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THE ACUTE SUSCEPTIBILITY OF NOMINAL GROUPING TO NEGATIVITY

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ABSTRACT

There is a growing body of literature regarding the relative advantages and disadvantages of group decision-making processes such as interacting groups, brainstorming groups, Delphi groups, and nominal groups. Prior research suggests a contingency approach to the selection of that process that best fits the nature of the problem, the nature of the group, and the nature of the participants. This report deals with a new finding for that body of literature--that the final vote in the five-step nominal grouping procedure can be significantly influenced by the slightest negativistic discussion.

GROUP DECISION-MAKING

The manager in today's dynamic business environment is well aware of the need to involve others in the decision-making process. The complexity of modern business is such that no one executive, despite his/her exceptional skills and knowledge, can resolve complicated business problems without input from a growing number of experts and advisors. Thus, operational necessity results in more and more use of the group process.

Interacting groups are found to be superior to individual working alone in a number of situations [321. Brainstorming groups, one of the more popular interacting procedures, are found to be superior to the same number of people brainstorming separately and independently [30]. Research [25] reports that people produce from 65% to 93% more ideas in a group activity than when working alone, and that mental output can be increased by more than 50% when stirred by the competition of others in the group. Another study [30] found that engineers were able to produce "44% more worthwhile ideas" using a group brainstorming technique than when members worked alone using other than brainstorming techniques. Brainstorming groups are also found to be better decision-makers than traditional discussion groups [5;31]. In general terms, groups tend to outperform individuals working alone because: (1) the group has a greater sum total of information and knowledge; (2) the group represents a greater number of approaches to the problem, as individuals tend to fall into thinking ruts; (3) participation in the group decision-making process increases acceptance so that, when a group agrees to the solution of a problem, a greater number of people accept the responsibility for making the solution work; and (4) there is better comprehension of both the problem and the solution, and chances of communication failures during solution implementation are reduced [26; 40].

INTERACTING VS NOMINAL GROUPS

A contingency approach is suggested for the choice of the appropriate group process for a given problem- solving activity. For instance, interacting groups are found to be superior at synthesizing information, evaluating information, and achieving group consensus [20; 36]. Nominal groups are found to be superior at fact-finding, idea-generation, establishing objectives and priorities, and the reduction of errors and estimation variability [5; 6; 11; 12; l3; l4; 15; 16; 24; 34; 25]. Selected studies [11; 12; 35; 36] found that nominal group members perceive greater levels of satisfaction with performance than interacting group members. Another experiment found no significant differences in satisfaction levels between the two techniques [21]. Still another test [101 found greater perception of satisfaction for interacting group members than for nominal group members. This somewhat conflicting body of research suggests that the level of perceived satisfaction is a function of situational factors such as the nature of the individual, the nature of the group, and the nature of the problem.

Advantages of Nominal Grouping

In general, nominal groups have demonstrated a number of advantages over the interacting groups:

1. Most problems inherent in the interacting process, that inhibit creative thinking, are eliminated or reduced by the nominal structure [6; l5; l6; 34]

2. The structured group norm emphasizes tolerance for nonconforming ideas, minority opinions, and conflicting philosophies [12; 36; 39].

3. Strong personalities tend not to dominate the group process [28].

4. Hidden agenda and political group dynamics are reduced by the emphasis on individual written work [19].

5. Evaluative and elaborative interactions are avoided during the critical time when the problem dimensions are generated [27].

6. There is a better balance between task roles and socio-emotional group maintenance roles [36].

7. The structured format forces equal participation among all group members [36].

8. The procedure devotes more time to idea- generation and less time to idea-evaluation, providing a greater quantity of quality ideas [2].

9. Each participant is given the time and the opportunity to think through and record each idea, promoting problem-centered ideas of high quality [18; 36].

10. Since no discussion is permitted during the listing and recording steps, the structured procedure eliminates the problem of focusing on one train of thought or centering around one perceived "good" idea for long periods of time [2].

11. The round-robin technique for idea-generation facilitates self-disclosure, promotes the sharing of risky dimensions with other group members, and decreases arguments over semantics [35].

12. The structured process imposes a burden on all members to produce their share toward achieving the group goal [1].

13. Group members feel a sense of responsibility to achieve group success [3].

14. Tension, resulting from the structure, maximizes individual involvement, commitment, and creativity [33].

15. The structured procedure reduces the "self-weighting" effect by which members participate only to the degree they feel equally competent with other group members [12].

16. The written assignment induces a greater sense of permanence than does oral communication [5].

17. The controlled procedure prevents "speedy," premature closure to the search for better alternatives [13; 2].

18. Nominal groups develop a problem-orientation that is more thorough and intuitive than the solution-orientation of the interacting group [13].

19. There is better consistency of decision-making [14].

20. Nominal group sessions tend to end with a greater perceived sense of closure, accomplishment, and interest in future phases of the problem-solving process [13; 35].

21. The skills needed to lead or facilitate a nominal grouping process are easily attainable [36].

Uses of Nominal Grouping

Nominal grouping has been successfully applied at all organizational levels in a wide range of institutions, including social services, government agencies, health care facilities, universities, and businesses [2;5;16; 22] . The nominal process has been used for all sorts of activities such as the identification of preferred human qualities [41], the identification of communication problems [22], the identification of training needs [20], the identification of organizational problems [8;22;36], the identification of personal problems [8;36], the identification of motivational factors [91, the identification of strategic issues and the determination of programs for their resolution [17], task force design [17], change implementation [17], OD intervention [29], MBO programs 139], formulation of a Program Planning Mode (PPM) [17], design of a management information system [391, development of solutions to case problems [14], and subject probability estimations [24].

Nominal Grouping Procedures

Nominal grouping practitioners agree about the need for structure in the process, but they disagree about the exact procedures to follow.

The Three-Step, One-Vote Procedure. Considerable research [7; 9; 10; 21; 22; 23] has utilized a three-step procedure with only one voting stage. Typically, this procedure is conducted as follows: Step 1 - Listing -Each participant is asked to work silently and alone in preparing a written list of responses to the group task. Step 2 - Recording - Each participant offers an idea from his/her list, in a round-robin fashion, to the group facilitator, who records the ideas on a master list in full view of the group. The round-robin continues until all ideas from individual lists are recorded on the master list. Individuals are encouraged to "hitchhike" on other ideas and to continue to add ideas to their own lists throughout the recording process. Step 3 - Voting - Each participant votes, on a separate ballot, his/her preference as to the best five ideas on the master list, in order of preference. The votes are tabulated on a 5-4-3-2-1 scale (five points for the best idea, four points for the next best idea, etc.). The votes are calculated and recorded on the master list. No verbal interaction is permitted during the first three steps except that necessary to explain or clarify an idea.

The Four-Step, One-Vote Procedure. Other studies [17; 35; 36] used the four-step, one-vote procedure, which adds a discussion step between recording and voting, as follows: Step 1 - Listing; Step 2 -Recording; Step 3 - Discussion--the group reviews, discusses, evaluates, clarifies ideas, eliminating some, adding some, and combining some; and Step 5 -Voting.

The Five-Step, Two-Vote Procedure. Still other research [8; 20; 37; 38] uses a five-step procedure with two votes, as follows: Step I - Listing; Step 2 -Recording; Step 3 - Voting; Step 4 - Discussion; Step 5 - Final Voting.

If the total group is large (20 or more), it is suggested that the total group be divided into smaller sub-groups of 7 to 10 for steps one through three and then reconvened as one large group for steps four and five.

Discussion Time in Nominal Grouping

One of the unresolved issues in nominal grouping is the role of the discussion period and its effect on the voting process. Some practitioners contend that the great strength of the nominal grouping technique is its structured process that delimits interactions and the associated inhibiting factors. Others claim that, by adding the discussion AFTER the first vote, the evaluative discussion should have minimal effect on the final vote, and the discussion period gives the nominal process the advantage of the "pooling" of information and knowledge, which is the strength of the interacting or brainstorming process. In other words, the five-step, two-vote procedure is designed to capture the unique strengths shown by both the nominal grouping and the interacting processes.

One prior study [4] found that, with the five-step, two-vote technique, the final voting for an idea was significantly correlated to the amount of time the idea was discussed during the discussion step.

THE EXPERIMENT

The purpose of this inquiry was to measure the influence of negative discussion time on the final vote in the five-step, two-vote nominal grouping procedure. Two different student groups were used in the experiment to generate ideas on how to improve campus parking. The first group consisted of 41 students, who met early in the day. They were placed into six small groups for steps 1, 2, and 3, and then gathered into one large group for steps 4 and 5. Later in the day, a second group of 28 students performed the same exercise, using four sub-groups for the first three steps. After the first voting of the second group, the facilitator studied the master lists and selected two ideas that: (1) were on all four lists; (2) had

"average" vote scores; and (3) had "average" vote scores from the first nominal exercise earlier in the day. The two ideas chosen had been ranked third and fifth in the final vote of the day's first experiment, and were ranked fifth and sixth after the first vote of the second exercise. Two students taking part in the current exercise, but from two different subgroups, were selected to act as "confederates" during the discussion period by focusing negative discussion on the two "test ideas." During the discussion period, two timers recorded the amount of discussion time, both positive and negative, directed toward each idea discussed. That is, one timer recorded the negative discussion time and the other timer recorded the positive discussion time.

RESULTS

The comparisons of the nominal grouping first vote versus the final vote, along with the amount of positive and negative discussion time, are shown in Table 1. The two "test ideas" which received the special negative discussion treatment had earlier been ranked during the first vote in the fifth and sixth positions. After the negative discussion, the final vote dropped them to the eighth and ninth positions.

TABLE 1
FIRST VOTE VS. SECOND VOTE
RANKING AND DISCUSSION TIME

First Vote		Discussion Time			Second Vote	
Rank	Weighted Vote	Positive	Negative	Net	Rank	Weighted Vote
1	79	4	0	+4	1	91
2	76	4	0	+4	2	87
3	66	3	0	+3	3	73
4	54	3	1	+2	4	60
5	47	1	6	-5	8	22
6	35	2	5	-4	9	18
7	28	2	1	+1	5	33
8	17	2	1	+1	6	23
9	7	1	0	+1	7	9
10	6	0	0	0	-	0
11	3	0	0	0	-	0
12	1	0	0	0	-	0
13	1	0	0	0	-	0
TOTALS	420	21	14	+7		420

Table 2 shows that, for every minute of positive discussion time devoted to an idea, its vote score increased by an average of 3.06 weighted votes. However, for every minute of negative discussion time received by an idea, it lost an average of 4.66 weighted votes. That is, the second vote is strongly influenced by the discussion period, especially by the negative discussion.

TABLE 2
NET VOTE GAIN/LOSS PER DISCUSSION MINUTE

Average Vote Gain Per Minute of Positive Discussion Time = 3.06
Average Vote Loss Per Minute of Negative Discussion Time = 4.66

The results of the experiment are somewhat unexpected and raise some serious questions regarding the role of the discussion step and its possible undue influence on the outcome of the final vote. Certainly, broad generalizations cannot be made after only one experiment, but the potential impact of these findings is such that further research is planned for the immediate future.

The potential implications for the nominal grouping practitioner are considerable, to say the least. Certainly, the discussion period might best be eliminated, especially if the nature of the problem and the group is such that free and open creativity is essential. The presence of the CEO or other high-status persons/experts might necessitate the elimination of the discussion period. Even if the discussion is permitted, the facilitator, who now knows the unique susceptibility of the final vote to any negativism may be tempted or even required to monitor and try to limit negative evaluations. Unfortunately, this sort of facilitator behavior tends to destroy the facilitator's traditional role by forcing him/her into a judgment function that would seriously impair the overall atmosphere and probably inhibit the total process. Further research into this potential flaw in the nominal grouping process is in order.

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