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Beverly Little
Editor, Organizational Behavior and Leadership
Western Carolina University

Dale Henderson
Editor, Strategic Management and Systems
Radford University

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ACADEMY OF STRATEGIC AND ORGANIZATIONAL LEADERSHIP JOURNAL

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LETTER FROM THE EDITORS

Welcome to the *Academy of Strategic and Organizational Leadership Journal.* The Academy of Strategic and Organizational Leadership is an affiliate of the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The *ASOLJ* is a principal vehicle for achieving the objectives of the organization. The editorial mission of this journal is to publish empirical and theoretical manuscripts which advance the discipline, and applied, educational and pedagogic papers of practical value to practitioners and educators. We look forward to a long and successful career in publishing articles which will be of value to many scholars around the world.

The articles contained in this volume have been double blind refereed. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies.

We intend to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in differences we find learning; in differences we develop understanding; in differences we gain knowledge and in differences we develop the discipline into a more comprehensive, less esoteric, and dynamic metier.

The Editorial Policy, background and history of the organization, and calls for conferences are published on our web site. In addition, we keep the web site updated with the latest activities of the organization. Please visit our site and know that we welcome hearing from you at any time.

In this volume, the duties of the Editors have been divided to facilitate the referee process and to allow for more rapid response to the participants. Dr. Little will concentrate her efforts on the organizational behavior and leadership aspects of the manuscripts while Dr. Henderson will devote his attention to the strategic management and systems aspects of the review process. The submission process will occur through info@alliedacademies.org and each editor will receive the appropriate manuscripts for review.

Beverly Little, Editor
Western Carolina University

Dale Henderson, Editor
Radford University

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Manuscripts

PARADIGM SHIFT AND ORGANIZATIONAL CONFLICT: A FIELD STUDY

H. Albert Wittliff, The Pentagon
Larry R. Watts, Stephen F. Austin State University
Thomas M. Box, Pittsburg State University

ABSTRACT

This paper presents the results of a field study conducted at a regional telecommunications company. The focus of the study was on the paradigm shifts and related conflicts taking place during a time of organizational transition. Using Sandole's (1999) three pillar approach to mapping conflict and conflict resolution, data were collected for analysis. The results indicated that the roots of conflict were deep-seated and based on historical challenges within the organization that have carried to the new organizational form. With the implementation of a new organizational culture, however, efforts to shift the paradigm within the organization appear to be reaching a turning point.

INTRODUCTION

Conflict can assume a variety of forms from large-scale wars to interpersonal disputes. While often associated with negativity and harm, conflict is an integral part of change and growth. Understanding the role conflict plays in organizational change is important when trying to comprehend the situation and issues involved. This can be particularly true during times of organizational transition when conflicts emerge or escalate. When circumstances shift, old rivalries and disputes surface as the parties seek to better their position. Also, the change itself can yield new challenges and conflicts that take time and energy to address. In either case, change is both cause and effect of conflict.

This field study will focus on the paradigm shifts and related conflicts taking place within the company we call East Texas Communications (ETXCOM) as it transitions into a wholly owned subsidiary of the company we call Southwest Utilities (SWU) to become Southwest Utilities Communications (SWUCOM). To establish a framework for understanding and analysis, the concept of paradigm shift will be explored first. The operational setting will then be presented to establish the context within which the research was conducted. The situation is then analyzed within this framework to gain a clear understanding of the shifts and related conflicts taking place as the organization transforms. Finally, suggestions for managing the conflict and ideas to help lead toward resolution are offered.

THEORETICAL BACKGROUND

Changes in organizational culture and work methods evoke the concept of paradigm shift as described by Thomas Kuhn (1962). The changes come from ideas generated by challenges that the old system was unable to adequately handle. In the case of the companies we call East Texas Communications (ETXCOM) and Southwest Utility (SWU), changes in the nature of competition, leadership, and corporate structure is forcing the organization to reevaluate itself and to shift toward a new paradigm. Several questions arise when considering this situation:

- *What are the sources of this paradigm shift?*
- *What are the effects of this shift on organizational members?*
- *What form is the interaction between the two styles taking?*
- *And is the new paradigm taking over?*

While both the old and new camps are members of the ETXCOM and SWU staff their methods for resolving the same problem with similar outcomes are in many ways diametrically opposed. These questions are addressed by looking at the overall shift and the application of the new school of thought by the staff of SWU. In order to understand the transformation that is taking place, the concepts of paradigm shift and turning points must be elaborated. Also, the history of ETXCOM and the changes taking place as it evolves into a wholly owned subsidiary of SWU are provided to establish a context for further analysis of the situation.

The Concept of Paradigm Shift

Thomas Kuhn's (1962) philosophy helps to form the basis for understanding a paradigm shift. The paradigm of the old ETXCOM operation was one grounded in the methods used by a very select group of people. This group was seen as the "bosses" and as such were rarely questioned. Their belief that a clear division between management and craft was needed to do business was accepted because they were in charge and "knew what was best." As more people both within and outside the company began to question the traditional methods and outcomes, a dissonance was generated. Dissonance is the breakdown between the preferred state of affairs, what ought to be, and the actual situation at hand, what is.

The potential comparisons between the changes in the world of scientific study and the business world, for example ETXCOM to Southwest Utilities Communications (SWUCOM), are substantial. With the generation of dissonance ones paradigms are called into question. As world views are challenged anxiety is the result and this can yield a crisis. Due to this, Kuhn's work will be useful in not only understanding the paradigm shift taking place within SWUCOM, but also to understand the forces at work within the telecommunications industry. For the change from the old *Realpolitik* system to the new *Idealpolitik* system to take place, first the anomalies within the old system must be understood and then effectively communicated to the practitioners. Since perception is embedded in paradigms this is a difficult proposition.

As is demonstrated in Kuhn's "vignette number two," where he tells of the famous debate between the French chemists Proust and Berthollet in which the scientists argued across purposes within the same topic, language is often inadequate to express concepts even between peers. Knowing this leads to the question of how to allow professionals at SWUCOM to communicate the new methods of dealing with changes in the telecommunications market. In order to communicate the new ideas, their source must first be understood and then a greater awareness of the paradigm shift and its consequences can be gathered. As such, relating the research to Kuhn, the project will begin with the old methods of management as "normal science" and move through the anomalies that have led to the crisis and the beginnings of a "scientific revolution."

Turning Points

Paradigm shifts can also be seen as turning or tipping points. In any conflict, including a business in transformation, there are turning points. A shift in the perspectives or stages of a conflict comprises a turning point. There is a build up to the change and often the shift appears very abrupt. The cause of the change can come from multiple sources or a single force. No matter what the source, the concept of turning points has played an important role in understanding human dynamics. Kuhn addresses the concept of turning points as "paradigm shift." Kuhn demonstrates the progress of scientific thought using thesis and anti-thesis. That is, for a given idea or state of being, there is potentially an idea that will force the examination of the first. As these two ideas confront one another a new more developed paradigm will emerge. The process of building to the shift can be analyzed to help determine when it could take place and give some idea of the new paradigm that is to emerge.

The idea of turning points can also be considered using the still developing scientific concept of "chaos theory." In chaos theory a complex nonlinear dynamic system, such as a conflict, is considered from the perspective of an ongoing process rather than a steady state of being. Within such a complex system, changes can take place that take the system or process in a new direction. As a chaotic system destabilizes sudden changes in its direction, character, or structure can take place. These radical changes are called bifurcations (Gleick, 1987). When a bifurcation takes place, the system rearranges itself around a new order, or pattern, which may or may not resemble the prior one. The onset of these radical changes can be predicted, however, their outcomes can prove more difficult to anticipate with certainty. Using scientific concepts such as chaos theory can provide a different methodology for understanding the shifts that take place in any system including conflict in it's many forms.

The idea of turning points has wide reaching implications not only for the hard sciences but also the social sciences. In his recent work *The Tipping Point*, Malcolm Gladwell (2000) considers the spread of social thought. He points out that small events can lead to major changes. These changes in ideas or perspectives spread like epidemics through a society. Drawing on ideas from dynamic social models to psychology to memory and beyond, Gladwell considers how an idea can become infectious and spread through a society with a sudden burst of activity. This shift can take place even after years of slow change or even stagnation. What sets it off is a disequilibrium within a given system. Once the balance is thrown off in one direction or the other, the system will suddenly change to incorporate the new concept. His examples include the sudden drop in crime rates in New York City in the mid-nineties. In this case, the crime in certain neighborhoods was extreme until it rather abruptly decreased. Gladwell proposes that several small changes such as a booming job market, an aging population, and changes in policing strategies are all long term changes that were happening all over the United States. These causes themselves are not the reason that the tip took place. Instead there was a culmination of causes and their timing that led to the shift. A small number of people began to change the way they behaved and it spread quickly. Also, these small changes all led to a major change. Finally, the shift happened quite dramatically. These three characteristics: contiguousness, small causes with big effects, and a sudden change are the foundation of Gladwell's tipping point theory. These concepts are very applicable to a conflict and to understanding the point at which the parties tip toward considering ending or at the very least de-escalating the situation.

Each of these ideas: paradigm shift, chaos theory bifurcations, and tipping points are examples of turning points. Each gives a good perspective for understanding the dynamic of shift, particularly in a complex system. Organizational changes and conflicts are by their nature complex. With multiple parties, issues, motivations, and histories a given situation is a unique and chaotic system. By understanding the shifts taking place, the inherent flexibility in a conflict can be demonstrated (Druckman, Daniel & Mitchell, 1995). This flexibility can provide the parties with an opportunity to move towards peace by shifting their paradigm from a destructive path of confrontation to one of increased cooperation. The parties can work together moving toward positive interrelation if the tipping point can be found. As the forces at work within a conflict build and establish patterns, the opportunity for a turning point can present itself.

SWUCOM BACKGROUND

In the late 1800s an East Texas physician traveled to Chicago to attend a conference where he witnessed a demonstration of Alexander Graham Bell’s telephone. Excited by the demonstration, he contacted his close friend a local Judge. With his friend’s help, the first telephones were installed in his rural East Texas community in1898. By 1900 several additional businessmen had their own telephones installed. The two friends realized the business potential and with the addition of a third partner, they three installed a magneto switchboard that operated with "crank" energy. A total investment of $1500 and an office in a small room led to the beginning of the telephone company. After the physician’s death in 1908, his heirs and the Judge bought out the third partner’s interest and incorporated the business to form the East Texas Telephone Exchange (ETXTX).

In a nearby community, another businessman was intrigued by the opportunity in telecommunications and began his own telephone exchange. The similarity of the businesses and the proximity of coverage areas prompted the ETXTX leadership to acquire the new telephone exchange. The new combined organizations underwent many enhancements over the next several years. In particular, they installed more efficient dial systems to replace the existing "crank" system. This new system was installed by an engineer who later went on to become the first general manager of the company who did not have family ties to the founders. Beginning in 1956 other area telephone exchanges were acquired. The final major acquisition in 1963 prompted the consolidation of the operations and ETXTX became known as ETXFON.

The growth in service area was not the only major change for ETXFON. Until 1968 a member of one of the founding families had led the organization. However, in 1968 a non-family member became the president of the company. His successor, also a non-family member, achieved industry leadership by investing in the latest technology and focusing on customer satisfaction. Technological advancements made major strides in the 1980's when ETXFON converted to digital switching. ETXFON led the way as the first telecommunications company in the United States to install a Northern Telecom DMS 100/200 switch. In 1986 the final portion of the company made the switch to digital and ETXFON became a completely digitally switched system. Technological leadership has continued as an organizational focus.

Major charges have also taken place within the structure of ETXFON. In addition to the consolidation of geographical operations, developments in the competitive environment have presented opportunities for service expansion. The deregulation of long distance service and the split-up of Ma Bell led to the conception of a new company, ETX Long Distance. In 1996, ETXFON and ETX Long Distance were combined under the umbrella of a single holding company, East Texas Communications (ETXCOM). This new organization was acquired by Southwest Utilities (SWU) in 1997 as a wholly owned subsidiary and became known as Southwest Utilities Communications (SWUCOM).

Southwest Utilities and a New Paradigm

During its history, ETXCOM developed a business culture centered on a clear division between management and "craft" employees. Also, providing services in the East Texas region was essentially a monopoly. With the de-regulation of telecommunications and the advent of competition, ETXCOM was forced to evolve in order to survive and succeed. A first step was the merger of SWU and ETXCOM. This expanded the resources available to ETXCOM and SWU as individual units. However, there are now two overarching paradigms to integrate. This has also led to attempts to shift the business culture within the SWUCOM portion of the newly formed SWU. The division between management and "craft" workers has expanded over time and has led to long term conflicts. Also, the monopoly perception is not functional for the new competitive environment. In November of 1997 SWU purchased ETXCOM. This critical turning point led to the beginning of the new business culture and paradigm at the newly formed SWU. The new leadership has sought to flatten the organization and improve information sharing across the company. Also, the new leadership of SWU is trying to transform the way the staff considers and accomplishes its work. The goal is to create a more open and interactive work environment in which employees in all fields and at all levels can embrace their work and achieve greater job satisfaction. The outcome of this new business culture is hoped to be a more enthusiastic, creative, and efficient work force that can adapt and succeed in the evolving business environment. In an effort to reach these goals, SWU has adopted a new set of organizational standards for the company. Using the principles from *Gung Ho!* the leadership of the SWUCOM portion of SWU is hoping to tip the environment of SWU towards this new culture.

Gung Ho

In its effort to encourage change within the organization, SWU and SWUCOM sought a resource to use as its cornerstone. The management techniques in Ken Blanchard and Sheldon Bowles' (1998) book *Gung Ho!* have been adopted as the guidelines for how the transformed organization should operate. The book tells the story of Peggy Sinclar and Andy Longclaw and their efforts to shift the situation at Walton Works plant #2 from being on the verge of shut-down to being one of the most efficient in the whole company. SWU and SWUCOM have sought to apply the principles of *Gung Ho!* to their organizations operations in an effort to increase efficiency, boost morale, tip the overall personality of the company in a more positive direction.

The Gung Ho process is based in three principles or pillars, the Spirit of the Squirrel, the Way of the Beaver, and the Gift of the Goose. Each of these metaphors outlines a facet of a successful business operation. The book relates the story of how Andy Longclaw taught the principles of Gung Ho to Peggy Sinclair and their combined efforts to re-energize Walton Works #2. SWU and SWUCOM has sought to apply these same teachings within its own organization as it attempts to achieve a paradigm shift and transform into a stronger team working towards a shared goal.

The Spirit of the Squirrel has its foundation in the principle of worthwhile work. Initially, this principle seeks to instill the concept of ones work making the world a better place. This is accomplished through learning as one works, seeing the benefits of the work, and achieving the self-esteem that comes from learning and understanding. Next, Gung Ho teaches that everyone should work towards a shared goal. To achieve this, the group must be given the opportunity to help set the overall goals of the group. Managers set critical goals, but the rest are set and reached for by the staff. If the team rather than just the management set these marker posts, there will be buy-in on the part of the group as a whole that will help to reach the goals. Finally, a foundation of values is given focus. With clear values that the group can support, an anchor that the team can count on is created. If the members of a working team all hold the same values there will be less concern over the actions of others. Through demonstration the team can realize these values and achieve their goals.

The Way of the Beaver, is grounded in the concepts of clear guidance and control over the processes used to achieve the goals of the team. By clearly defining the parameters of the process and then letting the staff work freely within those boarders each member is more likely to achieve their goals. This pillar teaches that the organization must be supportive of its members and that each member should be valued for their perspectives and input. Next, information must be shared among all members of the group. Through sharing information and control a manager can gain a great deal more from the team. Finally, the goals of an organization should be challenging but reachable. Failure to reach a goal can be demoralizing, however, underestimating the abilities of a team can be equally negative. By setting reasonable parameters and goals and letting the team take personal responsibility, the organization can achieve those goals in a timely and positive fashion.

The Gift of the Goose teaches that through being supportive the team will be more successful. Through active and passive congratulations team members are affirmed and the team will gain positive momentum towards its goals. Next, the team should encourage not just reaching the goal, but also the progress towards the goal. By giving specific, personal congratulations and focusing on positive events rather than negative ones, the encouragement is consistent and valuable to those receiving it. Finally, having a clear mission and control over reaching it makes for worthwhile work. By supporting this work through both congratulations and monetary rewards enthusiasm is boosted and so is work quality and effectiveness.

ANALYTICAL FRAMEWORK

Data Collection

This field study utilized multiple data collection methods. These methods included archival research, interviews with SWU and SWUCOM personnel, and direct observation. Each method provided unique insights into the various aspects of the situation and context required for analysis (Frankfort-Nachmias, Chava & Nachmias, 1996). Archival research included historical and business background information on SWUCOM. SWUCOM's publication, *Connections*, provided insight on activities within the organization including the new perspective management and staff are trying to establish regarding their work and interaction. Also, these publications afford a record of past steps taken to shift the organization to its new paradigm. Next and most importantly was *Gung Ho!* the management text being used as the guideline for establishing new business practices. This resource has been provided to the entire staff in an effort to gain a consistent plan for transforming the organization.

Since the shift taking place at SWU is ongoing, archival sources can provide only a foundation for further research. Thus, the most critical information must be collected first hand by the researcher. In this case, the most readily available resource for original, self-generated data is that of interviews (Frankfort-Nachmias, Chava & Nachmias, 1996). During the field study management and staff of SWUCOM were interviewed. Since these individuals make up the organization in transition, their first hand experience and perspectives provide invaluable information about the situation. The interviews were open-ended and informal, and served to gain insight into the interviewees' perceptions on the change in business culture and the resulting conflicts taking place. A total of twelve members of the staff were interviewed. These interviewees represent a broad cross section of SWUCOM employees. Representatives came from both the management and "craft" sides of the organization. Also, the personnel came from many different divisions within the company, including internal communications, information technology, financial, program management, union representation, and upper level management. The interview sample was non-random and designed to capture as broad a spectrum of the company as possible. The interviews focus on impressions of the shifts taking place within the business culture and the conflicts that are surfacing because of it. Opinions of the methods being used to tip the situation and their successfulness were sought as the primary information in the interviews. Also, personal stories of actual events were solicited to gain a better understanding of the overall situation, the changes taking place, and the related implications.

The final method used for collecting information was direct observation of staff interactions, especially when they were dealing with the challenge of transforming the business culture. By witnessing actual meetings, a more complete perspective on the situation was gained. In particular the opportunity to not only observe but also to participate in a facilitated workshop held by SWU provided tremendous insight into the problems and challenges facing the team. While it was a concern that the presence of an outsider could adversely affect the group's interaction, this did not appear to be an issue. Having previously interviewed members of the staff, and being from the local community, the researcher was not viewed as an outsider.

Data Analysis

In order to aggregate and develop the data from the various sources involved in the field study Dr. Sandole's (1999) model, as described in "A Comprehensive Mapping of Conflict and Conflict Resolution: A Three Pillar Approach," was used. This model is suggestive of a "generic theory" which is useful in that it attempts to identify the "common elements" involved in conflicts as a whole and for organizing information on specific conflicts. The three pillars serve to focus on the conflict, its causes and conditions, and options for intervention. Pillar 1, which is the center column on the map, makes it clear that the conflict is the focus of the model and the primary subject matter of the research and analysis. The other columns, Pillars 2 and 3, hold flanking positions since they can not be addressed without a fully developed understanding of Pillar 1. The environment in which the conflict is taking place and the options for preventing, managing, resolving, or transforming it are secondary and dependent upon comprehension of the core problem, the conflict. The first Pillar has several categories that provide a framework for organizing and analyzing the elements of the conflict itself. The first category is that of the parties involved in the conflict. While the parties can be individuals, groups, organizations, and so on it is the individual that makes up the central unit, since individuals are decision makers at all levels. Identifying the parties and their roles in the conflict is at the heart of understanding the situation. The next category is that of the issues of the party and the conflict. This element focuses on identifying not only the points of contention the parties claim to be in dispute about, but also in uncovering hidden agendas, buried concerns, and the overlap of topics, both overt and hidden. These issues can take on many forms form control over resources or information to ideological values. Most conflicts will have multiple issues that are interrelated in a very complex system and as such, proper identification is crucial. The objectives of the parties are another central element required for analyzing the conflict. Whether the group wants to maintain the status-quo or make a change to some other system, knowing the objective provides insight into the conflict and potential options for resolution. Many conflicts are characterized as zero-sum in which one party must loose for another to win and reach its objective. Such conflicts are potentially destructive and difficult to manage or settle. Another central element is that of the parties' means which are the resources available to a party to achieve its goals. The next area of information in Pillar 1 is that of the orientation of the parties. Simply put this is the perspective or culture of the parties. Determining whether they are competitive or collaborative, for example, is valuable not only in predicting turning points in the conflict, but also for generating solutions. Finally, the first Pillar is concerned with whether or not the conflict exists in an environment that contains mechanisms for addressing or resolving the conflict. Through identifying the elements in Pillar 1, a clearer understanding of the conflict can be attained.

The next portion of the map, Pillar 2, addresses the causes and conditions of the conflict. This aspect of the model focuses on the levels at which the conflict is operating. Most conflicts will occur on different levels. While an intra-organizational conflict is perceived predominately at that level, there is likely activity on the inter-group and interpersonal levels as well. In such an instance, the efforts to deal with the situation must take into account elements on the individual and societal levels. The complexity of conflict requires a dynamic method for conceptualizing its various aspects. By taking into account the multiple facets of a conflict and the levels at which it takes place, a potential method for resolutions can begin to be developed.

Pillar 3 addresses methods for conflict intervention on the part of potential third-parties. In order to deal with the conflict, the most appropriate method must be selected. Once the conflict and its causes and conditions have be analyzed, an intervention can be developed within the third Pillar that will best suit the complexity of the specific conflict. In some cases, for example, managing a conflict may be the best solution if the conflict is overt and would require a great deal of work to resolve. Other situations could call for resolution efforts to address the underlying causes of and existing conflict or transformation which seeks a win-win scenario to all the participants to move beyond a potential conflict. In any conflict, applying a method such as the three pillars for comprehensive mapping will provide a third party with the structure needed to analyze the conflict, take into account its causes and conditions, and to develop the most appropriate plan for a successful intervention.

ANALYSIS

In the specific case of SWUCOM and SWU the conflict is quite complex and certainly sensitive. During the term of the field study, the application of the three pillars helped to clarify the conflict. Also, it provided an excellent method to integrate theory with practice during an actual organizational conflict. Overall, it appears that the roots of the conflict run quite deep and were based on historical challenges within SWUCOM that have carried over to SWU. However, with the implementation of a new business culture, the efforts to shift the paradigm within the organization appear to be reaching a tipping point.

Pillar 1: The Conflict

The conflicts taking place within SWUCOM are highly complex and multilevel. While the parties, interests, and objectives of the situation at SWU cross several levels, this work focuses on the challenges being faced within the SWUCOM portion of SWU. Other levels do play a role in this conflict and will be addressed, but the issues being dealt with at SWUCOM are at the heart of the organization's challenges for shifting its business culture.

The parties within the conflict fall into two levels of primary and secondary. On the primary level there are two core parties. The organizational structure of SWUCOM has historically been divided into Management, salaried, non-union employees, and "Craft", hourly waged, unionized employees. Over the years, this division has become readily apparent to staff on both sides. The two parties view each other with varying degrees of animosity depending upon the situation involving their interaction. This split is the most significant within SWUCOM with regards to their current difficulty in shifting cultures. On the secondary level there are rivalries between two geographical portions of SWUCOM. This division has a long history as well, involving a perception on the part of one locality that the other takes a superior stance and looks down on the smaller of the two operations. While there are management and craft issues at both sights, the addition of the location element further exacerbates the issue. Another secondary party is the Home Office contingent of SWU. This group represents an outside management entity who's involvement with SWUCOM is that of external oversight. While SWU allows SWUCOM to operate independently, should the Gung Ho! effort fail, SWU could take over direct control of SWUCOM or perhaps even sell it off. Finally, the Communications Workers of America (CWA) make up another secondary party. This organization represents the craft employees to the management. Needless to say, as a national organization, CWA has its own issues and agendas that have impacted the situation SWUCOM for some time. While there are certainly additional external parties and other divisions within the organization itself, these parties are at the core of the conflict over the current paradigm shift.

The issues that underlie the conflict within SWUCOM are all part of an interconnected system of problems that impact one another in varying degrees at different times. The first issue involves the lack of trust on the part of the craft personnel with regards to management. This is rooted in a history of perceived mistreatment and numerous failed attempts to reshape the business environment. The craft staff is suspicious of the motivations of management in seeking to transform the business culture. It is believed among a portion of the craft personnel that participating in such an effort is a waste of time as "nothing ever really changes." Many within SWUCOM feel that there is a lack of a clear focus on the importance and impact of their work without which, it is difficult to believe the work is worthwhile. The lack of proper training for all staff, especially new managers, on issues of skills and new business cultures has proven to be a stumbling block. Much of the staff mistrusts new ideas and hold grudges due to past indiscretions and failed attempts at business improvement. Another important issue is a perception that much of management is unwilling to share information and power that they have worked to gain. This has let in many cases to managers who issue ultimatums rather than working with their staff to achieve a specific goal. The concept of positional validations, that is that the boss is always right, is a good example of the unwillingness to share control and a major snag in achieving a positive and adaptable environment. Also, the categories of management and craft are misleading as not all "management" personnel work as managers. With inaccurate lines drawn and a failure to communicate across and within groups, the environment is not one of a unified team. In fact, the problem that came up time and again during interviews and meetings was that the "us vs. them" mentality is rampant at SWUCOM and SWU. The "us" and the "them" is often perceived as the division between the primary parties, but can also be applied to secondary parties. This mind set is the central cause to the conflict taking place within SWUCOM and must be addressed in an open an positive format if it is to be transformed.

The objectives of the parties are also exist on multiple levels some overt other hidden. Overtly, an overarching goal from the position of SWU as an organization is to have an adaptable working team that can compete with AT&T and South Western Bell. From the perspective of management, a major goal is to create a more positive work environment that will improve efficiency and moral. A freer exchange of ideas and less restrained interaction between staff members is viewed as crucial to creating a more flexible organization. Most of the staff are seeking an open and enjoyable work environment. Also, the union membership is seeking to protect is members and to improve their benefits. The hidden agendas are, needless to say, a major source of problems for the company. Many individuals have worked hard to achieve their positions and are unwilling to share their power and information. In some cases a change is threatening to some individuals so they seek to prevent it. Finally, making compromises can often be interpreted as weakness. Different aspects of the organization, such as managers and the union are concerned over making concessions that they believe will weaken their overall positions within the organization both now and in the future.

The means available to each of the parties is fairly clear. Management controls the overall direction of the company and have leadership authority. Craft personnel make the systems and operations work and can slow or even prevent operations. Also, the Home Office portion of SWU has ownership and financial control over the organization as a whole. Finally, the union has the power of a national organization and can influence the craft personnel. In all of these cases the use of each parties means in a positive sense can move the company towards its goals. On the other hand the abuses of these powers are the resources that can be call upon in order to further individual or sub-group interests at the expense of the team.

The orientations of the conflict can take on almost every form at some point in the situation. In some cases the conflict is quite confrontational with parties directly at odds with one another and taking direct steps to subvert or gain an upper hand. The "us versus them" mentality is the best and most important example. This is a clearly damaging situation that has to be shifted in order for the organization to transform. At other times the conflict is ignored and avoided. This can be as damaging as a confrontational orientation in that the problems are not addressed and as such are not resolved and can often escalate. In both cases inertia is a large part of why the problem is not addressed in a more cooperative fashion as is needed. The perception that "things never change" prevents an interactive problem solving environment that can encourage transformation.

When taking into account the conflict environment at SWUCOM it is important to point out that with new direction and goals, there are attempts being made to better address the situation. While in the past there were not many resources available to deal with the problems, the new organization is taking a direct interest and is addressing the challenges with resources and methods intended to overcome the conflicts. While there are still major issues with failure to share information and power, there are direct attempts to level to playing field. Management makes itself very available for consultation and idea sharing. This new environment is a very positive aspect of a conflict that has numerous issues and challenges that will take a great deal of time and effort to transform.

Pillar 2: Causes and Conditions

The conditions of the situation at SWUCOM and SWU are multi-level. There are issues at the interpersonal and societal levels. At the societal level the causes are more obvious and can be addressed more directly. Naturally in any business situation economic factors play a major role in the conflict. The overall SWU organization seeks to increase its revenue and expand its business. Management wants to improve the organizations financial standing so that they can reap rewards. The craft personnel want to improve their own income as well. In all of these cases the perception of zero-sum budgets cause the parties to try and protect their own monetary situation to the point that it prevents new creative options for the organization. Linked to these economic factors are political and social ones. Certain actions are considered inappropriate politically and therefore can not be acted upon even if it is best for the company. These can include direct confrontations between leaders and firing of individuals who are members of the union. In both of these cases there could be good cause for action, but the politics of the situation prevent them from action being taken. Another political problem worth noting is that while the Home Office has endorsed the Gung Ho! process for SWUCOM they do not apply it to their own organization. This causes some friction and should be addressed. Socially there is a culture of suspicion and mistrust within the organization. While it is subtle it is most certainly present at SWUCOM and it is a major source of conflict as related to the issues in Pillar 1. A good example of the political and social factors and their impacts is that the committee created to deal with the challenge of shifting the culture and resolving the conflict is made up almost exclusively of management staff. With only one "craft" member, one of the primary parties has woefully inadequate representation in the sessions and as such the problem solving process does not receive a great deal of support from the under represented party.

On the individual level, the issues are less clear. Due to the culture of mistrust and a history of failed attempts to reengineer interaction within the organization there are certainly psychological blocks to achieving transformation. Members of SWUCOM who have been with the company for a long period of time find it hard to change their perspective and to overcome their fears and concerns related to the past. On the other hand, new personnel, especially the new management are frustrated at the difficulty in shifting the culture to a new positive environment. This clash is especially difficult since some parties know nothing but their culture of mistrust while other have seen a positive environment and find it difficult to understand why making the change is so time consuming and resource intensive.

The frustration felt due to long standing structural conflicts at SWUCOM have cause some parties to have little faith in a new business culture. They are used to an environment that is adversarial, based on the power of the parties involved, and typically takes a win-lose approach to conflict resolution. On the other hand, there is an effort under way to shift to a culture in which communication and problem solving are encouraged and conflicts are addressed from a win-win perspective. The clash between two such paradigms is an important aspect of the conflict taking place within SWUCOM and SWU must be considered on an individual as well as organizational level in order to resolve the conflict.

Pillar 3: Intervention Options

Attempts to change to situation at SWUCOM are already in full swing. The adoption of a central model for change is a positive one. *Gung Ho!* is providing the organization with a clear way to try and change their business culture towards the kind of environment they want. The concepts are clear and easy to understand which make them useful for broad based application. On the down side, some members of the organization find Gung Ho! to be a bit "hokey" and do not take it very seriously. Another problem is its introduction in pieces. One principle without the others is difficult to understand and to appreciate. A good step toward making the change would be to implement all of the concepts at once and accept that modifications and improvements will take place over time. Also, the concepts should be presented in a less literal fashion and have the story of Gung Ho! and its squirrels, beavers, and geese serve as a metaphor for a better business environment.

Since much of the causes of the conflict are very deep seated and effort to simply resolve them is not a good approach. Instead an effort to transform the conflict to a more positive situation. The long term relationships of the parties involved must be given focus so that when incidents take place that could cause a flare-up, the parties instead will seek a more collaborative method for handling the problem. In an effort to achieve this a third-party is a valuable asset to help conduct cooperative processes such as facilitation sessions, training, and problem-solving workshops. These efforts should all be linked to very clear goals and take in small phases. The current use of a facilitator by SWU is a positive step and should be continued. A modification to the sessions would be to provide a very clear set of goals for each meeting and for the time between sessions. In the observed session there were numerous good high level concepts discussed. The group had fun and there was a great deal of team building taking place. However, without addressing concrete issues and setting clear goals these sessions are less useful. The development of a very clear mission, values, and vision would be an ideal problem to work on in such a session. By producing tangible results, the rest of the organization can more easily support the proposals and ideas coming out of the sessions.

Also, as mentioned above the committee is made up almost solely from the management party. This lack of balanced representation does not allow for genuine cooperative problem-solving. Even when the ideas are taken back to the remaining staff by managers, there is no sharing of ideas across divisions so communication and information sharing stove-pipes will remain. Also, the members of the staff who are not involved or do not have adequate representation will lack buy-in to the concepts coming out of these sessions.

In the near future, SWUCOM and SWU would benefit greatly from providing training on topics such as business culture transformation and conflict resolution. These types of training should be provided by outside, third-parties who specialize in such fields and can provide more objective and less biased instruction. Such training should be focused on the leadership from all parties. If a more even spread of personnel are taken from across the spectrum of parties and are trained, they can then pass their knowledge on within their own groups and provide a source information sharing and consistency across the parties.

Another valuable step would be to conduct a strategic planning session. The goal of such a session would be to work collaboratively to develop the mission, values, and vision for the organization. Rather than the leadership, and in particular outside leaders at SWU Home Office, developing these important milestones, the team at SWUCOM should be given the opportunity. A mixed group with representatives from all of the various parties, management and craft, SWUCOM, Home Office, etc., should be brought together to accomplish this goal. If the mission and values are developed with multiple party perspectives that receiving more balance representation, they will have greater significance for the team and will be better suited to its needs. The same can be said of the vision, in that if the group as a whole helps to establish the long-term goals, they will be more likely to support and work towards them. This vision statement would be a “living” document that would need to be up-dated whenever the team needs to reevaluate their long-term goals. Finally, this session would provide an opportunity to clearly identify the major focus areas of the business, who the point of contact or “champions” of each are, and determine the best structure for future work. This will provide a more streamlined and dedicated operation and with clearer lines of communication to help achieve the vision developed by the team. A strategic planning session would then need to have regular follow-up meetings to provide status checks and up-dates and modifications to the vision as needed.

The final step required to the business culture paradigm shift to be successful is already being addressed by SWUCOM. That is to have fun and work towards building confidence and team work ethic. Initiating programs that support good work and encourage the group not only to work together but also to have fun together are already being implemented. Also the elimination of titles such as “Management” and “Craft” or “President” and “Technician” and instead moving towards the overarching title of “Associate” helps to take the focus away from one’s position and put it more squarely upon the work. Additionally, the leadership is making itself accessible to the entire staff and is attempting to interact more openly with all parties within the company. One example is that of the President of SWUCOM having lunch with the “craft” personnel and going on “ride alongs” with technical staff as they work in the field, rain or shine. Effort such as these on the part of the entire staff will serve a confidence building measures (CBM) for all aspects of the team. While all of these steps are useful, and the implementation of other more tailored steps, such as strategic planning, would also help to increase confidence, provide focus and boost support and moral, the whole process will take time. The conflicts at SWUCOM are deep seated and will not simply go away because of new efforts. It will take time and effort to improve the situation, but the team at SWUCOM is off to a good start and will be successful as long as they work together in an open and collaborative environment.

CONCLUSION

Conflict and change go hand in hand. The change is often the source of conflict. By gaining a deeper understanding of changes taking place in a given situation, a clearer perspective on the related conflict can be developed. Paradigm shift, such as the one taking place at SWUCOM, is radical change over a short period of time. When such shifts take place, the turning point at which the situation clearly changes is often times a revelation to the parties involved. By gaining awareness of the buildup leading to a shift and understanding the elements involved, the turning point can be anticipated. The parties can then adapt to the pending shift in the way best suited to their needs and goals. Undoubtedly, paradigm shifts can serve as a cause of conflict or as an escalating factor. However, shifts can also lead to de-escalation and even the resolution of a conflict.

In the case of SWUCOM the shift that is taking place is a current source of escalation in a complex and long-standing conflict. The new situation, leadership, and direction of the organization are providing an outlet for old grievances as well as causing new conflicts. The lack of faith in positive change is linked to the equally strong hesitance to embrace change. These two perspectives are at the heart of the conflict that is being faced at SWUCOM. Through careful analysis of the dynamic issues involved with the paradigm shift and the related turning points, studying those from the past and preparing for those in the future, the conflict can become a positive event that allows SWUCOM to evolve in to SWU in the best manner possible.

An understanding of paradigm shift is a useful tool in analyzing any conflict. By gaining a clearer perspective on the situation and the changes that are taking place, a more effective approach can be taken to anticipate and even influence the turning points that shape it. Analyzing and preparing for paradigm shift is a useful step in understanding any situation or process in which change takes place. Since change is prevalent in so many facets of life, awareness of paradigm shift and turning points is useful in many situations. By breaking down the elements involved with change and analyzing the implications and interactions, the conflict that often arises can be addressed in a positive and constructive manner that allows the situation to evolve along a beneficial course.

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THE EFFECTS OF FUNCTIONAL FIXATION ON RELATIVE PERFORMANCE EVALUATIONS

Margaret N. Boldt, Murray State University

ABSTRACT

Relative performance evaluations require evaluators to assess managers' performance levels, relative to the performance of other managers who face the same operating conditions. When accounting-based performance measures are used for relative performance evaluations, evaluators must filter out the effects of common factors that differentially affect those measures. Research has demonstrated that accounting information users frequently exhibit functional fixation by fixating on accounting measures and failing to adequately adjust their decision processes when the method of calculation and/or the outcome of an accounting measure changes. This study uses a relative performance evaluation task to investigate the hypothesis that the size of errors from functional fixation varies with context.

The direction of a change in performance measure outcomes (increase versus decrease) and ambiguity (high versus low) were manipulated in a 2 X 2 between-participants experiment. The results indicate that the size of errors in evaluations varies with the direction of change in performance measure outcomes. Specifically, the hypothesis that errors are larger when performance measures decrease was generally supported. The hypothesis that errors are larger in more ambiguous contexts was partially supported. The implication is that management accountants should provide evaluators with performance measures that remove the effects of common factors.

INTRODUCTION

Prior analytical research (e.g., Holmstrom 1979; Lazear and Rosen 1981) has demonstrated the benefits of using relative performance evaluation when it is costly to measure each manager's effect on firm profitability. Further, survey research (Reece and Cool 1978; Dean, Joye and Blayney 1991) has found that many manufacturing companies rely on accounting-based relative performance measures in evaluations. The implementation of relative performance evaluation requires evaluators to make judgments about a manager's performance, relative to the performance of peers who faced similar conditions. Specifically, the effects of common factors (e.g., economic booms or busts that affect the entire firm) should be filtered out of managers' evaluations (Holmstrom 1979; Diamond and Verrecchia 1982).

Accounting research (e.g., Ashton 1976; Luckett, Briers, and Chow 1995) has shown that decision makers often suffer from functional fixation, the inability "to look behind the labels attached to accounting numbers..." (Bloom, Elgers, and Murray 1984, p. 1). That is, decision makers functionally fixate on accounting measures and persist in reacting the same way to data when some change has made this reaction inappropriate. Functional fixation, in turn, may prevent evaluators from filtering out the effects of common factors when accounting-based performance measure outcomes are differentially affected by common factors (e.g., return on investment percentages will be differentially affected when divisions have different degrees of operating leverage). Further, psychology research has shown that the direction of a change (e.g., a gain or loss) (Kahneman and Tversky 1979; Tversky and Kahneman 1992) and the amount of ambiguity (Einhorn and Hogarth 1985) affect individual decisions. Therefore, the effects of functional fixation on performance evaluations may vary with the direction of change in performance measure outcomes and the level of ambiguity.

If evaluators do not filter out the effects of common factors when evaluating managers, then the provision and use of peer performance measures may not be useful. For example, suppose the Federal Reserve raises interest rates. In turn, fewer consumers purchase new homes and require new household durable products. As a result, a household durables manufacturing firm experiences a firm-wide sales decline so that all divisions' sales decline by the same percentage. Further, this firm utilizes relative performance evaluation and generally relies on return on investment percentage (defined as Income/Investments) as a primary performance measure. If evaluators properly apply relative performance evaluation, then the effect of the sales decline that is attributable to the Federal Reserve's action should be filtered out of managers' evaluations. However, a fixated evaluator will continue to assess managers' performance levels based on their relative return on investment percentages, even though the divisions' return on investment percentages are differentially affected by the sales decline because of differing degrees of operating leverage, average contribution margin ratios, etc.

This study uses an experiment to investigate whether the size of errors from functional fixation varies in different contexts. Two independent variables are manipulated: (1) the direction of change in the performance measure outcomes (increase versus decrease) and (2) the level of ambiguity (high versus low). The experiment requires participants to review a performance measure history and an evaluation history for several divisional managers. In addition, expected performance measure outcomes and evaluations for the upcoming period are provided. Then, a common factor, which differentially affects accounting-based performance measure outcomes for the divisions, is described. Importantly, participants are provided with enough information to ascertain that the difference between expected and actual performance measure outcomes is entirely attributable to the common factor. Finally, evaluations of the divisional managers are elicited.

The differences between elicited and expected evaluations measure the size of errors from functional fixation in each treatment condition. The results support the hypothesis that evaluations contain larger errors when performance measure outcomes decrease rather than increase. Next, although the effect was not significant for all evaluations, the results suggest that extremely ambiguous contexts affect the size of errors in elicited evaluations.

The remainder of this paper proceeds as follows. Section II develops the hypotheses. Section III describes the method while Section IV discusses the results. Finally, Section V provides some concluding remarks and discusses implications of the findings.

THEORY AND HYPOTHESES

Functional Fixation

Psychology research has shown that individuals functionally fixate on the use of an object and are slow to discover new uses for it (Duncker 1945; Birch and Rabinowitz 1951; Adamson and Taylor 1954; Flavell, Cooper and Loiselle 1958; Glucksberg and Danks 1967). Specifically, psychology researchers have investigated the behavior of individuals attempting to find new uses for objects (e.g., candles, boxes, matches, tacks) after undergoing training with the object for some other use (see Ashton 1976 for a review of this literature). In accounting, Ijiri, Jaedicke and Knight (1966) speculated that functional fixation may prevent decision makers from adjusting to changes in accounting methods. Several accounting studies (Ashton 1976; Chang and Birnberg 1977; Swieringa, Dyckman and Hoskin 1979; Dyckman, Hoskin and Swieringa 1982; Bloom, Elgers and Murray 1984; Barnes and Webb 1986; Hand 1990; Luckett, Briers and Chow 1995) have investigated extensions of this hypothesis and found that many decision makers fixate on accounting measures.

Chang and Birnberg (1977) delineate two distinct varieties of functional fixation. First, decision makers may not adjust their decisions when the method used to calculate the data changes. An inability to adjust to a LIFO-FIFO switch would provide evidence of this first type of fixation. Second, decision makers may not respond to a change in outcome when the method of calculation does not change. An example of this second type of functional fixation would be an inability to adjust decisions when cost standards change. Chang and Birnberg (1977) found evidence that decision makers have difficulty adjusting to a change in outcome (i.e., the second type of functional fixation).

While a firm rarely changes its method of calculating a particular performance measure, common factors frequently lead to changes in performance measure outcomes. For example, economy-wide booms and busts affect divisional net income levels and return on investment percentages that are then used in performance evaluations. Hence, evaluators reviewing performance measure outcomes may react inappropriately if they fixate on accounting-based outcomes. That is, evaluators may fail to adequately adjust performance evaluations when performance measure outcomes change because of a common factor. The above discussion leads to the first hypothesis (stated in the alternative form):

H1A: When a common factor causes a change in accounting-based performance measure outcomes, evaluators will functionally fixate and evaluations will contain errors.

Framing

The size of errors in performance evaluations may vary with the direction of change in performance measures. Psychology research (Kahneman and Tversky 1979; Tversky and Kahneman 1992) has demonstrated that individuals' value functions have different shapes for gains and losses. In Kahneman and Tversky's Prospect Theory (1979), value functions have two arguments: (1) the initial asset position, or reference point, and (2) the magnitude of change from the initial position. Changes in value framed as gains, or increases relative to the reference point, follow a concave utility function while changes in value framed as losses, or decreases relative to the reference point, follow a convex utility function. Further, decision makers exhibit loss aversion (Tversky and Kahneman 1992) which implies that decreases and increases of the same magnitude do not lead to equal amounts of change in utility; the loss in utility from a decrease is greater than the gain in utility from an increase. Hence, decision makers may react differently to increases and decreases in performance measure outcomes.

The different shapes for gain and loss value functions do not necessarily imply that evaluators are more or less likely to fixate on accounting measure outcomes. However, the framing of a change in performance measure outcomes may cause fixated evaluators to respond differently to increases and decreases. Lipe (1993) investigated the outcome effect using a task that required subjects to evaluate, on an interval scale, a subordinate's variance investigation decision. Her results demonstrated that evaluations were affected by how evaluators framed the decision's consequences; evaluators penalized decision makers more when expenditures associated with the decision were framed as losses than when they were framed as costs. Specifically, it is predicted that evaluators who fixate on performance measure outcomes will penalize managers more for perceived decreases than they reward managers for perceived increases. The second hypothesis is as follows (stated in the alternative form):

H2A: When a common factor causes a change in accounting-based performance measure outcomes, the errors in evaluations when the performance measure outcomes increase are smaller than the errors in evaluations when the performance measure outcomes decrease.

Ambiguity

The variability of historical performance measures may also impact the size of errors from functional fixation in performance evaluations. Highly variable performance measure histories (i.e., there has been a wide range, both over time and between divisions, of divisional performance measure outcomes in the past) are ambiguous because they report dissimilar signals about performance to the evaluator. Thus, highly variable performance histories do not allow evaluators to rule out sets of distributions for future performance measure outcomes as implausible. For example, consider two divisions that operate in comparable contexts. One has generated return on investment percentages that have varied between 20% and 30% over the last ten years. The other division has earned return on investment percentages that have varied from 0% to 50% over the same time period. When considering the probability that return on investment percentage will be some value in the coming evaluation period, evaluators are more likely to eliminate distributions that include values below 20% and between 31% and 50% for the first division. In contrast, these distributions cannot be eliminated as implausible for the second division. That is, evaluators are more uncertain about the appropriate distribution to utilize in the case of the second division. This second-order uncertainty makes the context more ambiguous for evaluators of the second division. Ambiguity, in turn, may affect the size of errors from functional fixation in performance evaluations.

Einhorn and Hogarth (1985) argue that high ambiguity leads to weak expectations and, hence, surprise at an unexpected outcome is unlikely. Thus, when the performance measure history is highly variable, evaluators may not be surprised by the change in performance measure outcomes. As a result, these evaluators may not consider how the performance measures are generated and, thus, are more likely to fixate on performance measure outcomes and make larger evaluation errors.

In contrast, low ambiguity leads to strong expectations and surprise at an unexpected result is likely. Einhorn and Hogarth (1985) do not predict how decision makers will resolve this surprise. However, they suggest that decision makers use simulation processes to assess the underlying generating process and make judgments under ambiguity. Intuitively, this simulation process may lead evaluators who are surprised at unexpected outcomes to consider various reasons for the change in outcomes. In turn, these evaluators are more likely to recognize that the performance measure outcomes changed because of factors affecting all managers. Thus, evaluators in a low ambiguity context should make smaller errors than evaluators in a high ambiguity context. Formally, the third hypothesis is as follows (stated in the alternative form):

H3A: *When a common factor causes a change in accounting-based performance measure outcomes, the errors in evaluations when historical performance measure outcomes are more ambiguous are larger than the errors when historical performance measure outcomes are less ambiguous.*

METHOD

Overview

The experiment provided participants with background information about a fictional firm as well as historical performance measure outcomes (i.e., return on investment percentages) and evaluations for several divisional managers. In addition, the task presented expected evaluations and performance measure outcomes for the upcoming period. After seeing actual performance measure outcomes, participants were asked to evaluate the divisional managers for the period.

Participants

The task was distributed during class meeting times to graduate business students who were enrolled in graduate accounting courses at two universities. Graduate business students, rather than managers at one or a few organizations, were selected to serve as participants so that company-specific evaluation procedures would not confound the results.

The analysis that follows was performed on data collected from 96 participants (24 in each cell of the design). The participants had an average of 4 years of work experience and, on average, had "rarely" or "sometimes" been involved with the evaluation of others in a business environment. Participants listed a wide variety of undergraduate majors with the largest grouping (40 participants) falling in the non-business category. More men (59) than women (37) participated. Also, 19 participants (20%) revealed that they had taken the Test of English as a Foreign Language which indicates that English is not their first language. Table 1, Panels A through D presents a summary of these non-theoretical variables. MANOVA confirmed that none of these non-theoretical variables have a significant effect on the dependent measure.

TABLE 1: Summary Statistics for Non-theoretical Variables

Panel A: Descriptive statistics for participants' reported years' of work experience and experience with evaluating others

Variable	Mean	S.D.	Range
Years of experience in a business-related profession	4.021	4.901	0 to 23
Extent of involvement in the evaluation of others in a business environment	2.322	1.080	1 (Never) to 4 (Frequently)

Panel B: Summary of participants' undergraduate majors

Major Area for Undergraduate Degree	Number
Accounting	15
Finance	10
Marketing	7
Management	16
Economics	8
Other	40
Total number of participants	96

Panel C: Summary of participants' gender

Gender	Number	(Percent)
Male	59	(61.5%)
Female	37	(38.5%)

Panel D: Summary of participants' reported test experience [a]

Test	Number

Graduate Management Admissions Test (GMAT)	90
Graduate Record Examination (GRE)	13
Law School Admissions Test (LSAT)	17
Test of English as a Foreign Language (TOEFL)	19
No tests reported	6
[a] Some participants reported taking more than one test	

Task

The task first briefly describes a fictional company and asks participants to play the part of an evaluator in a household durables (e.g., washing machines, refrigerators, etc.) manufacturing firm. Then, the instrument describes the use of return on investment percentage as a performance measure and explains that return on investment percentage, as provided in the task, may not always perfectly describe managers' performance levels. Next, participants reviewed a five year history of return on investment percentages for each of five divisions (Dishwashers Division, Stoves and Ovens Division, Small Appliances Division, Washing Machines Division and Refrigerators Division).

After reviewing the return on investment percentage history, participants viewed the expected return on investment percentages for the upcoming period. In addition to evaluations for the five prior years, the expected evaluation score for the upcoming period was provided. Participants then learned that the Federal Reserve unexpectedly changed interest rates and that this event led to all of the divisions experiencing a percentage change in sales. As a result, the divisions' return on investment percentage outcomes differed from the expected return on investment percentages. Actual return on investment percentage outcomes were then provided and participants were asked to evaluate the divisional managers on an interval scale (1 is labeled "Low" and 10 is labeled "High"). Finally, each participant completed a post-experimental questionnaire and responded to manipulation checks of the independent variables.

Design

A 2 X 2 between-participants experiment was used to test the hypotheses. The manipulated independent variables are: (1) the direction of change in performance measure outcomes (increase in return on investment percentages versus decrease in return on investment percentages) and (2) the level of ambiguity (highly variable versus less variable history of return on investment percentages).

The direction of change in performance measure outcome was manipulated by varying whether the Federal Reserve's action raised or lowered interest rates. Increase condition participants were told that the Federal Reserve lowered interest rates and that, as a result of the Federal Reserve's action, all divisions experienced a 15% increase in sales. Decrease condition participants learned that the Federal Reserve increased interest rates resulting in a corresponding 15% decrease in sales for all divisions.

Ambiguity was manipulated by varying the range of deviations around a line where return on investment percentage is the dependent variable and period is the independent variable. The lines for both the high and low ambiguity conditions have a slope of 2; that is, both lines predict a 2% increase in return on investment percentage per period. For the low ambiguity condition, deviations varying from -2% to +2% were randomly drawn to arrive at the return on investment percentages for each of the five periods. Deviations in the high ambiguity condition were randomly drawn from the range -10% to +10%.

Return on investment percentage was selected to serve as the performance measure because survey research (Reece and Cool 1978; Dean, Joye and Blayney 1991) has found that it is more widely used than other accounting-based performance measures like residual income. The expected return on investment percentages provided in the task were generated in the same manner as the historical return on investment percentages with the additional constraint that the implicit rank order of the expected return on investment outcomes be the same for both ambiguity conditions. The actual outcomes for divisional return on investment percentages reflect the expected return on investment percentages adjusted for the change in sales due to the Federal Reserve's action. Importantly, participants had enough information to correctly assess that the difference between expected and actual return on investment percentages can be fully accounted for by the change in sales due to the Federal Reserve's action.

Prior years' evaluations and expected upcoming evaluations were determined by assigning a "5" to the division with the median return on investment percentage for a period and then assigning the remaining four divisions' evaluations so that the implicit rank order of the return on investment percentages was preserved. The difference between the expected evaluation score and the elicited evaluation score measures the error in an evaluation score.

ANALYSIS AND RESULTS

Tests of Errors from Functional Fixation

The first hypothesis predicts that evaluators will fixate on performance measure outcomes and evaluate divisional managers based on outcomes that include effects from common factors. This hypothesis suggests that evaluators will fail to filter out the effect on accounting-based measures from a firm-wide change in sales when arriving at evaluation scores. The difference between the expected return on investment percentages and the actual return on investment percentages were entirely attributable to the firm-wide change in sales. Thus, evaluators who are able to adapt their decision processes and not functionally fixate on the behavior of return on investment percentages would provide the same evaluation score as the expected evaluation score.

Deviations from the expected evaluation scores provide evidence that evaluators are not able to adjust their evaluation process when the accounting measures change (i.e., the measures contain effects from a factor that should not be included in the evaluation). The absolute values of the differences between expected and elicited evaluation scores are used for statistical tests. Table 2 reports the means and standard deviations for the absolute value of the difference between expected and elicited evaluations for all five divisional managers across all conditions. The mean differences are significantly different from zero (p<.0001) for all divisions and across all conditions. Participants did not provide the expected evaluation scores. Thus, Hypothesis 1 is supported and it can be concluded that participants functionally fixated and provided evaluations that contained errors.

Tests of Framing and Ambiguity Hypotheses

Multivariate analysis of variance (MANOVA) was used to test Hypotheses 2 and 3 about framing and ambiguity. The use of repeated measures test, rather than an average of the differences, is consistent with the tests done in recent functional fixation experiments (see Luckett, Briers and Chow 1995). The dependent variable in the analysis is the vector of absolute values of differences between expected and elicited evaluation scores. Larger values in the elements of the vector indicate larger errors from functional fixation. The independent variables are the direction of change in performance measure outcomes (increase versus decrease) and the level of ambiguity (high versus low).

TABLE 2: Test for General Functional Fixation Effects (Hypothesis 1)
Means[a] and (Standard Deviations) for Expected Score - Elicited Score for all Divisions and All Treatment Conditions

	Treatment Condition			
Division	Increase in Performance Measures / Low Ambiguity n = 24	Decrease in Performance Measures / Low Ambiguity n = 24	Increase in Performance Measures / High Ambiguity n = 24	Decrease in Performance Measures / High Ambiguity n = 24
Dishwashers	1.875 (1.329)	2.583 (1.412)	1.833 (1.307)	3.792 (0.932)
Stoves and Ovens	2.625 (1.689)	2.333 (1.494)	2.792 (1.641)	1.458 (1.532)
Small Appliances	1.500 (1.103)	2.917 (1.692)	2.292 (1.459)	3.167 (1.786)
Washing Machines	4.125 (2.365)	2.750 (2.069)	4.083 (2.376)	2.625 (2.261)
Refrigerators	1.333 (0.963)	1.708 (1.654)	1.417 (1.060)	1.958 (1.160)

[a]All of the reported means are significantly different from zero (p < .0001). The probability of obtaining spurious significant results is somewhat higher than .0001 because of the number of tests being performed. For alpha = .0001, the probability of making one or more Type I errors is .002 (Kirk, 1982, p. 102).

Hypothesis 2 posits a relation between the direction of change in performance measure outcomes (increase versus decrease) and the size of errors in elicited evaluations. Specifically, the differences are expected to be smaller when the return on investment percentages increase and larger when the outcomes decrease. Panel A of Table 3 presents the multivariate results. The direction of change in performance measure outcome was significant ($p < .0001$). Panel B reports univariate analyses to assess which divisional evaluation scores were affected by the direction of change in performance measure outcome manipulation. The size of the differences was significantly affected by the direction of change in performance measure outcomes for all five divisions ($p < .10$).

An examination of the means reported in Table 2 indicate that the results support the alternative hypothesis that the differences will be smaller when performance measure outcomes increase for the Dishwashers Division, Small Appliances Division and Refrigerators Division. The univariate results also indicate that the direction of change in performance measure outcomes is significant for the Stoves and Ovens Division and Washing Machines Division. However, the means in Table 2 show that the effect for these two divisions is in the opposite direction from the predicted result. This unexpected result may have occurred because the expected evaluation scores were on the low end of the response scale. On a ten point scale, the Stoves and Ovens Division had an expected evaluation score of "3" and the Washing Machines Division had an expected evaluation score of "1". Thus, functionally fixated participants in the decrease condition were not able to provide responses that exhibited large errors. In general, the results support the hypothesis that the direction of change in performance measure outcomes has an effect on the size of errors that functionally fixated decision makers will make.

TABLE 3: Analysis of Effects from Context Variables (Hypotheses 2 and 3)
Dependent Variable: |Expected Score - Elicited Score| for each divisional evaluation

Panel A: Multivariate Results

Independent Variable	F-Value	p-Value [a]
Ambiguity	2.0276	.0824
Direction of Change in Performance Measure Outcomes	9.2984	.0001
Ambiguity X Direction of Change in Performance Measure Outcome	2.8837	.0185

Panel B: Univariate Results

Division	Independent Variable	df	Mean Square	F-Value	p-Value [b]
Dishwashers	Ambiguity	1	8.167	5.15	.0255
	Direction of Change	1	42.667	26.93	.0001
	Ambiguity X Direction of Change	1	9.375	5.92	.0169
Stoves and Ovens	Ambiguity	1	3.010	1.19	.2783
	Direction of Change	1	15.844	6.26	.0141

	Ambiguity X Direction of Change	1	6.510	2.57	.1122
Small Appliances	Ambiguity	1	6.510	2.77	.0994
	Direction of Change	1	31.510	13.41	.0004
	Ambiguity X Direction of Change	1	1.760	0.75	.3889
Washing Machines	Ambiguity	1	0.167	0.03	.8577
	Direction of Change	1	48.167	9.34	.0029
	Ambiguity X Direction of Change	1	0.042	0.01	.9286
Refrigerators	Ambiguity	1	0.667	0.43	.5113
	Direction of Change	1	5.042	3.29	.0731
	Ambiguity X Direction of Change	1	0.167	0.11	.7424

[a] Based on Wilks' criterion.
[b] Reported p-values are for the customary one-tailed F-tests for each of the overall null hypotheses. This reporting format is consistent with the contemporary practice of treating the entire family of interesting contrasts associated with each treatment and interaction as the conceptual unit for the error rate (Kirk, 1982, pp. 104-105).

Hypothesis 3 predicts that the level of ambiguity (low versus high) will have an effect on the size of the difference between elicited and expected evaluation scores. Differences are expected to be larger when there is more ambiguity. The MANOVA results in Panel A of Table 3 indicate that ambiguity has a marginally significant effect on the size of the difference between elicited and expected evaluation scores ($p < .0824$). The univariate results in Panel B indicate that ambiguity only has a significant effect ($p < .10$) on the differences in two divisions, Dishwashers Division ($p < .0255$) and Small Appliances Division ($p < .0994$). For these two divisions, the means in Table 2 are generally in the expected direction and indicate larger errors when there is more ambiguity.

The lack of support for the hypothesis that errors will be larger when there is more ambiguity may be due to an ineffective manipulation of ambiguity. Despite pilot testing, participants in the two ambiguity conditions indicated that they did not perceive significantly different levels of variability in the data provided in the task ($p < .2097$). Thus, a more pronounced difference in the variability of the provided data may reveal a stronger effect from ambiguity.

The multivariate analyses in Panel A of Table 3 report a significant interaction among ambiguity and direction of change in performance measure outcomes ($p < .0185$). However, the univariate results in Panel B show that this interaction is only significant for the Dishwashers Division ($p < .0169$). For the Dishwashers Division, participants supplied similar scores across ambiguity conditions when performance measure outcomes increased and different scores across ambiguity conditions when there was a decrease in performance measure outcomes (mean for high ambiguity = 3.792 and mean for low ambiguity = 2.583 from Table 3). Because of the significant interaction term for the Dishwashers Division, any inferences about the main effects for this division should be made cautiously.

CONCLUDING REMARKS AND IMPLICATIONS

For the last three decades, accounting researchers have focused their efforts on understanding when functional fixation will affect decisions and how the effects from functional fixation can be mitigated. Consistent with psychology efforts at debiasing (Fischhoff 1982), clarification of instructions or experimental stimuli has proven largely unsuccessful. This study first demonstrates that errors from functional fixation occur in four decision contexts for a relative performance evaluation task. Then, it assesses whether the size of errors varies with the context. The experiment manipulates two context variables: the direction of change in performance measure outcomes (increase versus decrease) and ambiguity (high versus low).

The results indicate that functional fixation leads to errors in relative performance evaluation scores in the four contexts that are examined. Further, the hypothesis that the errors from functional fixation are larger when performance measures decrease is somewhat supported. The results also suggest that an extreme amount of ambiguity may affect the size of errors. Although participants did not report differences in the perceived variability of the data provided in the tasks, the hypothesis that highly ambiguous contexts lead to larger errors in evaluation scores was supported for two out of five judgments made by participants. In contexts with either no ambiguity or very high ambiguity, then, differences in the size of errors may be detectable.

The current study focuses on two context variables. Other context variables, like risk and amount of data available, need to be investigated for a more thorough understanding of how context affects errors from functional fixation. However, it is noteworthy that evaluations contained errors in all four contexts examined in this study. Future research, then, will provide more insight by continuing efforts at finding contexts where the size of errors varies rather than trying to demonstrate the non-existence of fixating behavior in some contexts.

Given that all elicited evaluations contained errors, future research could direct efforts at developing an effective debiasing mechanism for contexts that lead decision makers to make errors that are costly. Note, however, that the task in the current study told participants that simply relying on the accounting measure was insufficient because factors that affect this measure should not always be included in evaluations. Hence, future efforts at informing decision makers about the pitfalls of fixating on accounting measures and not appropriately adapting their decision processes are not expected to be successful. Rather, the results from this study suggest that management accountants may need to supply decision makers with measures that remove the effects of factors that should not be considered by decision makers. Fixated decision makers could then use these measures in the same way as they would be used in the absence of those factors. Of course, the particular accounting measure, decision, decision maker(s) and organization would all determine whether such a debiasing mechanism would meet the organization's cost-benefit criteria.

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THE RELATIONSHIPS AMONG ROLE AMBIGUITY, ROLE CONFLICT, PARTICIPATIVE DECISION MAKING AND EFFORT-PERFORMANCE EXPECTANCY

Sam Faught, Lambuth University
P. Michael McCullough, University of Tennessee at Martin

ABSTRACT

A field study of 534 associates at three manufacturing plants, assessed the relationship between participative decision-making (PDM) and role ambiguity (RA) and role clarity (RC). The study further investigated RA and RC as they relate to performance-reward expectancy (E). PDM and RA were shown to be inversely related and RA and E also had a negative relationship. The results are discussed as important to manager-subordinate relationships, especially as communication of role behavior affects the expectancy aspect of motivation.

INTRODUCTION

Declining productivity rates in the midst of increasing global competition, has made productivity and quality, issues of concern for most U.S. companies (Sims & Manz, 1982). U.S. productivity rose only about 1% yearly between 1973 and 1989. This increase compares to a 2.7% increase for the previous 15 years (Blinder, 1989). As the productivity rate of U.S. companies has slowed, they have also been experiencing a loss of market share in world-wide sales (Franko, 1991). The decreasing productivity rate and the loss of market share are clear indications that U.S. companies are having problems competing in world-wide markets (Nohria & Berkley, 1994).

During the 1980s, U.S. manufacturing companies initiated a variety of activities to improve their competitiveness. Many of these companies declared that their strategy was to become "world-class". This decision meant they were going to be as good as the best companies in their industries. In pursuing this goal, they adopted one or more of a growing number of improvement programs, such as TQM (Total Quality Management), JIT (Just-in-Time) production, and DFM (Design for Manufacturability) (Hayes & Pisano, 1994). These programs have evolved into various degrees of participative management, employee involvement, and employee empowerment. The idea has been to give nonmanagement employees the freedom to make decisions without any supervision (Kirkpatrick, 1992). Another result of these programs has been the intensified interest in the management of quality at many U.S. companies (Miller, Nakane, & Vollman, 1983). A survey by Olsten Corporation (Quality Survey, 1994), revealed that quality control (QC) programs are increasing among U.S. companies.

Responses to productivity and quality concerns have resulted in businesses becoming more receptive to new ideas as to how a business should be run. A major focal point of attention through organizational change has been employee participation in decision making (PDM). PDM has been a key feature in the various forms of employee involvement plans. These efforts have shared a common commitment: giving the lowest-level employees the opportunity to participate in the day-to-day decisions that influence their working lives. The belief is that people who are involved in shaping their work inputs will achieve superior work outputs (Sims & Manz, 1982). The idea is that employee involvement will lead to improved quality, which leads to superior performance (Bensor, 1992; Corbett & Harrison, 1992). Surveys in the U.S. are revealing that there are an increasing number of U.S. companies who using employee participation as a means of improving productivity (Towe, 1990; Wellins & George, 1991).

In general, participation implies that there is shared decision making. Wagner (1994) has defined participation as a process in which influence is shared among individuals who otherwise operate at different levels of the organizational hierarchy. Mitchell (1973) suggested that workers contribute according to their competence and not always by their position or level in the organization. Mitchell believed that participation allows communication channels to be open in all directions resulting in greater and more accurate information flow. Hespe and Wall (1976) suggested that participation is more meaningful to workers when they participate in decisions concerning practices adopted in their own workplace.

Harrison (1985) has suggested that PDM is important to employees for several reasons. For those individuals who have a need for achievement, power, autonomy, and self-realization, PDM would provide the opportunity for them to develop their skills and have a greater level of responsibility associated with their job. Participation could provide financial incentives for individuals if they are allowed to participate in some employee gain-sharing plan. For managers Harrison (1985) suggested that PDM may be useful where there is a need for changes in the behavior and attitudes of subordinates. Participation may also lead to greater commitment by employees and increased employee satisfaction with the organization.

Researchers have tended to disagree as to the value of PDM. Some participation review studies have found that while satisfaction is achieved, there is no conclusive evidence for productivity (Locke & Schweiger, 1979). A meta-analysis by Guzzo, Jette, and Katzell (1985) found that participation had a strong effect on productivity. Other studies have found that both satisfaction and productivity have increased with the use of certain forms of participation (Cotton, Vollrath, Froggatt, Lengnick-Hall, & Jennings, 1988). A recent meta-analysis assessment of the research on participation's effects on performance and satisfaction (Wagner, 1994) has desputed Cotton et al.'s (1988) conclusions. Wagner (1994) suggested that participation can have statistically significant effects on performance and satisfaction without being practically significant. In other words, Wagner has suggested that the cost of participation may be greater than the benefits derived from it. However, Wagner has ignored the danger of maintaining a nonparticipative organizational culture in a society of participative cultures. Longterm issues such as morale, commitment, and communication may have a more significant affect on the attitudes and behaviors of workers than Wagner has observed in the short-term. Hackman and Oldham (1976) suggested that the creation of autonomous work groups would become an increasingly prominent and powerful strategy for redesigning and improving work systems.

Two popular PDM programs in recent years have been quality circles and self-directed work teams. A quality circle is typically made up of 6 to 12 volunteers who work in the same department or perform similar tasks. The group's purpose is to solve problems they have chosen from their daily work setting. These include such issues as product quality, productivity, and worker inconvenience (Berg & Wiebe, 1993). A self-directed work team is a small group of employees responsible for a work process or section of a work process (Wellins & George, 199 1). Self-directed work teams empower employees to take on more responsibility and make decisions in areas previously left to management (Schilder, 1992). They may become involved in company issues, such as vendor quality or safety (Wellins & George, 1991).

In an attempt to resolve -some of the issues surrounding employee participation, Schuler (1980) developed an expectancy model. He used this model to illustrate the "how" of participation in decision making. This model used role and expectancy perceptions to explain how participation mediates the relationship between PDM and employees' satisfaction with their work and their supervisors. Schuler reasoned that given the opportunity to interact with supervisors and fellow workers, the employee would gain a better understanding of the organization's performance requirements and the rewards that accompanied reaching that level of achievement. This interaction would raise the employee's belief that reaching performance goals would lead to desired outcomes. Schuler's results supported his hypotheses of negative relationships between PDM, role conflict and role ambiguity, and a positive relationship between PDM and the performance-reward expectancy (instrumentality). In his closing remarks, Schuler (1980) suggested that the expectancy model he used might be more effective in the participation-performance relationship. In this context, expectancy is the probability that putting forth effort will lead to the successful performance of the objective. Perceived participation in decision making (PDM) is defined as the degree to which employees perceive themselves as participating in decisions directly affecting their jobs (Fry and Hellriegel, 1987).

Studies by Mitchell and Knudsen (1973) and Mitchell and Pollard (1973) support the conclusion that increased control by individuals over their behavior, results in a higher correlation between predicted and observed effort. When PDM permits employees to voice and select work objectives, such participation may increase their understanding of the job, the amount and accuracy of task-relevant information, and clarify the paths and expectancies to various goals (Neider, 1980). Mitchell (1973) pointed out that when an employee participates in a discussion involving some aspect of a work assignment, it may become clearer how to perform that job more efficiently.

Neider's (1980) study supported her hypothesis that changes in performance and effort would occur only when the participation process clarified the effort-performance relationship and when valent outcomes were attached to the high performance. Mitchell (1973) agreed that participation partially affects effort and performance through the values that workers have for organizational outcomes.

Participation may also effect the individual's perceived role in the organization. Schuler (1977a) found that participation was more affective (more highly related to satisfaction with work) when there were higher levels of role conflict than lower levels of role conflict. The results were the same for role ambiguity. Morris, Steers, and Koch (1979) reported that PDM was the most relevant predictor of role conflict and the second most relevant predictor of role ambiguity for samples of secretarial/clerical employees, blue collar employees, and professional employees. It has generally been found that the lower the perceived levels of role conflict and role ambiguity, the higher levels of performance and satisfaction (Schuler, Aldag, & Brief, 1977).

An expectancy model was used to facilitate the understanding of the effect of perceived participation decision making on workers' expectancy in the effort-performance relationship. The differences between the model to be used in this study and that of Schuler (1980) are that: (1) emphasis is shifted to expectancy from instrumentality and (2) expectancy is dependent upon the intervening variables rather than being an intervening variable.

Vroom (1964) defined expectancy as "a momentary belief concerning the likelihood that a particular act will be followed by a particular outcome". Mitchell and Albright (1972) associated expectancy with the belief that putting forth effort would lead to successful performance by the worker. These beliefs suggest that individuals choose to perform in a particular manner when they believe that the results of those actions will lead to a given outcome (Baker et al., 1989). According to Mitchell (1973), it is not "participation" per se that increases performance and satisfaction, but rather improvement of the employee's expectancies. Mitchell (1973) argued that under a participative system, employee perceptions of the effort-performance relationship become clearer.

Purpose of Study

A research study was conducted to look at the effects of participation in decision making on associate role ambiguity and role conflict. The other relationship explored will be the effect of role ambiguity and role conflict on associate expectancy. The following hypotheses were tested:

Hypothesis 1a	*Perceived participation in decision making is inversely related to role ambiguity.*
Hypothesis 1b	*Perceived participation in decision making is inversely related to role conflict.*
Hypothesis 2a	*Employee expectancy level is inversely related to role ambiguity.*
Hypothesis 2b	*Employee expectancy level is inversely related to role conflict.*

METHODS

The studies participants were a convenience sampling (Gay and Diebl, 1992) of associates from three manufacturing facilities in West Tennessee. PDM programs were in place at each plant. The participants were told that the study was designed to assess factors that affect life in the workplace. The questionnaires were distributed by HR managers, completed independently by the participants, and placed in a drop-box at each of the three facilities.

PDM. Five items developed by Steel and Mento (1987) to measure the degree of influence associates perceive they have over decisions that affect their work, were used. These items were scored on a Likert response scale, from strongly disagree to strongly agree.

Role ambiguity (RA) and role conflict (RC). Scales developed by Rizzo, House and Lirtzman (1970) were used. These scales had been shown by previous studies to have good reliability.

Expectancy (E). Expectancy as defined here is the individual's perception as to the likelihood of his or her effort leading to acceptable performance. The scale used was developed by House and Dessler (1974).

RESULTS

Response rate and demographics. The total number of questionnaires left across the three locations was 633 and of these, 534 were returned usable, for a response rate of 84.4%. The respondents were 65.4% male and 34.3% female. The average age was 38.45 with a standard deviation of 10.96. The average length of service for the organization was 7.06 years with a standard deviation of 7.2 years. Only 4.7% of the respondents were college graduates, with 20.8% having attended college, with 13.9% having attended technical school, 51.1% having a GED or high school diploma, and 8.61% having no high school qualifications.

Reliability of scales. The scales used had the following Cronbach alpha, reliabilities: PDM (.742), RA (.745), RC (.621) and E (.891). This means that the ceiling on the validity of each of these measures is the square of the reliability, or PDM (.551), RA (.555), RC (.386) and E (.794). Obviously, the only low validity ceiling is that of RC correlated with any other variable.

Means and Standard Deviations. The scale means and standard deviations were: PDM (3.169, .968), RA (1.952, .730), RC (2.615, .592), and E (4.107, .740).

Zero order correlations. Pearson Product Moment correlations were calculated for each of the pairs of variables in the experiment. The results were as follows: PDM * RA = -.42 ($p < .01$), PDM * RC = -.10 (NS), PDM * E = .26 ($P < .01$), RA * RC = .20 ($p < .01$), RA * E = -.54 ($p < .01$), RC * E = -.08 (NS).

DISCUSSION

The results show that participation in decision making (PDM) had a positive relationship with expectancy (E) of successful performance and a negative relationship with role ambiguity

(RA). Furthermore, role ambiguity was negatively related to expectancy of successful performance. These findings lend support to the argument that participation in decision making can increase expectancy and strongly suggest that this effect occurs due to a reduction in role ambiguity.

Efforts to improve productivity and quality have resulted in many United States companies adopting improvement programs such as Total Quality Management, Just-in-Time Manufacturing, and Design for Manufacturability. One of the common threads in these programs has been the involvement or participation of employees in decision making at their work level.

Lowered Role Ambiguity and Role Conflict. In this study, perceived participation was been shown to have a negative relationship with role ambiguity and role conflict. Its relationship with role ambiguity ($p < .01$) was stronger than with role conflict ($p < .05$). Under a non-participative management style, workers would be told how to do their jobs and allowed little input as to how their jobs could be performed better. This lack of involvement could lead to high role ambiguity, in that workers would have little understanding as to why they were performing a certain job in a particular manner. However, there would be little role conflict since the workers, job roles would be to produce what the worker was told to produce. With a participative style of management, workers, are required to take on more management responsibilities. They attend training sessions, team meetings, and make decisions about their immediate work areas. Many of these decisions would have been made by management under the traditional system. As workers, become involved in decision making in their work areas, their role ambiguity should begin to decrease. Role conflict should also begin to decrease as workers have the opportunity to take on new responsibilities in their immediate work environment. However, as some conflict decreases, other conflict may increase because now the workers are assuming other roles besides that of production worker. This would explain why role conflict was higher than role ambiguity in the present study. However, those employees who take advantage of their opportunities to participate, can also reduce these conflicts. Workers who sense that they are having some input into work decisions, are also having the opportunity to resolve issues of role ambiguity and role conflict. If this is true, then managers should encourage employees to speak up in team meetings. Managers should also provide a working atmosphere that would not be intimidating to their employees.

Higher Levels of Expectancy. Low levels of role ambiguity were shown to have a negative relationship with expectancy. In other words, employees who have the opportunity to clear up role ambiguities about their jobs will also perceive that with increased effort, their jobs can be performed. This result has implications for all companies even those who do not have an employee involvement program. Clearly written statements of job descriptions for each worker should be effective in reducing role ambiguity for all workers. However, it may be that participation is required to make these steps effective.

Limitations

The first limitation concerns the sample used in this study. The individuals for this study were not randomly selected for inclusion. Employees from three manufacturing facilities comprised the sample. These facilities were chosen primarily because they were willing to participate in the survey. They do produce widely different products in that one is a manufacturer of sporting accessories, another produces industrial chain link fences, and the third produces industrial axles and air brakes. They are all three U.S. owned and managed. However, any inferences derived from the results of this study should be interpreted with caution. Additionally, the sample included individuals employed in the same type of work or job responsibility and were in a variety of age categories and had different levels of education. Still this sample may not be representative of employees in general.

The second limitation of this study concerns the common variance that may have occurred through the same individuals being used to answer all parts of the questionnaire. Avolio, Yammarino, and Bass (1991) define common variance as the overlap in variance between two variables attributable to the type of measurement instrument used rather than due to a relationship between the underlying constructs. In the social and behavioral sciences, data collection concerning multiple constructs from a single instrument is widespread (Podsakoff & organ, 1986; Avolio et al., 1991; and Tepper & Tepper, 1992). However, only recently have researchers expressed concern over the extent to which relationships between variables may be inflated by method variance when data are obtained with a single measurement vehicle (Tepper & Tepper, 1992). Podsakoff and Organ (1986) suggest that while it may not be possible to use other methods of data gathering, the magnitude of the problem should be reduced or at least an assessment of the problems inherent in the data should be conducted.

Future Research

As was stated earlier, there has been much disagreement as to the value of using employee participation as a tool to improve performance and productivity (Locke and Schweiger, 1979; Guzzo et al. , 1985; Cotton et al. , 1988) . Some researchers have suggested that the cost of participation may be greater than the benefits received from it (Wagner, 1994) .Glew, O'Leary-Kelly, Griffin, and Van Fleet (1995) suggest that participation-performance relationships have been overworked in research. They recommend that researchers look at individual questions regarding the participation process itself. In other words they appear to be saying that it is time to get away from the global approach to participation studies and look at the specific issues that influence the overall relationship between participation, performance, and job satisfaction. This study has attempted to address this recommendation by emphasizing perceived participation's relationship with the effort-performance expectancy probability.

Participation by employees does appear to have an effect on the level of expectancy of those employees. This effect may be seen primarily through the reduction of role ambiguity that the employees experience. However, if there is an increase in the level of expectancy, one may ask why has performance and satisfaction been found to increase in some research and not in others?

Trust should be measured to see if it is an intervening variable between expectancy, performance, and satisfaction. Jenkins and Lawler (1981) found trust to be essential for a successful organizational development program using participation. If employees do not trust that management is truly interested in their participation, performance levels and satisfaction may not be achieved by the organization. Past satisfaction with other management programs may also have an effect on trust. Individuals who have had bad experiences with previous management programs, may be less trusting of the new program.

Harrison (1985) has suggested that the quality and quantity of communication that subordinates experience with their superior is strongly associated with a successful participation program. It would seem likely that communication between work teams and within work teams would also be essential elements of a successful participation program. Therefore, research as to the types and quality of communication within a work team and in all directions from that work team should provide information as to why some participation programs are successful and others are not.

Amount of training, skills, and knowledge of the individuals participating in the employee involvement program may also effect their level of participation. If time is a factor as to a successful participation program, then the amount of training that an individual has had may effect participation more than the method of training used. Also, knowledge and skills that employees have acquired may effect their level of participation. Amount of training, skills, and knowledge should be measured along with in order to study their effects on perceived participation.

SUMMARY

The expectancy model developed for this study was adapted from a model by Schuler (1980) . Schuler's model is supported by the model in this study. Schuler was correct in that participation helps workers to understand how they can achieve various rewards. However, as Glew et al. (1995) have suggested, it is now time to look at specific issues of participation. This study has done that in that it has taken Schuler's model and looked at the affect of participation on the expectancy probability. In examining the results of this study, new issues were raised.

A study of trust, communication, amount of training, skills, and knowledge may offer some insight as to why some employee involvement programs work and others do not. Without trust, the employees may lack the motivation to become significantly involved in a participation program. A lack of communication paths may inhibit the work teams ability to make quality decisions. A sufficient amount of training will only result from a long-term commitment by management. Skills and knowledge that workers acquire on their jobs may offer some insight as to why new workers are less involved than those with a greater length of service.

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A REEXAMINATION OF TRINGO'S HIERARCHY OF PREFERENCE: THIRTY YEARS OF ATTITUDES TOWARD VARIOUS DISABILITIES AND OTHER CATEGORIES USING THE DISABILITY SOCIAL DISTANCE SCALE

Robert D. Hatfield, Morehead State University
James H. Turner, Morehead State University

ABSTRACT

This study reexamines and updates empirical research from 30 years ago in which Tringo examined preferences toward various disability types. Research indicates that disabled persons do not comprise a single homogeneous class in respect to discrimination, but the heterogeneity of persons with disabilities requires a more complex understanding. A modified version of the Disability Social Distance Scale examines levels or preference or intimacy for 17 disability and 13 other categories of behavior or status. Rankings and scores by similar subjects from 30 years ago are highly correlated with current scores despite strong legal and social attempts to lessen bias. Newer disabilities, like AIDS, are integrated into the hierarchy of preference.

INTRODUCTION

Persons with disabilities have lower employment rates, lower earnings, and are more likely to live in poverty, than those without disabilities (Kruse, 1998). Persons with disabilities also feel discriminated against. An alarming 53% report discrimination and 14% report high levels of discrimination. This is similar to the percentages found when women are asked whether they are discriminated against because of their gender (Hallock, Hendricks, and Broadbent, 1998). Both are higher than reports of report discrimination complaints from the broader population, which have been found to be about 27%.

Forty-three million citizens are disabled, according to the Americans with Disabilities Act (ADA). This means the ADA protects as many as one of every seven Americans. Disability is defined as "a physical or mental impairment that substantially limits one or more of the major life activities of such individual."

It may be surprising that recent research examining EEOC compliance data, complaints, and attitudes of employers indicates that the ADA has had only minimal impact on changing patterns of discrimination against the disabled (Schall, 1998). One problem in gaining a better understanding of the contours of the bias toward persons with disabilities is their categorization - or lack thereof. "Persons with disabilities" are seen as another uniform "protected class."

Many disabled people do share the common experiences of social and physical barriers (Finkelstein, 1993). Such studies seem to view disabilities as a homogeneous class, like gender or race.

One model uses disability category as one of several other variables used in attempting to explain work-related bias concerning a person with a disability. “Disability Type” and “Job Type” are presented as factors which moderate the effects that social and other “Information” available and “Internal Bias” has on Human Resource outcomes (Hui and Hatfield, 1992). Whether or not the job requires the employee to be in a public or exposed setting has been found to be an important factor. Amputee and epileptic applicants have been favored over nondisabled applicants for nonpublic, internal or “unexposed jobs” (Rose & Brief, 1979). Resumes from the nondisabled have been preferred over resumes from applicants who use a wheelchair when screening for a public accounting job which required extensive exposure to walk-in clients (Hui and Hatfield, 1992). While the wheelchair-bound applicant was discriminated against for a "public" job, in an unpublished study these authors reported that when the disability was altered to an artificial arm there was no significant main effect. Negative bias may be based upon the attractiveness of the applicant (Heilman & Stopeck, 1985). This expectation may also be seen in a survey of HR executives, where majority stated that certain positions should be developed to be filled by the disabled (McFarlin, Song, & Sonntag, 1991). This "positive" bias is a dangerous one, since it may lead a manager to discriminate against the disabled applicant who applied for a position which is not so targeted or stereotyped as a "disabled persons' job".

SOCIAL DISTANCE SCALE (SDS)

One of the most useful and durable attitude measures in survey research is the Social Distance Scale (Bogardus, 1925 and 1967). Bogardus used a Likert scale to identify at which contact level one would be most comfortable with another person. If seeking the preferred distance (e.g. for someone with diabetes) then the subject would choose between (from 7-1: most distant to least) live outside of my country, outside my neighborhood, speaking acquaintances, several families in my neighborhood, work beside in an office, friends, or would marry (Cover, 1995). The SDS was also used in recent studies examining the relative preference of the majority toward male and female homosexuals (Gentry, 1987 and 1986). Tringo made an early attempt to clarify the preference toward persons with disabilities by modifying the SDS into the Disability Social Distance Scale (Tringo, 1970). Tringo converted the SDS into a nine step scale, adding “keep in an institution” and the anchor, “would put to death”.

Here are the hypotheses addressed in this study: 1) The rankings and scores found in Tringo’s study in 1970 are still generally accurate descriptions of social attitudes. a) There will be no significant difference between the Tringo scores and the scores some thirty years later. b) The passage of the ADA, increased visibility (Farnall and Smith, 1999) and other societal factors have not altered the relatively stable pattern of stereotyping against the disabled. 2) How do disabilities which have become more well known since 1970, like AIDS, fit into any hierarchy of disability preference? We predict that HIV/AIDS will be associated with the most negative disability types.

METHODOLOGY

Subjects were 214 junior and senior college students from a large Midwestern university. Subjects received credit towards the research requirement of a management course by choosing to take part. The DSDS was modified to an eight step scale by the elimination of the controversial ninth step "put to death" and trimmed for parsimony. This modified DSDS scale was presented as follows:

Marry,
Kin by marriage,
Live next door,
Casual friend,
Work with,
Keep away from,
Keep in an institution, and
Send out of the country.

Disability types (shortened) and other conditions found in Exhibit 1 are listed and after each is found the eight options of social distance. The list of disabilities and other "anchor" descriptions are found in Exhibit 1 along with the resulting scores from the Ss in this study. Conditions like "Someone who reads..." was added to produce "intimate anchors" (low SDS scores). "A homicidal maniac..." was added to produce a "distant anchor" (a high SDS score).

Exhibit 1: New Scores & Ranking Comparisons: 1960's (New) and 1990's (Old) Subjects

New Score	Category	New Rank	Old Rank
1.25	College Graduate	1	
1.31	Someone My Own Age	2	
1.51	Medical Doctor	3	
1.60	Someone Who Reads to Relax	4	
1.92	Asthma	5	2
1.93	College Professor	6	
1.99	Diabetes	7	4
2.10	Arthritis	8	3
2.24	Ulcer	9	1
2.42	Different Religion	10	

Exhibit 1: New Scores & Ranking Comparisons: 1960's (New) and 1990's (Old) Subjects			
New Score	Category	New Rank	Old Rank
2.48	Heart Disease or Attack	11	5
2.55	Stroke	12	9
2.57	Cancer	13	10
2.66	Over 65	14	11
2.69	Artificial Arm/Leg	15	
2.77	Missing an Appendage	16	6
2.79	Deafness	17	7
2.90	Blindness	18	8
2.92	Wheelchair	19	
3.10	Cerebral Palsy/MS	20	13
3.24	Epilepsy	21	12
3.49	Tuberculosis	22	14
3.60	Mentally Retarded	23	15
4.08	Mental Illness	24	16
4.20	HIV but not Full Blown AIDS	25	
4.50	Alcoholic/Drug Addict	26	18
4.64	Full Blown AIDS	27	
4.73	Ex-Con/Felon	28	17
5.33	Transvestite	29	
7.16	Homicidal Maniac/Child Murderer	30	

Some disability types used in 1970 were dropped; others added. The resulting list includes some 17 disability types and 13 other conditions, for a total of 30 categories. Contact information was collected by modifying the "Contact With Disabled Persons Scales" (Yuker and Hurley, 1987; Eberhardt and Mayberry, 1995). Other questions concerned ADA knowledge and demographics.

RESULTS

Tringo reports six groups of Subjects in his 1970 study, three of which are college students similar to those in this study. For purposes of comparison we compare the combined scores of the three college groups from Tringo ("Old Rank") to those in this study ("New Rank"). An inspection of Exhibit 1 shows that there are some similarities in the rankings of the two studies. Exhibit 2 gives a clearer comparison of just the 17 disability types and showing the standardized scores for the "New Scores" and the adjusted scores for the "Old Scores".

Hypotheses 1: Considering the standardized New scores and the adjustments made by Tringo to the Old scores, the Pearson *r* is the most appropriate measure of correlation when the sets of data to be correlated represent interval or ratio scales (Gay, 1987). The *r* statistic is .914 when examining the ranking data and .947 when analyzing the standardized New and adjusted Old scores. A r of .947 indicates a very close correlation between the results among students in the 1960's and the 1990's on these 17 disability types.

Exhibit 2: Scores and Rankings Standardized

Disability Type	New	Old	New Rank	Old Rank
Asthma	-0.5870	0.4186	1	2
Diabetes	-0.5495	0.4810	2	4
Arthritis	-0.4897	0.4551	3	3
Ulcer	-0.4148	0.4074	4	1
Heart disease or Attack	-0.2901	0.5472	5	5
Stroke	-0.2502	0.6563	6	9
Cancer	-0.2402	0.6677	7	10
Old/Over 65	-0.1953	0.6769	8	11
Missing an Appendage	-0.1354	0.5801	9	6
Deafness	-0.1229	0.5888	10	7
Blindness	-0.0680	0.6033	11	8
Cerebral Palsy/MS	0.0392	0.8366	12	13
Epilepsy	0.1141	0.7681	13	12
TB	0.2463	0.8489	14	14
Mentally Retarded	0.3062	1.0892	15	15
Mental Illness	0.5632	1.1098	16	16
Alcoholic/Drug Addict	0.7852	1.1245	17	17
	RANK	Pearson r	= 0.914	
	SCORE	Pearson r	= 0.947	

The F-test performed upon the standardized New and adjusted Old scores surprising finds a significant difference with F = 2.6615 and P= .029. The variance within the New scores was much higher than the relative lack of variance in Old adjusted scores. A significant F can indicate that only one of the means is different while all other means are highly correlated, which seems to be the case in this study. A further analysis of which means should be performed based upon a prediction rather than simply running a t-test on each set of means.

These highly correlated scores and ranks tend to uphold the first hypotheses - that the rankings and scores found in Tringo's study in 1970 are still generally accurate descriptions of social attitudes and that there is no significant difference between the Tringo scores and the scores some thirty years of activism, legal intervention, and education later. Hypothesis 2: An examination of Exhibit 2 shows that AIDS related illnesses are very disconcerting to the Subjects. HIV only was ranked as 25 and "full blown AIDS" was ranked as 27. The strength of the responses can be seen by examining the modified DSDS used in this study. An average score of 4.64 (full blown AIDS) is the fifth step away from the intimacy found in the first step. The hypothesis was supported in that HIV and AIDS are in the negative end of the preference list, between ex-con and alcoholic or drug addict. The "distance anchor" category of "homicidal maniac..." had an average rating of a little over 7, which is close to "keep in an institution." Mental retardation and mental illness continue to garner negative social distance rating. Interestingly "transvestite" was the 29th ranked category, indicating strong negative attitudes, and with a score of 5.3 was moving from "work with" toward "keep away from".

DISCUSSION

There are obviously limitations to this study that should be considered. The use of student subjects has been hotly debated, but attention should be paid to the fact that it was the cognitive processes that were being examined here. Further, if there is bias in society, it should be found distributed somewhat evenly across society. Field research can be useful in verifying this assumption. Comparisons were made to Tringo's original study from 30 years ago that also used student subjects. His study found that students and non students has a similar hierarchy of preferences on these topics.

More exploration of this complex discrimination against the disabled would help in trying to understand when discrimination against the disabled is most likely to occur in the workplace. The effect seems to be different from the discrimination effects based upon gender and race and this heterogeneity makes any understanding of discrimination against the disabled complex.

One use of this study, and others like it, is the categorization of disabilities used in other studies. The preferences or levels of intimacy found in this study provide a basis upon which a researcher can choose particular disabilities knowing that they will have either more positive or negative stereotypes based upon the DSDS.

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HUMAN RESOURCE MANAGERS SEEK THE EXACT FIT EMPLOYEE IN A DOWNTURN JOB MARKET: IS THIS AN EMPLOYERS MARKET?

Joseph B. Mosca, Monmouth University

ABSTRACT

When Harry and Harriet were freshmen in college it was fair to say that it was a graduates market, the year was 1999. Retention was the norm and companies did everything they could to keep good employees from drifting off to another firm. Consumer confidence was high and the economy bright. In 1999 the stock market was a raging bull (Kovaleski, 2001). Now they are preparing to graduate from college and the economic landscape seems to be foreboding. Consumers have lost their confidence, businesses are sharply cutting back, and investors are concerned about future growth. Will this slowdown be nasty, and how will it affect Harry and Harriet?

Just twelve months ago the NASDAC was not suffering any pain and was experiencing gain. Now the Internet is mostly worthless, because small investors that traded on the net were holding on to their money, tech stocks have plummeted to the teens in value, and the blue chips have hit bottom (Serwer,2001). Millions of investors have lost their nest eggs, and frustration looms. Will Human Resource Managers continue with their retention strategies, or will the job market shrink, giving way to a tight situation, with retention a thing of the past?

WHAT IS HAPPENING?

In the 1987 crash, the loss represented almost half the Gross Domestic Product and over four times the amount of wealth for US investors was lost. Now, this plummet in stocks is leading to more cuts in consumer spending and depressed corporate profits. Investors are avoiding putting new money into stocks and corporate earnings are on the down swing. Companies are projecting record numbers of negative earnings warnings. What is this leading to? Reports indicate layoffs and bankruptcies. Tech companies are causing investors to worry as tech spending is slowing down and earning projections are cut back. In addition, the NIKKEI has fallen to its lowest level since 1985, and Japanese banks are in a negative credit state (Hovanesian, 2001).

According to Challenger, Gray & Christmas, American companies reported a record number of planned layoffs in January 2001. This was the largest number of job cuts in any month since 1993, resulting in 142,208 layoffs. Car manufacturers led the pack with 34,959 employees out of work. Not far behind were the telecommunication firms who had 22, 060 planned layoffs, while the retail trade announced cut backs of 15, 344 (Anonymous, Journal of Business Strategy, 2001).

Another sign of a U.S. economic downturn was the job cut announcement in February 2001 when planned cuts climbed above 100,000. It was the third straight month that such drastic numbers were reported. In the meantime, employers across the board planned to cut 101,731 employees to boost lagging profits. Putting these numbers in perspective, in 1998 a ten-year high of 677,795 job cuts resulted in a monthly average of 56, 483 layoffs. When calculated it is roughly half of the job cuts over the three-month period of December 2000 to February 2001. According to Challenger, for the three-month period December through February, layoffs totaled 377,652. As one can see this three-month period of layoffs was up 188.8 percent from the 130,752 cuts during the same period a year ago. What is sad to report is even if layoffs slow down to last year's average of about 51,000 each month, the potential year end cuts could be more than 750,000, resulting in an eight year high. Comparing these layoffs for the same month just a year ago could be evidence that a slowdown is in the making (Anonymous, 2001, Home Textiles Today).

Oddly enough, unemployment is lower, but job growth is slower. During 2000 the national unemployment average was 4.0 percent, and that was down from 1999's 4.2 percent. However, job growth has slowed considerably. Therefore, job growth this year could be below 2 percent, and that would be the lowest in the last ten years. It is estimated that the national unemployment rate will rise nearly 5 percent (Anonymous, 2001, Graphic Arts Monthly).

WHAT WILL ORGANIZATIONS DO?

It is now evident that the economy is beginning to slowdown, and organizations will have to take a hard look at what they have, and find better ways far more cost saving measures. It is predicted that giving more attention to optimization and quality of products and services can help (Wilson, 2001).

During the 1990's there was an explosive surge in business investments, companies boosted capital spending, As a result, profits took off and the economy was in an upward trend. A rising economy is now going in the opposite direction. Economists are concerned that the 90's investment boom could turn down into a bust, and the economy can go down with it. What would this mean in the long term? Companies will begin to lower their inventories. Now economists are beginning to focus on capital spending which could affect the economy more. Profits are down causing companies to pair down their capital budgets. The fourth quarter indicated that capital spending fell to 1.5 percent. This was after a 20 percent gain in the first quarter of 2000. The concern is that companies could radically cut capital spending to make up for slower consumer spending. As a result companies are cutting costs, lowering growth plans, and reducing payrolls (Miller, Hof, Shinal, Crocket, Arndt, Palmer, Rocks, 2001).

WHAT WILL HUMAN RESOURCE MANAGERS DO?

Currently the job market has changed; many firms have not cut jobs but have become more conservative in their hiring practices. Human Resource managers (HR managers) are beginning to focus on employee contribution as an important factor. However, while they are still in the hiring mode, they are looking for good fits, not just bodies to fill a position. The down side is that temporary work is contracting. As a result companies are back to right sizing a trend of the 90's. Today's unemployment rate remains at 4.2 percent, a small jump from 4 percent in the month of December, 1999. Employment ads fell 13 percent between January and August of 2000, but remained steady since. The good news is that 150,000 new jobs are being created on an average each month on average. More good news is that layoffs will not be drastic, but through attrition or early retirement will be spread over a number of years. It has been calculated that out of the 142,208 layoffs announced in January, more than half these layoffs are expected to be achieved through attrition. It must be kept in mind that layoffs reflect various factors, not just a downturn. For example, GE is repositioning itself by expanding into new markets and reducing itself in other sectors. AOL Time Warner is in the process of eliminating job duplications. As a result the job market is still good, but more competitive. The new buzzword for HR managers is "Exact Fit." Is this true? It has been reported by recruiting agencies that business is on the up swing. What is happening is that foreign companies who could not compete during the boom are hiring the best candidates? In certain sectors such as manufacturing, automotives, and retailing, hiring is beginning to slow down. However, workers with the right skills will find jobs if they have the "Exact Fit." What is expected is that factory floor workers will feel the pinch, and localized weaknesses might occur in the South, Midwest, and parts of the Northeast. HR managers predict wages will come under pressure; however, this has not occurred as yet. To date private sector employees have averaged a gain of 5 percent over the past twelve months. Indications are that this will not change, and managers will still keep retention in mind, especially with the "Exact Fits." Why? If companies get through this down turn, they do not want to face the perennial problem of finding the "Exact Fits," as they did during the boom. The strategy Human Resource Managers will use is to cut hours worked, overtime, bonuses, and stock options. They are relying on the forecaster predictions that unemployment will cap off at 4.5 percent, the worst that is predicted is a rise in unemployment of 5 percent (Bernasek, 2001).

HOW DO HUMAN RESOURCE MANAGERS FIND THE EXACT FIT?

It is the process that ensures that the right number and kinds of employees are in the right jobs at the right time. These employees are capable of effectively and efficiently completing those tasks that will meet organizational objectives. HR managers begin by reviewing their current human capital through a human resource inventory. This inventory provides the HR managers with data that depicts employee talents and skills. This is followed by a job analysis, which reveals workflow and behaviors that are essential to perform a task. A job description is then developed, a written document of what an employee does, how it is done, and why it is done, including conditions of employment. All of these processes lead to the job specifications, a statement of the minimum acceptable qualifications that an employee must possess to perform a given job successfully (Robbins, Decenzo, 2001).

HR managers will now have a struggle in this down turn to deal with employee costs while operations managers will have to deal with a consistent level of high quality production and services. The balance to maximize limited financial resources can take a toll on managers and employees as well. As organizations find ways to cut employee costs, these cost cutting measures usually increase employees' workloads. This results in frustration for HR managers, and employees. The "exact fit" is now paramount, along with retention of those with the fit capabilities, and is critical in meeting organizational objectives (Numerof, 2001). Without assistance from senior management, these managers and employees who fit can not succeed. Corporate seniors can instill in its HR managers the tools and desire to work with operational mangers to understand the needs of employees with "exact fit" (Noser, 2001). If the "exact fit" does become a predominate factor, new ways to evaluate the performance of these employees must be dealt with strategically (Mitchell, 2001).

A THREE PART STRATEGY

Companies can fail to address the "exact fit" challenge if they lack effective retention strategies. It is suggested that a well-planned retention strategy can impact retention and recruitment of "exact fit" employees. The strategy should have elements that include: Selection and orientation, training and career management, and motivation, along with compensation. Let's begin with selection and orientation. This can be an effective strategy that begins at the early stages of the recruitment and selection process.

HR manager's must identify and attract candidates who not only possess the skills that are needed, but also demonstrate the attitudes, personalities, and promote commitment.
Therefore, the "exact fit" can be found and a new corporate culture can be developed. Once this culture-based selection process is in place, the HR manager can carefully design an orientation program. If the program is designed properly, it can lay the groundwork for commitment by promoting the feeling of affiliation that characterizes the organizational fit the HR manager is looking for. It may be beneficial to involve the families of new prospective "exact fits" in orientation programs. Senior managers should participate in orientation showing new employees that they are important to the organization. In addition, an assigned department mentor can guide the employee during the first month or so. It is also helpful when line managers control the orientation process, to integrate new employees into the culture, then the fit can occur quickly.

Training and career management guidelines: HR manager's can adopt an interactive approach to training and development. Research indicates that the traditional paternalistic approach to career management is no longer effective. The reason why the paternalistic approach is no longer effective is, companies can no longer offer lifetime employment. Career mapping now lies primarily with employees, who want more input in deciding which development opportunities they will pursue. With this in mind, the HR manager can design an effective development program that operates as an interactive process, in which managers and their direct reports work in unison to identify skill gaps that must be filled and satisfy the professional interests of the employee. This interactive approach can help develop the competencies that will be needed to ensure employee and organizational objectives. This means that managers and senior staff should continually promote the benefits of development, and operational managers at all levels must work proactively to set developmental goals with employees. This process will provide information on the resources available to meet those goals, and offer assistance to facilitate the development process. In essence, when a manager is held responsible for these activities and their performance is evaluated on this basis, it ensures that employees develop the "exact fit" and sends a message to high performers that the company wants them to stay and is committed to their success.

Motivation and compensation guidelines: During this down turn the HR manager must incorporate non-financial rewards into the compensation program. The HR manager must keep in mind that compensation is an emotional bond that is based in intangibles, such as the feeling of being valued and appreciated. Therefore, offering non-financial rewards and giving employees more control over their work schedules can add quality to their work life and strengthen their feelings of affiliation. To make this process effective, the HR manager can impact the program by evaluating managers on how well they apply non-financial rewards. "Exact fit" employees are high performers who look for increased responsibilities and challenges. They tend to participate more than other employees do and usually offer more suggestions that lead to improvement. Therefore, HR Manager's should encourage managers to enlist these high performers as key problem solvers that can help strengthen their feeling of affiliation while enhancing their self-images as stakeholders. When the HR manager customizes non-financial rewards to individual employees, there is a definite impact on motivation and retention (Mello, 2001).

WHAT ARE HUMAN RESOURCE MANAGERS DOING TO ATTRACT EXACT FITS?

The economic down turn is likely to transform the labor market into an "employer's choice" environment. The rate of employment has been maintained at a low level for an extended period of time. The indication during this down turn is that future work force growth can slow down. In spite of these factors the demand for exact fits is out pacing the available supply. This can still create a critical labor and skill shortage in a variety of industries requiring specialized core competencies within the workforce. As a result it is also causing changes in how companies evaluate employee capabilities. Even if there is a transformation into an employer's choice environment it will not resolve the shortage of exact fit employees. According to Clarke (2001), he believes that during the next ten years the "exact fit" employee shortage will continue. HR managers must realize that "exact fits" will seek the following when deciding to remain with a firm or looking for another job:

They will look for organizations with recognition and leadership in the market place.
Companies with a strong sense of direction.
HR practices that are unique, bringing notoriety and employment branding to the industry.
Emphasis on careers that includes training and development.
Opportunities for advancement.
Corporate cultures that place emphases on innovation and creativity.

Strategies that reward performance.
Benefit programs that meet individual needs.
A corporate culture that values diversity and respect for individual differences.

What makes the labor market look bright even in the mist of a down turn? Baby boomers will and are preparing to leave the work place in large numbers. It is estimated that eighty million employees born after 1946 will begin the transition to retirement in the next ten years (Clarke, 2001).

ADJUSTMENTS REQUIRED FOR THE HRM

The HR manager should be a partner with senior management in the creation of organizational strategy. Human resource managers need to develop control methods and standards that are measurable and relate to the bottom line. As indicated, the HR manager has to be in a position to motivate other managers to support all organizational initiatives. The HR manager can provide leadership support for managers and assign them with responsibilities and accountability. During a down turn, linking the bottom line with initiatives can be essential to success (Clarke, 2001).

The HR manager should design a strategic retention program that clearly communicates organizational goals and employee criteria. This can be accomplished through performance-based incentives. This incentive program will serve to increase productivity and increase satisfaction for the “exact fit” employees, thus promoting retention. In addition, team building can be a key element in constructing an environment characterized by strong social ties. Teams help to build social ties, an important element for retention of exact fits (Horne, 2001).

HR manager’s must review their current generational demographics and project the future demographics of their workforce as well. They must consider how the face of the workforce might change with employees primarily comprised of generation X’s and millennials. The HR professionals need to make these adjustments, but be prepared to answer the following questions: What training programs would be most effective for these groups? How do they prepare managers to manage across these organizational groups? Keeping in mind that some baby boomers will remain on the job, the work place is certainly diverse, and there will be a mix of age groups. How will HR managers tailor the performance management process? How will the HR manager meet and balance the differences in employee needs for compensation, employee recognition, employee development, and other areas still being determined? Will the “exact fit” multigenerational employee function more effectively as a team member or as an individual? These alterations and questions must be considered before the HR manager’s can adjust. In addition, the HR manager’s must meet the overall organizational needs, goals, and objectives in order to keep the business running (Lathrop, 2001).

HOW WILL HUMAN RESOURCE MANAGERS INFLUENCE “EXACT FIT EMPLOYEE LOYALTY IF A DOWNTURN OCCURS?

If a down turn becomes a reality, then downsizing can go along with it. Loyalty in a downsizing environment becomes a problem for HR managers. The previous discussion indicates that employee empowerment and job enrichment are elements that allow survivors to cope with downsizing stress. In a study conducted by Niehoff, Moorman, Blakely, and Fuller, they examined the relationship between empowerment behaviors, perceptions of job enrichment, and loyalty behaviors with employees who survive downsizing. The research indicated that empowerment does not have a direct effect on loyalty, but affects loyalty indirectly through job enrichment, as indicated earlier in this paper.

Loyal employees put forth extra efforts in their work; they go above and beyond the norm in assisting the organization function effectively. The problem is that the 90's downsizing environment placed loyalty in a precarious position and X's are a result of the era. The effects of downsizing have jolted stock prices, profits, productivity, and remains to be seen if a down turn occurs. This is another issue the HR manager's must prepare for in order to retain the "exact fits" and find new ones.

It is obvious that in a down turn economy finances will become tight and there are no easy answers to the question, "How will HR manager's influence loyalty in this environment?" The empowerment process sets the stage for enriched tasks and such enrichment can give employees control over their work. In these times when everything seems to be up in the air and possibly out of control, if employees gain control over their jobs, it may be the starting point for building loyalty. However the study does not suggest that managers overload employees with additional work (Nihon, Moorman, Blakely, Fuller, 2001).

DISCUSSION

Retention is a bottom line issue for HR manager's, especially in this uncertain time. This research indicates that employees are looking for a more flexible, supportive work environment one that allows them to be themselves, do good work, and be acknowledged for their efforts. If they feel that another environment is more in sync with their needs, they will make a change. The challenge for the HR manager is finding and retaining the "exact fits." There is a considerable amount of research to be done in order to answer all of the questions raised. However, the issues addressed do have some starting points for HR manager's to consider. If the down turn takes hold it is believed that the "exact fit" employee will become the norm.

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ORGANIZATIONAL CITIZENSHIP BEHAVIOR: SATISFACTION, JUSTICE, COMMITMENT AND JOB SCOPE AS COMPETING PREDICTORS

Kermit W. Kuehn, American University of Sharjah
Marc C. Marchese, King's College
Bernie J. Healey, King's College

ABSTRACT

This study examined the relative usefulness of self-reported job satisfaction, procedural and distributive justice, affective and continuance commitment, and job scope in predicting organizational citizenship behavior (OCB) in a sample taken from a health services organization (rehabilitation center) in the U.S.A. (n=267). Using hierarchical regression, tests were conducted to determine the relative contribution of each correlate on OCB. Job scope and affective commitment were found to be the only significant predictors of OCB. Implications for theory and management practice are briefly discussed.

INTRODUCTION

Organizational Citizenship Behaviors (OCB) are those behaviors exhibited by employees that are characterized as extra-role, or discretionary in nature. OCB has received growing acceptance as a construct in organizational research, which is in part due to the growing awareness that such behaviors could be the difference between excellence and mediocrity in terms of organizational performance (Organ, 1990; Morrison, 1996). With greater emphasis on work designs that emphasize the need for employee autonomy, good will and creativity, OCB appears to capture the essence of these various interests in human performance.

With this continued research attention, however, the relative significance of the several potential correlates becomes harder to discern. Reviews (Organ, 1990) and meta-analyses (Organ & Ryan, 1995) have helped summarize the state of the field and offer profitable suggestions for future research. In particular, Organ and Ryan's (1995) meta-analysis attempted to assess the cumulative evidence for several predictors of OCB. Their findings indicated that correlations with OCB for satisfaction, justice (fairness) and commitment were generally the same, suggesting to them that no particular attitude correlate among the three proved better than the others. No support was found for dispositional influences on OCB. Job scope, a correlate of particular interest in this study, was not among those included, due in part to the lack of sufficient numbers of studies to test the correlate.

From the Organ and Ryan (1995) study, we find that the potential correlates tested were limited by the number of suitable studies available. This fact alone diminished significantly the conclusions that could be made from their analysis. Clearly more studies will strengthen the value of these kinds of studies. Increasingly, researchers are comparing known or suspected correlates of OCB with one another, attempting to evaluate the relative strength and relationship among typically two competing correlates (Williams & Anderson, 1991; Organ & Lingl, 1995; Farh, Podsakoff, & Organ, 1990).

The purpose of this study was to evaluate multiple known correlates of OCB in a test of relative significance or usefulness in predicting citizenship behavior. Specifically, this study assesses the relative influence of satisfaction, organizational justice, organizational commitment and job characteristics on OCB ratings. By placing variables in competition with one another in explaining variance in OCB within the same sample, it is hoped that a clearer understanding will emerge as to the relative significance of these variables.

In the following sections, we will discuss key issues from the OCB literature. After summary discussions of key findings for the correlates included in the study, we review theoretical arguments and available empirical evidence. We conclude each discussion of the particular correlate with an hypothesis for this study.

Satisfaction and OCB

Organ and Lingl (1995) note that some 15 studies have found a "reliable statistical relationship between OCB and job satisfaction". Williams & Anderson (1991) observe that satisfaction has been "examined most frequently" with citizenship behavior. While the correlations between satisfaction and OCB remain rather modest, generally ranging from the low 20s up to mid 40s on some components of OCB, it has nonetheless been a persistent correlate (see Organ and Ryan (1995) and Organ (1990) for reviews).

Theoretically, the relationship between OCB and satisfaction has been long standing and quite straight forward. Employees who are satisfied with their jobs will more likely exhibit more discretionary behaviors. In this sense then, satisfaction is seen as causally prior to OCB (Organ and Ryan, 1995; p. 796).

As to performance in conjunction with other variables, however, satisfaction has not done particularly well. When satisfaction is included as a predictor of OCB with fairness or justice variables, such as leader fairness or procedural justice, it has at times not accounted for any significant new variance in OCB (Farh et al, 1990; Moorman, 1991); likewise, when included with task scope (Farh et al, 1990). The relative importance of satisfaction on OCB when compared to organizational commitment is less certain. Organ and Ryan (1995) found them to be equally important correlates of OCB in their recent meta-analysis. As job satisfaction and organizational commitment tend to be significantly inter-correlated, it might be expected that only one of these correlates will be significant in this study. Finally, considerable effort has recently been made to bolster the case for a dispositional aspect of satisfaction, which some have argued may account for satisfaction's somewhat weak performance as a predictor (Organ, 1990). Empirical support for this perspective remains weak. Given that, however, the suggestion by Organ and his colleagues is that if satisfaction reflects a dispositional element, it will likely be an influence in weak situations. Weak situations are defined as those where the specific context is not strong enough to determine the behavior or attitudes of the actors, thus allowing for more general dispositional influences to manifest themselves (Organ, 1994). However, to date, with little exception, satisfaction has been a better predictor of OCB than dispositional variables (Organ & Ryan, 1995).

For our purposes, we are interested in confirming the relative importance of this prominent OCB correlate. From the above review, we do not expect it to prove as important a predictor as some other variables in this study.

Hypothesis 1: Job satisfaction will not be a significant predictor of OCB when tested against organizational commitment, justice and job scope.

Organizational Justice and OCB

In general, people who perceive that they are being treated fairly by the organization will more likely exhibit attitudes and behaviors that are positive toward the organization (Greenberg, 1993). Thus, theoretically, citizenship behavior, being discretionary, may be how an employee responds to justice issues in the organization. Therefore, it is argued that the perception of injustice would result in less OCB while perceptions of justice likely result in more OCBs (Greenberg, 1993). Organizational justice has commonly been defined in two ways: (1) procedural justice, referring to the fairness of the procedures used by the organization to determine outcomes, and (2) distributive justice, referring to the procedural outcomes received by the organizational member (Moorman, 1991).

The justice-OCB relationship has been relatively reliable, with several studies confirming this relationship (Moorman, Blackely & Niehoff, 1998; Tansky, 1993; Moorman, 1991). For example, Moorman (1991) found that procedural justice (specifically, the interactional component) significantly predicted OCB over distributive justice, and over satisfaction. Tansky (1993), however, did not provide as strong of support for justice as Moorman (1991), with overall fairness measures predicting only one dimension (altruism) of the five OCB dimensions. Satisfaction actually was more strongly related to OCB in this study than justice. On the other hand, Farh, Podsakoff, and Organ (1990) provided strong support for the 'fairness' correlate over satisfaction. Leader fairness, which tapped procedural fairness of the leader, was a significant predictor of altruism, though not of the compliance component of OCB. Moorman et al (1998) found some support for their hypothesis that procedural justice was mediated through perceived organizational support.

This brief discussion is representative of the results of this literature and illustrates the uncertainty as to the relative importance of this variable on citizenship behaviors. Organ (1990) hypothesized that "job satisfaction is unrelated to OCB when the fairness component is partialled out" (p. 61). This prediction has not been universally borne out by research. The meta-analysis discussed earlier has not done much to support or deny that proposition (Organ & Ryan, 1995). However, from the literature it does appear that procedural justice will capture more variance in

OCB than distributive justice and more than general job satisfaction. As a result, we make the following hypothesis.

> *Hypothesis 2:* *Procedural justice, but not distributive justice, will be a significant predictor of OCB when tested against satisfaction, organizational commitment and job scope.*

Organizational Commitment and OCB

A number of studies have assessed the role of organizational commitment on extrarole behaviors (e.g., O'Reilly & Chatman, 1986). Theoretically, commitment is seen more and more in this literature as a "psychosocial attachment" to the organization (Organ, 1990), and has been hypothesized to be positively related to OCB-type behaviors (Meyer, Allen, & Smith, 1993). Allen and Meyer (1990) have conceptualized commitment as comprised of three components: affective, normative and continuance. Affective commitment is defined as "employee's emotional attachment to, identification with, and involvement in, the organization", while continuance commitment "refers to commitment based on the cost that the employee associates with leaving the organization". Normative commitment "refers to the employee's feelings of obligation to remain" (Allen and Meyer, 1990; p. 1). Persons are believed to engage in discretionary behaviors because of their level of involvement with the organization and their desire to remain in it. In essence, they engage in OCB because they have a continuing personal interest in the organization's welfare.

Some recent studies have continued define the contexts for these effects. Deckop, Mangel and Cirka (1999) found support for their view that "value alignment" (similar to the affective commitment construct) with organizational goals, was an important determinant of whether pay-for-performance programs would negatively impact OCB. They found that those employees under a pay-for-performance incentive system who were low in value alignment were lower in OCB than those who were high in value alignment. Interestingly, Van Dyne and Ang (1998) found in data collected from service organizations in Singapore, that contingent-worker OCB was influenced more by affective commitment than the fact of them being contingent workers, whereas for regular (non-contingent) workers, it was their regular status that predicted their OCBs.

Some studies have attempted to measure at least two dimensions of commitment. For example, Morrison (1994) measured affective and normative commitment, finding that affective commitment was positively related to all OCB dimensions used in the study, while normative commitment was related to only one. O'Reilly and Chatman (1986) measured three dimensions of psychological attachment, finding that there was a reliable relationship between self-reported prosocial behaviors and commitment based upon identification with the organization and/or the internalization of its values.

Other studies have not found a significant relationship between commitment and citizenship behaviors (Williams & Anderson, 1991; Tansky, 1993). Williams and Anderson (1991) failed to replicate O'Reilly and Chatman (1986), finding no relationship between commitment and either of their two dimensions of OCB. Tansky (1993) found no relationship between commitment on any of the five dimensions of supervisor-rated OCB.

A couple of things seem important to note about these latter two studies. Firstly, Williams and Anderson (1991) were unable to dimension commitment into the three components needed for an adequate retest of O'Reilly and Chatman's (1986) study. Secondly, Tansky's (1993) work used Mowday, Steers, and Porter's (1979) commitment scale, which assumes commitment to be a largely unidimensional construct. These factors may account for the lack of relationship between commitment and OCB in these studies. As indicated previously, more recent research has established the multidimensionality of organizational commitment, with certain dimensions of commitment being expected to relate to OCB and some not (Meyer, Allen, & Smith, 1993). Meyer and Allen (1991) have argued that affective commitment will be related strongly with OCB, while continuance commitment will be unrelated.

Thus, the relationship between commitment and OCB has generally been expected by OCB theorists (Organ, 1990) and this view has been supported by recent meta-analytic work where commitment seemed to perform as well as satisfaction and fairness variables (Organ & Ryan, 1995). From this accumulated evidence, organizational commitment is expected to correlate with citizenship behavior, but whether it will prove relatively more important that other known variables is unclear. Theory and some evidence do suggest that if any component of commitment proves a significant predictor of OCBs against other important variables, then affective component should be the one (Dunham, Grube, & Castaneda, 1994).

Hypothesis 3: *Affective commitment, but not continuance commitment, will be a significant predictor of OCB when tested against satisfaction, organizational justice and job scope.*

Job Scope and OCB

Aspects of organizational design continue to be examined as they pertain to performance. For example, Lambert (2000) found that the employee perceptions of usefulness of work-life benefits (a context factor) was an important predictor of OCB. Deckop et al (1999) was discussed earlier with regard to pay-for-performance progams. Job design is a relatively recent entrant into the OCB predictor pool. It was selected for this study due to its convincing performance in the limited number of studies (Farh et al, 1990; Morrison, 1994) and because of its known or expected relationship to other variables discussed in this review (Morrison, 1994; Dunham et al, 1994; Meyer et al, 1993).

Theoretically, the inclusion of job scope has been underdeveloped in the OCB literature. Farh et al (1990) argued that intrinsically motivating tasks should promote a broader sense of responsibility and control by the job incumbent. This sense of responsibility could be expected to extend well beyond in-role definitions of job responsibilities as the individual possessing wider job latitude "acts according to the situation" (p. 709). This suggests that an individual reporting wide job scope will experience increased discretion as to how and what behaviors may be exhibited. Griffin (1987) reinforces this point by noting that individuals whose tasks are tightly controlled have “little or no latitude for individual self-regulation” (p. 94). Conversely, increasing amounts of control and discretion over “working conditions, required and optional social interactions…” (p. 94) would at least give the employee opportunity to engage in extra-role behaviors, if not a sense of obligation. This obligation is not organizationally required (in-role), but is perhaps more of a felt personal obligation as developed in a social exchange sense of the term.

From a social exchange perspective, an employee makes contributions to the organization without necessarily receiving direct identifiable benefits. As long as a person judges the organizational environment as being fair over the long term, it is theorized that he or she will continue making such contributions. This is in contrast to a more economic exchange orientation where the relationship between the employer and employee is based on specific transactions. Konovsky and Pugh (1994) argued that since trust and fairness were theorized to be crucial to the development of social exchange, these should be pre-cursors to OCBs. They found evidence for social exchange by showing that an individual's trust in his or her supervisor predicted OCB and mediated fairness effects.

We propose that the amount of perceived job discretion or control may be a more explicit indication of organizational fairness, a facilitating condition for OCBs. Social exchange relies on a reciprocity norm as the exchange mechanism between the individual and the organization. Increased job scope reflects an increased level of trust by the organization in the jobholder. The employee reciprocates trust with actions consistent with the trust given by the organization, thus, the sense of obligation mentioned earlier.

However, Organ (1990) has argued somewhat differently from this. He posits that a task that is more engaging of the full resources of an employee raises the threshold of the individual's perception of unfairness. Simply, the employee is too involved to take account of every injustice that may occur in the organization.

Empirically, the most direct test of job scope was done by Farh et al (1990). Using the composite scores from Hackman and Oldham’s (1980) Job Description Survey, they found that task scope predicted altruism and compliance components of OCB better than satisfaction, and better than leader fairness on compliance. Morrison (1994) found that job breadth explained additional variance in all the OCB dimensions, above that contributed by commitment and satisfaction.

Whereas we argue that broader scope provides opportunity and the motivation for an employee to engage in extra-role behaviors, Organ’s view suggests that more scope dulls the person to the injustice realities of the job. In either case, and based on empirical evidence to date, we expect job scope will explain additional variance over the other variables in the study.

Hypothesis 4: *Job scope will be a significant predictor of OCB when tested against satisfaction, organizational justice and commitment.*

METHODS

The sample consisted of employees from a health service organization in the northeastern part of the United States. The sample included employees from maintenance, food services, clerical, nursing and non-nursing clinical (physical and occupational therapists), supervisors and management. Of the 267 responses returned (31% response rate), 211 (79%) were female. The average age was approximately 36 and average organizational tenure was 5 years. It is typical in the healthcare industry to find that females make up a larger proportion of the workforce. While no direct test of the respondents' representativeness of the organization as a whole was possible, comparing our results with samples in other studies using healthcare samples (e.g., Organ and Konovsky, 1989) suggested nothing particularly unusual with our sample.

Measures

All data in this study were self-report. Data was collected using well-recognized and validated scales from their respective literatures. All scales used likert-type scaling with values ranging from 1 to 5. All scale alpha coefficients from this study are reported in Table 1.
OCB was measured with the revised and validated version of Organizational Citizenship Behavior Scale (Podsakoff, MacKenzie, Moorman, & Fetter, 1990). The scale is comprised of five components of OCB: Altruism (ALTRU), civic virtue (CIVIRT), courtesy (COURT), sportsmanship (SPORT), and conscientiousness (CONSC). Organizational commitment was measured using Allen and Meyer's (1990) commitment instrument. This conceptualization views commitment as three dimensional. The affective (AFFCOM) and continuance commitment (CCOM) subscales were used in this study. Job satisfaction (JOBSAT) was assessed through the Job in General Scale (JIG), a subcomponent of the Job Descriptive Index (Smith, Kendall, & Hulin, 1969). This is a global measure of job satisfaction. Organizational justice was measured using selected scale items provided in Moorman (1991). The procedural justice (PROJUS) and the distributive justice (DISJUS) subscales were used in this study. Finally, job scope (JDS) was measured using Hackman & Oldham's (1980) Job Diagnostic Survey. This instrument is the most professionally recognized measure of task characteristics (Taber & Taylor, 1990).

Data Analyses

A usefulness test using hierarchical multiple regression was applied to all of the predictor variables on OCB (Table 2). This procedure loads each variable into the regression equation in different sequences, noting at each entry the incremental variance explained by the variable entered and the significance of this change (Farh et al., 1990). For example, to test the usefulness of job scope, job scope was entered first into the regression equation and the R-square was noted. In the next set of regression equations, the other variables are first entered into the equation and then job scope is entered last. The incremental increase in R-square again is noted. If job scope significantly explains the variance in OCB when entered first and last, it is considered to be a useful predictor of OCB. The procedure was used on job satisfaction, procedural and distributive justice, affective and continuance commitment, and composite scores of job scope. The “usefulness analysis” is described fully in Darlington (1968) and Cohen and Cohen (1983).

Finally, since all of the data originated from self-report indices, common method variance was evaluated. Common method variance was examined by applying Harmon's one factor test. This test begins with a factor analysis of the variables. If the unrotated factor solution results in either a single factor or the first factor accounting for the majority of the covariance in the variables, then common method variance is significant (Podsakoff & Organ, 1986). The results of Harmon’s one factor test did not result in a single factor or the first factor accounting for the majority of the covariance in this sample.

RESULTS

Means, standard deviations, correlations and scale reliabilities (alphas) of the variables were computed and reported in Table 1. Scale reliabilities were generally strong, except for three of the OCB subscales, Conscientiousness (.53), Sportsmanship (.54), and Altruism (.58). These low scores suggest some instability in the constructs as measured in this sample. Prior research has revealed similar results, particularly with Conscientiousness and Sportsmanship (e.g., Morrison, 1994). Factor analysis of OCB items revealed a generally clear five-factor structure for OCB, with items loading most strongly on theorized factors. Our decision was to retain all items as theoretically proposed.

Correlations among the variables revealed several significant relationships, the most notable being the total lack of significant correlations between any of the variables and the Conscientiousness (CONSC) component of OCB. This in part could be attributed to the relative instability of the subcomponent discussed earlier. CCOM also revealed considerably weaker correlations with other variables, relating significantly only with AFFCOM and CIVIRTUE. All other variables revealed significant correlations with OCB components.

Table 1: Descriptive statistics and correlations for dependent and independent variables.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1 Job Scope	81.97	12.95	(.86)	.32***	.32***	.04	.38***	.23***	.26***	.25***	.31***	.13*	.03
2 Job Satisfaction	34.30	8.47		(.87)	.45***	.12	.46***	.40***	.08	.14*	.17**	.22***	-.04
3 Affective Commitment	37.96	9.28			(.84)	.29***	.52***	.49***	.22***	.33***	.20**	.28***	.06
4 Continuance Commitment	35.45	9.20				(.72)	.09	.10	.07	.17**	.09	-.03	.11
5 Procedural Justice	24.76	7.76					(.89)	.63***	.20**	.28***	.26***	.22***	.09
6 Distributive Justice	13.06	5.91						(.95)	.11	.25***	.20**	.21***	.05
7 Altruism	18.64	2.15							(.58)	.45***	.47***	.22***	.28***
8 Civic Virtue	17.19	3.02								(.75)	.47***	.23***	.26***
9 Courtesy	19.31	2.06									(.78)	.28***	.24***

10 Sportsmanship	15.05	3.70										(.54)	.01
11 Conscientiousness	17.87	2.99											(.53)
Alpha coefficients are in parentheses on the diagonal. n=267 $^{*}p < .05$ $^{**}p < .01$ $^{***}p < .001$													

Results from the usefulness tests conducted to evaluate our hypotheses are presented in Table 2. When all of the independent variables were regressed on OCB components, the total R-square ranged from .03 on CONSC to .16 on CIVIRTUE, with a median R-square of .11 for all OCB components. Overall, job scope (JDS) and affective commitment were observed to be useful predictors of OCB.

Overall, there was general support for all but one of the hypotheses. Hypothesis 1 was supported. Satisfaction did not explain additional variance in any of the OCB components over the other variables in the study. Only partial support was found for Hypothesis 2, where distributive justice was not a significant predictor of OCB, as expected. Contrary to expectations however, procedural justice did not explain additional variance either. Hypothesis 3 predicted that affective commitment, but not continuance commitment, would be a significant predictor of citizenship behaviors. This was generally supported in that continuance commitment did not explain variance in any of the OCB components, as hypothesized. Further, affective commitment explained significant additional variance in altruism, civic virtue and sportsmanship. Finally, we proposed in Hypothesis 4 that job scope would explain additional variance in OCB. This expectation was supported with JDS significantly explaining variance in altruism, civic virtue and courtesy.

Table 2: Significant hierarchical regression analyses results [1]

Variables	Multi-R		Total R-square		beta		F[2]		R-square Chg[3]
	First	Last	First	Last	First	Last	First	Last	
ALTRUISM									
Job Scope	.26	.32	.07	.10	.26	.21	19.31	4.82	.04***
Aff. Commit.	.22	.32	.05	.10	.22	.15	13.23	4.82	.01*
CIVIC VIRTUE									
Job Scope	.25	.40	.06	.16	.25	.15	17.78	8.15	.02**
Aff. Commit.	.33	.40	.11	.16	.33	.20	32.45	8.15	.02**
COURTESY									
Job Scope	.31	.35	.10	.12	.31	.24	28.12	6.15	.05***
SPORTSMANSHIP									
Aff. Commit.	.28	.33	.08	.11	.28	.23	23.20	5.19	.03***

[1] Only statistically significant (useful) results are reported in this table for each OCB subscale. Conscientiousness was not significantly predicted by any of the independent variables. Results reflect variable when entered first and last in the regression, except for the Fs, which reflect overall regression results.
[2] All *F*s were significant at p< .000.
[3] Significance of changes in R-square are as follows:
$^{*}p<.05$ $^{**}p<.01$ $^{***}p<.001$

In summary, usefulness analysis clearly identified two predictors of OCB: job scope (JDS) and affective commitment (AFFCOM). Both JDS and AFFCOM were useful for predicting altruism and civic virtue. Moreover, JDS was a useful predictor of courtesy, and AFFCOM was a useful predictor of sportsmanship. Not surprisingly, based on the correlation results from this sample, no predictor was useful for the conscientiousness component.

DISCUSSION

This study confirms the role of job scope on self-reported citizenship behaviors suggested by earlier studies (Farh et al, 1990; Morrison, 1994). Job scope correlated significantly with four of the five components, explaining significant additional variance on three of the five OCB components. Altruism, civic virtue, and courtesy were significantly predicted by job scope. These components seem most discretionary of the five components. Broader job scope grants more personal control to the jobholder to perform tasks, which logically would allow the jobholder to engage in such discretionary behaviors, whether directed toward a particular individual (altruism), toward fellow employees (courtesy) or toward the organization (civic virtue).

But even should this interpretation be accepted as plausible, it does not follow necessarily that jobs that allow for jobholder control will result in the prosocial behaviors reported here. There must be some motivation to engage in these particular behaviors; that is, there must be a willingness to direct this personal control toward such positive ends. As discussed earlier, Farh et al (1990) argued that job characteristics could be expected to arouse intrinsic motivations, and thus link theoretically job scope and OCBs.

However, the significant role of affective commitment in this study suggests that the motivational source may be rooted in the emotional attachments of the jobholder to the organization. The willingness to act in prosocial ways predicted behavior toward individuals (altruism) and the organization (civic virtue and sportsmanship). As with job scope, affective commitment was significantly correlated with all OCB components, except for conscientiousness, suggesting that the relationship in this sample was quite pervasive.

The findings also confirmed the relatively weak performance of job satisfaction as a useful predictor. While satisfaction was significantly correlated with OCB components, it did not prove useful relative to other predictors. This result continues the accumulating, albeit not always consistent, evidence that satisfaction has limited unique variance to explain in OCB.

One unexpected result was that organizational justice, in particular, procedural justice, did not demonstrate usefulness when tested against other correlates. Like satisfaction, it did not contribute unique, substantive variance above other variables in this sample. The moderate intercorrelations between procedural justice and job scope and affective commitment suggests that the relationship found in previous research may be a result of spurious associations due to the failure to include other important correlates. Ironically, this was the same conclusion reached by Moorman (1991) as to the correlations between satisfaction and OCB in earlier studies.

As reviewed earlier, Konovsky and Pugh (1994), using a social exchange theory perspective for OCB, argued that in social exchange relationships (as opposed to economic exchanges), employees expend effort in behalf of the organization eventhough they may not receive immediate reward for such effort. They reason that since the social exchange relationship is rooted in a trust developed over time with the organization, an employee will accept short term inequities in the relationship in the belief that they are temporary and are resolved over the long term.

In their study, Konovsky and Pugh (1994) theorized that one way trust developed between the organization (in their case, the supervisor) and the employee was through the existence of "procedurally fair practices" (p. 658). They found support for their view that employee trust in the supervisor mediated the relationship between procedural justice and OCB. That is, employee perceptions of procedural fairness were related to ratings of trust, which was subsequently related to OCB.

In our study, we did not measure trust. However, we did propose earlier that job scope was a more explicit measure of an organization's trustworthiness. That is, when the organization grants greater control over the job and provides more information about the job to an employee, we would expect an increase in employee ratings of trust. As suggested by social exchange theory, the relationship between the organization and the employee is one of reciprocity. Therefore, it might be expected that employees who experience increased job control would judge the socially-based relationship as secure, and thus continue to exhibit discretionary behaviors.

In sum, the worker may conclude that the perception of increased control over his or her work is an explicit indication of organizational fairness, thus negating any independent effect of a fairness variable itself. Adding to this, the support found for affective commitment as a predictor may further this effect as not only does the jobholder not have time to notice, as Organ (1990) suggested, but is less inclined to notice. Affective attachments to the organization may act as “rose colored” glasses for the employee, inhibiting perceptions of injustice by the employee, or the employee simply does not necessarily interpret specific organizational actions as unfair.

Implications for Theory and Practice

The findings in this study, as well as those in Farh et al. (1990), support our conclusion that job design should be included in future research of OCB. In our earlier discussions, we tried to make the case that from a social exchange perspective, job scope has a theoretical place in OCB research. We argued that job scope may reflect a cognitive appraisal by jobholders of how fair the organization is by how much control or discretion it gives them over their work. Arguing from a reciprocity view, increased trust from the organization begets increased trust from employees, and vice versa.

From a management practice standpoint, job design has clear managerial implications. Unlike affective commitment, job design can more easily be managed by supervisors. All of the task characteristics (e.g., task variety, autonomy) can be considerably influenced by organizational management. As suggested above, if job characteristics reflect a perception by the job incumbent of fairness, or trust, then it follows that managers that increase control in perceptible ways can expect higher incidences of extra-role behaviors.

Job enrichment, however, is not without costs. Research has shown job redesign to be related to higher compensation costs (Campion & Berger, 1990; Campion & McClelland, 1991). An employer will have to decide if the potential benefit of increased OCB is worth the additional resource demands.

Limitations and Future Research

The data from this sample was self-report and cross-sectional. Self-report measures introduce the likelihood of common method influences on the results. The extent of such a possibility is not completely known. Attempts were made to evaluate this possibility. It should be noted however, that the results found in this study have been supported by previous studies using other methods (e.g., Farh et al, 1990). Further, the tests used in this study focused on unique variance contributed by variables, not common variance. The cross-sectional nature of the data make claims of causality problematic. Our analyses implied a causal ordering of variables that is not strictly permissable with this data. We did model variable relationships consistent with the literature, but this does not remove the possibility that these models are incorrect.

A second related concern has to do with the use of self-reported OCB. The merits and demerits of using supervisor-, peer-, or self-ratings has been delineated in previous research (e.g., Organ and Konovsky, 1989; Van Dyne, Cummings and McLean Parks, 1995). Moorman (1991) reported that tests comparing OCB-source ratings found that there was little difference between supervisor ratings and self-report ratings of OCB. Organ (1990) observed “each source of ratings seems to present its own form of bias...” and “present a dilemma for researchers trying to decide on the appropriate source for measures of OCB” (p. 51).

It is recommended that in future research of OCB, a general trend toward multi-variable testing be continued, even expanded. Single variable tests no longer seem appropriate, except perhaps for the initial testing of potential new correlates. This study has provided some evidence that the failure to include multiple variables in previous work may have resulted in spurious associations among variables. A replication of the results in this study is recommended, but with the use of multi-rater designs for OCB.

Our previous discussion left unanswered a couple of issues of interest for future research. First, we argued that ratings of job scope are cognitive expressions of a type of justice or trust variable. We suggested that justice was mediated by job scope because job scope revealed a key element of organizational fairness, that being the discretion the jobholder perceived in his or her job. Future studies will need to explore the relationship between justice, job characteristics, trust and OCBs, in order to substantiate this claim. A second issue considers the relationship of affective commitment with job scope. In every study cited in this paper, job scope contributed significantly to explaining variance in OCB. This was not the case for commitment. The conditions for which commitment will predict OCB remains unclear. It is possible that when commitment is low, justice may resurface as a correlate. It seems reasonable to expect that within a social exchange framework, perceptions of trust by an employee may increase his or her level of commitment. The question of whether increased job scope will likewise increase commitment deserves more attention.

Finally, evaluating the particular job characteristics that contribute to extra-role behaviors seems beneficial, particularly from a practitioner level. If job scope proves in subsequent research to be a significant predictor of OCB, then a better understanding of the underlying structure of this relationship would profit practitioner and researcher alike.

CONCLUSION

This study has suggested that increasing job scope would encourage in practical ways the discretionary behaviors of jobholders. Job scope's established relationship to OCB supports our belief that more discretionary behavioral control would allow for more positive, discretionary and necessary behaviors to occur within the organization. While the job characteristics themselves might be sufficient to provide the motivational base for such behaviors, this study suggests that increasing psychological attachment, or commitment, provides additional motivation to engage in these behaviors.

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THE CHANGES IN FUNCTIONAL MANAGERS' WORK AND SATISFACTION DUE TO DUAL REPORTING

Mazuki Jusoh, Multimedia University, Malaysia
Chong Siong Choy, Multimedia University, Malaysia
Maimun Simun, Multimedia University, Malaysia

ABSTRACT

This paper attempts to examine the changes in functional managers' job characteristics, involvement and job satisfaction as a result of dual reporting. Data was collected from a survey done on a sample of 71 functional managers of a major telecommunication company in Malaysia where they are involved in dual reporting relationships. Analyses on the mean scores indicate favorable effects of dual reporting structure on all of the three variables. In addition, job characteristics and employee involvement are found to correlate positively with job satisfaction. The findings are interpreted as illustrating the important roles played by several councils created by the company as a coordinating mechanism between its functional and geographical divisions.

INTRODUCTION

In facing fast technology changes and globalization, companies have introduced many initiatives to face these challenges. The changes are rapid and the organizations around the world have been experimenting with different ways to organize the way they do business. For some, restructuring of the business may be one of their strategies to compete and stay in the market.

The actual act of restructuring can focus on several issues, such as portfolio, organizational, or financial restructuring (Bowman & Singh, 1993). Organizational restructuring, in particular, may come in several forms such as integration of departments, reduction in the layer of management, or a change in the reporting relationship. An employee, for instance, may have more than one superior to report to as a result of organizational restructuring. This situation, commonly known as dual-reporting relationship or structure, may not only influence the tasks of workers' jobs directly but may also influence internal work motivation and general job satisfaction as work groups change in terms of member composition (Hackman & Oldham, 1976; Reilly, Brett & Stroh, 1993; Salanick & Pfeffer, 1977).

Hence, whenever organizational restructuring takes place, some impact on employee’s behavior will occur to a certain extent (Zajac & Kraatz, 1993). Since individual behavior is the foundation of organizational performance, understanding the changes in employees' behavior as a result of restructuring is therefore, critical for effective management.

With that purpose in mind, this paper attempts to examine the impact of dual-reporting structure on job characteristics, involvement and satisfaction of employees of a major telecommunication company in Malaysia which has introduced a dual-reporting relationship into its structure.

LITERATURE REVIEW

Although job satisfaction has been defined in various ways, most of the definitions describe it as an affective or emotional response toward various facets of one's job (Smith, Kendal & Hulin, 1969; Locke, 1976; Weiss & Cropanzano, 1996). However, a popular conceptualized definition of job satisfaction is the intrinsic-extrinsic distinction (Weiss, Dawis, England & Lofquist, 1967). Intrinsic satisfaction is derived from actually performing the work and experiencing feelings of accomplishment, self-actualization, and identity of task. Extrinsic satisfaction is derived from the rewards given to individual by peers, superiors, or the organization and can take the form of recognition, compensation, advancement, and so forth (Naumann, 1993).

Various antecedents to job satisfaction have been investigated over the years, including organizational structure (Kline & Boyd, 1991). One of the structures widely used by the organization is the matrix organization. Even though there is no agreed definition of the term (Knight, 1976), usually the name is applied to cross-functional structures which involve some form of dual or multiple authority. A review of literature on cross-functional organizational forms published since 1976 found numerous contradictions regarding the impact of the matrix organizational form (Ford & Randolph, 1992). In spite of these inconsistencies, the idea of dual-reporting or matrix structures seems to be acquiring increasing momentum (Knight, 1976). In particular, several researchers have posited that a matrix structure positively influences job satisfaction (Denis, 1986; Knight, 1976; Larson & Gobeli, 1987). On the other hand, Denis in his study also suggested that satisfaction is negatively influenced by the ambiguous, dual authority of a matrix organisation.

Even though there are many facets of dual reporting structure, only certain aspects of the structure will be examined in this paper in relation to job satisfaction. They are job characteristics and employee involvement.

Jobs that are designed with effective characteristics can improve employees' behavior towards their jobs and the organization (Udo, Guimaraes & Igbaria, 1997). As a matter of fact, job characteristics have been found to be positively related to job satisfaction (Badawy, 1973; Morrow, 1983). These include the five core characteristics identified by Hackman & Oldham (1980).

The first characteristic, skill variety, has been found as a strong predictor of satisfaction (Hackman & Oldham, 1975; Katz, 1978; Dewar & Werbel, 1979; Haynes, 1979 Gerhart, 1987). Ting (1997) further found that federal government employees at all levels strive to make good use of their skills and abilities, and it is the most important factor in determining their job satisfaction. In Glisson & Durrick's (1988) study, it was found out that skill variety has a positive significant effect on job satisfaction. This suggests that the more workers are allowed to use an assortment of their abilities in completing work tasks, the more satisfied they will be with their jobs.

Other job characteristics that are found to affect satisfaction are task identity and task significance (Rizzo, House & Lirtzman, 1970; Hackman & Oldham, 1975; Katz, 1978; Haynes, 1979; Bedein & Armenakis, 1981). Task identity and task significance reflect the degree of identifiable work performed and its importance, respectively. Another variable of job characteristics that generally receive weaker but still significant support as predictors of job satisfaction are autonomy and job feedback (Naumann, 1993). Autonomy refers to the degree of freedom, independence, and discretion employees have in performing their jobs while feedback is how much information employees receive on the effectiveness of their work performance (Hackman & Oldham, 1976).

Of the organization characteristics, several involvement-related variables are strong predictors of satisfaction which include participation (Gladstein, 1984; Glisson & Durrick, 1988). According to Lorsch and Lawrence (1972), the aim of the dual structure is to create an environment conducive to "increase commitment and participation of all those involved". Theorists like Likert, McGregor and Blake & Mouton propose that participation will lead to greater attainment of high-order needs such as self-expression, respect, independence, and equality, which will in turn increase morale and satisfaction (Miller & Monge, 1986). Depending on the levels of participation, job satisfaction will vary (Black & Gregersen, 1997). Further to the finding, there are five processes involved in the participation and those that have above average levels in all processes report significantly higher levels of satisfaction. In another development, a study by Shadur, Kienzle and Rodwell (1999) found that employees' job satisfaction is also positively related to teamwork. Although there are many possible dimensions of organization characteristics, two are examined in this paper; participation in decision-making and level of teamwork due to strong correlation with dual reporting structure (Galbraith, 1971; Knight, 1976; Larson & Gobeli, 1987).

BACKGROUND OF COMPANY

Since its establishment in 1985, the company has undergone some changes in its organization structure over time. Before 1994, organization structure of this company was based on geographical departmentalization. There were five regional areas of which each of the region (consisting of several states) was divided according to main functions such as marketing, network, finance and personnel. The regional General Manager was responsible for all developments and operations of telecommunications services in his/her respective region.

Due to rapid changes in technology and markets, in 1994 the company changed from a hierarchical geographical-based organisation to a more functional and customer-based organisation. Consequently, the organisation structure at each state level is based on customer segmentation where jobs and activities are grouped according to the type of customers served. For example, most of the business customers are taken care of by the Major Business Sales (MBS) manager, whereas, residential customers by the Consumer and Business (CNB) manager.

As for the technical divisions, citing some examples, Customer Network Operation (CNO) division focuses on the operation and maintenance of customer access network whereas Switching Operation and Maintenance Area (SOMA) division is responsible for the switching operation and maintenance. These units are headed each by a functional manager and they work within their own areas of expertise. This new restructuring exercise made no changes in the reporting structure where it maintained the single reporting structure.

However, the structure had posted several undesired outcomes such as low sales growth and unfavorable financial results. In addition, there was a lack of co-ordination among the functional managers at the state level. Even though each of the functional managers had their own business target, the structure was not successful in achieving the business target due to the nature of business where one needs to depend on one another and to work together as a team. Moreover, the managers have a tendency to be concerned only on their own unit's performance without looking at company’s interest as a whole.

This scenario has prompted the company's management to create the State General Manager post for each state in July 1997. Its main role is to co-ordinate all cross-functional activities at state level. The functional managers who were previously reporting directly to their respective functional General Manager/Head at Headquarters now will also be reporting to the State General Manager. As a result, a single reporting structure has now changed into a dual reporting structure. In effect, this new structure resembles a matrix organisation where it involves some form of dual or multiple authorities (Knight, 1976).

Since the implementation of a dual reporting structure, co-ordination on the business and day-to-day activities of the state has increased and is made through two main councils: the Business Council and Quality Council. These councils, which have been scheduled to meet at least once a month, are chaired by the State General Manager and all functional managers of the state are members of this meeting. The council’s monthly meeting is the most important activity of the state where its main objective is to decide on the business direction and activities at state level so as to achieve yearly business plan targets. In addition to the councils, various other State Business Area activities that require co-ordination such as quality week and winning back customers are also conducted.

OBJECTIVES

With the formation of state's Business and Quality Councils coupled with other Business Area activities, it was expected that the functional managers play a more active role in such activities. The activities will open up the opportunities for the managers to participate in decision-making process as well as to show teamwork spirit among them. The structure has the potential to greatly increase collaboration between a wider range of people, emphasizes interdependence of departments rather than create boundaries between them, and brings opportunities for enhanced discretion, a greater personal contribution and participation in decision-making.

In other words, with the dual reporting structure and increased involvement in state activities, the functional managers are exposed to the changes in their job characteristics which may increase their skills, task identity and significance, autonomy as well as feedback on their performance.

For the company, the structure has been implemented for more than three years and it is timely to assess how the dual reporting structure in the company has affected the functional managers' job satisfaction. Since job satisfaction seems to play key roles in the occurrence of both turnover and burnout (Udo et al., 1997), it is important to assess the current impact on the employee and make necessary recommendations to improve the situation so as to avoid such negative occurrences.

Although various studies (Turner, Utley & Westbrook, 1998; Denis, 1986; Larson & Gobeli, 1987) have been devoted to the impact of the dual reporting structure in relation to matrix organization on job satisfaction, the authors could not locate any published report on Malaysian companies on this subject. Hence, this paper seeks to find answers to the following specific questions:
What are the impact of dual reporting structure on the functional manager's job characteristics, involvement and satisfaction?

How are job characteristics, involvement and satisfaction relate to each other in a dual reporting environment?

In relation to the second objective, the following hypotheses will be tested:

H_1:	*In a dual reporting structure, job characteristics which include skill variety, task identity, task significance, job feedback and autonomy are positively related to job satisfaction.*
H_2:	*Employee involvement (through participation and teamwork) in a dual reporting structure is positively related to job satisfaction.*

METHOD

Sample

108 questionnaires were sent by mail to all functional managers who were affected by the dual reporting structure in all fourteen state offices of the company. Follow-up calls were made to the managers who did not respond after two weeks. In total, 71 were returned for a response rate of 66%.

Analysis of the demographic data showed that most of the respondents are male (76%) and Malay (79%). The average age of employees is 41.9 years and most of them are in the range of 41 to 50 years old (62%). In terms of the education level, most of the respondents are highly educated where more than 95% of them at least received university or higher-level education.

The average tenure in the company is 17.1 years. In short, the respondents are highly educated and experienced where most of them had been employed by the company for more than ten years.

Questionnaire

A questionnaire was developed primarily by integrating questions used in previous research efforts. The questions used were those which internal and external validity have been proven and which have been frequently used in leading academic journals. For each of the measures, a 5-point Likert type measurement was used from 1 (strongly disagree) to 5 (strongly agree). The specific references for each of the measures are presented in the following paragraphs.

In measuring job characteristics, a total of 14 items were adapted from measures developed by Hackman and Oldham (1980) on five core dimensions namely task identity, skill variety, task significance, autonomy, and feedback.

In order to include the element of dual reporting into the measures, a statement of "By reporting to both my State General Manager and my Functional Head, I feel that:" was added at the beginning of each item which relate to skill variety, task significance and feedback. Likewise, a statement of "Even though I have to report to both of my State General Manager and my Functional Head:" was added at the beginning of items which relate to task identity and autonomy.

For employee involvement, there are two main measures used: participation in decision making and teamwork. 7 items selected from Dennis' (1974) Communication Climate Scale, which was used by Razali (1997), was adopted to measure participation in decision making. For teamwork, the statements were adapted from Shadur et al. (1999) consisting of a five-item measure that assessed employees' perceptions of teamwork in the organization. A statement of "By getting involved in the Business Council, Quality Council or any State Business Area activities, I feel that:" was added at the beginning of each item to include the element of dual reporting structure.

The questions used to measure job satisfaction were based on the modified short form of the Minnesota Job Satisfaction Questionnaire (MSQ) developed by Weiss et al. (1967). The short form of the inventory includes 18 items that are relevant to a number of job facets of this study and provides both intrinsic and extrinsic job satisfaction scores.

The Cronbach alpha coefficient was calculated for each of the variables and shown in Table 1. All of the coefficient values fell in the range of 0.76 to 0.92 which indicate that the internal consistency of the measurement scales appears to be reasonably good.

RESULTS

Impact of Dual-Reporting Structure on Job Characteristics, Employee Involvement and Job Satisfaction

Table 1 presents the mean rating for all items on job characteristics, employee involvement and job satisfaction. The results indicate that most of the managers regard their job characteristics positively even though they have to report to both the State General Manager and their respective Functional Head. Task significance receives the highest rating (mean = 4.26) followed by task identity (mean = 3.92), skill variety and autonomy (mean = 3.65). Feedback from job receives the lowest overall mean rating (3.52).

The second variable, employee involvement, is measured by the participation in decision making and teamwork. The results indicate that, in general, most of the managers agree (mean = 3.68) that they have the opportunity to participate in the decision making process. The results also indicate that the level of teamwork is high where most of the functional managers agree (mean = 3.95) that teamwork has increased.

Table 1: The mean score for job characteristics, employee involvement and job satisfaction
(scale: 1 = strongly disagree, 5 = strongly agree)

VARIABLE & ITEMS	MEAN
Job Characteristics: Skill Variety (Mean = 3.65, Cronbach = .85)	
Opportunity to do different things	3.68
Variety of works	3.62
Job Characteristics: Task Identity (Mean = 3.92, Cronbach = .92)	
Able to see the work outcome	3.96
Opportunity to complete the work	3.92
Chance to do the complete job	3.89
Job Characteristics: Task Significance (Mean = 4.26, Cronbach = .77)	
Significance of work towards company's goal	4.34
Performance affecting others	4.10
Significance of work in the organization	4.04
Job Characteristics: Autonomy (Mean = 3.65, Cronbach = .92)	
Opportunity for independent thought and action	3.75
Opportunity for independence and freedom	3.65
Chance to be left alone to do work	3.56
Job Characteristics: Feedback (Mean = 3.52, Cronbach = .90)	
Acknowledged on the performance	3.63
Opportunity to find out on performance	3.51
Feedback on performance	3.42
Employee Involvement: Participation in Decision Making (Mean = 3.68, Cronbach = .87)	
Participation in planning of work	3.90
Establish own goals	3.76
Bosses receptive to ideas	3.72

Table 1: The mean score for job characteristics, employee involvement and job satisfaction (scale: 1 = strongly disagree, 5 = strongly agree)	
VARIABLE & ITEMS	MEAN
Opinion make a difference	3.63
Have influence on what goes on in group	3.61
Influence in organizations	3.61
Recommendations are heard	3.54
Employee Involvement: Teamwork (Mean = 3.95, Cronbach = .92)	
Often work in groups	4.04
Belong to the team	4.03
Cooperation from other	3.97
Teamwork increases	3.86
Better solutions as a team	3.86
Job Satisfaction: Intrinsic (Mean = 3.77, Cronbach = .76)	
Job keeps busy all the time	4.35
Feeling of accomplishment when job completed	4.14
Job allows to use the abilities	3.99
Job gives chance to try own method	3.79
Freedom to use own judgment on the job	3.75
Job gives chance to do things for others	3.73
Job allows to do things that do not go against conscience	3.65
Job allows to direct others to do things	3.58
Job allows to do different things from time to time	3.54
Job provides job security	3.54
Chance to work alone on the job	3.45
Job Satisfaction: Extrinsic (Mean = 3.35, Cronbach = .76)	
Bosses competent in making decision	3.86
Co-workers get along very well	3.79
Agree with the way bosses handle people	3.61
Agree with the way company policies put into practice	3.18
Get praise for doing a good job	3.08
Pay commensurate with amount of work	3.07
Chances for advancement/promotion are very clear on this job	2.89

The results for job satisfaction as shown indicate that, in general, the managers are satisfied with their job. From this study there is a higher rating of intrinsic satisfaction (mean = 3.77) compared to extrinsic satisfaction (mean = 3.35).

Relationships among Job Characteristics, Involvement and Satisfaction

Table 2 presents the Pearson's correlation coefficients among job characteristics, employee involvement and job satisfaction. The results show that all correlation values are positive and significant (at $p < 0.01$ level).

It is hypothesized (in H_1) that in dual reporting structure, all job characteristics variables namely skill variety, task significance, task identity, feedback and autonomy are significantly positively related to job satisfaction. From the results, the hypothesis is fully supported where all of the job characteristics variables are positively related to job satisfaction both intrinsically and extrinsically. The strength of the relationships is mostly moderate (r values ranging from 0.36 to 0.56).

Table 2: Pearson correlation coefficients among job characteristics, employee involvement and job satisfaction variables

	1	2	3	4	5	6	7	8	9
1 Skill Variety	1.00								
2 Task Identity	0.56*	1.00							
3 Task Significance	0.51*	0.54*	1.00						
4 Autonomy	0.49*	0.51*	0.45*	1.00					
5 Job Feedback	0.44*	0.56*	0.50*	0.43*	1.00				
6 Participation	0.47*	0.52*	0.47*	0.52*	0.55*	1.00			
7 Teamwork	0.47*	0.52*	0.46*	0.47*	0.41*	0.67*	1.00		
8 Intrinsic Satisfaction	0.45*	0.41*	0.56*	0.37*	0.45*	0.50*	0.42*	1.00	
9 Extrinsic Satisfaction	0.39*	0.56*	0.48*	0.36*	0.54*	0.55*	0.66*	0.47*	1.00

Note : *Correlation is significant at the p_ 0.01 level (2 tailed).

H_2 proposed that there are significantly positive relationships between employee involvement (through participation in decision making and teamwork) with job satisfaction in a dual reporting structure environment. The results (where r coefficients range from 0.42 to 0.66) fully support the hypothesis of a significantly moderate to strong relationships existing between employee involvement and job satisfaction.

Besides the relationships with job satisfaction, job characteristics and employee involvement variables are also related to each other. In particular, participation in decision making has the highest (r = 0.55) correlation with job feedback while teamwork has the highest (r

= 0.52) correlation with task identity. Another interesting result to note is the strong positive correlation between teamwork and participation (r = 0.67).

DISCUSSION

The results show that dual-reporting structure has influenced the job characteristics, involvement and satisfaction favorably. The support for both hypotheses posited in this study further proves that job satisfaction is positively related to job characteristics and employee involvement. The findings are consistent with the Hackman and Oldham's job characteristics approach of increasing employee satisfaction. Similar to the current findings, research overwhelmingly demonstrates a moderately strong relationship between job characteristics and satisfaction (Ambrose & Kulik, 1999; Wong, Hui & Law, 1998; Loher, Noe, Moeller & Fitzgerald, 1985). The results also confirm to suggestions that teamwork (Shadur et al., 1999) and participation in decision making (Glisson & Durrick, 1988) are significantly related to job satisfaction, particularly in a matrix organization (Galbraith, 1971; Knight, 1976).

There are several implications from the findings that can be highlighted. The involvement of the functional managers in the state's Business Council, Quality Council or Business Area activities has opened up the opportunity for them to enhance their skill, task identity and significance. In addition to that, the clarity of business targets and recognition of the role that managers have to perform may also contribute to the positive outcomes on the task identity and task significance.

Being the expert in their field in the state and also the need to work effectively with other members of the councils have led the functional managers to exert more authority in his/her own area of expertise without relying too heavily on the decision-making of their Functional Heads who are geographically distant. As a result, the functional managers' job autonomy increases. This finding is supported by Corey and Star (1971) where successful managers in a dual structure organization had considerable authority and responsibility as compared to managers working under traditional functional hierarchy.

As practiced in the company, the functional managers review their achievement and performance in the Business Council meeting every month. The higher frequency of receiving performance feedback through these meetings besides the semiannually performance appraisal explains the positive response on the feedback variable.

Overall, the functional managers felt a high level of involvement (in decision making and teamwork) through the councils or Business Area activities. The result reflects how well the managers get along with each other and it appears that the finding showed a high level of cohesiveness among the managers, which further support the important roles played by the councils. As stressed by Perham (1970), decisions can be made more rapidly, and changes in given situations can quickly be translated into changes of plan and acted on.

As emphasized by Larson & Gobeli (1987), participation in decision making and teamwork are positively influenced by organization structure. Since membership of the dual structure is based on special knowledge and responsibility for given aspects of the work, hence the members have to be listened to irrespective of status and rank (Galbraith, 1971). In this company, the council meetings serve as a good platform for the managers to discuss and exchange ideas. Through these councils the managers are more involved in the decision making process. In doing so, the teamwork improves via high co-operation and cohesiveness among the managers. As mentioned by Galbraith (1971), this results in the enhancement of the members' commitment to the task since they have a greater say in significant decisions.

On top of that, competition from other telecommunications providers and a regime called "equal access" which was introduced by the Malaysian government to foster healthy competition in the industry has triggered the managers to work harder and to be united to face these new challenges. The relationship among the functional managers is further enhanced when the company implemented a customer-vendor agreement between units. The agreement essentially requires performance monitoring of all deliverables of each unit and giving feedback to the respective unit on frequent basis. Thus, the environmental forces also encourage higher teamwork and participation among the managers.

In summary, the results indicate that employees in a dual reporting structure are satisfied with their job. Even though several other studies showed contradicting results, the current findings from this study support findings of other studies (Denis, 1986; Larson & Gobeli, 1987) which described that dual reporting structure positively influences job satisfaction. From this study there is a higher rating of intrinsic satisfaction compared to extrinsic satisfaction. This result does not come as a surprise after taking into consideration the favorable results on the managers' job characteristics. Such an enriched job will affect satisfaction positively. In addition, the high level of intrinsic satisfaction could also be due to their accumulated job experience which allows them to make use of their developed competencies. This is evidenced by the high tenure of the managers in the company (tenure mean = 17.1 years). This situation is further supported by Bedein, Ferris and Kacmar (1992) where they found significant positive relationship between job tenure and job satisfaction.

The findings also confirmed to suggestions that teamwork (Shadur et al., 1999) and participation in decision making (Glisson & Durrick, 1988) are significantly related to job satisfaction, particularly in a matrix organization (Galbraith, 1971; Knight, 1976). They allow us to make conclusions that job satisfaction will increase if managers feel that the level of teamwork and participation in decision making increase.

It is also worth to note that besides the relationships with job satisfaction, job characteristics and employee involvement variables are also related to each other. The moderate to strong correlation results further confirm the interaction effects of job characteristics, participation in decision making and teamwork. In other words, the various state councils have managed to positively influence job characteristics and the level of involvement (in decision making and team) among the managers.

CONCLUSION

The dual reporting structure introduced by the company has positively increased the functional managers' job characteristics, involvement and satisfaction. In particular, the roles played by various state councils should be given the credit as a successful coordination mechanism between the functional and geographical divisions in the company.

Nevertheless, this study, like other studies, has limitations and therefore the findings should be used with some precautions. One limitation is that only functional managers at state level were studied. The overall impact of dual reporting structure could be measured more accurately if the study incorporates employees in other units at the Headquarters level where different reporting arrangement may be practiced. Secondly, the generalizability of the findings from this study may be limited due to the sample that was restricted to a telecommunication company. Another limitation is that the data for this study were collected only at one point of time, that is 3 years after the restructuring exercise. The actual 'difference' in the impact of dual reporting structure could be gauged more accurately if data were collected at different points of time such as 'before' and 'after' the restructuring exercise. These are some of the aspects that future research need to address.

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SMALL AND LARGE FIRM JOINT VENTURE PERFORMANCE MEASURES: A STRUCTURAL EQUATION MODELING APPROACH USING AMOS

Louise Hatfield, Shippensburg University
Jonathan Kohn, Shippensburg University

ABSTRACT

This study models partner goal achievement, partner satisfaction, joint venture duration, and joint venture survival. Using structural equation modeling (SEM), significant differences were found between smaller and larger partner firms. Smaller partner firms were significantly more concerned with joint venture survival than were larger partner firms. For the smaller partner firms, SEM model explained 81 percent of partner satisfaction, with joint venture survival being the strongest predictor of partner satisfaction. However, for the larger firms, SEM model explained 57 percent of partner satisfaction, with partner goal achievement being the strongest predictor of partner satisfaction. Joint venture survival offered no significant explanation of partner satisfaction for the large partner firms. Additionally, some studies have utilized the variables examined in this study as though they were equivalent measures of performance. However, the findings of this study suggest that partner goal achievement, joint venture duration, joint venture survival, and partner satisfaction are separate phenomena that are positively related. In addition to enhancing research on joint venture success factors, such delineation encourages separate, but integrated, investigations into the antecedents of joint venture duration, joint venture survival, and partner satisfaction. Failure to separate these phenomena can lead to erroneous conclusions and increased apprehension among practitioners.

INTRODUCTION

Joint venture performance has been measured in a variety of ways. These measures include partner goal achievement, joint venture duration, joint venture survival, and partner satisfaction. There has been considerable disagreement as to the comparability of these measures. It has been suggested that although these measures are related, they represent different phenomena. Partner goal achievement is the more appropriate performance measure, while joint venture duration, survival, and partner satisfaction are related outcomes that are affected by partner goal achievement. Although these relationships have been theoretically and empirically modeled, they have not been statistically tested.

Further, there has been no investigation into the differences between smaller and larger partner firms' experiences with regard to how joint venture performance and related outcomes interact. Using structural equation modeling (SEM) and Amos software, this study will illustrate that the basic causality structure of the relationships among these joint venture outcomes is the same for both smaller and larger partner firms. However, the path coefficients are not the same, suggesting that the importance (or existence) of some relationships vary between larger and smaller partner firms.

LITERATURE REVIEW

Joint venturing is a cooperative strategy--a type of strategic alliance. Joint ventures are discrete, jointly-owned entities created by two or more firms that provide inputs and share outcomes of the created entity. Joint venturing is faster, more flexible, less risky, and less costly than internal start-ups and acquisitions, while simultaneously increasing the partners' access to critical resources such as marketing, technology, raw materials and components, financial assets, managerial expertise, and political influence (Schillaci, 1987). Joint ventures allow firms to pool resources and complementary strengths to increase productivity and to improve competitive position in a way that they could not do alone (Harrigan, 1988; Pearce, Robbins, & Robinson, 1987). They provide the opportunity to share costs and risks, to acquire knowledge, to enter new markets, and to gain economies of scale or to rationalize operations (Contractor & Lorange, 1988). Joint ventures offer a mechanism for doing together what firms are unable to do alone, which is especially important for smaller firms with very limited resources.

On the down side, joint ventures lessen individual control, and can be slow in their responsiveness to environmental dynamics due to the complexity of joint management (Kanter, 1989; Killing, 1982). Partner firms run the risk of creating new competitors, damaging their original firm's reputation, and eroding their technological base (Gomes-Casseres, 1989). Reported joint venture failure rates range from 36 to 70 percent (Killing, 1983; Levine & Bryne, 1986).

In the absence of a theory of joint venture performance, researchers have used a variety of performance indicators without addressing how these surrogate measures relate to each other. Four of the most popular joint venture performance measures include managerial assessments of partner goal achievement and partner satisfaction, and the more objective measures of joint venture duration and survival.

Although duration and survival have been found to significantly correlate with overall partner satisfaction (Geringer & Hebert, 1991), the degrees of correlation (.46 and .59, respectively) suggest that these variables measure different phenomena. Gomes-Casseres (1987) identified several "adaptive" reasons for joint venture termination: dissolution due to partner's acquisition of new capabilities, growth in a partner firm's network that leads to a change in the optimal ownership structure to exploit economies of scope, and government policy changes. Thus, duration and survival appear to be unacceptable measures of performance because termination of a joint venture may be the result of success, failure, or simply an adaptation to changes in the environment.

Recognizing the inadequacies of traditional performance measures, joint venture researchers have turned to overall measures of partner satisfaction (Beamish, 1987; Blumenthal, 1988; Habib & Burnett, 1989; Killing, 1983; Schaan, 1983). Although partner satisfaction lacks precision, it allows for broader coverage compared to financial measures and overcomes the contamination problems associated with joint venture duration and survival.

Partner goal achievement has recently emerged as a preferred measure of joint venture performance (Hatfield & Pearce, 1994; Hatfield, Pearce, Sleeth, & Pitts, 1998; Parkhe, 1993; Zeira & Parker, 1995). In addition, Hatfield et al (1998) built a model of joint venture performance using partner goal achievement, joint venture duration, joint venture survival, and partner satisfaction from data on manufacturing joint ventures. This model suggests that partner satisfaction is an overall assessment measure, largely determined by partner goal achievement and joint venture survival. Therefore, it is problematic to consider partner satisfaction as a joint venture performance measure because satisfaction is confounded by joint venture survival, as well as other unidentified factors (including environmental change).

Hatfield et al (1998) concluded that partner goal achievement is a more appropriate managerial assessment measure of joint venture performance than is partner satisfaction. Partner goal achievement offers more precision than partner satisfaction while maintaining breadth of coverage and avoiding the contamination of non-performance factors. Although Hatfield et al (1998) offered a theoretically and empirically supported model of the four joint venture outcome variables, they did not statistically test the model. Further, they did not address the potential differences between smaller and larger partner firms.

There has been little research on firm size and joint ventures. However, firm size has been addressed to some extent in terms of the broader category of cooperative strategies. Strategic alliances in large firms have been frequently addressed in the management literature (Butler & Carney, 1986; Hamel, Doz, & Prahalad, 1989). It has been argued that large firms enter into strategic alliances more often than do small firms (Khandwalla, 1981). Nevertheless, cooperative strategies are important in small business management (Golden & Dollinger, 1993). Further, it has been shown that such strategies reduce environmental uncertainty for small firms and improve their sales performance (Dollinger, 1990; Dollinger & Golden, 1992). Such findings suggest that there may be differences in smaller and larger firm joint venturing experiences.

HYPOTHESES

Organizational size has long been identified as a critical variable affecting firm performance (Hofer, 1975; Smith, Guthrie & Chen, 1989). The strategy-performance literature contains multiple examples of how size affects strategy, competitive advantage, and performance (Hambrick et al, 1982; Kelly & Amburgey, 1991), with smallness having its own unique advantages (Fiegenbaum & Karnani, 1991, Katz, 1970). Thus, research findings that apply to large firms may not apply to small firms (Pugh, Hickson, Hinings, & Turner, 1968). In addition, it has been suggested that researchers have not adequately investigated differences between small and large firms (Chen and Hambrick, 1995).

Although there are limited empirical comparisons between small and large firm use of cooperative strategies, the literature on firm size suggests that it is important to examine small versus large firm experiences. The relationships among variables may well vary with partner firm size. Thus, this study will statistically test the model of joint venture performance suggested by Hatfield et al (1995), and test the model for consistency between smaller and larger partner firms. Further, it is hypothesized that there will be differences in relationships between the smaller and larger partner firms. However, theory is insufficient to-date to suggest exactly what these differences will be. Therefore, this analysis is somewhat exploratory in terms of actual expected differences in the joint venture performance models between the smaller and larger firms.

RESEARCH METHODS

Partner goal achievement was measured in terms of goal importance and goal performance. A list of 12 goals was assembled by consolidating the findings and propositions of previous researchers (Berg, Duncan, and Friedman, 1982; Blumenthal, 1988; Contractor and Lorange, 1988). Survey respondents utilized five-point Likert scales to rate each goal.

To provide comparability with prior research, partner satisfaction was measured using a Likert scale ranging from 1, extremely dissatisfied, to 5, extremely satisfied (Beamish, 1987; Blumenthal, 1988; Habib and Burnett, 1989; Killing, 1983; Schaan, 1983). Respondents also reported the year the joint venture was formed and whether the joint venture was dissolved or ongoing. If the joint venture was dissolved, the dissolution date was also reported.

SAMPLE AND PROCEDURES

Data were collected via mail surveys from executive officers of U.S. firms and subsidiaries involved in manufacturing joint ventures. These individuals were identified through telephone conversations with corporate officers at the partner firms as being the most knowledgeable about the sampled joint ventures. The population base consisted of 72 joint ventures created by two U.S. manufacturing firms that were formed between January 1, 1981 and December 31, 1988.

Once the appropriate individuals were identified and agreed to participate in the study, each was mailed a questionnaire that had been tested in the field and modified according to respondents' comments to improve clarity and comprehensiveness. Executive officers of the joint venture partners provided consensus responses.

Eighty-three responses from partner firms of 50 joint ventures were received, representing a response rate of 70 percent, based on the population of 72 joint ventures (58 percent based on the population of 144 partners). The sample consisted of joint ventures in standard industrial classification (SIC) codes 28-38, with the largest number of joint ventures (26 percent) in SIC 36 (electrical and electronic), followed by 24 percent in SIC 28 (chemicals and pharmaceutical), and 20 percent in SIC 35 (machinery). The 83 responses included 13 ongoing and 37 dissolved joint ventures, reflecting a survival rate of 26 percent among responding firms.

The opportunity to assess the descriptive differences between response and non-response firms was limited because firms are not required to report information on joint ventures separate from their consolidated financial statements. However, response and non-response firms were compared on the basis of the joint venture industry, year of joint venture formation, and percent of ongoing and dissolved joint ventures. No significant differences were found.

VARIABLES AND MEASURES

Partner goal achievement and joint venture duration had to be computed. Respondents rated the importance and performance of twelve goals pursued through participation in specific joint ventures, using five-point Likert scales. The Likert scale for goal importance was labeled as follows: 1-none, 2-minor, 3-moderate, 4-high, 5-critical. Participant ratings yielded the following order of goal importance: Product or technology development/acquisition, Market or product expansion, Market entry, Profits, Acquisition of technical knowledge/skills, Revenues, Economies of scale or production efficiency, Spread financial risk, Management competition, Increased available capital, Vertical integration, and Overcome government barriers. Respondents did not add any additional goals in the write-in space provided on the survey. The Likert scale for goal performance was labeled as follows: 1-far short of plan, 2-short of plan, 3-about at plan, 4-exceeds plan, 5-far exceed plan.

The partner goal achievement variable is a composite measure, developed by averaging the performance ratings of all goals rated to be of minor to critical importance (2-5 on the Likert scale). Goals rated as not important were excluded. Thus, the higher the importance rating the more weight the goal carried in the composite measure. The reliability coefficient, alpha, for the composite partner goal achievement scale was .88.

Duration was measured by computing the life span for each of the 50 joint ventures. Each respondent reported the formation year and, if applicable, the dissolution year of their joint venture. Thus, duration for the dissolved joint ventures was calculated by subtracting the formation year from the dissolution year. For the ongoing joint ventures, duration was calculated by subtracting the formation year from the date of the survey. Survival is a dichotomous variable, which indicates that the joint venture was dissolved or was still in existence at the time of the survey.

In order to test for firm size differences, the sample was split by number of employees, yielding a smaller partner firm group and a larger partner firm group. Given the employee size range of the firms (15-775,000) in the sample, it was decided that grouping small and medium size firms together would yield a large enough group size for statistical comparison between smaller and larger firms. The dividing point for this study is 2500 employees. The smaller partner firm group consists of twenty-nine firms with the number of employees ranging from 15 to 2500 (17 of the 29 firms had 500 or fewer employees), and the larger partner firm group consists of fifty-four firms with the number of employees ranging from 3152 to 775,000.

ANALYSIS AND RESULTS

Descriptive statistics (means, standard deviations, and correlations) for all of the variables used in this study are presented in Table 1. The data was analyzed using structural equation modeling (SEM).

While there are many goodness-of-fit statistics in SEM, this study will report three of the most popular measures (CFI, NFI, and Chi-square/df), with Comparative Fit Index (CFI) being the primary fit-statistic used in this study. A 1.0 CFI or NFI suggests a perfect fit and if under .9 the model can probably be improved (Bentler and Bonnett, 1980). Chi-square/df ratios of up to 3 are indicative of acceptable fit models (Marsh and Hocevar, 1985). CFI is less affected by sample size than is NFI or the Chi-square ratio (Kline, 1998).

Table 1

Means, Standard Deviations, and Correlation Coefficients For Total Sample

Variable	Mean	SD	1	2	3
1 Partner Goal Achievement	2.58	.93			
2 Partner Satisfaction	2.65	1.31	.77**		
3 JV Duration	4.18	2.53	.43**	.43**	
4 JV Survival [a]			.52**	.59**	.65**

N=83, **p<.01

Means, Standard Deviations, and Correlation Coefficients For Smaller Partner Firms (2500 or fewer employees)

Variable	Mean	SD	1	2	3
1 Partner Goal Achievement	2.42	.95			
2 Partner Satisfaction	2.34	1.32	.78**		
3 JV Duration	3.48	2.47	.66**	.79**	
4 JV Survival [a]			.63**	.85**	.86**

N=29, **p<.01

Means, Standard Deviations, and Correlation Coefficients For Larger Partner Firms (more than 2500 employees)

Variable	Mean	SD	1	2	3
1 Partner Goal Achievement	2.66	.92			
2 Partner Satisfaction	2.83	1.29	.75**		
3 JV Duration	4.56	2.50	.28*	.19	
4 JV Survival [a]			.47**	.45**	.56**

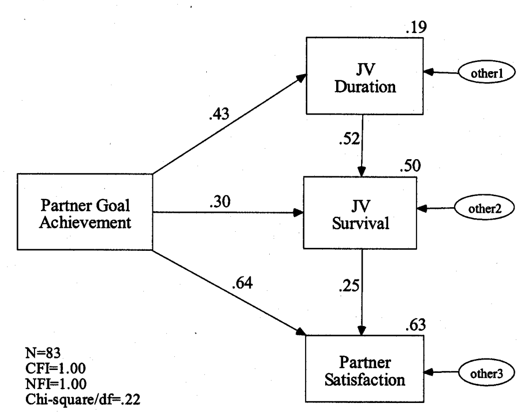
N=54, *p<.05, **p<.01

[a] A mean and standard deviation are not listed for JV Survival because it is a categorical variable.

Path coefficients are tested for significance using Critical Ratios (CR). A CR of 2.00 is considered to be statistically significant at the .05 level (Bollen, 1989). The Chi-square difference test will be used to compare the model structure of the smaller and larger partner firm groups (Bollen, 1989).

The performance model presented by Hatfield et al (1998) will be tested using the total sample, and the smaller and larger partner firm groups. Figure 1 reports the SEM model using the total sample. This model fits the data well (CFI =1.00). All of the causal relationships are significant (CRs > 2.00).

Figure 1: Joint Venture Performance For Total Sample



In order to test for differences between smaller and larger firms' joint venturing experience, the same SEM model is analyzed using the smaller partner firm group and larger partner firm group. The procedure for determining invariance of the structural model across independent groups begins with a test for the same "form" or basic causality structure. That is, are the variables related in the same causal fashion? Figure 2 reports excellent fit indices (CFI=1.00, NFI=.99, Chi-square/df=.68) for the comparison, confirming that the smaller and larger partner firm models have the same form. This analysis suggests that the variables are, indeed, related in the same cause and effect relationships.

However, the path coefficients and R2s are different between the smaller partner firm group and larger partner firm group. This suggests that the magnitude and significance of the individual relationships are not the same. To test the invariance of the relationships between partner goal achievement and the other variables (between the exogenous and endogenous variables), the gamma path coefficients of the corresponding linkages between the smaller and larger partner groups are equated to each other. The results of this analysis are reported in Table 2. These path coefficients are significantly (p<.05) different, as suggested by the chi-square difference test.

To test the invariance of the relationships between JV Duration, JV Survival, and Partner Satisfaction (between endogenous variables), the beta path coefficients of the corresponding linkages between the smaller and larger partner groups are equated to each other. The results of this analysis are reported in Table 3. These path coefficients are significantly (p<.01) different, as suggested by the chi-square difference test.

Figure 2: Joint Venture Performance
For Smaller Partner Firm and Larger Partner Firm Groups

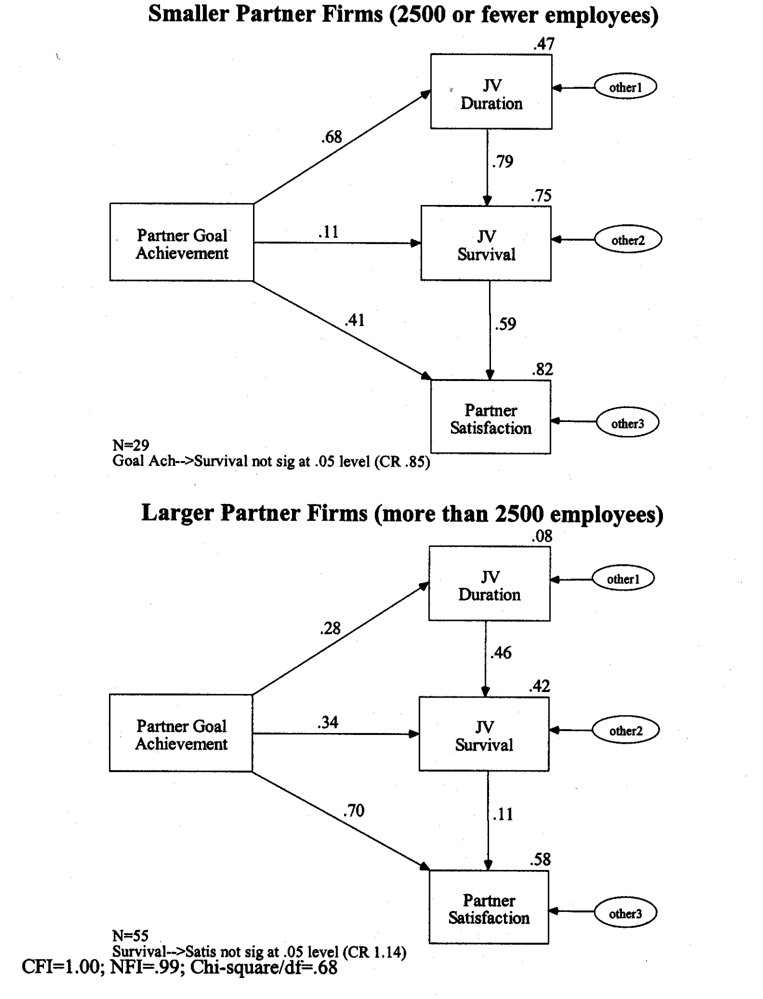


Table 2: Comparison of Smaller and Larger Partner Firm Groups					
Invariant Relationships	Chi-square	df	Chi-square Ratio	Chi-square Difference	df Difference
Form	1.37	2	.69		

Form & Gammas	11.42	5	2.29	9.85*	3
N=83; *p=<.05					

Table 3: Comparison of Smaller and Larger Partner Firm Groups					
Invariant Relationships	Chi-square	df	Chi-square Ratio	Chi-square Difference	df Difference
Form	1.37	2	.69		
Form & Betas	15.03	4	3.76	13.66**	2
N=83; **p=<.01					

NEW THOUGHTS ON MEASURING JV PERFORMANCE

The findings in this study are consistent with past research in terms of the total sample, but not when the sample is split into smaller and larger partner firm groups. For example, the correlations between Partner Satisfaction with JV Duration and JV Survival (.43 and .59, respectively) for the total sample are remarkably consistent with past research that found correlations of .46 and .59, respectively (Geringer and Herbert, 1991). However, the correlations for smaller partner firms were much higher (.79 and .85) and the correlations for larger partner firms were much lower (.19 and .45).

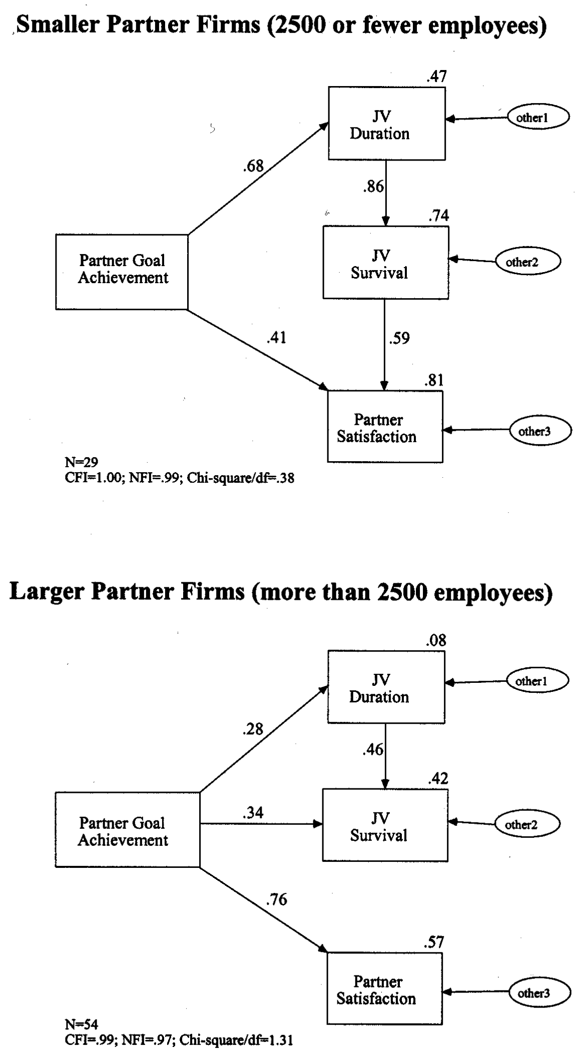
Similarly, the SEM model for the total sample in this study supports the cause and effect relationships between Partner Goal Achievement, Partner Satisfaction, JV Duration, and JV Survival suggested in the literature (Hatfield et al, 1998). However, while the model structure (or form) fit both the smaller and larger partner firm groups, the strength (path coefficients) of individual relationships varied significantly between groups. Each group model contained a non-significant linkage: Partner Goal AchievementàJV Survival for the smaller partner firm group, and JV SurvivalàPartner Satisfaction for the larger partner firm group.

Figure 3 reports independent (versus groups) SEM models for smaller partner firms and larger partner firms as they best fit the data, with the non-significant linkages removed. The fit indices are extremely good, CFI=1.00 and NFI=.99 for the smaller partner firms, and CFI=.99 and NFI=.97 for the larger partner firms. All linkages are significant and, therefore, belong in these models (unlike the models in Figure 2). These models clearly show the significant differences between the smaller partner firms and the larger partner firms. As illustrated in these models, what satisfies the smaller partner firm is not the same as what satisfies the larger partner firm. In past studies this distinction has not been recognized. Thus, in studies examining both large and small firms, the partner satisfaction measure was used without regard to firm size.

The differences between the two models in Figure 3 illustrate that using partner satisfaction as a surrogate measure of joint venture performance is inappropriate because the factors that affect satisfaction are clearly different for smaller and larger partner firms. Similarly, using joint venture survival as an indicator of joint venture performance is not appropriate. For the smaller partner firms, partner goal achievement did not significantly affect joint venture survival. Thus, if partner goal achievement is accepted as a measure of joint venture performance then joint venture survival cannot be considered a surrogate for joint venture performance. Further, high dissolution rates have often been attributed to other causes such as the rate of change in business.

Although not as dramatically illustrated, these models also suggest that joint venture duration is not a good measure of joint venture performance. The path coefficient in the larger partner firm model between partner goal achievement and joint venture duration is the smallest of all the linkages in the model. Although the linkage is stronger in the smaller partner firm model, there is still a significant percent of joint venture duration unexplained in this model, and the linkage is clearly affected by firm size.

Figure 3: Joint Venture Performance Independent Models



CONCLUSIONS

This study suggests that smaller firms are much more concerned with joint venture survival than are larger partner firms. In fact, the smaller partner firms were more satisfied by JV Survival than by Partner Goal Achievement (path coefficients .59 and .41, respectively). Although joint ventures offer similar benefits to smaller and larger firms, this finding suggests that smaller firms may want to proceed more cautiously. Given the importance of joint venture survival to smaller partner firms' satisfaction and the generally high rate of joint venture dissolution, joint venturing appears to be a more risky endeavor for smaller firms.

On a broader level, this study provides support for the argument in the literature that partner satisfaction, as well as joint venture duration and survival, are not satisfactory performance measures. That is, the effect of partner goal achievement (a more direct measure of joint venture performance) on these outcomes is significantly different for smaller firms as compared to larger firms. As illustrated by the SEM models, a smaller firm's satisfaction with the joint venture experience is significantly affected by joint venture survival, which is not the case for larger firms. This is understandable given that the joint venture is probably one of many activities that the larger firm is involved in and, thus, dissolution of the joint venture may not be a major disruption for the larger firm. However, for a smaller firm the joint venture may be a more integral part of the company's total operations.

The findings of this study suggest that partner goal achievement, joint venture duration, joint venture survival, and partner satisfaction are separate phenomena that are positively and causally related. In addition to enhancing research on joint venture success factors, such delineation encourages separate, but integrated, investigations into the antecedents of joint venture duration, joint venture survival, and partner satisfaction. Failure to separate these phenomena can lead to erroneous conclusions and increased apprehension among practitioners.

This study differentiates between performance measurement and related outcomes necessary for development of a theory of joint ventures. It also provides an explanation for conflicting findings in the joint venture performance literature, in which a variety of measures have been used to represent joint venture performance and smaller and larger partner firms have been lumped together. The findings of this study are also consistent with the broader research on organizational size, supporting the long held belief that research findings that apply to larger firms may not apply to smaller firms. Despite this study's arbitrary division (2500 employees) between smaller and larger firms, findings clearly show differences in firms' joint venturing experience based on firm size. Thus, a theory of joint ventures should address partner firm size and recognize the unique needs and experiences of smaller firms, as well as larger firms.

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MAXIMIZING PERFORMANCE VS. MINIMIZING LIABILITY: AN EXAMINATION OF PROGRESSIVE AND DEFENSIVE HUMAN RESOURCE MANAGEMENT PRACTICES

Elyssa Blanton Schultz, Loyola University at New Orleans
Rusty Juban, Southeastern Louisiana University
Randy Settoon, Southeastern Louisiana University

ABSTRACT

Over the past two decades, U.S. companies have been urged to refocus the way they manage their human assets in ways that maximize overall firm performance. Two of the most popular prescriptions derived from academic research involve the integration of human resources with firm strategy and the adoption of high performance work practices. Despite numerous testimonials for the financial benefit of both types of practices, the extent to which companies have accepted them is uncertain. In contrast, it seems that practices that seek to minimize organizational liability may be more widely accepted. The purpose of this paper is to examine the extent to which progressive human resource practices are implemented in organizations as compared with practices that limit (or try to minimize) organizational risk. Based on the results of the survey, it appears that many businesses are failing to capitalize on opportunities for competitive advantage across the spectrum of HRM activities. While most of the human resource managers indicated having defensive practices like equal employment opportunity, and almost half indicated the presence of sexual harassment practices, relatively fewer human resource managers indicated that either strategic human resource management or progressive practices were implemented.

INTRODUCTION

Due to increasing competition and a demand for greater profitability, U.S. companies have been urged to manage human resources in ways that maximize overall firm performance. The most vocal advocates have been the academics who specialize in the study of human resource management. Two of the most popular prescriptions derived from academic research involve the integration of human resources with firm strategy and the adoption of high performance work practices (referred to herein as "progressive" human resource management practices). There have been numerous testimonials to the advantages of strategically managing a firm's human resources and to the value of progressive HRM practices. However, the extent to which companies have accepted these practices is uncertain.

In contrast with SHRM and progressive human resource practices, practices that seek to minimize organizational liability may be more widely accepted. For example, sexual harassment prevention training, EEO policies, and diversity training are often considered as more pressing issues for human resource professionals and vital for limiting organizational risk. The purpose of this paper is to examine the extent to which progressive human resource practices are implemented in organizations as compared with practices that limit (or try to minimize) organizational risk (referred to herein as defensive human resource management practices). Further, we will discuss the implications of our findings for building a bridge between theory and practice.

SHRM AND PROGRESSIVE HUMAN RESOURCE PRACTICES

Almost two decades ago, articles began to appear that encouraged managers to tailor human resource practices to match organizational strategies (e.g., Fombrun, Tichy & Devanna, 1984; Schuler & MacMillan, 1984). This approach to human resource management (HRM), labeled Strategic Human Resource Management (SHRM), has focused on the mechanisms by which human resource managers can positively influence the "fit" between a firm's strategy and its environment (Jennings, 1994). Beginning with a flurry of activity in the mid-1980s, researchers explored SHRM's conceptual and empirical potential (e.g., Dyer, 1985; Fombrun et al., 1984; Lengnick-Hall & Lengnick-Hall, 1988; Schuler & Jackson, 1987; Schuler & MacMillan; 1984). Collectively, these articles propose the following: 1) organizations can and should use human resources strategically; 2) organizations operating under different strategies require different HRM practices; and 3) organizations creating an alignment between strategy and human resource management will enjoy a competitive advantage over other firms. Research suggests that organizations having human resource managers who play an active role in organizational planning have strategies that are likely to capitalize on the strengths of the firm's human resources. Further, if human resource managers are a full partner in strategic decision making, they are better positioned to craft human resource practices that elicit employee behaviors supportive of organizational strategy (Huselid, 1995; Schuler & Jackson, 1987; Schuler & MacMillan, 1984).

Similarly, research has provided support for the importance of progressive work practices for organizational performance. Due to changing employee demographics and greater attention to quality of work life, U.S. companies have been urged to adopt a variety of performance-enhancing human resource management practices to improve their competitiveness in the global marketplace. Practices such as employee participation and job redesign, team-based production systems, extensive training systems, and performance-contingent incentive systems are widely believed to improve the overall performance of organizations (Delaney & Huselid, 1996). Both the academic and popular press have argued that progressive work practices reduce turnover and productivity (Huselid, 1995).

DEFENSIVE HUMAN RESOURCE PRACTICES

At the same time HR professionals have been urged to strategically manage their human resources and to implement the proper progressive HRM practices, there has been a strong force affecting the way human resource practices have been structured in organizations -- the complicated legal environment of business. For over two decades, organizations have been viewed as vicariously liable for the illegal behavior of their employees. Researchers and human resource consultants have been advocates of human resource practices that reduce an organization's exposure to lawsuits and negative publicity. Some of the much-touted practices include sexual harassment prevention training, equal employment opportunity (EEO) policies, and diversity training. Failure to develop practices and policy in these areas have resulted in millions of dollars in damages for organizations (Pearson, 1997). Moreover, in recent Supreme Court decisions, the degree to which employee training was implemented and policy was developed in the areas of sexual harassment and discrimination was a factor in deciding the liability of organizations (Cava, 2001; Smiley-Marquez, 1999).

In sum, the purpose of this paper is to examine the extent to which progressive and defensive human resource practices are implemented in organizations. Both types of practices have important implications for organizations. The presence of strategic human resource management and progressive human resource management practices has been shown to increase organizational performance and has further been shown to have positive effects on many intermediate outcomes such as turnover and employee morale. Similarly, the absence of defensive human resource practices has the potential for negative consequences that are direct and grounded in employment legislation.

SAMPLE

The data used in this paper was collected from 109 businesses in a state in the Southern U.S. Companies in the sample were from a wide variety of industries -- from contract construction and manufacturing to transportation, communication and wholesale and retail trade. Also represented in our sample were firms in finance, industry, real estate, as well as the service sector. The average size of firms in the sample was 631, with firms ranging in size from 5 to 11,000. The sample was drawn from membership lists provided by regional chapters of the state's Society for Human Resource Management (SHRM). In many cases, the SHRM membership list contained multiple respondents for an organization. Also, each list included individuals who were not human resource managers (e.g., consultants, academicians, and students) and it was necessary to first identify the proper respondent at each firm. Where there were two or more individuals from the same site on the mailing list, short telephone interviews were conducted in order to identify the individual most in charge of human resources at the organization. Those individuals who worked as HRM consultants or academicians, as well as students, were eliminated.

FINDINGS

Respondents completed a five-part human resource manager questionnaire, designed to identify the HRM policies and practices in place at the focal organization as well as to assess various characteristics of the human resource manager and the focal organization. Data was collected on the extent to which the following practices are implemented in organizations: 1) strategic human resource management, 2) progressive practices, and 3) defensive practices.

Strategic Human Resource Management

To address the extent to which the human resource management function is linked to the strategic process of the organizations, human resource managers were asked to indicate on a 5-point likert scale (1=strongly disagree, 5=strongly agree) their level of agreement with three statements. Fourteen percent (14%) of human resource managers indicated "agreement" (i.e., both "strongly agree" and "agree") with the statement, "In this organization, a major role of the human resource manager is an integral member of top management." Twenty-four percent (24%) of human resource managers indicated agreement with the statement, "The human resource manager in this organization has significant input on most business matters." Finally, 19% of human resource managers indicated agreement with the statement, "In our organization, human resources planning is linked to strategic business planning."

Progressive Human Resource Management Practices

Respondents were asked to indicate on a 5-point likert scale (1=not implemented; 5=fully implemented) the extent to which they have implemented the following human resource management practices: employee participation and empowerment, progressive training, performance-contingent incentive compensation, performance appraisal, and staffing selectivity. These areas broadly represent the domain of progressive work practices identified in prior work and also are said to represent important choice variables on which many firms differ significantly (Delaney & Huselid, 1996; Huselid, 1995).

Regarding employee participation and empowerment, respondents were asked to indicate the extent to which participative management practices and self-directed work teams were implemented in their organization. Twenty-two percent (22%) of respondents reported implementing participative management programs. Sixteen percent (16%) of respondents reported that self-directed teams were present in their company.

In the area of training, respondents reported the extent to which four specific practices were implemented: training needs analysis, skill development training, cross-training, and executive development. Eighteen percent (18%) of human resource managers reported doing training needs analyses to identify discrepancies between current and desired skills. Similarly, 18% of human resource managers reported having skills development training for employees. Twelve percent (12%) of human resource managers reported having executive development for managers. Finally, 12% of human resource managers reported having cross-training for its employees. To further explore the extent of training in the companies surveyed, human resource managers responded to two additional questions. First, 3% of respondents indicated agreement with the statement, "Managers in this organization receive substantial training before they assume responsibility." Second, 14% indicated agreement with the statement, "In this organization we have a strong commitment to training and developing skilled managers."

The survey contained four questions focused on incentive-based compensation practices. Of the four, gainsharing plans were least common, described as present by only 6% of human resource managers. Twelve percent (12%) of human resource managers reported having group-based incentive pay, and 13% reported having some form of individual-based incentive pay. Almost one-quarter (22%) of human resource managers reported having skill-based pay in place in their firm. When questioned more generally about the presence of incentive-based compensation in their organizations, human resource managers' responses indicated that incentive-based pay is not widespread. For example, 11% of respondents indicated agreement with the statement, "In this organization, pay consists of performance-based rewards." Additionally, 14% of managers indicated agreement with the statement, "The rewards managers in this organization receive are linked to results."

Three types of performance appraisal practices were addressed: 360 degree performance appraisals, group/team-based performance appraisals, and goal-setting practices. Twenty-eight percent (28%) of human resource managers indicated that goal-setting practices were in place as part of the firm's performance appraisal system. Seven percent (7%) of human resource managers reported using 360 degree performance appraisals, and 1% reported using group or team-based appraisal system.

The survey contained questions on staffing issues. An important part of the literature focusing on progressive human resource management practices focuses on staffing selectivity. For example, research indicates that staffing selectivity is positively related to firm performance (Becker & Huselid, 1992; Schmidt, Hunter, McKenzie, & Muldrow, 1979). The survey contained three practices: intelligence/aptitude/skill testing, psychological/personality testing, and assessment centers. Intelligence/aptitude/skill testing was reported as present by 18% of human resource managers, while psychological/personality testing was used according to 11% of respondents. Surprisingly, assessment centers were reported as present by only 2% of human resource managers. Interestingly, 13% of human resource managers indicated that in their organizations they felt that they had gone to great lengths to establish the best staffing procedures possible.

Defensive Human Resource Practices

Respondents were asked to indicate on a 5-point likert scale (1=not implemented; 5=fully implemented) the extent to which they have implemented the following defensive human resource management practices: sexual harassment training, equal employment opportunity practices, and diversity practices.

Regarding sexual harassment prevention training, human resource managers were asked to indicate the degree to which their organization implemented practices associated with limiting sexual harassment lawsuits. Forty-two percent (42%) of human resource managers reported using harassment prevention training.

Human resource managers were asked about the EEO Practices in their organization. Eighty-three percent (83%) of human resource managers indicated that equal employment opportunity practices were used in their organization.

Finally, human resource managers were questioned about the diversity initiatives in their organization. Fourteen percent (14%) of human resource managers reported that their company had fully implemented diversity training practices.

CONCLUSION

Based on the results of the survey, it appears that many businesses are failing to capitalize on opportunities for competitive advantage across the spectrum of HRM activities. While most of the human resource managers indicated having defensive practices like equal employment opportunity, and almost half indicated the presence of sexual harassment practices, relatively fewer human resource managers indicated that either strategic human resource management or progressive practices were implemented. Although many researchers and consultants have touted the importance of developing practices that support strategy and implementing progressive human resource practices to improve the knowledge, skills, and abilities of a firm's current and potential employees, the results of the survey indicate that this message has not been translated into practice. These results are surprising, given the suggested benefits of such activities, as well as the potential problems that may arise when these practices are not aligned with strategy.

There are several potential explanations for why management may ignore practices such as strategic human resource management and progressive policies, yet implement equal employment opportunity policies and sexual harassment prevention training. Referring to the decision-making literature on framing effects, we would expect management to place more emphasis on decisions that minimize an organization's liability versus maximizing organizational performance (Plous, 1993). According to Tversky and Kahneman (1981), a decision frame is "the decision maker's conception of the acts, outcomes and contingencies associated with a particular choice." For the human resource manager, the constant news of harassment and discrimination litigation may be a powerful motivator to adopt a training practice in these areas - especially considering the large punitive damages associated with such lawsuits.

Following this line of reasoning, we point to an interesting finding regarding the low number of companies with diversity training practices. Considering the number of companies using equal employment opportunity practices was quite high, it might be surprising to see that such a low number of firms attempted to go beyond a purely preventive stance to include practices that could contain a proactive element. The incidence of firms using diversity practices was comparable to those that also implemented progressive human resource policies such as skills training and executive development.

Another decision-making theory developed by Kahneman and Tversky (1979) may also shed some light on these findings. Prospect theory attempts to explain how decision makers create value functions for different decisions. According to their research, Kahneman and Tversky found that the value function for losses is steeper than the value function for gains - hence "losses loom larger than gains." Practices such as strategic human resource management and progressive human resource management practices are generally touted as a means of increasing overall firm performance (a gain), while sexual harassment practices are a way to avoid expensive litigation costs (a loss).

Another explanation for the results of the survey may rest with the different types of knowledge that academics and consultants attempt to transfer. According to Boland, Singh, Salipante, Aram et al. (2001), knowledge can be categorized along several dimensions, abstract to concrete and figurative to literal. In their research, it was found that abstract knowledge was less effective in producing decision responses than concrete and unambiguous knowledge. The knowledge provided by the academic community tends to be general and abstract, requiring practitioners to make their own interpretation of the information presented. For human resource managers with little or no time to cognitively process information from academic sources and integrate these abstractions into their own work situation, it is improbable that practices using abstract concepts and ideas will be implemented.

Considering the findings here, what can be done to close the gap between theory and practice? Borrowing from the research on framing, one suggestion might be for academicians to frame research findings differently. Strategic human resource management and progressive human resource management practices are, for example, almost always framed positively. Specifically, various positive outcomes have been associated with the integration of human resources and strategy. HRM integration, for example, ensures that human, financial, and technological resources are given consideration in setting goals and assessing implementation capabilities. Another espoused benefit of HRM integration includes a broader range of solutions for solving complex organizational problems (Lengnick-Hall & Lengnick-Hall, 1988).

Perhaps, instead, it is also important to warn human resource managers of potential losses that may be incurred from not implementing progressive practices. As documented by Kerr (1995), examples of reward systems that elicit one behavior while hoping for another abound. A firm engaged in an enterprise dependent on innovation, for example, should be interested in encouraging teamwork and a long-term orientation toward performance. A compensation system that is designed to reward cooperative behavior and process, rather than independent behavior and results, would support such a strategic need. In fact, the latter system would encourage employee behavior that is clearly counter to that firm's strategic needs.

Similarly, firms that implement staffing practices without consideration of future organizational objectives and direction are less likely to capitalize on this advantage. Trends in the internal and external environment, and subsequent changes in strategic direction, dictate differences in the types and numbers of employees needed. Firms in their early stages, for example, may require employees with entrepreneurial flair, financing, and research skills. Over time, marketing and even cost control skills may become more important (e.g., Dyer, 1983).

Integrating staffing and strategy will reduce the chances of hiring employees with obsolescent skills or having situations in which there are employee shortages/surpluses. Recognizing the costs associated with the recruitment of new talent and even the displacement of those employees who are no longer needed, it becomes more important for managers to integrate the staffing function with the goals and directions of their firms. Despite the fact that the academic literature on HRM contains numerous prescriptions regarding the need to develop practices that support strategy and implement progressive practices, the results of this study indicate that organizations have viewed such practices as less important than defensive practices. We have suggested several explanations for our findings and have offered several suggestions for framing future research findings. We believe that this study has offered steps toward bridging the gap between theory and practice in human resource management.

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