

## Group Dynamics in Janis's Theory of Groupthink: Backward and Forward

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**Janis's groupthink theory is an appealing explanation of how group process can get in the way of optimal decision making. Unfortunately, Janis was selective and not always consistent in his application of research in group dynamics. This paper traces groupthink to its theoretical roots in order to suggest how a broader and more consistent use of research in group dynamics can advance understanding of decision-making problems. In particular, the paper explores and reinterprets the groupthink prediction that poor decision making is most likely when group cohesion is based on the personal attractiveness of group members.** © 1998 Academic Press

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Groupthink (Janis, 1972, 1982) is a theory of how group dynamics can get in the way of effective decision making. The success of the groupthink formulation seems to have turned attention away from its origins in group dynamics research, and in this paper I look backward to clarify these origins and forward to highlight more recent research that may help improve group decision making. I begin with a brief summary of groupthink predictions and the normative model of decision making implied by these predictions. Then I examine the origins and limitations of Janis's use of group dynamics research and try to show how a broader and updated view of group dynamics can amplify our understanding of how group decisions go awry. Finally, I offer my own opinion about why groupthink has been so popular a conception, despite its problems, and about how Janis's work should inspire future research.

I acknowledge at the outset my own parochial limitations as a social psychologist; I am not able to integrate in this paper the burgeoning literature on group performance in relation to issues of management and organization (e.g.,

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Beyerlein, Johnson, & Beyerlein, 1995; Guzzo & Salas, 1995; Klein, Orasanu, Calderwood, & Zsombok, 1993). Similarly, I do not aim to evaluate the research evidence concerning the value of the various groupthink antecedents, symptoms, or remedies (see Aldag & Fuller, 1993; McCauley, 1989; Mullen, Anthony, Salas, & Driskell, 1994; Park, 1990); I focus rather on the group dynamics that are thought to link all these elements of the groupthink model.

### GROUPTHINK THEORY IN BRIEF

Groupthink (Janis, 1982) is a linear model of how seven antecedents increase the likelihood of premature concurrence seeking (groupthink), which leads to eight psychological symptoms of groupthink, which lead to eight symptoms of defective decision making, which lead to poor decision outcomes. The central antecedent is group cohesion, which Janis sees as necessary but not sufficient for groupthink. "Provocative situational context" includes the two antecedents (high stress from external threat and low self-esteem from recent failure or decision difficulty) that are said to be the primary determinants of whether high cohesion will lead to groupthink. "Structural faults of the group" (insulation from outside experts, lack of impartial leadership, lack of norms for methodical consideration, homogenous background of groupmembers) are secondary determinants. Janis (1982, pp. 249 and 301) described these as moderating variables that can, by their presence or absence, multiply or counteract the expression of the groupthink tendency associated with cohesion and provocative context (but see Aldag & Fuller (1993) and McCauley (1989) for evidence that promotional leadership is empirically the best predictor of groupthink).

Janis (1982) offered the rudiments of a theoretical account of his model in terms of self-esteem. The stress of an external threat is the anticipation of loss of self and social esteem if the group does not respond successfully to the threat, and the group is more likely to anticipate failure when the current decision is perceived as difficult or morally ambiguous or follows recent group failures. Similarly, the symptoms of groupthink have in common that they all contribute to forming and maintaining a consensus that the group and its premature decision are reasonable, right, and likely to succeed against an external threat from people who are unreasonable, wrong, and likely to fail. In short, the primary antecedents of groupthink are threats to self-esteem and the symptoms of groupthink are a shared bolstering of self-esteem.

### GROUPTHINK AS A THEORY OF OPTIMAL DECISION MAKING

Any theory of how decision making can go wrong must contain at least the seeds of a theory of how decision making can go right, and the groupthink model offers quite a strong specification of what the ideal should look like. Good decision making requires a systematic search for possible courses of action and a painstaking evaluation of these alternatives in light of all the relevant information that can be made available. Groupthink is premature consensus

seeking, which leads to the seven symptoms of defective decision making: poor information search, selective bias in processing information, incomplete survey of objectives, incomplete survey of alternatives, failure to reexamine preferred choice, failure to reexamine rejected alternatives, and failure to develop contingency plans (Janis & Mann, 1977, p. 132).

If groupthink is a disease of insufficient search for information, alternatives, and modes of failure, the cure (Janis, 1972, 1982, 1989) is better search procedures: impartial leadership that encourages airing of doubts and objections in the group and encourages search for information and evaluation from sources outside the group, procedural norms supporting systematic consideration of alternatives, "second-chance" meetings after preliminary consensus, and special attention to the motives and communications of threatening competitors. Thus ideal decision making emerges as the inverse of the definition of groupthink and the specification of its failings: the essence of the ideal is maximizing search and evaluation procedures. The group must be better than the average individual in the group if group procedures ensure that information and ideas are pooled and that evaluation averages away individual biases (cf., Stewart & Stasser, 1995, p. 619).

Behind this confidence in the potential of group decision making is the information-processing metaphor made popular by the advent of computers. The best judgment is an output from the best data processed by the best algorithm. A group can access more and better data than any one individual in the group, and group evaluation can average away the biases of individual group members. So the only way that group judgment can be worse than individual judgment is if there is something wrong with the algorithm, that is, the software.

Aldag and Fuller (1993) have noted that getting to the best quality decision is only one of the possible goals of group decision making. Compared with more authoritarian decision-making styles, group decision may also produce more satisfaction with and commitment to the decision for participating group members, may consequently produce improved implementation by group members, and may diffuse responsibility for poor decisions. The importance of these goals may equal or even surpass the importance of getting to the best quality decision, and it is a significant limitation of the groupthink model that it treats decision quality as the only goal of the ideal decision-making process. Aldag and Fuller offer an enlarged model of group decision making, the general group problem solving (GGPS) model, that does consider goals other than decision quality. Surprisingly, however, the enlarged range of outcomes in the GGPS is still supposed to issue linearly from emergent group perceptions and processes that are little changed from the factors that Janis (1972, 1982) listed as "symptoms of groupthink."

The GGPS model reminds us that groupthink is a theory of poor decision making in relation to maximizing decision quality, which may be only one of many goals of group decision making. Within this limitation, I will consider the theory of group dynamics that lies at the heart of the groupthink model,

the theory of concurrence seeking so powerful as to get in the way of the kind of search and evaluation procedures that lead to the best decision.

### GROUP DYNAMICS IN THE GROUPTHINK MODEL

Janis (1972, 1982) did not slow down his presentation of groupthink with the detailed references typical of papers published in professional journals, and most of his debt to group dynamics research is covered in a long first footnote to Chapter 1. This footnote recognizes the contributions of Lewin and his students, gives special recognition to Festinger's theory of social comparison (Festinger, 1954), but cites only one source: the classic *Theories in Social Psychology* by Deutsch and Krauss (1965). Nevertheless it is possible to reconstruct some of the important ideas that Janis put to work in his groupthink model: the distinction between group goals and the social reality value of the group, the distinction between compliance and internalization, and the multiple sources of group cohesion.

#### *The Social Reality Value of Group Consensus*

*Origins.* The first idea that Janis took from the group dynamics literature was the distinction between two general sources of group pressure toward uniformity: the group as a means to group goals and the group as a source of social reality. In his theory of informal social influence, Festinger (1950) lumped together all the values of group activities, group goals, and group prestige ("group locomotion") in order to distinguish these from the particular value of confidence about issues of evaluation (social reality). Questions of value include most of what human beings most care about, but no science of facts can answer questions of value. Agreement with others, especially similar others (Festinger, 1954), is our only source of confidence in answering questions of value, including questions about our own value. It follows that uncertainty about questions of value is stressful; our self-esteem is anchored in our answers to these questions (see Greenberg, Pyszczynski, Solomon, Simon, and Breus (1994) for recent application of this perspective in "terror control theory").

Of course some level of group consensus is necessary if the group is to work together effectively for group goals, but Festinger emphasized the degree to which consensus is necessary for the emergence of value and meaning. Cohesion, or attraction to the group, is then the sum or resultant of the value of group goals and the social reality value of the group. Festinger's (1950) theory is basically a homeostatic model in which communication and persuasion are aimed at controlling disagreements that can undermine both group goals and the confidence of consensus.

*Social reality and the antecedents of groupthink.* Festinger's view of group consensus as the answer to uncertainty is what ties together the antecedents of groupthink that Janis (1982) described as "provocative situational context"—the factors which, when combined with high cohesion, make groupthink likely.

“High stress from external threats with low hope of a better solution than the leader’s” is a description of high uncertainty about a decision where failure will be very painful. “Low temporary self-esteem induced by recent failures, difficulties in current decision task, and moral dilemmas” is again a description of high uncertainty about a difficult decision. Following Festinger (1950), the greater the uncertainty and the greater the importance of the issue, the greater should be the pressure for a consensus that offers the only antidote to the stress of uncertainty. Thus it is the discomfort of high uncertainty that can lead a decision-making group to premature consensus; the consensus will never be premature in the sense of ending the stress of uncertainty too soon.

My emphasis here on the stressful nature of uncertainty should be seen as a clarification of Janis’s focus on self-esteem as the common denominator of the antecedents called provocative situational context. The threat of failure in a difficult and important decision is indeed a threat to self-esteem, but it is worth emphasizing that the threat of failure emerges from uncertainty about what decision to take. Empirically, the impact of this clarification would be to remove the Pearl Harbor decision from the realm of groupthink, because Admiral Kimmel and his staff seem to have suffered no uncertainty, no sense that they were making a risky and difficult decision. Likewise, at least the early months of the Watergate coverup may not properly be considered as groupthink, because President Nixon and his advisors seem to have been operating during this period with little stress and a weak sense of external threat (see also Janis (1982 p. 301, footnote 5) for similar concern about both these cases).

*Social reality and the symptoms of groupthink.* The social reality value of the group also links the eight symptoms of groupthink (illusion of invulnerability, collective rationalization, belief in superior morality, outgroup stereotyping, pressure on dissenters, self-censorship, illusion of unanimity, and self-appointed mindguards). Longley and Pruitt (1980) criticized Janis’s initial (1972) statement of the groupthink model because it attempted to link the eight symptoms as tending to enhance self-esteem, even though self-esteem was not elsewhere mentioned in the theory. In his 1982 revision of the theory, Janis explicitly included factors of low self-esteem, as I have noted above, under “provocative situational context.” Nevertheless, the 1982 Janis is not entirely clear about the theoretical relation between symptoms and self-esteem; he suggests briefly (“Rudiments of an explanatory theory,” Janis, 1982, pp. 254–256) that “participating in a unanimous consensus along with the respected fellow members of a congenial group will bolster the decision-maker’s self-esteem.”

How does consensus bolster self-esteem? Janis (1982, p. 258) points to the harm to self-esteem that can come from criticism of a group member’s ideas, but also notes that consensus maintains confidence in the group’s decision. Again amplifying in light of Festinger (1950), we can say that the threat to self-esteem emerges from uncertainty about a difficult and dangerous decision and that the eight symptoms of groupthink all contribute to forming or maintaining a premature consensus that is the antidote to uncertainty and anxiety.

Four of the eight groupthink symptoms serve directly to create or preserve unanimity: self-censorship, illusion of unanimity, pressure on dissenters, and self-appointed mindguards. The remaining four symptoms serve to create or preserve confidence in the group decision: illusion of invulnerability, belief in the superior morality of the group, collective rationalization, and stereotypes of outgroups.

Thus the psychological symptoms of groupthink, like the contextual antecedents of groupthink, hang together in relation to the social reality value of the group. Where Janis emphasized self-esteem threat in the antecedents and bolstered self-esteem in the symptoms, I have emphasized decision uncertainty in the antecedents and bolstered decision certainty in the symptoms. It seems to me that the emphasis on uncertainty is warranted for two reasons. The first is that, following Festinger (1950), premature consensus is more directly an antidote to uncertainty than a boost to self-esteem; the second is that the symptoms of groupthink are more directly related to creating and preserving unanimity than to creating and preserving self-esteem.

#### *Compliance versus Internalization*

*Origins.* The second important idea that Janis took from the group dynamics literature was the distinction between public and private acceptance of group influence. This distinction became important in Asch's (1956) studies of conformity in which about 75% of individuals judging line lengths yielded at least once to a (bogus) unanimous majority making an incorrect judgment. Asch found in postexperimental inquiry that most of his subjects had yielded in order to avoid sticking out from their fellows (distortion of report—public but not private acceptance), although some yielded because they thought their fellows must be able to see the line better (distortion of judgment—private acceptance). This distinction has been referred to variously as the difference between normative and informational social influence (Deutsch & Gerard, 1955), as dependent versus independent influence (French & Raven, 1968), and, perhaps most commonly, as the difference between compliance and internalization (Kelman, 1958).

*Groupthink as internalized influence.* Janis (1982, p. 247) recognized this distinction in denying that groupthink is only compliance: "In a cohesive group of policy-makers the danger is not that each individual will fail to reveal his strong objections to a proposal favored by the majority but that he will think the proposal is a good one, without attempting to carry out a critical scrutiny that could lead him to see that there are grounds for strong objections."

It is not surprising that Janis wanted to understand groupthink as internalized opinion change, rather than mere compliance. His focus on the social reality value of the group, as described above, would be inconsistent with groupthink as compliance. Group influence that produced only public without private acceptance could not answer the stress of uncertainty; the social reality value of the group depends upon internalization of group influence toward uniformity.

*Evidence of compliance in groupthink case histories.* Janis sometimes recognized that cohesion could have sources other than personal attractiveness (see below), but more often he talked about "cohesion" when he meant only the personal attractiveness of group members (McCauley, 1989; see also Cota, Evans, Dion, Kilik, & Longman, 1995). This inconsistency led Janis into suggesting that compliance decreases with increasing cohesion even as groupthink (internalized influence) increases and that optimal decision making may occur at intermediate levels of cohesion where the total of compliance and groupthink is minimized. This suggestion is contrary to research and theory in group dynamics that links high cohesion with both high compliance and high internalization and contrary as well to evidence of compliance in some of the very groupthink cases that Janis examined (McCauley, 1989).

Whether called groupthink or not, compliance in order to maintain position in a high status decision-making group certainly does occur. High cohesion is not enough to produce compliance, however. No matter how attractive the group, a deviant will not suppress his opinion unless he feels insecure in his position in the group—feels, in other words, a threat of ridicule and exclusion for expressing a deviant opinion (Longley & Pruitt, 1980; McCauley, 1989; 'tHart, 1990, Chapter 3). When cohesion based on personal attraction is very high—when group members feel confident in being accepted, appreciated, or loved—then Janis may be correct that group members are less likely to comply and more likely to express their doubts. It was perhaps no accident that President Kennedy chose his brother Robert to be the devil's advocate in the discussions surrounding the Cuban missile crisis. Absent the confidence of family relationship, however, high-stakes decision groups probably rarely attain the level of congeniality-cohesion that releases the group from compliance pressures.

#### *The Multiple Sources of Cohesion*

*Origins.* The third major source of the groupthink model is Back's (1951) experiment comparing the effects of different manipulations of group cohesion. Pairs of subjects wrote stories, first alone and again after discussion, in reaction to (supposedly) the same pictures. In a  $2 \times 3$  design, Back manipulated high vs low cohesion by presence/absence of a \$10 prize for the best pair of stories, by presence/absence of expected similarity and congeniality, and by presence/absence of shared expertise in the writing task. (In order that liking based on similarity should not play a role in the prize and expertise conditions, subjects in these two conditions were explicitly informed that they were not similar to their partners and could not expect any special congeniality.)

For all three manipulations of cohesion, high cohesion pairs showed more influence attempts during discussion and more influence accepted (i.e., changes between first and second versions of the stories written). These results were broadly consistent with Festinger's (1950) theory of informal social influence which, as noted above, assumed that it is the total of all attractions to the group—cohesion—that leads to communication and influence toward group

uniformity. Festinger had not predicted different effects for different sources of cohesion.

Even in Back's results, however, it was clear that the source of cohesion did make a difference. Although high cohesion led to more influence attempts and more influence accepted no matter what the manipulation of cohesion, Back noted that the nature of the discussion differed considerably across conditions. In particular, discussion in the pairs working for the prize was relatively shorter and business-like, whereas discussion in the pairs expecting mutual liking was more a long and pleasant conversation. Back (1951, p. 20) further noted that it was only in the personal-attraction groups that "the group member whose attempts had not been effective rates his partner low" on a postexperimental scale of personal attractiveness. This result was consistent with Back's expectation that

[I]f an individual is attracted to a group because he wants to be with some of the members, he will consider the group activity mainly a means of meeting them. We should expect therefore that he will try to be pleasant and active with less regard to the performance of the group activity as such. (p. 19)

Here in Back's paper is the germ of the groupthink model: cohesion based on attraction to the group can interfere with task performance. Janis (1982) follows Back quite closely:

Concurrence seeking tendencies probably are stronger when cohesiveness is based primarily on the rewards of being in a pleasant "clubby" atmosphere or of gaining prestige from being a member of an elite than when it is based primarily on the opportunity to function competently on work tasks with effective co-workers. In a cohesive policy-making group of the latter type, careful appraisal of policy alternatives is likely to become a group norm to which the members conscientiously adhere; this helps to counteract groupthink. (p. 201)

*Cohesion effects in laboratory experiments.* Mullen *et al.* (1994) have given the preceding quotation additional significance by interpreting it to mean that Janis predicted groupthink only when group cohesion is based principally on personal attractiveness or prestige. Their metaanalysis of nine laboratory groupthink experiments found that only cohesion based on personal attractiveness lowered decision quality; high cohesion based on task commitment or group pride was actually associated with increased decision quality. These results are very much consistent with Back's (1951) concern that cohesion based on personal attractiveness could get in the way of task performance. Thus Mullen *et al.* suggest that Janis was correct to link groupthink to cohesion based on personal attractiveness, but incorrect to link groupthink to cohesion based on group prestige.

In fairness to Janis, it can be argued that the quotation above is unrepresentative in lumping together group prestige and personal attractiveness. Outside of this quotation, Janis focused almost exclusively on cohesion based on personal attractiveness as the necessary condition for groupthink to occur. Here, for instance, is Janis (1982, p. 245) talking about the role of cohesion in groupthink:



"In the very first chapter I stated as the central theme the following generalization: The more amiability and esprit de corps among the members of an in-group of policy makers, the greater is the danger that independent critical thinking will be replaced by groupthink."

One apparent exception to this prediction is the research by Turner, Pratkanis, Probasco, and Leve (1992). These investigators interpreted the results of three experiments as showing that groupthink is a collective effort to maintain a positive view of a group threatened by public failure; they suggest that it is group identity rather than group congeniality that is the antecedant of poor decision quality when decision making is conducted under threat.

Unfortunately for this interpretation, the manipulation of cohesion was not clearly a manipulation of group identity. Pursuant to a manipulation of identity, Turner *et al.* gave names and nametags to high cohesion but not to low cohesion groups. However, high cohesion groups were also asked to discuss their similarities for 5 min before beginning the decision problem, whereas low cohesion groups discussed their differences. This kind of similarity manipulation has been a common manipulation of personal attractiveness since it was introduced by Back (1951). The manipulation of cohesion used by Turner *et al.* may therefore have been at least as much a manipulation of attractiveness as of group identity. In short, it may have been cohesion based on congeniality rather than cohesion based on group identity that led to lower quality decisions under high-threat conditions.

*Cohesion effects in Janis's case histories.* The importance attributed to cohesion in the groupthink model has not been easy to verify in historical examples of high-stakes decision making. Janis claimed that high cohesion, understood as personal attractiveness of group members, is necessary but not sufficient for groupthink to occur. It is now clear that his case studies could not provide any serious test of the role of cohesion, because the decision-making groups he considered all had high cohesion. Not only were the members of these groups personally attractive, the groups were attractive also for the importance of the group's decision-making tasks and goals and for the prestige associated with these groups. The importance of high versus low cohesion cannot be demonstrated by examining only such consistently high cohesion groups (McCauley, 1989).

This is a continuing vexation for case studies of important decision-making groups. High-level decision-making groups in business, government, and military tend all to have high cohesion from multiple sources of cohesion. Although Janis seems to have discounted the value of laboratory tests of groupthink predictions (see Aldag & Fuller, 1993, p. 539), laboratory experiments may be the only way to test the impact of cohesion on decision making.

#### *The Relation between Groupthink and Congeniality*

As described above, groupthink asserts—and laboratory experiments find—a special connection between poor decision making and cohesion based on attractiveness of group members. There is precedent for this idea in the Back (1951)

experiment, but the nature of the opposition between personal attractiveness and poor search and evaluation procedures in group decision making has not been made clear. In particular, it is not clear why premature consensus should be more likely when cohesion is based on personal attractiveness than when it is based on group prestige or a group goal. Especially in a group where the goal is to avoid failure in an important and difficult decision, uncertainty about the decision should be very unpleasant and premature consensus—groupthink—should offer a very tempting end to the unpleasantness. Indeed one might argue that decision uncertainty should be more threatening to the group when group cohesion is based on avoiding decision failure than when cohesion is based on personal attractiveness. So why is premature consensus a danger when cohesion is based on personal attractiveness but not when it is based on group goals or group status?

The most likely answer is the conflict between friendly relations in the group and frank evaluation of decision alternatives. Back (1951) noted that it was only when cohesion was based on personal attractiveness that individuals downrated partners who resisted their attempts at influence. When there was asymmetry of influence in a pair, such that one person accepted influence but the other did not, the one refusing influence was less liked by his partner. That is, there were interpersonal costs associated with resisting influence based on interpersonal attractiveness; these costs did not appear when attractiveness was based on prestige or group goals.

Back's result suggests the following (see Brown, 1965, p. 685; Janis, 1982, p. 258; Bernthal & Insko, 1993). Ideas have individuals attached to them. Evaluating a suggestion or an argument is unavoidably an evaluation of the individual behind it. High cohesion based on personal attractiveness leads group members to expect mutual respect and support, but frank criticism of individuals' ideas is inconsistent with maintaining friendly relations (perhaps especially when criticism and influence are not symmetric).

The conflict between task requirements and socioemotional requirements is represented in the familiar distinction between social and task leadership. Bales (1958) introduced this distinction to account for his finding that, especially when group interaction is prolonged in time, the group member rated most likable is usually not the same as the group member rated highest for task ability. According to Bales, the difficulty of combining both kinds of leadership is that successful performance of the task requires frank evaluation that hurts feelings and interferes with personal attractiveness.

There is then a special conflict between personal attractiveness and frank evaluation of arguments and ideas. Cohesion based on personal attractiveness is directly threatened by the kind of frank appraisal required for optimal decision making. The experience of the group working on the development of the Marshall Plan gives some indication of the personal costs of frank evaluation of individual suggestions.

Janis (1982, p. 159–172) offers the deliberations of Kennan's group as an example of high-quality decision making that avoided groupthink, and he describes the tone of these deliberations in a section titled "The 'agony' of critical

appraisal" (pp. 166–167). Kennan had himself selected the members of the group, but was "put personally over the bumps, to drive whole series of cliches and oversimplifications out of my head." The group did not spare one another "the embarrassments and humiliation of having to listen to a pet idea being subjected to incisive criticism and sometime hacked to pieces."

Janis's other example of high quality deliberation was the Cuban Missile Crisis. Again, Janis (1982, pp. 147–150) describes unpleasant discussions filled with bickering, strain, agitation, impatience, and anger. The threat of nuclear war was sufficient to hold the group together, but personal attractiveness was evidently severely compromised during these discussions.

Janis interpreted the unpleasantness of high quality discussions in these two cases in terms of the need for unanimity that could answer uncertainty.

Knowing that one misstep could precipitate a devastating nuclear war, the members' need for emotional support from the group was undoubtedly very high, but most of the time the lack of consensus frustrated this need, depriving the members of a sense of unity that would have enabled them to feel more confident about a successful outcome. (p. 147)

Without denying the social-reality value of consensus, as emphasized above, I am suggesting that the unpleasantness of high quality discussion goes beyond the unpleasantness of uncertainty to include the personal unpleasantness of frank evaluation of individual contributions to discussion. Janis's own descriptions of high quality decision making offer support for this interpretation.

This interpretation is also consistent with Festinger's (1950) theory, in which the pressure toward consensus is focused on relevant issues, and issues are more and less relevant in relation to the attractions of the group. When cohesion is based on personal attraction, the relevant issues are issues of interpersonal esteem and respect; the group seeks consensus in positive evaluations of group members because negative evaluations and asymmetries of respect and influence will undermine the basis of the group. To the extent that cohesion is based on prestige or group goals, however, the relevant issues concern the preservation of group status and its benefits or—as above—the decisions about group activities and the means to group goals. Personal unpleasantness can be tolerated in groups focused on status or task because it does not undermine the basis of the group.

Finally, this interpretation is consistent with the results of the metaanalysis reported by Mullen *et al.* (1994). As noted above, experimental manipulations of cohesion on the basis of personal attractiveness showed high cohesion associated with lower quality decisions, whereas manipulations on the basis of group pride or task commitment showed high cohesion associated with higher quality decisions. This pattern emerged only for conditions where antecedent conditions were not manipulated, that is, where neither promotional leadership nor systematic search and appraisal of alternatives was imposed by the experimenter. If, as above, high quality decision-making is understood to mean full and frank appraisal of alternatives, then it is not surprising that the impact of high versus low cohesion on whatever basis is attenuated by direct intervention to subvert or strengthen methodical appraisal.

It is time to notice that this view of the link between personal attractiveness and poor decision making is now a long way from what Janis had in mind. Rather than premature consensus to avoid the discomfort of uncertainty about an important issue, premature consensus may occur to avoid the discomfort of frank appraisal of ideas that have individuals attached to them. This formulation has the advantage of predicting directly that group cohesion based on personal attractiveness should be especially liable to poor search and evaluation of alternatives. It leads directly to integrating problems of group decision making with other areas of research in group dynamics.

*Group Dynamics beyond Groupthink: Two Directions for Better Decision-Making*

Earlier I noted the limitations of defining successful decision making only in terms of full search and evaluation of alternatives in the service of the best possible decision. Even within this limitation, however, there are at least two areas of group dynamics that Janis did not draw on, which may yet have important implications for the quality of group decision making: research on brainstorming and research on the impact of group size.

*Separating Creativity from Evaluation*

There is a sizeable literature suggesting that the production of ideas may often be better accomplished when separated from the inhibiting effects of evaluation. Perhaps the earliest evidence of this sort came from Allport (1924), who reported that word associations were more conventional and cliched when produced by subjects in coworking groups than by similar subjects working alone. The coworking groups were not interacting or discussing their associations, but only writing them down at the same table with others doing the same task at the same time. Allport suggested that the coworking associations showed the impact of an "attitude of incipient conformity" such that the mere presence of others was enough to lead to unconscious censorship of associations.

More direct evidence to the same point comes from research on brainstorming for new ideas (e.g., new uses for a common object). Brainstorming (Osborn, 1957) is a technique designed to avoid negative impact of group dynamics on creativity. It is worth noting that brainstorming instructions (concentrate on number of ideas, build on others, avoid criticism) overlap with some of Janis's suggestions for avoiding groupthink (avoid promotional leadership, encourage expression of doubts).

Experiments comparing groups with and without such instructions (Parnes & Meadow, 1959) found better performance—more ideas and an equal proportion of good ideas—from brainstorming groups. However, experiments comparing individual and group creativity when both were given brainstorming instructions (Dunnette, Campbell & Claastad, 1963; Taylor, Berry, & Block, 1958) found that individual performance was better than group performance; ideas pooled from  $n$  individuals (nominal groups) were more numerous and no lower

in quality than ideas from a discussion group of size  $n$  working for the same period of time.

More recent research has focused on trying to explain the disadvantage of group brainstorming. Diehl and Stroebe (1987) report results indicating that the group productivity loss is associated with groupmembers' having to wait to express an idea until someone else finishes speaking. During the wait groupmembers may be distracted from recalling their ideas or from generating new ideas. Camacho and Paulus (1995) point to the importance of individual differences in explaining the group disadvantage: socially anxious individuals produce many fewer ideas in group discussion, whereas nonanxious individuals show little decrement. In the same vein, Mullen, Johnson, and Salas (1991) concluded from their metaanalysis of brainstorming experiments that groupmembers' concern about evaluation is part of what gets in the way of group brainstorming. Further indication of the importance of evaluation concerns comes from research on social loafing in a creativity task; Bartis, Szymanski, and Harkins (1988) found that subjects whose outputs could be individually identified actually produced fewer uses than subjects whose outputs were pooled.

In sum, the evidence indicates that production of new ideas is impeded by the distraction and the threat of evaluation that occurs in group interaction. The implication for group decision making is that more ideas about possible courses of action might be developed from a group if the groupmembers were to write down their suggestions in private and then bring them to the group. The information-processing model of optimal decision making breaks down here; ideas about what to do do not appear on the table simply by aggregating information. Alternative courses of action are creative products that must articulate available information with group goals (see Longley and Pruitt (1980, pp. 77-78) on groupthink as a problem of too little idea proliferation and too much idea integration). Brainstorming research suggests that the development of ideas and alternatives about what to do might better begin outside of the group, after information aggregation in the group but before group discussion to evaluate the alternatives identified by individuals.

There are two doubts that can be raised about this suggestion. First, Aldag and Fuller (1993) raise the possibility that the group might be bogged down in a welter of poor suggestions from individuals. However, they give no evidence from experiment or case history to suggest that this potential problem is at all likely. Second, crisis decision making may not permit extended time for individual brainstorming. At least in Janis's cases, however, even the most pressing crises probably left time for half a day of individual creativity before group appraisal of alternatives.

#### *Group Size*

Janis (1972, 1982) did not give much attention to group size, and did not suggest any particular relation between group size and the likelihood of groupthink. Indeed it requires close reading of Janis's presentation of his case histories to reconstruct the size of the groups he described. With some tentativeness,

I make out the number of individuals regularly meeting in each case as follows: Bay of Pigs, 18; North Korea, 14; Pearl Harbor, 18; Vietnam escalation, 8; Cuban Missile Crisis, 13; Marshall Plan, 6; Watergate coverup, 12. These figures give some suggestion of the importance of group size: one of the two cases where groupthink was avoided was the smallest group, and the group responsible for the other case of groupthink avoided (missile crisis) was smaller (13 vs 18) than the similar group responsible for the prototypic groupthink case (Bay of Pigs). Across the seven cases, group size is correlated  $r(5) = .48$  with absence or presence of groupthink. (Group homogeneity, group insulation, and promotional leadership are correlated .55, .55, and .73 with presence of groupthink across the same seven cases (see Table 1 of McCauley, 1989)).

There is considerable experimental evidence that group size affects group product. Perhaps the most studied aspect of group dynamics since the 1950s is the phenomenon of group polarization (Brown, 1989, Chapter 6; see especially 'tHart, 1990, on groupshift in relation to groupthink), and the size of the risky shift was found to increase as group size increased from 3 to 8 (Teger & Pruitt, 1967). In the metaanalysis of groupthink experiments cited above, Mullen *et al.* (1994) found that the correlation of cohesion and decision quality became more negative with increasing group size. That is, high cohesion conditions were more likely than low cohesion conditions to produce poor decisions when group size was relatively large. This and other research by Mullen (1987, 1991) indicates that group size is "a potent predictor of group phenomena" (Mullen *et al.*, 1994, p. 200).

Indeed Mullen *et al.* (1994) suggest that, in larger groups, impairment of decision quality with high cohesion may be better understood as social loafing or deindividuation (inattention to self and to behavioral standards) than as the pressure for consensus that Janis described. This is an interesting possibility, but I want to suggest how distraction and evaluation in larger groups may interfere with optimal decision making.

In a remarkably ambitious series of studies in the 1950s, Bales and his collaborators observed hundreds of group discussions, most often involving college students discussing human-relations problems, and coded every "speech act," its origin, and its target. In one notable report of this work, Bales, Strodtbeck, Mills, and Roseborough (1951) report on more than 130,000 contributions to 171 discussions, with group size ranging from 3 to 10. One of the regularities emerging from the analysis was the strong tendency for inequality in contribution to increase with group size. For groups of three, the average proportion of contributions from the most active contributor was about 45% and the proportion for the least active contributor was about 25%. For groups of 8, the corresponding proportions were about 40 and 5%. The disproportion in contribution thus increased from a ratio of about 2:1 to a ratio of about 8:1.

This may be one of the more powerful regularities of social psychology, but, to my knowledge, it has attracted surprisingly little theoretical attention. Increasing inequality with increasing group size may stem from fear of speaking in larger groups, from changing motivation to dominate in larger groups, from tacit decline in the equality norm in larger groups, from increasing need for

structure to organize activities of larger groups—or, following Mullen *et al.* (1994), from deindividuation or social loafing. Whatever its origins, the significance of high contribution rate is that high contributors tend also to be more central in group communication; they address themselves more often than others do to the whole group, and, as individuals, they are more often than others the target of others' remarks. The increasing disproportion of contribution that occurs with increased group size is, in other words, the development of an increasingly centralized communication and decision network (Leavitt, 1951; Shaw, 1964).

Recall, however, that ideal decision making, at least in terms of maximizing the quality of decision, is understood to require a complete and unbiased survey of the information and ideas available to groupmembers, as well as the frank evaluation of ideas and decision alternatives. Group decision should be better than the average individual decision only to the extent that the relevant information is pooled and the final evaluation averages away individual biases. However, inequality in contribution gives some individuals less impact in the evaluation of alternatives; the averaging away of individual biases is thereby undermined. At the limit, promotional leadership means that the group decision is only the leader's evaluation.

Inequality in contribution also means that some individuals are less likely to get their information or ideas into group consideration. Strasser and his colleagues (Stasser, Taylor, & Hanna, 1989; Stasser & Titus, 1985) have shown that information held by only one group member is much less likely to get into group discussion than information shared by all group members. The disadvantage for unshared information can be largely eliminated if individuals with the unshared information are seen as "experts," but even here only about half of all information got into discussion (Stewart & Stasser, 1995). This research indicates that simply getting relevant information into group consideration is far from assured, even when groupmembers are told that the experimenter is interested in how they use information (in evaluating candidates for student council president). The difficulty of getting unshared information into discussion is likely to increase with increasing group size.

The conclusion of this consideration of group size is that larger groups may be much less likely than smaller ones to achieve the full exchange of relevant information and the averaging away of individual biases that are required for high-quality decision making. Before extending this conclusion to practical application, however, there is a further complexity to consider.

Americans, at least, tend to *like* small groups better than large groups. In his questionnaire study of 5871 workers in 228 workgroups, Seashore (1954) found that group cohesion (feeling part of group, wanting to stay in group, feeling group better than others) declined almost monotonically with increasing group size from  $n=3$  to  $n=20-24$ . Part of the attraction of smaller groups may well be the greater equality of contribution in these groups. However, the higher cohesion of smaller groups surely includes more congeniality-based cohesion, which means that workers tend to like best the very work groups in

which groupthink is most likely to occur. This dilemma may be worth investigating in future research aimed at advancing the performance of decision-making groups.

### WHY HAS GROUPTHINK BEEN SO SUCCESSFUL?

The success of the groupthink model is a phenomenon worth attention in its own right, particularly on the occasion of the model's 25th birthday. Early and late, the model has been described as unclear, incomplete, and inconsistent with existing research. Despite all this criticism, groupthink has been so popular that it is now as much a part of popular discourse as it is a continuing topic of scholarly attention. Groupthink's unusual success in the marketplace of ideas must signal an unusual match between consumer needs and the qualities of the model. What has made groupthink so alluring?

Aldag and Fuller (1993) have raised this question in the context of their detailed reappraisal of groupthink theory and research and have suggested that the answer may lie in various frailties of human information processing. Janis (1972, 1982) introduced his conception of groupthink on the basis of evidence from half a dozen vivid case histories, and Aldag and Fuller (1993, p. 547) surmise that appraisal of case evidence may be all too easily biased by availability, illusory correlation, and implicit theories of group functioning. Without denying the potential impact of cognitive heuristics and biases, I want to suggest that the success of groupthink cannot be understood without an inquiry into motivation. Beyond any cognitive biases in the appraisal of the evidence lie the needs of groupthink consumers.

#### *The Hunger for Practical Significance*

Academic interest in groupthink has certainly been encouraged by its promise of practical application for theory and results in the literature on small group behavior. The link between theory and practice was strong in the work of Kurt Lewin, but Lewin died in 1949, shortly after bringing his students to the Center for Group Dynamics at the Massachusetts Institute of Technology. Just before he died, his students stumbled upon the "electric charge" of individuals reacting to feedback about their own behavior in a group (Back, 1972). This was the origin of an explosion of group technologies known variously as sensitivity-training groups, interpersonal-encounter groups, and experiential groups (Lakin, 1972). In relation to the groupthink model, it is interesting to note that a common denominator of these groups is that participants gain direct experience of the extent to which group process affects group product.

After Lewin's death, the students interested in practical application of group dynamics in encounter groups moved to found the National Training Laboratory in Bethel, Maine, while the more theoretically inclined moved with the Center for Group Dynamics to the University of Michigan. The split between theory and practice widened as the academics left behind the messy inconclusiveness of field studies—such as the seminal study of MIT housing groups by Festinger,



Schacter, and Back (1950)—to concentrate on more rigorous laboratory experiments. Laboratory research offered more confidence about cause and effect conclusions, but the practical significance or generalizability of laboratory research was more often assumed than tested.

Thus groupthink was attractive in rejoining theory and practice for those interested in small-group behavior. Janis embodied this synthesis: a Yale University professor of impeccable academic credentials was reaching out to help groups make better decisions. Janis's development of the groupthink model brought back something like Lewin's famous "action research" orientation, in which theory should emerge from engaging practical problems.

### *The Hunger for Evaluation without Blame*

Groupthink is a group phenomenon. No one person is responsible for groupthink any more than one person is responsible for a plague. Groupthink emerges from cohesion and various situational and structural conditions (Janis 1972, 1982), rather than from any individual frailty or failing. Indeed, the leader of a group suffering from groupthink is as much a victim as anyone else in the group.

Janis (1972, p. iii) describes how he came to the idea of groupthink by asking himself, about the Bay of Pigs invasion, "How could bright, shrewd men like John F. Kennedy and his advisers be taken in by the CIA's stupid, patchwork plan?" The sympathy that Janis brought to his account of the Bay of Pigs decision is typical of groupthink interpretations of poor decision making. Groupthink is an explanation that indicts group process rather than individuals, and this agreeable quality has made groupthink attractive both to those making decisions and to those who would talk to decision makers about their failures.

### *The Hunger to See How Group Decisions Can Be Better Than Individual Decisions*

A third source of the attractiveness of groupthink is that it helps maintain the democratic assumption that group judgments and group decisions should be better than individual judgments and decisions (c.f. Aldag & Fuller, 1993, p. 535). Partly this assumption is grounded, as noted earlier, in the information-processing metaphor drawn from experience with computers. However, partly this assumption is grounded in political values: democracy is the worst form of government except for every other form that has been tried.

Research results often show at least some advantage for group over individual judgment, but the group advantage is often surprisingly small. Thorndike (1938) studied the power of the right answer versus the power of the majority by asking college students for individual then group answers to true-false items about art, poetry, public opinion, geography, economics, and politics. Almost 1200 subjects formed 222 groups of four, five, or six members. The most striking result was the power of the majority. When a majority but not all of the individuals gave the correct answer, the group decision (not always

unanimous) moved toward the majority in 79% of cases; when a majority but not all individuals gave the *incorrect* answer, still the group decision moved toward the majority in 56% of cases. The difference between 79 and 56% indicated the influence of the correct answer, but it was clear that the influence of the majority was much greater. Indeed the power of the majority when incorrect was the chief reason for the overall small improvement associated with group discussion: the average group decision was only slightly more often correct than the average individual before discussion (66% vs 62%).

Results like these might temper the assumption of group superiority, but groupthink supports the essential superiority of group judgment by explaining how the software of group structure and group process can go wrong. Groups can be superior to individuals if group potential is unleashed. Our democratic values lead us to *want* to find groups better than individuals, and groupthink helps us maintain our confidence in the potential of group decision making despite our everyday experience of group decisions gone awry. Folk wisdom has it that the camel is a horse designed by committee; groupthink helps us maintain our confidence that this is only a joke.

No one of the motives cited can explain groupthink's success; the appeal of the groupthink model depends upon the triple satisfaction that it provides.

### CONCLUSION

The groupthink model asserts that optimal search and appraisal methods are undermined by high cohesion based on personal attractiveness of group members, which leads to premature consensus as an escape from uncertainty about an important decision. Experimental research indicates that there is a special link between personal attractiveness and poor decision making, but the groupthink model leaves this link a bit mysterious. Groupthink does not explain why uncertainty should be more unpleasant and early consensus more attractive when cohesion is based on personal attractiveness than when cohesion is based on group prestige or the importance of a common goal.

My suggestion is that the linkage depends, not on the special cost of uncertainty when cohesion is based on personal attractiveness, but on the special cost of frank appraisal of ideas and alternatives. Criticism of ideas is criticism of the individuals behind these ideas, and such criticism is a direct threat to the group when attraction to the group is based on personal attractiveness. High cohesion based on group prestige or common goal will not conflict directly with unbiased search and evaluation and will not lead to poor decision making.

This interpretation amounts to a new version of groupthink theory in which poor decision making results, not from seeking consensus as the antidote to decision uncertainty, but from seeking to preserve friendly relations in a group based on the personal attractiveness of group members. In this interpretation, the importance of cohesion as an antecedent of poor decision making is dependent upon the norms of the group in regard to unbiased search and evaluation of decision alternatives. If the norms enforce unbiased search and evaluation, or if the norms inhibit unbiased search and evaluation, then level of cohesion

will have little effect on the quality of decision making. If there are no norms for unbiased search and evaluation, then high cohesion based on interpersonal attractiveness will likely undermine group decision making to preserve a consensus of mutual esteem.

In retrospect, the greatest strength of the groupthink model was also its greatest weakness; it drew on group dynamics research to illuminate decision making, but it ran into problems precisely in being inconsistent and selective in its use of group dynamics. This perspective led me to two additional issues of group dynamics research that may be important in improving group decision making. The first issue is group versus private creativity; there is evidence that brainstorming for decision alternatives may be more productive when conducted by individuals than when conducted in groups. The second issue is group size, which may militate against unbiased search and evaluation to the extent that larger groups produce more inequality in contributions to group discussion.

My conclusion is that there is nothing wrong with the groupthink model that cannot be cured with a bigger dose of theory and research from group dynamics. Perhaps what will be left after the cure will no longer be recognizable as groupthink. A reductionist view might be that, if we are concerned to maximize decision quality, we need only emphasize Janis's recommendations for avoiding groupthink: impartial leadership, imported experts, methodical information search and evaluation and so forth. This is good advice for groups facing difficult and important decisions, no matter what their group dynamics; we do not need the groupthink model to recognize that successful decisions are more likely to come out of full information search and unbiased evaluation.

I believe that this viewpoint underestimates the importance of Janis's example in putting group dynamics theories in touch with real examples of high-stakes decision making. Janis made an enormous investment in learning the details of the case histories he analyzed. He made a further large investment in trying to broaden and revise his model in reaction to its successes, failures, and, especially, its ambiguities in application to the case histories. This seems to me to be the long-term value of his work: Janis showed us what it takes to get theory out of the journals and into practice—notably the willingness to risk criticism and correction from those of us who fill the mainline social psychology journals with well-controlled experiments and guarded conclusions. We needed Janis's groupthink model to show us the way toward "action research," and, at least in social psychology, we still need it.

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