem.	3.	1	2	3	4	5
4. The only time our unit uses the decision making process is during Annual Training.	4.	1	2	3	4	5
5. Members of our group generally think alike.	5.	1	2	3	4	5
6. I feel pressure from outside sources (chain of command, OC/T) on my group during decision-making.	6.	1	2	3	4	5
7. I consider myself a valuable member of this group.	7.	1	2	3	4	5
8. Outcomes from our decisions always impact outside parties.	8.	1	2	3	4	5
9. Decisions associated with a crisis situation (time pressured event) are made by the leader without any input from the group.	9.	1	2	3	4	5
10. We could have developed a better solution than the chosen course of action.	10.	1	2	3	4	5
11. My opinion in group discussion is not taken seriously.	11.	1	2	3	4	5
12. I never take reasonable risks.	12.	1	2	3	4	5
13. When expert advice was available, my team ignored it when it went against our preferred solution.	13.	1	2	3	4	5

14. I feel people on our team are friendly toward each other.	14.	1	2	3	4	5
15. Members are discouraged from seeking help from persons outside the group.	15.	1	2	3	4	5
16. Our leader seeks out everyone's ideas, especially from the silent members	16.	1	2	3	4	5
17. Our decision-making procedures are very orderly and systematic.	17.	1	2	3	4	5
18. Everyone in our group shares the same beliefs / ideas.	18.	1	2	3	4	5
19. During decision-making my group never feels pressure from outside threats (chain of command, OC/T)	19.	1	2	3	4	5
20. When a decision made by the group goes badly, everyone's self-worth is lowered.	20.	1	2	3	4	5
21. Members of our group are never impacted by the outcomes of our decisions.	21.	1	2	3	4	5
22. We never have enough time to make a decision.	22.	1	2	3	4	5
23. During decision-making we consider very few alternatives.	23.	1	2	3	4	5
24. Dissenting arguments are encouraged as the group discusses an issue.	24.	1	2	3	4	5
25. I tend to explain away potential problems created by the group's decision.	25.	1	2	3	4	5
26. Professional development classes are conducted by someone within the unit.	26.	1	2	3	4	5
27. I think there is a great sense of belonging within our group.	27.	1	2	3	4	5
28. When deficiencies in the group's knowledge and skills are discovered, we seek advice from outside experts.	28.	1	2	3	4	5
29. The leader of our group encourages everyone to express his/her opinions in group discussion.	29.	1	2	3	4	5
30. When making tactical decisions, we follow the same general procedures each time.	30.	1	2	3	4	5
31. Very diverse individuals make-up our group.	31.	1	2	3	4	5
32. I always feel that our group is competing against other groups.	32.	1	2	3	4	5
33. My self-confidence decreases when poor decisions are made by our group.	33.	1	2	3	4	5

34. Tough decisions cause us to choose between a series of unfavorable options.	34.	1	2	3	4	5
35. We never feel pressure due to time constraints.	35.	1	2	3	4	5
36. We survey as many alternatives as possible in solving a problem.	36.	1	2	3	4	5
37. I avoid bringing up an issue or argument that is against the currently popular idea.	37.	1	2	3	4	5
38. I take a "who cares?" attitude when making a decision.	38.	1	2	3	4	5
39. My unit tries to seek advice from experts as we solve problems.	39.	1	2	3	4	5

Please mark one for each item:

- a. Rank: SGT___ / SSG___ / SFC___ / MSG ___ / 1SG___ / LT___ / CPT___
- b. Gender: Male ___ / Female ___
- c. Time in current position: ___years ___months
- d. Appropriate school for position:
 Yes completed___ / Partially completed___ / None ___

Appendix B – Methodical Decision-Making Process (Decision Making – OC/T Survey #2)

DIRECTIONS:

- ◆ Read and understand the following consent statement.
I understand that by returning this questionnaire, I am giving my informed consent as a participating volunteer in this study. I understand the basic nature of the study and agree that any potential risks are exceedingly small. I also understand the potential benefits that might be realized from the successful completion of this study. I am aware that the information is being sought in a specific manner so that no identifiers are needed and so that confidentiality is guaranteed. I realize that I have the right to refuse to participate and that my right to withdraw from participation at any time during the study will be respected with no coercion or prejudice.

<ul style="list-style-type: none"> ◆ Read each of the items carefully. Decide to what extent you believe each statement is true of your organization today. ◆ Rate each statement on a scale of 1-5. ◆ Circle the number that best describes your organization as it exists today. 	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 16.6%;">Not True</td> <td style="width: 16.6%;"></td> <td style="width: 16.6%;">Sometimes True</td> <td style="width: 16.6%;"></td> <td style="width: 16.6%;">Always True</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> </table>	Not True		Sometimes True		Always True	1	2	3	4	5
Not True		Sometimes True		Always True							
1	2	3	4	5							

MISSION ANALYSIS

1. High commanders' concept and intent two levels up were understood.	1. 1	2	3	4	5
2. All specified and implied tasks were identified during mission analysis.	2. 1	2	3	4	5
3. All constraints and limitations placed on the unit were identified during mission analysis.	3. 1	2	3	4	5

NOTE: If you rated a 1 or 2 for questions 1-3, have the leader answer question 1 and 2 on the back.

SITUATION ANALYSIS & COA DEVELOP

4. All of the elements of METT-T were used to analyze the unit's situation.	4. 1	2	3	4	5
5. All of the elements of OCOKA were used to analyze the terrain.	5. 1	2	3	4	5
6. Leader used defined steps when developing their courses of action.	6. 1	2	3	4	5
7. Subordinate unit's task and purpose were determined.	7. 1	2	3	4	5

NOTE: If you rated a 1 or 2 for questions 4-7, answer question 3 and 4 on the back.

COURSE OF ACTION ANALYSIS

8. The unit's proposed course of action was war-gamed against the enemy's most probable course of action.	8. 1	2	3	4	5
9. The unit's proposed course of action was war-gamed against the enemy's most dangerous course of action.	9. 1	2	3	4	5

NOTE: If you rated a 1 or 2 for questions 8-9, answer question 5 on the back.

COURSES OF ACTION COMPARISON

10. The unit's course of action was chosen by comparing factors identified during mission analysis.

10. 1 2 3 4 5

NOTE: If you rated a 1 or 2 for question 10, answer question 6 on the back.

Note: The following is the backside of the Decision Making-OC/T Survey #2.

MISSION ANALYSIS

1. Did you understand your commander's concept and intent two levels up? If you did not, explain why?

2. During mission analysis, did you determine all of the following items: specified & implied tasks, and limitations on your mission? If you did not, explain why?

SITUATION ANALYSIS & COURSES OF ACTION DEVELOPMENT

3. As you analyzed your situation, did you use METT-T and OCOKA properly? How successful were you at seeing the whole situation?

4. What steps did you take to develop your courses of action to accomplish the mission?

COURSES OF ACTION ANALYSIS

5. How did you analyze these courses of action? Did you use the Army's war-gaming technique or some other method?

COURSES OF ACTION COMPARISON

6. How did you select which course of action to chose?

Appendix C – Closed Leadership Style Behaviors (Leader Style – Unit & OC/T Survey #3)

DIRECTIONS:

- ◆ Read and understand the following consent statement.
I understand that by returning this questionnaire, I am giving my informed consent as a participating volunteer in this study. I understand the basic nature of the study and agree that any potential risks are exceedingly small. I also understand the potential benefits that might be realized from the successful completion of this study. I am aware that the information is being sought in a specific manner so that no identifiers are needed and so that confidentiality is guaranteed. I realize that I have the right to refuse to participate and that my right to withdraw from participation at any time during the study will be respected with no coercion or prejudice.

<ul style="list-style-type: none"> ◆ Read each of the items carefully. Decide to what extent you believe each statement is true of your organization today. ◆ Rate each statement on a scale of 1-5. ◆ Circle the number that best describes your organization as it exists today. 	Not True 1	2	Sometimes True 3	4	Always True 5
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In your opinion:

1. Participation in-group discussions is always encouraged.	1.	1	2	3	4	5
2. The group leader states his/her opinion at the beginning of the meeting.	2.	1	2	3	4	5
3. The group leader does not encourage opinions different from his/her own.	3.	1	2	3	4	5
4. The group leader emphasizes the importance of reaching a wise decision.	4.	1	2	3	4	5
5. I feel that I am allowed to add my perceptions during group meetings.	5.	1	2	3	4	5
6. Participation in group discussions is never encouraged.	6.	1	2	3	4	5
7. At the beginning of the meetings, the group leader does not state his/her opinions.	7.	1	2	3	4	5
8. The group leader encourages opinions different from his/her own in group discussion.	8.	1	2	3	4	5
9. The group leader does not emphasize reaching a wise decision.	9.	1	2	3	4	5
10. I feel that I am not allowed to add my perceptions during group meetings.	10.	1	2	3	4	5

Please mark one for each item:

- a. Rank: SGT___ / SSG___ / SFC___ / MSG___ / 1SG___ / LT___ / CPT___
- b. Gender: Male ___ / Female ___
- c. Time in current position (job): ___years___months
- d. Appropriate school for position:
Yes completed___ / Partially completed___ / None ___

Appendix D – Symptoms of Groupthink (Group Characteristics-Unit Survey #3, back side)

DIRECTIONS:

◆ Read and understand the following consent statement.
 I understand that by returning this questionnaire, I am giving my informed consent as a participating volunteer in this study. I understand the basic nature of the study and agree that any potential risks are exceedingly small. I also understand the potential benefits that might be realized from the successful completion of this study. I am aware that the information is being sought in a specific manner so that no identifiers are needed and so that confidentiality is guaranteed. I realize that I have the right to refuse to participate and that my right to withdraw from participation at any time during the study will be respected with no coercion or prejudice.

◆ Read each of the items carefully. Decide to what extent you believe each statement is true of your organization today. ◆ Rate each statement on a scale of 1-5. ◆ Circle the number that best describes your organization as it exists today.	Not True 1	2	Sometimes True 3	4	Always True 5
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In your opinion:

1. I keep silent about my misgivings on decisions.	1. 1	2	3	4	5
2. I assume that members who remain silent during group discussion are in agreement with the majority.	2. 1	2	3	4	5
3. Disagreement among ourselves is encouraged.	3. 1	2	3	4	5
4. Differences of opinion are expressed freely.	4. 1	2	3	4	5
5. Group members joke and laugh about potential dangers that may result from the group's decision.	5. 1	2	3	4	5
6. I objectively weigh the moral and ethical consequences of the group's decisions.	6. 1	2	3	4	5
7. I take great pains to be objective during decision-making.	7. 1	2	3	4	5
8. I stereotype others outside my group.	8. 1	2	3	4	5
9. I feel empowered to question the wisdom of the majority.	9. 1	2	3	4	5
10. I engage in vigorous debate in our group decision-making process.	10. 1	2	3	4	5
11. Differences of opinion are expressed freely.	11. 1	2	3	4	5
12. The group members are prevented from challenging the leader or the majority.	12. 1	2	3	4	5
13. I believe we are realistic in assessing the group's vulnerabilities.	13. 1	2	3	4	5
14. The moral and ethical consequences of the group's decisions are never taken into account.	14. 1	2	3	4	5

- | | | | | | | |
|---|-----|---|---|---|---|---|
| 15. Group members explain away potential problems created by the group's decisions. | 15. | 1 | 2 | 3 | 4 | 5 |
| 16. Group discussion avoids stereotyping other individuals and groups. | 16. | 1 | 2 | 3 | 4 | 5 |

Appendix E – Symptoms of Groupthink (Symptoms of Defective Decision-Making#3)

DIRECTIONS:

- ◆ Read and understand the following consent statement.
I understand that by returning this questionnaire, I am giving my informed consent as a participating volunteer in this study. I understand the basic nature of the study and agree that any potential risks are exceedingly small. I also understand the potential benefits that might be realized from the successful completion of this study. I am aware that the information is being sought in a specific manner so that no identifiers are needed and so that confidentiality is guaranteed. I realize that I have the right to refuse to participate and that my right to withdraw from participation at any time during the study will be respected with no coercion or prejudice.

<ul style="list-style-type: none"> ◆ Read each of the items carefully. Decide to what extent you believe each statement is true of your organization today. ◆ Rate each statement on a scale of 1-5. ◆ Circle the number that best describes your organization as it exists today. 	Not True 1	2	Sometimes True 3	4	Always True 5
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In your opinion

1. The unit did not do a complete survey of alternatives.	1. 1	2	3	4	5
2. The unit conducted a complete survey of their objectives.	2. 1	2	3	4	5
3. The unit failed to examine risks of their preferred course of action.	3. 1	2	3	4	5
4. The unit failed to reappraise their initially rejected alternatives.	4. 1	2	3	4	5
5. The unit conducted a poor mission analysis.	5. 1	2	3	4	5
6. The unit showed favoritism toward a preferred course of action?	6. 1	2	3	4	5
7. The unit failed to work out contingency plans for their mission.	7. 1	2	3	4	5
8. The unit conducted a complete survey of alternatives.	8. 1	2	3	4	5
9. The unit conducted an incomplete survey of their objectives.	9. 1	2	3	4	5
10. The unit performed an adequate risk assessment before each mission.	10. 1	2	3	4	5
11. Initially rejected alternatives were always reappraised.	11. 1	2	3	4	5
12. The unit performed an adequate mission analysis.	12. 1	2	3	4	5
13. Favoritism was never shown when selecting a course of action.	13. 1	2	3	4	5
14. Contingency plans were planned for each operation.	14. 1	2	3	4	5

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