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# Perceived Random Leader Selection in Work Groups

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#### Abstract

Different methods of selecting a leader for work groups have been shown to have significant effects on the group's overall performance (Henningsen, et al., 2004). It has been suggested that systematic selection of leadership is detrimental to a group's performance and cohesiveness in certain cases (Haslam et al., 1998). This has been supported by many studies (Haslam et al., 1998; Henningsen et. al., 2004). In such cases it may be more beneficial to pick a leader in a random fashion instead of picking one due to leadership abilities. It was hypothesized that it is even more beneficial in these cases if the leader is picked due to credentials (systematically selected) but the leader is perceived by the rest of the group as being randomly selected. The hypothesis was tested with four groups creating a building model out of drinking straws. No significant effects were found in terms of group performance or group cohesiveness.

### Perceived Random Leader Selection in Work Groups

Groups are an increasingly popular way to achieve organizational goals (Aubé & Rousseau, 2005). Such a trend is not surprising with the abundant benefits in mind. Some advantages associated with work teams in organizations include increased productivity, flexibility, innovation, employee satisfaction, as well as decreased production costs, turnover, and absenteeism (Aubé & Rousseau, 2005). It makes sense because when people are put together they are thought to have access to a broader range of decisionmaking resources which make them better equipped to make high-quality decisions (Larson, Foster-Fishman, & Franz, 1998). Larson, Foster-Fishman, & Franz (1998) demonstrated this when individuals in a group shared previously unshared information to make a good group decision. Even college students will rarely find a class that does not utilize groups as part of the learning experience. Professors certainly understand the growing importance of groups; they are not hesitant to give their students exposure to working in them. Exposure alone, however, is just a start to the lifetime of learning that will occur pertaining to dynamics in work groups. There are numerous variables that affect the characteristics of group dynamics, and with organizations' growing dependence on groups it would certainly be beneficial to be familiar with these variables.

Many different types of groups exist. A group could be a sports team, a military unit, or a political action group. A group could also be as informal as a social group. On the other end of the spectrum is a work group; many people will be a part of this type of group in their lifetime. These are formal groups usually established by an authoritative figure with one or more clear-cut goals and an unambiguous purpose for existing. Within work groups there can also be numerous classifications such as committees, boards of

advisors and directors, councils, quality improvement teams, research and development teams, and task forces. Work groups can be classified by type, such as executive, negotiation, production, advisory, and service groups. They can be classified by function, such as groups that plan, direct, or integrate. They may be classified by their setting such as corporate, medicine, transportation, fast food, or law groups. Groups may engage in problem solving, decision making, planning, and/or implementation (London, 2007). London (2007) also reinforces the point that many of today's work is done by groups, often consisting of multiple functions and organizational levels. A group may consist of people from accounting, marketing, and reseach and development at the same time. The same group could also have people from middle management and people from operational levels. Many people may also be members of more than one group, such as a quality circle and a problem-solving team. Many groups are temporary, such as a group formed to figure out cost-cutting measures, and many are permanent, such as a group formed to keep costs down all of the time. Many groups have ambiguous goals, such as groups formed to figure out how to motivate employees and many have clear goals, such as groups formed to cut costs by ten percent. Despite the countless characteristics that set groups apart, as London (2007) would agree, groups are definitely an important part of any workplace, so the study of such groups would certainly be valuable.

The existence of a work group is pointless, however, without some kind of process to assess its performance. Proper assessment of group performance can help the group process and help make decisions about individuals in the group and the group as a whole. If a group is not doing well something can be done to improve the group's performance; it may also be disbanded. Whatever the result, it is unwise to waste time and resources on a group that is not performing adequately; thus assessment of work groups is essential to make sure they are achieving their desired purpose (London, 2007).

Group performance is a difficult thing to measure, but once a method of assessment is figured out, it could always be useful. Of course, group perormance is not the only factor that can be useful to assess. There are many dimensions by which groups can be assessed. Examples of such dimensions are number and length of the meetings, goal clarity, overall attendance, social and task oriented interactions, clarity and frequency of communication between group members, influence on other groups, and goal achievement. Some of these dimensions might be quite hard to measure such as clarity and frequency of communication between group members. Others may be easy to measure such as goal achievement. Some may not necessarily be indicative of group performance like number and length of the meetings. Obviously, there are many unknowns when attempting to assess group performance. Assessment of groups is very difficult because it depends on the nature of the group and the desired output of the group. Group assessment is beneficial only if done correctly and each factor is taken into account by the assessor (London, 2001).

One factor that benefits the performance of a group is individual and group goal commitment. An individual who is highly committed to a goal will direct cognitive and behavioral resources toward attaining the goal, and an individual who is not highly committed may direct such resources toward something else like water cooler gossip. Although group performance is the only thing that matters from the perspective of some stakeholders (such as stock holders) there are several other factors that are taken into account (London, 2007). Group experience is a factor with which every team member is concerned. A higher quality group experience makes an individual group member happy to be a part of the team. Another factor to be taken into account is that of team validity, or the team's ability to adjust to internal and external changes. Group experience also has an effect on overall group performance (London, 2007).

Accordingly, the relationship between many of these factors was examined by Aubé and Rousseau (2005). Aubé and Rousseau (2005) examined seventy-four work teams in thirteen organizations. The data was gathered by means of questionnaires to employees and supervisors. Using a Likert scale, team goal commitment was found to be positively correlated to team performance, the quality of group experience, and team validity. Therefore, teams with individuals committed to the team's goals were more likely to have good overall performance, have a good experience in the group, and agree with the other group members (Aubé & Rousseau, 2005).

The discussion of work group dynamics is plentiful but one factor that deserves specific attention is that of group leadership. The study of leadership itself was traditionally a topic of social psychology, but its decline in popularity has now made it a prime topic of organizational psychology (Fielding & Hogg, 1997). The behavior, attitudes, and perceptions of leaders affect many organizations greatly. Accordingly, leadership has become a more specialized form of psychology. Hollander (1990) shed some light on the developments of the study of leadership. Historically leadership had been studied under the assumption that successful leaders possessed universal traits. Under this theory, researchers identified leadership traits, developing methods for measuring them, and using the methods to select leaders. Such traits included intelligence, dominance, self-confidence, energy, and activity, among others. (Griffin, 2007) The theory assumed that such characteristics were fixed and successful across all situations. Hollander (1990) pointed out that it failed to take into consideration the situation faced by the leader including the followers and the actual quality of performance of the leader. The argument led to the development of the situational approach. The approach recognized many situational elements that affected the leadership process such as the nature of the task, the availability of human and material resources, and the quality of leader-follower relations. Clearly, no matter how many positive leadership traits a leader possesses, the leader will not be successful at all if no resources are available and leader-follower relations are horrible. Many things can affect these relations, Hollander (1990) mentions, such as the leader's perceived competence, motivation, and personality. Furthermore, Hollander (1990) asserts that leadership is very objective and can be displayed by followers as well. Influence can be exerted from both the leader and the followers. It is a leader's job to guide their followers, but that is not to say followers cannot give feedback to the leader for the situation.

Similarly, the use of contingency models is another way of explaining leadership. Contingency models, such as the Least-Preferred Coworker (LPC) and path-goal model, consider leadership to be a function of both leader qualities and situational demands which interact to make certain leadership qualities only relevant to certain situations (Hollander, 1990). The LPC model rates the leader in terms of whether they are more concerned with interpersonal relationships or task-relevant problems. Both of these different motivations could potentially lead to different outcomes depending on the situation. The path-goal model suggests that effective leaders clarify the path (behaviors) that will lead to desired rewards (goals) (Griffin, 2007). It proposes that another situational factor that should be added into the leadership mix is the expectancies of the followers. In other words, people will be more motivated to get the job done if they expect a bonus. Their work is thus reinforced when this bonus is received. Also mentioned was the growing awareness of the effect of organizational culture which is the organization's values and norms (Hollander, 1990). Often a top leader of an organization will set the tone of leadership style that filters through to lower leaders. Therefore, leadership style is not merely a result of the leader's characteristics or skills but of the organization's environment. Hollander (1990) also explained how the growing attention to groups in the workplace has caused a shift from a leader-dominated view, one in which the leader has most of the power, to a broader one of follower empowerment, a context of thinking that encourages participative leadership and autonomous employees making decisions independent of the leader.

Morris, Hulbert, and Abrams (2000) conducted an experiment examining participative leadership. According to the participative decision-making model, group members are more likely to have a positive opinion toward group process, procedure, and their group position if the leader involves the members in the decision-making process. It is thought that participative decision-making enhances the group members' commitment to the execution of the group's goal (Morris, Hulbert, & Abrams, 2000).

The researchers executed an experiment was to determine if participative decision-making was correlated with group satisfaction. Morris, Hulbert, and Abrams (2000) also tested the difference in effect between personal and group influence on the decision. Groups of five (including one confederate) were asked to come to a conclusion in a hypothetical lawsuit scenario. The specific conclusion was not of importance because after a conclusion was reached each group member was given a feedback sheet. Each feedback sheet reflected one of three scenarios to each participant: either they personally influenced the leader's decision greatly, the group as a whole influenced the leader's decision greatly, or neither of the two. The results provided evidence that when group members perceive that they personally influenced the decision their group satisfaction significantly increased. However, there was no significant difference between no influence and group influence. These findings imply that people are happier in a group in which they are directly exerting influence on their leader. In addition to this, participants who were made to believe the group had the most influence on the leader had the most commitment to the group. Participants who were made to believe they had a lot of individual influence on the decision, though not as much as the previous condition, also felt a lot of commitment. To sum up, there are certainly many beneficial consequences when the individual group members have influence on the leader (or feel like they are having influence) (Morris, Hulbert, & Abrams, 2000).

Next, another factor that could affect a group's decision is the interaction between leadership styles and whether or not a group has full information regarding a decision. Larson, Foster-Fishman and Franz (1998) found evidence that led them to argue that a group's decision tends to favor their shared information, or the information known to every group member. Often unshared information is held back and may give light to a better solution. This type of situation is what is known as a hidden profile. A hidden profile occurs when individuals hold information that seem to favor one decision but the group as a whole holds information that, when each individual's information is taken into account, favors a different situation. For example, when deciding on the right candidate for a new teacher of a college class, it may be known to every group member that Dr. Miller has a Ph.D. from a very prestigious institution. However, one group member knows that Dr. Miller is a registered sex offender and another knows that Dr. Miller has an explosive temper. If this information is not shared, a disastrous decision could be made (Cruz, Henningsen, & Smith, 1999).

Consequently, Larson, Foster-Fishman and Franz (1998) discuss how different leadership styles affected the sharing of such information. One style discussed was participative leadership, a leadership style in which the leader involves every group member in the decision-making process and makes sure that every member's opinion is heard. On the other hand is directive leadership, a leadership style in which the leader does not value each group member's opinion very much but rather tries to get every group member to come to an agreement around the leader's own preferred solution. The directive leadership style can be very detrimental because "there is an increased risk of groupthink--a restrictive mode of decision making characterized by the pursuit of unanimity at the expense of careful appraisal of all available options" (Larson et al 1998).

Cruz, Henningsen, and Smith (1999) conducted an experiment to test factors such as leadership styles and individual versus group decisions. Participants were asked to solve a fictitious murder case. The confederate leaders tried to persuade the other group members to choose a certain suspect from the start. Results showed that groups who disagreed with the leader tended to make higher quality individual choices than groups who agreed with the leader. Perception of conflict was also tested in the experiment. They found that there was more perceived conflict in groups with full information and in groups with leaders who advocated the wrong suspect. Obviously there would be conflict when the leader tries to advocate the clear wrong choice, but the group members were also less happy when each group member had full information regarding the decision (Cruz, Henningsen, & Smith, 1999).

Larson, Foster-Fishman and Franz (1998) designed an experiment to study the factors of amount of information and leadership styles as well. The leadership styles used during the study were directive and participative. The groups were told to choose one of three psychology professors who would be the best to teach an introductory psychology class. Consistent with leadership style descriptions, results showed that directive leaders almost always expressed their opinions first whereas participative leaders almost always expressed their opinions for that groups with participative leaders shared more information overall than groups with directive leaders. Groups with directive leaders did a better job of talking through the problem but groups with directive leaders explored more aspects of the problem. The results show that directive leadership may be best when the group has mixed information, but participative leadership should work best on most other occasion (Larson, Foster-Fishman, & Franz, 1998).

Styles of leadership most assuredly affect group performance; but another significant factor may as well be the perception of leaders. Jones and Kelly (2007) set out to determine a question facing the perception of leaders: whether quality or quantity of group discussion contributions has more of an effect on group members' perceptions of leadership qualities. Such a dilemma has roots in the old trait theory of leadership; it would be interesting to know whether people think extroverted people (judged by number of contributions) or insightful people (judged by quality of contributions) are better suited to be a leader. Such an answer is important to know because if quantity is a stronger determinant of leadership characteristics than quality, a suboptimal decision could possibly be made when the group members are more easily persuaded by an incompetent but talkative group member than an intelligent introvert. Attempting to get supporting evidence, Jones and Kelly (2007) had participants reading a fictitious discussion of a group. Quantity was controlled by a rating (one star for low quality and three stars for high quality, for example) and quantity was controlled by how many comments each group member made. Participants were told to rate each group member in terms of leadership, competence, and influence. Quality was found to have had a stronger positive effect on all three variables (leadership, competence, and influence) than quantity was found to have had a stronger positive effect on all three had a stronger positive effect on all three variables than quality (Jones & Kelly, 2007).

Of course, quantity and quality of group participation are not the only factors that have an effect on leadership perceptions. Kirscht, Lodahl, and Haire (1959) suggested another factor: the number of group-oriented statements by each group member. Instead of just stating an opinion on the topic at hand, group-oriented statements intend to keep the group on track, possibly a statement that asks for an opinion, organizes the current opinions, or proposes a course of procedure. Kirscht, Lodahl, and Haire (1959) had participants discuss a problem and then elect a representative for whom they thought should be their leader. From the elected representatives and the group interactions they found that chosen representatives were found to have talked an average of 44.8% of the time and the nonrepresentatives talked 27.6% of the time. Furthermore, the average number of group-oriented statements for representatives was 12.6 whereas the number for nonrepresentatives was 6.1. Kirscht, Lodahl, and Haire (1959) concluded that participation and group-oriented statements had a positive moderate correlation with perception of leadership, meaning the more group-oriented statements an individual made the more they were perceived as being a successful leader (Kirscht, Lodahl, & Haire, 1959).

Next, another factor identified by Fielding and Hogg (1997) that could possibly effect perceptions of leadership is self-categorization. The theory of self-categorization means that one is perceived more as a leader if one has the characteristics of a prototypical group member. In other words that person embodies the most valued aspirations, attitudes, and behaviors of the group. Group members do not perceive this as merely being prototypical but they perceive the person as having charismatic leadership qualities. Self-categorization also states that group members are able to gain power over the group if they are socially attractive (liked) which makes people more likely to comply with their suggestions, requests, and orders. In other words, one way of being perceived more as a leader is to be friendly, extroverted, and be like everyone else.

Fielding and Hogg (1997) tested this theory by administering questionnaires at an Australian challenge course over a two to three week period. Seventy percent of the participants nominated the same person as leader over the period of the course. What is more, group identification increased, perceived leader effectiveness increased, group prototypicality of the leader increased, and social and personal attraction of the leader increased. This result was directly in line with the hypothesis. To be sure that these effects were due to self-categorization, participants were also told to give their perceptions of a group member who they thought was the least influential. Compared to this person, the leader was determined to be much more prototypical and more socially attractive. Subconsciously, the leader gained power over the rest of the group simply by being socially attractive and being like the rest of the group. (Fielding & Hogg, 1997).

Furthermore, Ginter and Lindskold (1975) provided some insight into why high participation rate increases perception of leadership qualities. Group members may perceive that person as possessing skills and knowledge necessary for completing a task in the absence of any other indicator. Ginter and Lindskold (1975) conducted an experiment to test this hypothesis. They hypothesized that if one already knows a person has the skills and knowledge for a task their participation rate has little effect on the person's leadership ratings. In other words, when a person is identified as an expert, that person will have high leadership ratings regardless of their participation rate. The hypothesis was supported by the experiment. Ginter and Lindskold (1975) hypothesized further that neither participation rate nor expert status mattered in terms of leadership ratings when the task being performed is unambiguous. Talkative people who were not experts as well as experts who were not talkative were found to be perceived less as leaders when ambiguity was low.

Much has been said about the perception of leaders, but still more is to be studied about the effect of leadership perception on group performance. Price and Garland (1981) examined the effect of leaders' perceived competence on group members' compliance. Price and Garland (1981) conducted an experiment with three independent variables: perceived leader competence, perceived group member competence, and reciprocity. Results supported their hypothesis that compliance is significantly effected by manipulated leader competence. Participants with high-competence leaders had significantly higher compliance scores than did those with low-competence leaders. Furthermore, participants in low-competence groups complied more with the leader's suggestion than did those in the high-competence condition. When the participant was high in competence, however, his level of compliance did not differ much as a function of perceived leader competence (Price & Garland, 1981).

Furthermore, Atwater (1995) presents the idea that how one perceives leadership depends a lot on that person's cognitive leadership schemas (or their idea of what a leader should be). The previous description illustrates the leadership categorization theory and has been suggested to play a bigger part than leaders' behavior. So in addition to the selfcategorization theory as examined by Fielding and Hogg (1997), people also perceive leaders in terms of what they think a leader should be (Atwater, 1995).

Another factor that could have great influence on the perception of leaders is the actual method of their selection. It could be beneficial to learn how to pick a leader in the group's best interest as it could lead to increased group performance. Levinson (1994) believes the selection process should be long, deep, and detailed. In his opinion, even the major search firms are not doing as well as they should be doing. He believes there should be three things to be considered in the selection process: the psychology of the individual, the kind of person who will manage the individual, and the nature of the organization. Levinson (1994), however, mainly speaks of selecting top level executive positions like Chief Executive Officers. A lot of the time it is not worth the time and effort to go into a lengthy selection process. Such a process may be inefficient because the group or person selecting the new leader could be putting their resources and efforts

into something more productive. In these cases, simplified forms of selection must be used. Henningsen, Henningsen, Jakobsen and Borton (2004) conducted an experiment focusing on the overall performance of the group as a result of the leader's access to information; more specifically, they studied different forms of leadership selection.

Subsequently, Henningsen, Henningsen, Jakobsen and Borton (2004) stated that sometimes individual group members will know more information than the other members. In other words, one group member may have certain facts pertaining to the decision at hand whereas another group member may know some other facts than the first group member. Sometimes information held by an individual group member will favor a suboptimal decision whereas the information held by the group as a whole would favor an optimal decision. This kind of situation is referred to as a hidden profile by Cruz, Henningsen, and Smith (1999). For example, one group member's limited knowledge may favor one decision but if that information is pooled with the rest of the group's knowledge a completely different decision will seem to be the best choice. Therefore, the researchers hypothesized that when a hidden profile group has a leader with full information, they are more likely to make an optimal decision than if the leader only had partial information. Though they examined many factors, the concept of a hidden profile was the primary focus of the experiment.

Additionally, Henningsen, Henningsen, Jakobsen and Borton (2004) also studied the effect of leader selection. Each leader of each group was selected by using the person whose last name came first alphabetically. The random groups knew that their leader was picked randomly, whereas the systematic groups were told that their leader was selected due to leadership credentials. The researchers formulated numerous other hypotheses having to do with leadership selection and hidden profile's effect on group cohesiveness, the type of information shared, and the optimality of the decision (Henningsen, Henningsen, Jakobsen and Borton, 2004).

First of all, each participant was put into one of four groups. It was a 2 x 2 design, the first condition either being a group in which the leader had full information pertaining to the decision or a group in which the leader only had partial information pertaining to the decision. The second condition was leadership selection. The leader was either systematically or randomly selected. All other group members had partial information. A trained coder listened to, transcribed, and coded each group discussion. Cohesiveness was measured after the discussion by using a 9-point Likert scale anchored at nine(strongly agree) and one(strongly disagree). The groups were given three options and twelve criteria on which to base the decision. Developer A, one of the three options (a fictitious developer to build the new community center) was clearly the optimal decision based on the information provided as it met more of the criteria than the other two.

The results gave light to evidence that groups with systematically selected leaders tended to make poorer decisions than groups with randomly selected leaders when the leader's information favored the optimal decision. Likewise, groups will make better decisions when the systematically selected leader's information favors the suboptimal decision. In other words, members were more likely to oppose the leader's stance if the leader was believed to be systematically selected and more likely to agree with the leader if the leader was believed to be randomly selected. The researchers studied group cohesiveness as well and they hypothesized that groups with randomly selected leaders would feel more cohesive than groups with systematically selected leaders (Henningsen, Henningsen, Jakobsen and Borton, 2004). The hypothesis was found to be true, as well as the fact that groups felt more cohesiveness when the leader had full information as opposed to partial information.

Similarly, Haslam, McGarty, Brown, Eggins, Morrison, and Reynolds (1998) conducted an experiment with the main subject matter of leadership selection methods. A couple of theories were cited by the researchers (like the social-identity theory and the self-categorization theory) that give rise for the impact of leadership selection methods: these theories "suggest that leaders and followers are more likely to act in terms of a shared group membership (and hence orient themselves toward the achievement of common goals), to the extent that they perceive themselves to share a common social identity" (Haslam et al 1998). It was also stated that social identity could be undermined if the context of social interaction is characterized more by interpersonal differences than by intragroup similarity. To make this more clear to the study at hand, "if the selection process draws attention to the former (by explicitly focusing on interpersonal differences in competence or suitability), then this may undermine the group's inherent 'groupness'" (Haslam et al 1998). Such reasoning explains why systematic selection may have a negative effect on some groups and why Henningsen, Henningsen, Jakobsen and Borton (2004) found that group members with systematically selected leaders tended to feel less group cohesiveness and tended to disagree on their leaders' stances. A hypothesis was formed: the process of seeking to identify the best leader for a small group task might actually undermine rather than enhance group performance, thus random selection of a leader would be more advantageous (Haslam et. al. 1998).

Next, Haslam, McGarty, Brown, Eggins, Morrison, and Reynolds (1998) set out

to test that hypothesis with two experiments. The independent variable was the manner of leader selection and the two dependent variables for each experiment were goalachievement and group-maintenance. The groups were told to imagine they were stranded in an inhospitable environment and they needed to rank items they needed to survive in order of importance. The goal-achievement dependent variable was measured simply by the quality of survival strategy chosen by the group as measured relative to experts' ratings. For example, a group's decision was deemed of high quality if they chose items that favored survival (tent, lighter) until help arrived rather than navigational ones (compass, map) because that is what survival experts deemed to be most important. The group-maintenance dependent variable measured the difference between individuals' decisions and the group's decision. Less difference between the group's decision and the individual group members' decisions displayed more group maintenance.

Further, the two experiments conducted by Haslam et al. (1998) had different independent variables. The first experiment contained three groups: random selection, formal selection, and informal selection. In the random selection scenario the person whose last name appeared first alphabetically was chosen to be the leader. In the formal selection condition the leader was selected by a 10 point Likert scale questionnaire which was supposed to be a predictor of managerial success. In the informal selection condition the groups were told to decide their leader on their own. These groups performed two different survival tasks as to minimize any extraneous variables associated with just performing one variation (Haslam et al., 1998).

Consistent with their hypothesis, Haslam et al. (1998) found that groups with randomly selected leaders had a higher quality score than groups with nonrandomly selected leaders. There was no difference in decision quality between formally and informally selected groups. There was no significant difference between groups with randomly selected leaders and groups with nonrandomly selected leaders for groupmaintenance. However, groups with formally selected leaders showed more group maintenance than groups with informally selected leaders. The researchers also found evidence that groups with randomly selected leaders felt that they were involved more in the decision making process and felt that their group leadership was less effective than groups with systematically selected leaders. Even though they felt the leadership was less effective, groups with randomly selected leaders tended to make better decisions and tended to have a higher quality group experience than a group with any other method of selection. (Haslam et al., 1998).

Secondly, the next experiment replaced the informal leader selection condition with a group with no leader selection whatsoever. Minor procedural changes were also made so as to eliminate some extraneous variables that might have existed in the first experiment. The methods were nearly identical to the first experiment. The results of the experiment showed higher quality decisions made in groups with randomly selected leaders than the other two conditions. There was no difference in decision quality between the groups with formally selected leaders and groups without selected leaders. Other effects were found as well: formally selected leaders enjoyed the task more, perceived themselves as being more effective leaders and perceived themselves to have made more effort. None of these effects occurred in the first experiment. Group maintenance was found to be stronger in groups with randomly selected leaders than groups in the other two conditions (Haslam et al., 1998). The studies reviewed provide evidence that leadership perception is a result of many factors. Jones and Kelly (2007) as well as Kirscht, Lodahl, and Haire (1959) state that perception of leadership is affected by both quality and quantity of participation in group discussions. Ginter and Lindskold (1975) elaborate by pointing out that if a person is considered an expert at the task at hand, neither quality or quantity matters in terms of leadership perceptions. Fielding and Hogg (1997) contest that leadership perception depends on how representative of the group the person is. It is worth pondering what role leadership perception plays in the experiments by Henningsen et al. (2004) and Haslam et al. (1998). Atwater's (1995) article suggests that leadership perception may play a bigger part than leader performance.

Henningsen et al. (2004) and Haslam et al. (1998) have conducted experiments that supported the fact that random selection of leaders does have its advantages when compared to systematic selection of leaders. However, this could be due to the performance of the humble and unsuspecting randomly selected leader or this could be due to the perceptions of equality amongst the group members. If this effect is indeed due to perceptions and not performance, it could be possible to get the benefits of having a leader with proven leadership ability and the benefits of having a completely equal group mindset at the same time. Through minor deception one could get optimal results out of a group in many situations. It is hypothesized that group performance and group experience will be higher than every other condition when members perceive the leader is selected randomly but the leader is selected based upon their leadership credentials. The group will have strong orientation to the group's common goals due to their similarity and equality but at the same time they will have the strong directive leadership of someone Participants signed up for a time (a condition) on their own free will. Group performance was measured by a group task as described by Wolff (2004). Participants were instructed that they were a group of architects and they needed to create a building model for a client. This building model had to consist of ninety-five percent drinking straws. The client also gave other explicit criteria (no triangles, sturdy, parking garage). Group performance was measured by how tall (in inches) the building model was with extra points awarded for following the client's specific instructions. The experiment took place four different times, once for each different condition. The four conditions consisted of different leadership selection methods: random selection, systematic selection, perceived randmon selection, and a control group (no leader selection).

Group experience scores were measured by means of an individually completed post-experimental questionnaire (Appendix B). The questionnaire contains eight Likert scale (1 - 7) questions and one yes or no question. The post-experimental questionnaire was used to measure variables of group experience such as confidence, cohesiveness, inclusiveness, excitement, and motivation, all of which are important for a group to have.

The first session was the systematic selection group. To start, each participant was given the informed consent forms (Appendix D). To determine leadership qualifications, ten questions borrowed from Haslam et al. (1998) were used. For the experiment it was called the Leadership Skills Index (Appendix A). Each participant filled out the Leadership Skills Index and the scores were calculated. The person with the highest score was assigned the group leader. The group was then given instructions and started on the group task. The group had nineteen minutes to build a building model. After the task was finished participants were asked to fill out the post-experimental questionnaire.

Participants were able to leave right after filling out the questionnaire.

The second session was the control group. No leader was selected for the control group. To start, each participant was given the informed consent forms. The group was then given instructions and started on the group task. The group had nineteen minutes to build a model. After the task was finished participants were asked to fill out the post-experimental questionnaire. Participants were able to leave right after filling out the questionnaire.

The third session was the random selection group. To start, each participant was given the informed consent forms. Names of the participants were put on small slips of paper. The slips of paper were crinkled and mixed up. The person whose name was picked from the pile of names was assigned as the leader. The group was then given instructions and started on the group task. The group had nineteen minutes to build a model. After the task was finished participants were asked to fill out the postexperimental questionnaire. Participants were able to leave right after filling out the questionnaire.

The fourth session was the perceived random selection group. To start, each participant was given the informed consent forms. The participants were also given Leadership Skills Inventories to fill out. Those scores were calculated to find the most qualified person to be the leader. To give the impression that the leader had been randomly chosen, however, each person's name was put on a small slip of paper. These slips of paper were crinkled and mixed up. Regardless of the actual name picked, a slip of paper was obtained from the pile and the person whose Leadership Skills Index score was highest was announced to be the leader. The group was then given instructions and started on the group task. The group had nineteen minutes to build a model. After the task was finished participants were asked to fill out the post-experimental questionnaire. Participants were able to leave right after filling out the questionnaire.

#### Results

Unfortunately, the small n of the experiment makes it impossible to do any scientific analyses on the group performance measures. The results will be merely descriptive in nature. The group performance factors and the total scores are displayed in Appendix C. The highest scoring group, in line with the hypothesis, was the perceived random group. The perceived random group achieved a score of 39. The systematic and control groups had identical scores with 27. The lowest scoring group, the random group, had a score of 20.5. Though there is no way to determine if these scores have any scientific significance, the perceived random group did achieve a considerably higher score than the other groups.

The questionnaire data were analyzed with a Kruskal Wallis H test. A two-tailed alpha of .05 was used. The test did not find any significant differences among the answers of the groups, however. For the first question (How much confidence do you have in your group's model?), the systematic group had considerably lower responses than the perceived random group and the control group. This was not significant. It is worth noting that every participant in the random group thought that another person emerged as leader aside from the assigned leader; it was the only group for that answer to be unanimous.

#### Discussion

The results were not in line with the study done by Haslam et al. (1998).

According to Haslam et al. (1998), the random group should have performed better than the systematic group and that is certainly not the case. However, the results were in line with the current hypothesis that the perceived random group would perform better than the rest of the groups. While this does not necessarily support studies such as Haslam's, it does shed some light on the cognitive reasons for Haslam's findings. Since the perceived random group performed so much better than the random group, it can be assumed that the benefits brought about by random leader selection is due to group members' perception of the leader, not the leader's actual behavior.

Undoubtedly, there are many things that could be done differently to produce more reliable results. One of the most obvious factors was the lack of participants. It prevented any kind of scientific results for group performance altogether. Not only that, but even if scientific analysis was possible, the small numbers could have led to inaccurate results. The fact that each experimental group only consisted of one group of participants could have lead to a myriad of extraneous variables affecting the data. Perhaps some of the participants had experience building things from drinking straws. Maybe one of the participants was tired and cranky during the experiment which could have lead to subpar group performance and below average questionnaire responses. Whatever the case, the lack of numbers left the results extremely vulnerable to individual differences. Clearly this reduced the accuracy of the results.

Another problem was the fact that all of the groups consisted of four people except for one, the perceived random group, which consisted of three people. There was a total of fifteen participants for the four groups. The fact that all participants volunteered for the experiment made the numbers inconsistent and unpredictable, so though it was attempted to have each group consist of four people, it did not work out for all of the groups. It would be assumed that, given the nature of the group task, a group with one less person would have a low score on the group performance measure. The perceived random group's score was far from low, however, as it was the highest scoring group. Nevertheless, the inconsistent numbers may have had an effect on the results. Ideally every group should have been exposed to the same conditions except the changing independent variable. Should the experiment be replicated, it is completely necessary that the groups all consist of the same number of people and there be as many groups as possible.

Leadership was obviously a big factor in this experiment. Leadership's role in the experiment, however, may not have been emphasized enough. Aside from assigning each group a leader and making everyone aware of the leader, little was done to facilitate the effect each leader had on the group's performance and cohesiveness. Perhaps something small could have been done such as giving the leader a separate prompt from the rest of the group. It really would not have mattered too much what that separate prompt had actually said as long as the leader did not tell anyone else what it was. Just the fact that the leader may or may not have known something the group members did not know would have increased their reliance on the leader, therefore increasing the independent variable's effect on the dependent variable. Perhaps the leader could have had a separate ability from the rest of the group members like being the only one able to distribute straws or tape. Such a detail should certainly be fixed if the experiment is replicated.

Another factor worth taking into consideration is the measurement of group performance itself. The building model task may have left the results open to possible extraneous variables. Maybe one of the group were full of people who were not very good at building crafts and maybe another group was full of people who were very talented in building crafts. Of course, the reason for group performance not relying totally on the height of the building model was to put some emphasis on following directions; this would not be effected by the aforementioned extraneous variables. Even so, height was still a big factor in the group performance measurement, and an alternative method of measuring group performance could have been considered.

An obvious implication of this experiment is to utilize the perceived random method of leader selection in a company's work groups (or any type of goal-oriented group for that matter). It could benefit the group to be led by a qualified leader and not have the lack of equality that often occurs when the leader is deemed superior to the rest of the group (as far as leadership skills). Both factors could ultimately shape the group dynamic so that the optimal group performance is achieved.

Exact utilization of the perceived random leader selection should be used with caution, though. Deception is often a common theme found in psychological experiments. However, in real world situations deception may not be a good idea. Recent examples such as the Enron scandal are blatant reminders of how deception within an organization can be devastating, granted deceptive leader selection pales in comparison to fabricating financial statements. If anything, the example of Enron is relevant in that deception may be a slippery slope. Letting employees think their group leader was randomly selected may not be a big deal in and of itself, but if deception is a part of the organizational culture in that way, what is to stop it from getting worse? If an employee finds out about the deceptive methods of the organization, employees will lose trust in the management.

Lack of trust makes for a bad working environment. In many business organizations, openness with its own employees is essential in maintaining a healthy organizational culture.

The real implications of this study would be the knowledge of how leadership selection affects group performance and cohesiveness. The same results of the perceived random method of leader selection could possibly be achieved without outright lying. There can be other ways of promoting equality within the group despite the leader's superior leadership abilities. Such a thing could be achieved by pointing out other truths to facilitate equality. One way of doing so could be to let the group know that even though they all have leadership qualities, this leader is best for the situation. Almost always is this true, because rarely is the situation not taken into account when selecting an appropriate leader. Another possible way would be to stress the importance of the group within the organization, thus taking focus of inferiority from the leader and replacing it with a focus of superiority from individuals outside of the group. There may be other methods to create equality that are out of the realm of this study such as rewards. Rewards and incentives may compel the group members to set sights on a common goal of obtaining these rewards, thus creating equality. Another option would be not to tell the group how the leader was selected at all which would take focus off of the method of leader selection altogether. It would not do anything to foster equality, but at the same time it would not do anything to foster inferiority within the individual group members, either. Clearly there are many options aside from random leader selection (or perceived random leader selection) to further equality within a group.

Although this study lends no evidence to the subject at hand, there is evidence elsewhere that random leadership selection has its advantages in some situations. There is evidence that systematic selection has its advantages as well. With that in mind, one would assume that there would be a lot more evidence that the advantages brought upon by each method can be successfully combined within the same group. Further research with this objective is definitely encouraged. Another angle worth noting would be to compare post-experimental questionnaire answers to group performance (i.e. does the confidence in one's leadership correlate with group performance?). The results of this experiment did not turn out to be exceedingly helpful, but there are many things that could have been done differently and many more approaches to this area yet to be explored.

## Appendix A

- 1. How well do you communicate verbally?
- 2. How lazy are you when you work with a group of other people?
- 3. How objective are you about your own performance?
- 4. How rigid are you in your approach to tasks?
- 5. How aware are you of your social environment?
- 6. How intolerant are you of uncertainty?
- 7. How resistant are you to stress?
- 8. How high are the personal standards you set yourself?
- 9. How broad-ranging are your interests?
- 10. How good are your organizational and planning skills?

The questions were answered on a scale of *not at all* (1) to *extremely* (7). Numbers 2, 4, and 6 were reverse-scored. The individual scores were summed and the highest scorer was appointed to be leader.

## Appendix B

- A. How much confidence do you have in your group's model? (1 = very little, 7 = a great deal)
- B. How much did you identify with the other members of your group? (1 = very little, 7 = a great deal)
- C. To what extent was the group leader representative of the group? (1 = not very, 7 = extremely)
- D. How involved did you feel in building the model? (1 = extremely uninvolved, 7 = extremely involved)
- E. How effective was the leadership of your group? (1 = extremely ineffective, 7 = extremely effective)
- F. How much did you enjoy taking part in this study? (1 = very little, 7 = a great deal)
- G. To what extent did the group leader encourage participation? (1 = very little, 7 = a great deal)
- H. To what extent did you feel motivated to build the model? (1 = very little, 7 = a great deal)
- I. Did anyone emerge as a leader other than the assigned leader? (Yes or No)

Questions C, E, G, and I were omitted from the control group's questionnaire.

## Appendix C

	Perceived Random	Systematic	Random	Control
Height (inches)	27	12	10.5	12
Distinguishable Parking Garage (3)	0	3	3	3
Sturdy (3)	3	3	3	3
No Triangles (3)	3	3	3	3
95% Straw (3)	3	3	0	3
Form = Attractive (2)	2	2	0	2
Тор (1)	1	0	1	1
Color Considered (1)	0	1	0	0
Total	39	27	20.5	27

Every factor (excluding height) reflects a specific instruction given to the groups before starting the task. The explicitly stated instructions are worth 3 and the factors worth less than 3 were related to attractiveness. They are worth less because they were either subjective or not explicitly stated.

## Appendix D

## **Informed Consent Agreement**

### Please read this consent agreement carefully before you decide to participate in the study

Project title: Leader Selection Perception in Groups

**Purpose of the research study:** The purpose of this study is to investigate the effect of leader selection on group performance and cohesiveness

What you will do in the study: You will be asked to build a tower made primarily of straws. You will do so with the other participants as a team.

Time required: The entire procedure will take about 30 minutes.

Risks: There are no risks.

Benefits: There are no direct benefits to you for participating in the study.

Confidentiality: The information that you give in the study will be handled confidentially.

Voluntary participation: Your participation in the study is completely voluntary.

**Right to withdraw from the study:** You have the right to withdraw from the study at any time without penalty.

How to withdraw from the study: If you want to withdraw from the study, tell the experimenter quietly and leave the room. There is no penalty for withdrawing. You will still get class credit for participating in the study.

**Payment:** You will receive no payment for this study. You will receive participation credit from your class instructor.

Who to contact if you have questions about the study: Dr. Virginia Cylke, Psychology Building, Lynchburg College, Lynchburg, VA 24501. Telephone: (434) 544-8315. Email: cylke@lynchburg.edu

Experimenter: Daniel Marsh (544-6484)

Who to contact about your rights in the study: Donald W. Werner, Ph.D., Psychology Department, Lynchburg College, Lynchburg, VA 24501. Telephone: (434) 544-8317. Email: <u>Werner@lynchburg.edu</u>

#### Agreement:

I agree to participate in the research study described above.

Signature:

Date:

You will receive a copy of this form for your records.

## References

Atwater, Leanne H. (1995). Leaders: it's the thought that counts. *Contemporary Psychology*, 40(3), 205-206.

Aubé, Caroline, and Vincent Rousseau (2005). Team goal commitment and team effectiveness: the role of task interdependence and supportive behaviors. Group Dynamics: Theory, Research, and Practice, 9(3), 189-204.

Cruz, Michael G., David Dryden Henningsen, and Brian A. Smith (1999) The impact of directive leadership on group information sampling, decisions, and perceptions of the leader. *Communication Research*, 26(3), 349-369.

Fielding, Kelly S., and Michael A. Hogg (1997). Social identity, self-categorization, and leadership: a field study of small interactive groups. *Group Dynamics: Theory, Research, and Practice*, 1(1), 39-51.

Ginter, Gary, and Svinn Lindskold (1975). Rate of participation and expertise as factors influencing leader choice. *Journal of Personality and Social Psychology*, 32(6), 1085-1089

Griffin, R., & Moorhead, G. (2007). Organizational Behavior. Boston: Houghton Mifflin Company.

- Haslam, S. A., Craig McGarty, Patricia M. Brown, Rachael A. Eggins, Brenda E.
  Morrison, and Katherine J. Reynolds (1998). Inspecting the emperor's clothes:
  Evidence that random selection of leaders can enhance group performance. *Group Dynamics: Theory, Research, and Practice*, 2(3), 168-184.
- Henningsen, David D., Mary L. Henningsen, Lika Jakobsen, and Ian Borton (2004). It's good to be leader: the influence of randomly and systematically selected leaders on decision-making groups. *Group Dynamics: Theory, Research, and Practice*, 8(1), 62-76.
- Hollander, Edward P., and Lynn R. Offerman (1990) Power and leadership in organizations: relationships in transition. *American Psychologist*, 45(2), 179-189.
- Jones, Eric E., and Janice R. Kelly (2007). Contributions to a group discussion and perceptions of leadership: does quantity always count more than quality? *Group Dynamics: Theory, Research, and Practice*, 11(1), 15-30.
- Kirscht, John P., Thomas M. Lodahl, and Mason Haire (1959). Some factors in the selection of leaders by members of small groups. *The Journal of Abnormal and Social Psychology*, 58(3), 406-408.

Larson, James R., Jr., Pennie G. Foster-Fishman, and Timothy M. Franz (1998). Leadership style and the discussion of shared and unshared information in decision-making groups. *Personality & Social Psychology Bulletin*, 24(5).

Levinson, Harry (1994). Beyond the selection failures. Consulting Psychology Journal: Practice and Research, 46(1), 3-8.

London, Manuel (2007). Performance appraisal for groups: models and methods for assessing group processes and outcomes for development and evaluation. *Consulting Psychology Journal: Practice and Research*, 59(3), 175-188.

Morris, Leigh, Lorne Hulbert, and Dominic Abrams (2000). An experimental investigation of members' perceived influence over leader decisions. *Group Dynamics: Theory, Research, and Practice*, 4(2), 157-167.

- Price, Kenneth H., and Howard Garland (1981). Compliance with a leader's suggestions as a function of perceived leader/member competence and potential reciprocity. *Journal of Applied Psychology*, 66(3), 329-336.
- Wolff, S. (2004) OB in Action: Cases and Exercises. Boston: Houghton Mifflin Company.