MANAGEMENT STYLES IN RELATIONSHIP TO SMALL

GROUP OUTPUT: LET'S STANDARDIZE

MANAGEMENT PRACTICES

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Steven Philip Putnam

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MANAGEMENT STYLES IN RELATIONSHIP TO SMALL GROUP OUTPUT: LET'S STANDARDIZE MANAGEMENT PRACTICES

Thesis Supervisor:

Richard Archer, Ph.D. Department of Psychology

Approved:

Heather C. Galloway, Ph.D. Dean, Honors College

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Abstract

Effective management is something that successful businesses strive to have. Without management, organizational structures would crumble into anarchy. In this senior thesis, an argument is made for an answer to the question, "Is there an organizational structure allows for a significant increase in productivity of small groups compared to other organizational structures." After looking at the varying roll of small groups in different organizational structures the specific characteristics of the small group are identified and defined as three factors. With the management needs of the small group identified, a method for finding the most effective management structure is then proposed, future research pending.

Keywords: Small group, management structure, productivity

Chapter 1: Introduction

Proper management is one of the most important aspects of group interaction. From the classrooms of tomorrow's leaders to the offices of the world's most successful businesses proper management is required to function effectively as an organized group. That is perhaps why professionals in the academic world study management so frequently. In order to understand how management style affects the output of a group, professionals in the industrial/organizational field of psychology implement different styles of management and study what comes of the interaction. Eventually the implementation of different styles of management yields results that either improve or damage the ability of a group to function efficiently. Small groups are affected by management style acutely as there is minimal diffusion of the results among a large organization. For example, a group meeting to assess potential changes in the courses offered at a university will have a larger effect on the individuals involved in the meeting than if an e-mail that is meant to serve the same purpose is sent out. In small groups every person has a function to serve and if they do that job to a lower standard then the group's overall product will suffer. That is the management problem, "How do you organize a group to maximize output and minimize waste". The point of this paper is to examine different styles of management and argue for a most effective style after having looked over and analyzed the data. The present research is predominantly behavioral in nature. This is to say that most of the literature has been focused

on the behavior of individuals within the group. Behavioral studies can be an effective way to study the effectiveness of a group management style.

Chapter 2: Literature Review

Organizations often break themselves down into several models of organizational structure. Each type of structure has its own weaknesses and strengths. Perhaps the most interesting thing about management is that there is no single way to do things. By that I mean there is no way that has been proposed to be the best way of doing things. Instead, Brown (1999) argues that there are several guidelines that make group work more fluent and productive:

Being clear about your group's organizational structure, roles, responsibilities, mission, and goals can make a big difference in how successful your group is. Organizational structure means the pattern of relationships within the group. It may include hierarchy (who's in charge) and roles and responsibilities (who does what), but it also incorporates people's attitudes and perceptions, the quality of what is produced, the way decisions are made, and hundreds of other factors. The most effective structures are built out of conscious choices. They frame how we do business.

Organizational structure plays a major role in any functional group's success. Brown (1999) found that, "many organizational problems arise when: (1) the group didn't choose an organizational structure in the first place, or (2) they mixed and matched components from different structures". So what are these different types of organizational structure? There are many proposed structures

in the literature. There are, however, several organizational structures that are most often used in the real world. I plan to identify the most efficient approach from examining five of the most commonly used organizational structures for the purpose of analyzing the typical role of the small groups play in organizational structures.

Line of Command Structure

Examples of the line of command or rigid organization are the military, the police, or firefighters. Rigid organizations follow a chain of command that is traceable all the way up to the head of the organization and are hierarchical in nature. Perhaps the most visual representation of that chain of command is the wall of command in every military installation that is topped by the commander and chief.

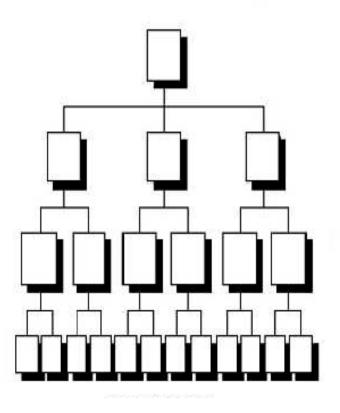


Fig 1 Typical Line of Command Structure

The figure above shows a very general outline of a rigid organizational structure. The strength of this structure is that it is well suited for the particular environments for which it was designed and implemented. It does require a group of people who are willing and obligated to submit to the line of command. It also is weak in its ability to change and in the implementation of new parts. Rank is the most important aspect of this organization and management style. Small groups are cohesive units under this style of leadership. The groups are at the bottom of the organization and the singular leadership at the top.

Board Management Style

Senior management team refers to the board leadership style of management that many companies are organized under in today's business world. This style of management is often used in the private sector of business where two or more people are in charge of legislative decisions. This method of organizational structure has a small group that leads it at the top and often has autonomous workers that spend little time interacting with others at the bottom. This style of management is vulnerable to "groupthink" because one autonomous group of people has power Janis (1972). Small cohesive groups that have power and believe themselves to be experts have a tendency to submit to groupthink and make uninformed decisions. Riordan (2013) stated, "the general theory suggests that, in an effort to keep the approval of their leader or group, members are likely to adopt a solution without critical evaluation". Using Janis's (1972) construct of groupthink can help account for error on the part of group decisions.

One group that can fall victim to this particular issue are the boards of regents

that are common in academia.

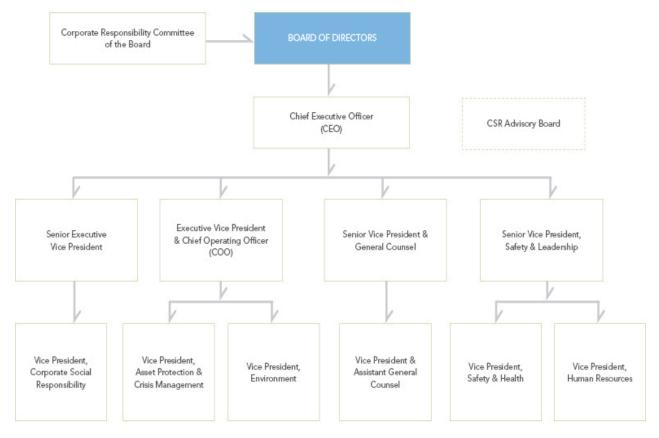


Figure 2. Example of a board management structure

The figure above displays the composition of a board style management structure. This particular structure belongs to a company that produces and sells gold on the market.

Matrix Management Style

One of the newest and most powerful management styles is the matrix style. Tavis notes that, "matrix organization structure with multiple reporting lines is now becoming the organizational structure of choice for large complex organizations." The matrix style of management is growing in popularity in the technology sector. What does the matrix style look like?

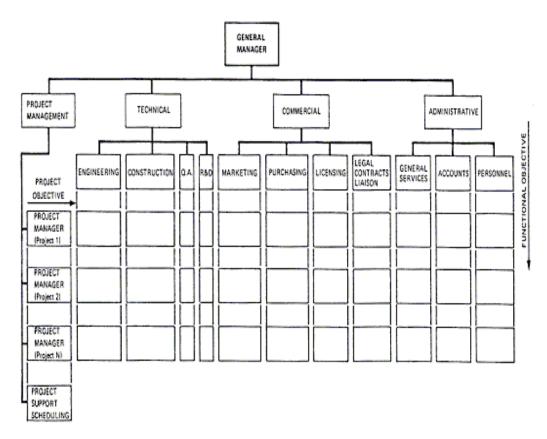


Fig 3 Typical matrix organization for management

The figure above depicts a fairly regular matrix style management scheme. This particular graph is used to organize the workers at a nuclear energy facility and is specific to that factory. It is important to note that there are fewer vertical steps to reach a superior in this system instead there is more horizontal integration. This can be beneficial to the organization that chooses to set up their management this way. Gupta (2006) stated, "Horizontal diversification presents key opportunities for new product development. In Gupta's thesis he finds that the more horizontal diversification in an organization the higher the level of innovation". Gupta (2006) defines innovation as positive change and originality in an organization at any level; the innovation can be at the activity, process, product, or business level. In today's environment, innovation has become a tool

for attracting new consumers with unique selling propositions. Innovation is driving the competitive bar higher.

Project Management

Project management refers to the style of management where a group of people are given a specific task and some guidelines or parameters and told to complete the task in a temporary team or task force. Park (2012) wrote,

Project management must control the activities of many technically based groups (such as the various engineering disciplines) without necessarily having any direct line authority over them. Thus, project management is the essential financial and technical link between technically oriented internal (within a particular partner) and external (other partners) groupings.

A group may not have direct supervision from a superior but the hierarchy within the group serves to keep everyone on task to complete the goal. That is to say that the leader of the group does not have to contact his supervisor day to day. These group leaders have freedom to decide what will work best in the overall completion of the task at hand. "Product-teams are formed for specific assignments but not as a regular practice". This system is often seen with contractor groups. See figure below for a typical project management style of organization.

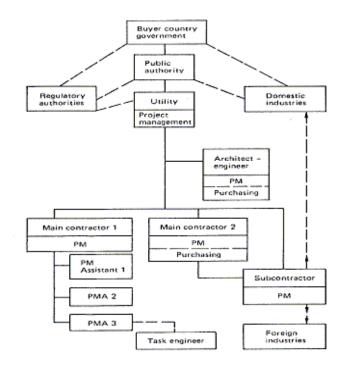


Fig 4 Project management hierarchy

Organic Style

The organic style of management is most common among grass roots movements. One centralized group of people organizes an idea then takes their mission out to other people for them to complete. This style of management tends to be lax and allows people to put in whatever amount of work they deem to be practical. Brown (1999) states, "this model (Organic style) works in community action settings where the intent is to get people involved in making the community a better place to live". It provides the most flexibility and opportunity for spin-off organizations. The grassroots food co-ops more commonly found in the 1960's epitomized this model.

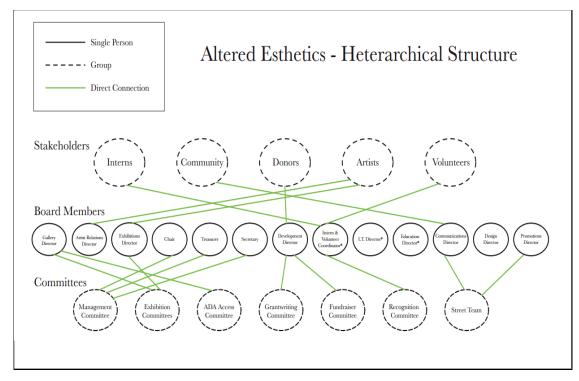


Fig 5 Heterachical (un-ranked) Grassroots Organization Style Schumacher (2010)

Above a specific type of the grassroots organization style is modeled.

All of this introductory information will serve as a literature review for this thesis. This argument will be based on evidence that is apparent in the literature. Looking at how small groups behave, the problems associated with small groups, and the understanding that there are alternatives methods of group management I will argue for a most beneficial organization structure for small group management.

Chapter 3: Problem

It's Time to Consider the Small Group

In order to understand the implications of this thesis one must first understand what a small group is, how it forms, the composition of a small group, and the effects that being within a group has on the individual. Instead of focusing on defining the optimal size of a small group this study will be more interested in the quality of interaction between the participants in the group. That being said, for the purpose of this study a small group is no less than two members and usually no more than ten.

What are the Stages of Small Group Development?

The literature on small group formation supports a series of stages of development that occur across situations and types of small groups. Tuckman (1965) looked at fifty-five articles on therapy groups, human relations training, and natural and laboratory-task groups in order to create a general model of the of changes in the group throughout its functioning. Jensen (2010) states, "Tuckman proposed a model of developmental stages for various group settings over time, labeled (1) testing and dependence, (2) intragroup conflict, (3) development of group cohesion, and (4) functional role relatedness". Tuckman's proposition has been replicated by one study, Runkel et al. (1971), and cited in a number of others.

Although there are several models of the developmental stages of groups many of them follow the pattern that Tuckman envisioned in his classic study. In his 1965 paper Tuckman identified the sequence of group development as forming, norming, storming, and performing. First the group is subject to anxiety about meeting each other. At this point the group is lacking structure. Second there is a period of conflict characterized by hostility between subgroups. The third stage can be considered a period of productivity and is the point at which a bulk of the work the group will do gets done. Fourth and finally the group goes through a period of anxiety towards termination.

Conflict within the Group

There are issues that arise when people are grouped together to complete a task. It is evident in the literature that there are many different issues with group work. Negative performance and intergroup conflict can both cause lower performance in the group as a whole.

In a study done by Reining et al. (2009) a correlation between positive performance and improvement of future performance was found. "Positive performance results in influence satisfaction both directly in the session in which they occur and indirectly through a carry forward effect of previous satisfaction levels". Inversely negative performance effects future performance negatively.

Using Levine and Moorland's (1994) group socialization model, Isobel et al. (2010) was able to distinguish in what situations a single person might be shunned or ostracized by a small group, "ingroup full members play a special role in validating the group's social identity, and their ability to do so is seriously compromised when they deviate from the group's standards". Negative reactions are generally paired with deviate behavior and the group member is marginalized and eventually cast out. This can cause negative effects on the output of the group and is considered a major issue within small groups in general.

How Groups and Group Composition Affect Individual Output

Group composition and being a part of a group both have a major effect on the individuals involved in the group work. There is large body of work concerned with group composition and individual output.

In her introduction Jehn (2004) claims the increase in popularity that small groups have gained over traditional hierarchies because they are believed to improve productivity and effectiveness of individual workers. She states, "research has shown, for example that work groups are more effective. This is owed to their capacity to adjust to new information and challenges with greater speed, accuracy, and efficiency". The popular and intuitive belief that groups perform better than individuals is backed up in the literature. One could say it disconfirms the old saw, "If you want something to never get done send it to a committee."

Group diversity is also regularly cited as a reason for group's ability to increase productivity over the individual in an organizational setting. With more points of view available for reference and a larger pool of experience inherent in a group there is more of a chance that a problem can be solved quickly and effectively. Jehn (2004) states, the international trend toward increased immigration and the globalization of firms and the domestic trend toward an aging workforce and a greater representation of women and minorities in the workplace are bringing together more people from diverse backgrounds. This is to say that groups are increasingly diverse. Perhaps this diversity reduces pressures to conform to the group because it offers more potential allies willing to be dfferent. Asch (1956) states in his most famous study, "A minority can have a great influence, one ally may be necessary to resist group pressure".

Both groups and group composition can affect the productivity of a worker positively. It can be said that diversity increases the effectiveness of a worker

and since groups are inherently and increasingly diverse they have been linked with an increase in individual productivity. The ability of one person to adapt or meet a variety of situations is increased when they are members of a group, and the situation is specific to the function of the group.

Non-Organized Groups

Groups that come together on an ad hoc basis serve a purpose can be considered non-organized groups. These groups can be found in the grassroots organizational structure as well as in situations that foster their occurrence. One example of this type of group can be seen in Wikipedia.

Arazy et al. (2011) states that, the success of Wikipedia demonstrates that self-organizing production communities can produce high-quality information-based products. Research on Wikipedia has proceeded largely atheoretically, focusing on (1) the diversity in members' knowledge bases as a determinant of Wikipedia's content quality, (2) the task-related conflicts that occur during the collaborative authoring process, and (3) the different roles members play in Wikipedia.

The writers of a Wikipedia article may not know each other and may not ever communicate directly at any point during the authorship of an article. This nonorganized group is essentially a loose body of people that forms to solve a particular problem. In the case of Wikipedia the problem is creating a legitimate article that is factual and interesting. Another example of this "non-group" is the campaign teams that form around candidates during election years. These

groups form quickly to solve a problem and dissolve once the goal is accomplished or failed.

Chapter 4: Solution

What does it take for a Small Group to be Successful?

Small groups can and do increase the productivity of their members despite the drawbacks and potential pitfalls associated with being a member in a group. For a group to be effective however it must be several things. After careful consideration I am going to name these three factors; Cooperation, Diversification, and Role Identification. They are each individually important to the success of a group. After defining each factor I will identify which organizational structure if any best displays each factor.

A successful small group is *cooperative*. For the purposes of this thesis cooperation is considered to be several individuals working together to complete a task that is in the interest of each member of the group to complete. In Kuglar's (2013) study on the effects on the effects of being in a non-cooperative group vs. tackling a problem individually he states, generally, even individuals do better than non-cooperative groups, regardless of the type of conflict. We know from Kuglar's study that cooperation is necessary for a group to function correctly and when a group is firing on all cylinders there is evidence that individual worker output is increased.

In addition to being cooperative a successful group must be *diverse*. For this thesis diversity can be defined as a group consisting of people with differing points of view, experiences, and abilities. As noted above a diverse group

multiplies the ingroup resources and is able to extend the experience of each member to the adaptability of the group as a whole.

For a group to be successful it must also be clear what role and responsibility each person has within the group. *Role identification* can be defined as the understanding of roles, responsibilities, and how they relate to others within the group. Groups built out of conscious choice are considered to be the most effective at identifying the roles and responsibilities each member has. The literature is conclusive on the fact that groups who are able to identify generally perform better in a given situation.

The presence of each of these factors is a way to gauge the likelihood of group success in any organizational structure. These factors are so integral to the success of a group that they must be present in an organizational structure to maximize the beneficial effects of being in a group. This is to say, if a structure is deficient in even one of these three factors, the problems associated with being in a group will override the benefits.

Chapter 5: Conclusion and Discussion

What group best represents the factors posed in the last section? That is a difficult question to answer without further research. For example, the rigid organizational structure is highly defined in regards to its group roles. However, with emphasis placed on rank and not value of the individual, diversity may very well be lacking in this organizational structure. There is no research that identifies to what degree each of the three factors Cooperation, Diversification,

and Role Identification interact in a given organizational structure. Therefore it is difficult to place one structure above the rest in regards to small group output.

There is certainly past research highlighting Cooperation, Diversification, or Role Identification but there is little that includes all three. Gupta (2011) places emphasis on diversification as a positive factor on group interaction but does little to mention the other two factors in his analysis of Indian small-scale industries. Kuglar (2013) looks at the importance of cooperation of individuals in a group but he does not address diversity or role identification as unique factors necessary for success of a small group. Brown (1999) defines role identification as imperative to the success of a group. He does fail to mention the other two factors completely. This trend continues throughout the literature. There are studies that follow each factor individually. There are no studies that identify each of the three factors and study their interaction together.

Given they are critical factors, the best way to predict success of a group is to see maximization of the factors in an organizational study. A reliable method for measuring the presence of each factor in these groups needs to be created. Based on the following questions:

Cooperation

- Does the group work together to actively complete a task?
- Does every member of the group share equal parts of the workload?
- Are all interactions fundamentally constructive towards the goal of the group?

Diversification

- Do the apparent experience levels of the group members vary?
- Are a wide range of skills represented in the group?
- Is there a variety of problem solving approaches being used in the group?

Role Identification

- Can the leader of the group be identified?
- Are the roles of each individual in the group well defined?
- Are the relationships between individuals in the group understood?

Using the measures outlined above a study could be conducted on intact organizations. The results of each question can be placed on a Likert scale. The dependent measure being, "how much does each of the factors appear in the small groups of an organization representative of a given organizational structure?" Participants who are members of the intact groups would rate the criteria. This would be compared to the ratings of participants who are not familiar with the group. A multiple regression would be conducted to measure the main effects and interaction between factors, between inside and outside raters, and between organizational structures.

At first glance we might expect the results of the multiple regression outlined above to support project management as the organizational structure that is most representative of the three critical factors. A project management small group is composed of people who are considered able to complete the contracted task. That inherently makes the group diverse because members are taken from different parts of the organization to create a group that can tackle a specific task. The small group in the project management organizational

structure is also co-operative as there is generally a deadline associated with the group being formed. Also roles are understood as each member has a unique task to complete and there is a crew leader who orchestrates it all. Another strong candidate is the board management structure because it has the potential to display high levels of co-operation (the goal of the company is paramount) as well as role identification (CEO, treasure, financial expert, etc.). However diversity may be lacking as most members of a group of this sort most likely have a MBA, have been working for the company for a while, and have similar working experience. The other three organizational structures should not be discounted; however these two are most likely the structures in which small groups preform the very best. It's an empirical question.

References

- Asch, Solomon (1956). Studies of independence and conformity: I. A minority of one against a unanimous majority. Psychological Monographs: General and Applied, Vol 70(9), 1956, 1-70
- Arazy, Ofer, Oded Nov, Raymond Patterson, and Lisa Yeo. (2011) Information Quality in Wikipedia: The Effects of Group Composition and Task Conflict. *Journal of Management Information Systems*, 27,4, 71-98. Print.
- Brown, Viviane (1999). Choosing Your Group's Structure, Mission, and Goals. Watershed Stewardship: A Learning Guide 1507, 11-2.
- Gupta, Meenakshi (2011). Innovation in Indian Small Scale Industries: Case Study of Cosmetics Small Scale Industry in Mumbai
- Janis, Irving L. (1972). A Psychological Study of Foreign-Policy Decisions and Fiascoes. Oxford England: Houghton Mifflin.
- Kugler, Tamar, and Gary Bornstien (2013). Social Dilemmas between Individuals and Groups. Organizational Behavior and Human Decision Processes, Science Direct. Web, 23, Feb. 2014.
- Lee, Rongbin, Benny Cheung, and Y. Wang. Managing Unstructured Information and Knowledge Flow. *Ebsco*. The Hong Kong Polytechnic University, n.d. Web. 20 Oct. 2013.
- Levine, J. M., & Moreland, R. L. (1994). Group socialization: Theory and research. In W. Stroebe & M. Hewstone (Eds.), European review of social psychology (Vol. 5, pp. 305–336). New York, NY: Wiley.

- Park, Yong-Chip. (2012). Planning and Implementation of Nuclear Power Plant Construction.
- Pinto, Isobel, Jose Marques, John Levine, and Dominic Abrams (2010).

Membership Status and Subjective Group Dynamics: Who Triggers theBlack Sheep Effect?Journal of Personality & Social Psychology 99,

1, 107-19. Print.

- Runkel, P.J., Lawrence, M. Oldfield, S., Rider, M., Clark, C. (1971) Stages of group development: An empirical test of Tuckman's hypothesis . The Journal of Applied Behavioral Science, 7(2), 180-193.
- Reinig, Bruce A., Ira Horowitz, and G. E. Whittenburg. (2011). A Longitudinal Analysis of Satisfaction with Group Work. *Group Decision and*

Negotiation. Print.

- Riordan, Michael. (2013) Guarding against Groupthink in the Professional Work Environment: *Journal of Academic & Business Ethics*: *Ebsco*. Web. 20 Oct. 2013.
- Sahay, Yamini P., and Meenakshi Gupta. Role of Organization Structure in Innovation in the Bulk-. *Indian Journal of Industrial Relations* (2011): n. pag. *Ebsco*. Web. 20 Oct. 2013.

Simon-Brown, Viviane United States. U.S. Department of Agriculture, and Oregon Counties. *Choosing Your Group's Structure, Mission, and Goals*. N.p.: n.p., n.d. Print.

- Schumacher, Jamie Rebecca (2010). A New Model for Grassroots Nonprofit Organizations in an Innovation Society. (Master's Thesis). University of Minnesota
- Tuckman, B.W. (1965) Developmental sequence in small groups. Psychological Bulletin, 63(6), 384-399.

Tuckman, Bruce W., and Mary Ann Jenson. (2010) Stages of Small-Group
Development Revisited. *Group Facilitation: A Research & Applications Journal* 10: 43-48.b *Business Source Complete*. Web. 2 Feb. 2014.