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The Effects of Span of Supervision on Satisfaction: Exploring the Moderating Effects of Leader-Member Exchange on Unionized Subordinates

Stephen H. Putman

THE EFFECTS OF SPAN OF SUPERVISION ON SATISFACTION:
EXPLORING THE MODERATING EFFECTS OF LEADER-MEMBER EXCHANGE ON
UNIONIZED SUBORDINATES

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy in
Leadership and Education in
the Adrian Dominican School of Education of
Barry University

by

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* * * * *

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Area of Specialization: Human Resource Development

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ABSTRACT

THE EFFECTS OF SPAN OF SUPERVISION ON SATISFACTION: EXPLORING THE MODERATING EFFECTS OF LEADER-MEMBER EXCHANGE ON UNIONIZED SUBORDINATES

Stephen H. Putman

Barry University, 2006

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The creation of mega-corporations has revitalized the debate on span of supervision and how work outcomes such as satisfaction are impacted. Satisfaction with work and satisfaction with supervision are examined to find what relationship exists within the constraints of a unionized workforce. Utilizing a quantitative method, the researcher calculated to what degree span of supervision impacted satisfactions within this group of subordinates working under a collective bargaining agreement and if the Leader-member Exchange Theory (LMX) moderates these results.

Data for the current study were collected from a large provider of courier services in the United States. A total of 500 employees were offered the survey, resulting in $N=222$ employees responding, for an overall response rate of 44.4%. The following hypotheses were made:

Hypothesis 1a: The author expects a negative significant relationship between satisfaction

with supervision and perceived span of supervision.

Hypothesis 1b: The author expects a negative significant relationship between satisfaction with supervision and access to senior-level supervision.

Hypothesis 1c: The author expects a negative significant relationship between satisfaction with work and perceived span of supervision.

Hypothesis 1d: The author expects a negative significant relationship between satisfaction with work and access to senior-level supervision.

Hypothesis 2: The author expects that LMX is a moderator to hypotheses 1a, 1b, 1c, and 1d.

The results indicate that a negative significant relationship between satisfaction and perceived span of supervision only occurs with certain management styles. Additionally, crewmembers with more access to senior-level supervision tend to be more satisfied with supervision and more satisfied with work. The LMX relationship does not moderate these results, but other important outcomes are discussed. These include union seniority, LMX relationships, and perceived organizational support, which are all significant predictors of satisfaction with work and organizational commitment.

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CHAPTER ONE

PROBLEM STATEMENT

Introduction

There is a growing need to better understand how management's span of supervision affects work satisfaction. The author believes workforce size impacts span of supervision and is one of the many relationships that influence work satisfaction. Although the study of work satisfaction has been widely researched (e.g., Locke, 1976; Martin & Schinke, 1998; Spector, 1986, 1987), the researcher does not find any studies that focused specifically on the work satisfaction within unionized airline crew bases. The correlation between organizational size and the measure of worker satisfaction is consistent; however attempts to account for this relationship have been inconclusive (Free, 1990; Hodson, 1984; Talacchi, 1960; Zipp, 1991). As early as 1933, Elton Mayo introduced workplace relationship when he wrote of social needs of employees. Complex relationships between group size and work satisfaction is still not well understood; early studies on group size and work satisfaction reported inconsistent results. Negative relationships were found (Rump, 1979; Dekker, Barling, & Kelloway, 1996) as well as positive relationships (Hodson, 1989; Osborne & Hunt, 1972). Granrose and Portwood (1987) found that firm size had no direct effects on organizational satisfaction, which led Lang and Johnson (1994) to conclude that firm size should not have direct impact on work satisfaction.

One reason for the inconsistency is that smaller organizations may offer more opportunities to use skills and a more interesting job, while larger organizations generally can pay more and offer fringe benefits and security (Dekker et al., 1996). Span of supervision, not group size, will be the independent variable, and satisfaction with supervision and satisfaction with work will be the dependent variables for the purpose of this dissertation. Leader-member exchange (LMX) will be important as moderator variables.

To date, few attempts have been made to explore the linkages between span of supervision and satisfaction with supervision, and span of supervision and satisfaction with work. The

implications of this study in the area of human resource development (HRD) will be the development of research which looks at how span of supervision impacts satisfaction with supervision and satisfaction with work, and if a LMX relationship moderates the results.

Additionally, work satisfaction is an important human resource dynamic in many corporations. With the development of mega-corporations, small increases in work satisfaction can yield significant results. A one-percent change in work satisfaction does not give the impression of importance; however, with mega-corporations now nearing one million employees, this one-percent change must be considered an impact. The combination of satisfied employees and nimble corporate structure is an important component to corporate success. Baile (2005) believes that corporate competitors will run circles around organizations burdened by too many layers of supervisors, and that a wider span of supervision allowing for reduced layers of supervision is preferred. These issues are all important to the human resource development professional practice, development, and research.

Work satisfaction is impacted by many components, such as satisfaction with the work itself, co-worker satisfaction, satisfaction in compensation, job promotion satisfaction, and supervisor satisfaction (Probst, 2003). Hierarchical consolidation in organizations creates a growing need to better understand how supervisory span of supervision affects worker outcomes such as workplace satisfaction, perceived organizational support, and organizational commitment.

Purpose of the Study

The vision of the flight operations department being studied includes the desire to be the world's safest, most competitive, cost-efficient and on-time airline – where our people enjoy coming to work. The intention of this research is to examine the job satisfaction aspect of this vision to see what components of job satisfaction can be manipulated within the limits of the

working collective bargaining contract. The collective bargaining agreement between union and management eliminates many job satisfaction components that a HRD professional normally maneuvers to improve job satisfaction. Specifically, linked to this company's employee contract, the following areas cannot be adjusted by those responsible for implementing the vision: pay, work rules, promotion opportunities, scheduling, work environment, and longevity. The researcher therefore examines the impact of the supervisory leadership style and leadership relationships on overall work satisfaction. Beyond these relationships, the leadership impact on perceived organizational support and on organizational commitment have work satisfaction implications.

The LMX relationships traditionally are relational between a subordinate and a supervisor who has the power to impact many of the work-related benefits that are important to subordinates. In this research, the LMX relationship is greatly limited by the union and management agreement. The supervisor has limited tools available to alter the subordinate's work environment, and answering questions such as, "How would you characterize your working relationship with your supervisor?" has new relevancy.

The researcher's examination of span of supervision and how it impacts work satisfaction within the limits of a collective bargaining contract, and if LMX relationships moderate these findings, should be helpful to management who desire improved relationships within a union contract.

Definition of Terms

Actual span of supervision: The number of subordinates assigned to one supervisor.

Crew-base: This is the location where a flight crewmember works from. It may be near where the flight crewmember lives, but does not have to be.

Flight crewmember: A holder of a FAA commercial pilot certificate who is currently

employed as an aircraft pilot for a FAA Part 121 airline.

Leadership styles (LS) are categorized as transformational, transactional, or as laissez-faire behaviors (Bass, 1985, 1998; Walumbwa, Orwa, Wang, & Lawler, 2005).

Leader-Member Exchange (LMX): A theoretical approach to leadership at work which focuses on the relationship between the leader and subordinate (Graen & Uhl-Bien, 1995).

Locus of control (LOC) explains individual differences on perceptions of how environmental events are within one's control or outside of one's control (Bogg & Cooper, 1995; Boone, De Brabander, and Hellemans, 2000; Kren, 1992; Lewin and Stephens, 1994; Newton and Keenan, 1990; Schilit, 1986).

MANOVA: Multivariate analysis of variance which is a statistical procedure used in the examination of group differences that occur on more than one dependent variable (Salkind, 2003).

Organizational commitment (OC) represents individual employee concern for the organization (Shore & Wayne, 1993).

Perceived organizational support (POS) is the degree to which employees judge that their employer is concerned with their welfare (Shore & Tetrick, 1991).

Perceived span of supervision is the number of other subordinates that one believes is assigned to his or her supervisor.

Population: The entirety of some group, in this case flight crewmember from one airline.

Sample: A representative portion of the population group

Supervisory span of supervision: Indicates how many people a supervisor is responsible for communicating to (Baile, 2005).

Span of supervision: The number of individuals supervised in a work environment.

Subordinate: An individual being supervised in a work environment. In this study, the subordinate will be the flight crewmember.

Work satisfaction: The degree to which an employee has a positive orientation towards employment by an organization (Price & Mueller, 1986).

Research Questions

The purpose of this dissertation is to first review the literature on span of supervision and satisfaction with supervision and satisfaction with work, as well as examine the moderating effects of supervisor-subordinate relationship quality on these relationships. The research question is whether a correlation between span of supervision and subordinate satisfaction with supervision and subordinate satisfaction with work exists and if LMX has a moderating affect on these relationships. The researcher will examine the relationships that unionized subordinates have with their immediate supervisors and supervision on the chief pilot level. The subordinates will be asked questions about their immediate supervisors and their relationship in their crew base. Crew bases are divided into two types, a large base with one chief pilot for approximately 2,200 pilots and a small crew base with one chief pilot for approximately 200 subordinates. By measuring responses in a crew base situation, the research will gain insight into the subordinates' relationship with their chief pilot. However, specific hypotheses are offered:

Hypothesis 1a: The author expects a negative significant relationship between satisfaction with supervision and perceived span of supervision.

Hypothesis 1b: The author expects a negative significant relationship between satisfaction with supervision and access to senior-level supervision.

Hypothesis 1c: The author expects a negative significant relationship between satisfaction with work and perceived span of supervision.

Hypothesis 1d: The author expects a negative significant relationship between satisfaction with work and access to senior-level supervision.

Hypothesis 2: The author expects that LMX is a moderator to hypotheses 1a, 1b, 1c, and 1d.

Organization of the Remainder of the Study

The remainder of the study will be organized in an additional six sections. Chapter II will

include a review of the literature specifically examining supervisory span of supervision, span of supervision, work satisfaction, and leader-member exchange theory, leadership styles, locus of control, organization commitment, and perceived organization support. The extensive literature review will build the foundation for the dissertation and lead into the areas where new knowledge can be explored.

Chapter III will be the methods section. As this is a quantitative research project, this section will cover quantitative methodology and procedures relative to this dissertation. Data collection process will consist of a survey taken by participants in this study. The population of this study will be flight crewmembers from a United States based airline. The casual comparative research method will look at the different Crew bases to examine different relationships. This form of quasi-experimental research was selected because the researcher will test for casual relationships without having full control of the test groups. This section will consist of a research process; correlation coefficients and multiple linear regressions, to examine the research specific hypotheses.

In Chapter IV, the research process is scrutinized and an analysis of the research question and results is conducted. Findings are presented in both written and table-chart formats for a clearer understanding. This chapter includes a section on discussion, interpretation, and evaluation, tying together the relation to theory, review of literature, and the rationale of the dissertation.

Chapter V provides a discussion. This section will be a summary of the purpose of the study, population, and instrument used. Additionally, this chapter will discuss any conclusions on the relationships of satisfaction with work and perceived organizational support as well as organizational commitment. The moderating effects of span of supervision on these relationships will also be examined. The final two sections of this dissertation will consist of a list of references and a section including appropriate appendixes.

CHAPTER TWO

REVIEW OF THE LITERATURE

Supervisory span of supervision

Supervisory span of supervision, associated most closely with Luther Gulick (1937), has an uncomplicated logic: individuals in management positions should supervise a relatively small number of subordinates. Urwick (1956) claimed that six was the maximum workable number of subordinates, indicating that as the number of subordinates under an executive's control increases, monitoring the behavior of subordinates becomes more difficult. Criticizing this logic, Simon (1946) claims that by adopting the theory of limited supervisory span of supervision, in which executives oversee a comparatively small number of subordinates, the number of levels within an organization's hierarchy will increase. Simon suggested that organizations be designed with few organizational levels: This is a principle directly opposite that implied by adherence to narrow spans of control in structuring relations between executives and subordinates (Meier & Bohte, 2000). In flat organizations, the workforce can focus on the work itself rather than on the chain of command (Gittell, 2000), however small supervisory span of control provides supervisors the ability to monitor behaviors and outcomes and to supply useful feedback.

Developing a better understanding of how varying spans of control affect organizational performance is important in HRD, from the standpoint of developing our existing theories of management-employee relations. The selection of narrow or wide spans of control over employees may impact work satisfaction. McGregor's (1960) Theory X and Theory Y management theories call for entirely different approaches to structuring relations between executives and subordinates. Under Theory X, spans of control should be very narrow because supervisors cannot trust their employees. Under Theory Y, spans of control should be wide so as

to encourage employees to achieve their fullest potential by working independently and taking on new responsibilities.

According to Meier and Bohte (2000), limited amounts of research scrutinize how supervisory span of control affects organizational performance, but the limited data available suggest that supervisory span of control is an important variable that must be measured when examining how organizations perform their tasks. Ingham (1970) argued that smaller organizations rely typically on identification and informal controls, while larger organizations often favor coercive and remunerative power to accomplish their objectives. Group size or supervisory span of control does not act alone in its relationship with job satisfaction, Lang and Johnson (1994) find.

Gittell (2001) suggests that managerial efforts to create a leaner, flatter organization with greater employee empowerment, foster reduced layers of supervision in an effort to react more quickly and effectively. Increasing spans of control may have a superficial efficiency benefit, however: the reduced effectiveness of first-line managers could reduce work satisfaction (Altaffer, 1998). Additionally, short-term demands on line managers, time pressure, lack of rewards or acknowledgment for assuming developmental roles, perplexity about their roles, lack of organizational commitment favorable to employee development, and inadequate skills and competence may serve as barriers that hamper employee development and satisfaction (Ellinger, Ellinger, & Keller, 2003; Goleman, 2000; Honey, 1995; Hunt & Weintraub, 2002; Hyman & Cunningham, 1998; Larsen, 1997; McGovern, Gratton, Hope-Hailey, Stiles, and Truss, 1997; Redshaw, 2000; Yarnall, 1998).

When increased span of supervision leave voids in the workplace, employees get value from group participation. Members are positive about being in a group when they have accurate

understanding of who knows what and use that understanding to fill the gaps in knowledge and apply existing and new knowledge to solve complex problems (London, Polzer, & Omoregie, 2005), and these benefits are facilitated by interpersonal similarity at high levels. In a study by Nielsen, Jex, and Adams (2000), a positive correlation between friendship opportunities, friendship prevalence, and job satisfaction was found. In a smaller group, friendships can develop naturally, while in a larger group or organization, a work environment through grouping of units and departments may lead to an increased opportunity for friendships (Riordan & Griffeth, 1995).

Decisions about how much supervisory span of control is optimum are almost impossible to calculate as a scientific determination considering the influences of the complexity of the human resources (Valenstein, Souers, Wilkinson, 2005). They indicate a belief that supervisors overseeing subordinates should critically examine their staffing decisions.

The size of the span of supervision may moderate relationships between leader-member exchange and various outcomes caused by the constraints imposed on interactions (Schriesheim, Castro, & Yammarina, 2000). Additional outcomes that may be related to span of supervision are organizational commitment and perceived organizational support. Allen and Meyer (1990) indicate that organizational commitment is related to management receptiveness, participation, and feedback. Perceived organizational support is directly related to supervisor recognition, influence, and expectations (Eisenberger, Fasolo, & Davis-LaMastro, 1990). The constraints imposed on supervisors' subordinate relationships with large spans of supervision suggest a more valued relationship to subordinates. Specifically, Schriesheim et al. suggest that these relationships are more valued because the amount of time needed to develop relationships, coaching, providing information and so forth is considered a time valued resource. Alternatively,

those subordinates with ample available time with supervisors may not value the relationship as much, due to easy access. Leadership behavior that inspires teamwork enables others, and sets examples can significantly affect job satisfaction (Gartner, 2000).

Gittell (2000) found that to reduce supervision and to increase the emphasis on performance measurement (results) were mutually reinforcing. With detailed performance measurements, less supervision is needed; however, by broadening supervisory span of control, there is a reduced level of supervisor feedback. Conversely, organizations that increase supervisory span of control and reduce emphasis on performance measurement found that these choices were mutually reinforcing (Gittell); specifically, with less detailed information on performance, more supervisors were needed.

In previous research, Putman and Tejada (2006) examine span of supervision relationship to work satisfaction. In this study, no direct relationship is found between span of supervision and satisfaction with supervision, or satisfaction with work. Putman and Tejada's span of control was limited to spans of no more than 15 subordinates to one supervisor. In a more recent study, Putman, Tejada, and Hubschman (2006) expanded to 40 subordinates to one supervisor and found again that no relationship exists between satisfactions with supervision and span of supervision or between job satisfaction and span of supervision. In both of these studies, the findings imply that span of supervision is independent of satisfaction outcomes. The researcher intends to build on these previous findings and to examine the relationship of satisfaction with supervision and span of supervision now on two levels, specifically addressing actual span of supervision and perceived span of supervision.

Satisfaction with Supervision

Interestingly, in today's work environment, the sources of satisfaction have changed. The

researcher believes that satisfaction once tied to company loyalty is now focused on loyalty to other employees along with relationships between colleagues and supervisors. Many current job satisfaction studies indicate that an employee's direct supervisor has the most influence on a subordinate's job satisfaction. Specifically, having a supervisor who understands them is important in total job satisfaction.

Leaders behave differently as their supervisory span of control changes, according to self-attention theory (Carver, 1979; Carver & Scheier, 1981; Dual & Wicklund, 1972; Mullen, 1983; Mullen, 1987; Mullen, Cynthia, Hu, & Salas, 1988). Self-attention theory describes the relationship between members of a group and their concern with standards of behavior as the relative size of their group changes (Mullen, Johnson, & Drake, 1986). Supervisory span of control, as described by Bailey (2005), indicates how many people to whom a manager is responsible for communicating, or as described by Altaffer (1998), it is the number of people supervised by a manager, specifically by first-line managers. Another description of supervisory span of control is the number of subordinates who report to a superior (Dobbins, Cardy, & Platz-Vieno, 1990). Schriesheim, Neider, and Scandura (1998) find that supervisors in high-quality relationships with a subordinate are more likely to have increased satisfaction with supervision and satisfaction with the work environment. Continuing with this line of thinking, the researcher will examine the subordinate's satisfaction with supervision in high-quality relationships.

As a group gets larger, leaders may begin to act like taskmasters rather than working with subordinates as specific individuals (Mullen et al., 1988). To a subordinate, leadership engagement is important and satisfying as compared to nonparticipation (Mullen et al.) because initiating behavior gives subordinates the sense that the leader is effective and competent, which produces a feeling of leadership caring and concern. While increased spans of control may have a superficial cost benefit, the reduced effectiveness of first-line managers in meeting subordinate needs could reduce job satisfaction (Altaffer, 1998).

Receiving feedback about job performance that is substantial leads to higher levels of

satisfaction, compared to subordinates receiving little feedback (Dobbins et al., 1990). In fact, Dobbins et al., show that subordinates are motivated to collect information about job performance from their bosses who allow them to regulate behavior, reducing anxiety and uncertainty.

Burke (1976) ranks the order of job satisfaction on a scale of twelve items. It is interesting to note that in the Burke study, advancement to greater administrative status ranks first and increased professional respect of colleagues ranks second. In both of these items, direct supervision plays an important role. Judge, Locke, and Durham (1997) identified self-esteem, generalized self-efficacy, neuroticism, and locus of control as traits which are at the core of the self-evaluation construct. These integrative personal traits, or core self-evaluations, are linked to job satisfaction (Judge et al.). These elementary, bottom-line evaluations that individuals believe about themselves and others influence job satisfaction (Bono & Judge, 2003). There is a relationship between core self-evaluations and job satisfaction (Judge & Bono, 2001), giving insight to the process by which individuals with a positive self-regard develop higher job satisfaction.

Positive self-evaluation employees rated their work as having higher core job characteristics of identity, variety, feedback, autonomy, and significance (Judge, Locke, Durham, & Kluger, 1998). Judge et al. demonstrated that positive self-evaluation individuals were more likely to rate higher in job satisfaction. Additionally, small spans of control allow supervisors to be more available for coaching and feedback (Porter & Lawler, 1964). Scandura et al. (1996) suggest that moving from infrequent, random and spontaneous mentoring/protégé dyads to more frequent, systematic and planned mentoring increases the benefits of mentoring to all concerned parties. Smaller spans of control allow for more time to develop these mentoring/protégé dyads. The impact of supervisory span of supervision is illustrated in Figure 1.

Large Span of Control	Small Span of Control
Warnings	Coaching
Punishment	Feedback
Autocratic	Shared Goals

Figure 1. Supervisory span of supervision impacts relationships differently.

How a supervisor sees himself or herself impacts job satisfaction, according to the findings by Moshavl, Brown, and Doss (2003). They indicate that supervisors can be characterized in three types of styles: underestimators, in-agreement, and overestimators. Their study finds that subordinates of underestimators have reported significantly higher levels of satisfaction with supervision than those of in-agreement supervisors, who also reported higher levels of job satisfaction than those reporting to overestimators (Moshavl et al.). What is important to consider here is that supervisor style and not only supervisor relationship are important components to job satisfaction.

Satisfaction with supervision or a perceived high quality of supervision has been associated with higher levels of job satisfaction (Brewer, 1995; Evans and Hohenshil, 1997; Kavanagh, Spence, Wilson, & Crow, 2002; Newsome and Pillari, 1991; Schroffel, 1999). This does not indicate that the mere presence of supervision is associated with increased job satisfaction (Kavanagh et al.; Schroffel), but with the nature or quality of the relationship. Beyond the issue of satisfaction, support from supervisors reduces burnout and intentions to quit (Firth, Mellor, Moore, and Loquet, 2004; Kalliath and Beck, 2001; Moore, 2002). Additionally, lack of supervisor support is a predictor of job dissatisfaction and intention to leave a job (Firth et al.; Hatton and Emmerson, 1998; Munn, Barber, and Fritz, 1996), and low levels of

communication between supervisor and subordinates contribute to increased stress (Moore).

The core job characteristics previously described are positively related to job satisfaction, which is important because supervisory span of supervision, not group size, is the independent variable. The researchers believe supervisory span of supervision should not be linked to physical distance. A study by Clinebell and Shadwick (2005) showing physical distance as negatively correlated with job satisfaction overlooks the concept of supervisory span of control. In this article, the researchers use data collected from the Minnesota Satisfaction Questionnaire and analyze satisfaction between main office employees and branch office employees. Clinebell and Shadwick noted that branch offices without first-line supervisors available could have a negative effect on employee attitudes, without indicating how this could happen. They also noted that interaction and communication may be lacking for those employees not at the main office. First-line supervisors, communication, and interaction are all key components in LMX and ultimately job satisfaction. It is the researchers' contention that reduced LMX, not increased physical distance, impacts the lower job satisfaction in the Clinebell and Shadwick study.

De Vries, Roe, and Tallieu (1998) argue that subordinate need for supervision is a concept that can help to differentiate between circumstances in which leaders do and do not affect subordinate behavior. Supervisor feedback offers subordinates a sense of the leader's involvement, competence and interest, which in turn leads to increased reports of satisfaction (Dobbins, Cardy, and Platz-Vieno, 1990; Mullen et al., 1988). This study is moderately consistent with Schriesheim (1982), who established that human-oriented leadership, and not task-oriented leadership, is a significant predictor of job satisfaction. Additionally, narrow spans of control allow supervisors to be more available for feedback and intensive interaction, reducing the role of supervisory monitoring (Porter & Lawler, 1964, Gittell, 2001). One of the key findings of the Mullen et al. study was that the effect of leadership behavior on subordinate satisfaction seems to be completely independent of the variable of group size, and group size had little effect on satisfaction. Hence, how much span of supervision a front-line manager has could impact the employee's work satisfaction.

Subordinates with a low need for supervision may be unconnected to the presence of supervisors in an organization, according to Martin (1983). Subordinates accustomed to the hierarchal structure in an organization accept supervision for various reasons such as the opportunity to make advances on the career ladder (de Vries et al., 1998). Low need for supervision is possible when subordinates are able to complete their assignments without supervision and when supervisors have no control on the performance of subordinates. Schriesheim (1982) indicates that human-oriented leadership, and not task-oriented leadership, is the most important predictor of job satisfaction; however, task-oriented leadership may have a slightly more positive effect in the beginning of a career (de Vries et al.). Supervisor support can reduce the impact of stress, which may increase work satisfaction. Monitoring workloads, and supervisor and subordinate relationships, according to Firth et al. (2004), may benefit the corporations with increased job satisfaction.

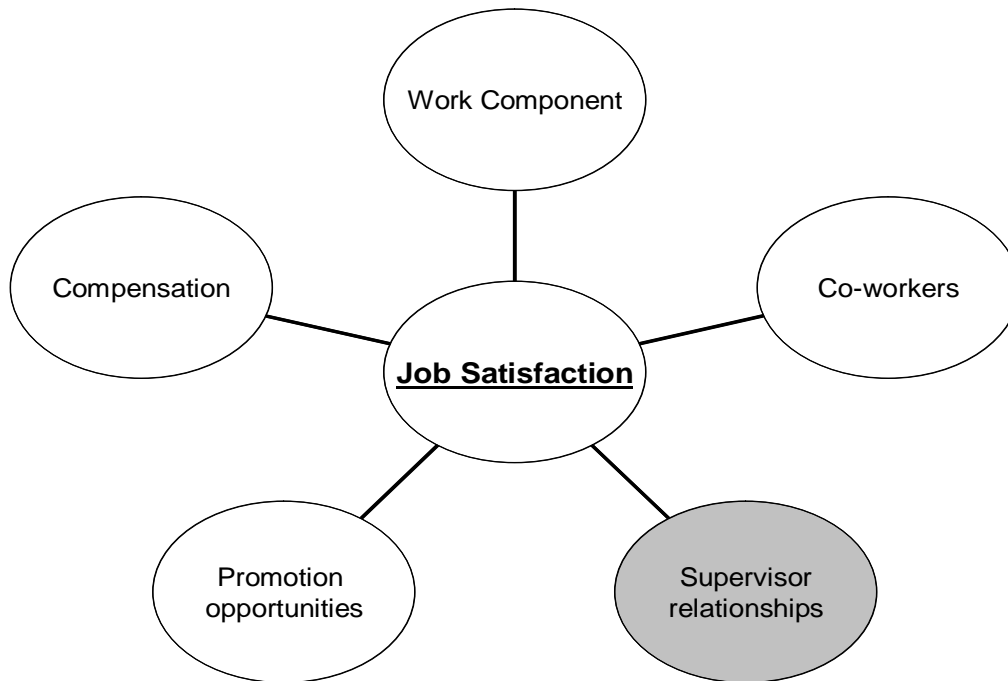
Satisfaction with Work

Work satisfaction has been described as a positive evaluation of a particular job situation by Sweeney, Hohenshil, and Fortune (2002). Locke (1976) views work satisfaction as a correspondence between what is perceived to exist in the work environment and what one wants from that environment. Additionally, work satisfaction has been described by Price and Mueller (1986) as the degree to which an employee has a positive orientation towards employment by an organization. Why we work has been extensively studied and researched. Probst (2003) conceptualized job satisfaction as consisting of five facets described earlier: satisfaction with the work itself, co-worker satisfaction, satisfaction in compensation, job promotion satisfaction, and supervisor relationship satisfaction. In figure 2, the components of job satisfaction are linked. In addition, work security satisfaction has been shown to be a facet of job satisfaction by Harrison (1961, as cited by Probst). The facet satisfaction theory examines job satisfaction as not a one-dimensional element, but the sum of many facets, or factors (Sweeney et al., 2002). This dissertation observes work group size, supervisory span of supervision, and supervisor quality of

exchanges relationship as factors in job satisfaction. To date, thousands of articles have been written on job satisfaction. There is an intense interest in increasing work satisfaction in the fields of management, psychology, and human resource development. The components of job satisfaction are many, and as researchers break it down, new knowledge is developed. The researcher's choice to examine single items is consistent with the finding of Wanous, Reichers, and Hudy (1997) that single-item measures are robust when determining overall job satisfaction. Nagy (2002) indicate that single-item measures accommodate relatively unexplored components of job satisfaction, which can easily create new measures.

Job security, which Harrison linked to job satisfaction, in the study of employees in today's rapidly growing and changing workforce indicate that variables such as physical and mental health outcomes, turnover, and safety all are influenced by the perception of job security (Probst, 2003). The longer people stay with a job, the more they build forms of equity. These include skill equity, social equity, influence equity, and financial equity (Probst).

Skill equity is the knowledge and know-how that you have developed over time: the special capabilities and competencies that bring you respect for a job well done and enable others to count on you. Social equity is the friends and colleagues you've gotten to know (who often feel like family), or the customers with whom you enjoy interacting. Influence equity is the ability to get your ideas heard, the connections you've learned to use, and the resources that others make available to you so you can get your job done. Financial equity is the dollars you get for the job you do, and also retirement, investment or bonus funds, insurance, memberships, even perks such as a parking space. In sum, financial equity is all of the tangible rewards of your know-how and commitment (Probst, 2003).



Probst (2003)

Figure 2. The linking of job satisfaction and five components is shown with emphasis on supervisor relationships (adapted from Probst, 2003).

Job satisfaction is affected by salary, respect, and security (Burke, 1976). Burke believes that occupational stress can have both positive and negative results. Burke also lists occupational stress items that have only positive correlations, unclear job duties and responsibilities, unclear about promotional opportunities, concern that someone else may get the higher job, not knowing where they stand in regards to their bosses, being unable to influence decisions that affect their job, unable to get information they need to complete the job, job progress slower than they think it should be, and feeling unreasonable pressure for improved job performance. Burke goes on to list the occupational stress items that have negative correlations, such as too much responsibility, too heavy a workload, feeling not fully qualified for the task, and having to make decisions that affect other people's lives.

How an individual views his or her career may explain more than the effect of the match between needs and rewards on job satisfaction (Scarpello & Campbell, 1983). Expanding on that

concept, Smucker and Kent (2004) indicate that job satisfaction is an attitude people have about their jobs and job experience in relation to previous experiences, current expectations, or available alternatives. Workers with high overall job satisfaction perceive themselves as having realized desired amounts for many personally important job-related outcomes (Locke, 1983). How one compares his work experience with his coworkers' relates to job satisfaction. Adams, (1963, as cited by Smucker & Kent, p. 32) states, "Only when outcomes and inputs are seen as reasonable compared to other people does satisfaction result."

Friendship is also important to job satisfaction, and there is empirical evidence that peer relations are an antecedent of job satisfaction (Morrison, 2004). Morrison used factor analysis to support the positive relationship between job satisfaction and interpersonal interactions and work environment, which includes fellow workers and their leadership.

According to Cox (2003), key issues in job satisfaction in the nursing profession are intrapersonal conflict, intra-group conflict, inter-group conflict, and team performance. Cox indicates that intrapersonal conflict was the strongest predictor of work satisfaction for nurses, and those nurses showing more intrapersonal conflict had less job satisfaction. Although the Cox research is in the nursing profession, it may be generalizable to other industries.

Indexes such as the Job Description Index (Orpen, 1984) are used to measure job satisfaction. These indexes fail to measure the global satisfaction of individual employees' overall feelings about the job. Scarpello and Campbell (1983) believe that job satisfaction among employees differs depending on the stage of employees. Newcomers to jobs want to establish identities, so their job satisfaction is based on identity, significance, and feedback. Variety, identity, significance, autonomy, and feedback are not important to job satisfaction until the initial stage of employment is completed (Scarpello & Campbell). The attractiveness of any work environment is often defined by the role of the front-line managers (Numerof, Abrams, & Ott, 2004). How much supervisory span of supervision a front-line manager has could impact the employee's job satisfaction.

To what extent does failure to determine the contribution made by supervisory span of

supervision impede the measurement of overall job satisfaction? Instruments that measure only overall job satisfaction in a single item, with general questions such as “How much did your overall job satisfaction change in the last year?” exclude important concepts as supervisory span of control (Putman & Tejada, 2006). The acceptance over the past fifty years of single-item measures such as the Faces Scales (Kunin, 1955) should cause concern, the researcher believes. The suggestion by Wanous et al. (1997) that practical limitations may favor the use of single-item measures is understandable. However, single-item measures limit researchers’ ability to access unique aspects of job satisfaction, such as group size, supervisory span of control, and quality of exchanges.

Chalofsky (2003) indicates that work is one of the ways that mature adults care for themselves and others. Work is an opportunity for service to others and not distinct from the rest of life; it can be viewed as a way of expressing one’s self in the world. Chalofsky believes the meaning of work implies a relationship between the person and the workplace in terms of commitment, loyalty, and dedication.

Leader-member exchange theory (LMX)

LMX is a theoretical approach to leadership at work which focuses on the relationship between the leader and subordinate (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Liden, Sparrowe, & Wayne, 1997; Schriesheim, Castro, and Cogliser 1999). Unlike many leadership theories that emphasize leadership from the point of view of the leader or the follower, the LMX theory is centered on the interactions between leaders and followers in a dyadic relationship (Northouse, 2004). See Figure 3, which illustrates this relationship. As first described by the works of Dansereau, Graen, and Haga (1975); Graen and Cashman (1975); and Graen (1976) LMX continues to be researched in the area of leadership process (Northouse, 2004). The LMX approach argues that leaders develop quality relationships with subordinates at different levels (Martin, Thomas, Charles, Epitropaki, & McNamara, 2005). Out-group exchanges are those of low-quality LMX in which individuals receive fewer valuable resources from their leader (Dansereau, Cashman, & Graen, 1973), while in-group exchanges build a high-quality LMX

relationship and individuals are favored by their leadership. The LMX theory suggests that superior-subordinate relations cannot be conceptualized into an average style, but are sufficiently differentiated to need a focus on each dyad separately (Allinson, Armstrong, and Hayes, 2001).

By definition, LMX is “(a) a system of components and their relationships (b) involving both members of a dyad (c) in interdependent patterns of behavior (d) sharing mutual outcome instrumentalities and (e) producing conceptions of environments, cause maps, and values” (Scandura, Graen, & Novak, 1986, p. 580).

Figure 3. LMX is a dyadic relationship.

Gagnon and Judd (2004) indicate the relationship between leader and follower exists from high involvement to low involvement, and that these relationships are valuable because of the outcome variables such as employee attitudes and behaviors. A high-involvement relationship has shown to lead to improved employee attitudes and performance (Gerstner & Day, 1997; Gagnon & Judd). Benefits such as loyalty, support, mutual trust, respect and reciprocal liking with supervisor are outcomes of a high-quality relationship between supervisors and subordinate (Schriesheim, Castro, & Yammarina, 2000), while those subordinates participating in low-quality relationships are limited to contractual exchanges with supervisors. Graen (1989) characterized good-quality leader-member associations as involving giving subordinates' sufficient resources to complete key assignments, preparing subordinates for complex assignments, and providing special information that is helpful for subordinates' task achievement. Graen and Scandura (1987) include these variables, as well as the variable of providing support for subordinates, in high-quality LMX.

People come to like and find value in in-group membership over being in the out-group (Brewer, 1979; Hogg, Cooper-Shaw, & Holzworth, 1993; Hogg, Hardie, & Reynolds, 1995). Swann, Milton, and Polzer (2000) find a link between satisfaction and being connected in a group, while Graen, Novak, and Sommerkamp (1982) found that high LMX is associated with subordinates' increased job satisfaction. A meta-analysis by Gerstner and Day (1997) suggests that there is a significant relationship between LMX and job satisfaction.

Scandura and Schriesheim (1994) have indicated that high-quality leader-member relationships have similarities to mentoring relationships. The mentor-protégé employee relationship may lead to a work/career satisfaction with the process of mentoring (Scandura et al., 1996). Member satisfaction (Scandura et al.) may increase as the personal and professional needs are met in this process of relationship development.

When high levels of LMX exist, subordinates view themselves as in a good working relationship and know how satisfied their supervisors are with their job performance (Graen et al., 1982). Subordinates in a high-quality LMX experience reciprocal trust characteristics (Scandura et al., 1986) and are often asked to participate in nontrivial decisions affecting their work units. Sharing in work decisions and informal participation enhances satisfaction, Cotton, Vollrath, Froggatt, Lengnick-Hall, and Jennings (1988) found. Wagner (1994) indicates that the effects of participation on satisfaction are statistically significant, but there is a concern about practical significance. Leader in-group and out-group outcomes are described in Figure 4.

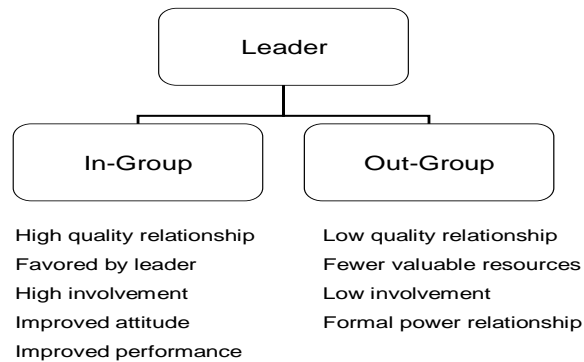


Figure 4. In-group and out-group membership have different outcomes.

How does one get into the in-group? Allinson et al. (2001) indicates a leader develops close associations (in-group) with a few subordinates and more distant relationships (out-group) with the rest, which is often based on the constraints of time and energy. Because leaders can only develop a close relationship with a few subordinates, they rely on formal power for the remaining subordinates (Dobbins et al., 1990). Supervisory span of supervision thus becomes an important factor on how many subordinates will find themselves in the in-group.

Coordination and participation are important elements of a positive LMX relationship. When subordinates perceive that they are in a high-quality LMX relationship, they perceive an increased ability to participate in a two-way fashion (Yrle, Hartman, & Galle, 2003). The findings in the Yrle et al. study suggest that subordinates in a low-quality LMX relationship perceive that their supervisor engages in two-way coordination without permitting the subordinate true participation.

The consequences of LMX are not trivial. LMX has been related to many important organizational outcomes, including job satisfaction, productivity, turnover, decision making and

the career progress of managers (Graen & Uhl-Bien, 1995; Scandura & Graen, 1984; Scandura et al., 1986). In an extensive review of the LMX research to the date of publication, Graen and Uhl-Bien cite numerous studies demonstrating that LMX has benefits to subordinates in career progress, empowerment, innovation, job climate, job satisfaction, organizational citizenship behavior, organizational commitment, performance, procedural and distributive justice, satisfaction with supervision, and trust.

In relation to supervisory span of control, earlier studies have supported the argument that supervisory span of control is an important contingency variable in leadership research (Schriesheim & Murphy, 1976). Kerr, Schriesheim, Murphy, and Stogdill (1974) reported that subordinates in large work groups have more difficulty adjusting to performance expectations when compared to colleagues in smaller work groups, because supervisors in smaller work groups are able to devote more time to interaction opportunities. Consistent with these findings, Green, Anderson, and Shivers (1996) found that as the size of a workgroup increases, the subordinate-supervisor dyadic relationship deteriorates. Finally Schriesheim et al. (2000) found moderate support for supervisory span of control as a salient contingency between LMX and work commitment, a common correlate of work satisfaction.

Leadership Style

The concept of leadership has many meanings and definitions. Leadership style in the framework of this dissertation will run parallel to the Multifactor Leadership Theory (Bass, 1985). Multifactor Leadership Theory encompasses both mundane leadership and charismatic behaviors which range from non-leadership, known as laissez-faire, to transformational leadership (Tejeda, Scandura, & Pillai, 2001). It is a widely cited, comprehensive theory of leadership (Bass, 1985; Bass & Avolio, 1993a; Tejeda et al.; Yukl, 1994). Using a full range of leadership, management behaviors or styles are categorized as transformational, transactional, or

as laissez-faire (Bass, 1985, 1998; Walumbwa et al., 2005). To influence, motivate, and enable subordinates to contribute to the value and the success of an organization are characteristics of leadership (House & Aditya, 1997), while leadership style is the method in which leaders communicate particular leadership behaviors. It is interesting to note for this dissertation that in a nursing study, Doran et al. (2004, p. 23) state, “An interesting finding of this study is that no leadership style can overcome the effects of a wide span of control.”

Transformational leadership has been defined as those leaders who transform the ideals, desires, and aspirations, and priorities of subordinates and motivate them to perform beyond expectation (Bass & Avolio, 1994). Transformational leaders motivate subordinates to do more than they originally intended or thought possible (Bass & Avolio, 1998). The leader-subordinate relationship is one of intense emotion in which subordinates place a great deal of trust and confidence in the leader (Bass, 1985; Bass & Avolio, 1995; Burns, 1978; Deluga, 1990). The four components of transformational leadership, according to Bass and Avolio, are idealized influence, inspirational motivation, intellectual stimulation, and individual consideration.

There is a well-established link in research between transformational leadership and work-related attitudes such as job satisfaction and organizational commitment (OC), which shows that subordinates working with transformational leaders are more involved, satisfied, empowered, motivated, and committed to their organization (Barling, Weber, and Kelloway, 1996; Bono & Judge, 2003; Walumbwa & Lawler, 2003; Walumbwa, Orwa, Wang, & Lawler, 2005; Walumbwa, Wang, Lawler, & Shi, 2004). The individualized attention paid by transformational leaders is one of the important reasons that transformational leaders are able to build trust and respect among subordinates and to motivate them to perform better (Avolio & Bass, 1995; Bass, 1985; Bass, 1998). Because transformational leadership is concerned with the performance of subordinates and also with their developing to their fullest potential, job satisfaction is often increased (Avolio & Bass; Northouse, 2004). The subordinates that feel they obtain the leader’s unique attention are more likely to work toward longer-term goals and work harder to meet his or her expectations, resulting in increased job satisfaction (Walumbwa et al.,

2005). The researcher finds that while this might be true in some situations, the concept of span of control and the impact of increased span of control has not been fully considered.

Transactional leadership differs from transformational leadership in that the transactional leader does not individualize the requirements of subordinates nor focus on their personal development, but rather exchanges things of value with subordinates to mutually advance the agendas of both the leader and the subordinates (Northouse, 2004). Transactional leadership is grounded in social learning and social exchange theory, which recognize the reciprocal, deterministic nature of leadership (Bandura, 1977; Bass, 1985; Burns, 1978; Hollander, 1978; Tichy & Devanna, 1986). Leaders and subordinates bargain using power and benefits to foster mutually beneficial outcomes (Deluga, 1990). This exchange is based on the leader conferring with others what is necessary and specifying the conditions and rewards these others will obtain if they complete those requirements (Bass & Avolio, 1998). These benefits include work for pay, goals to be reached for desired rewards, and corrective actions in light of failure to meet objectives (Bass, 1981; 1985). It is important to note that transactional leadership depends on contingent reinforcement, which can be either positive contingent rewards or a more negative management-by-exception process (Bass & Avolio, 1998).

Transactional leadership styles include contingent reward, management-by-exception active (MBEA), and management-by-exception passive (MBEP). As the name implies, contingent reward refers to leadership behaviors that support subordinates for completing tasks and accomplishing goals (Tejeda et al., 2001). Management-by-exception comprises leadership behaviors that are based upon coercion or punishment of subordinates who make errors. In active management-by-exception, performance is actively monitored for errors, while passive management-by-exception describes the leader as waiting passively to learn of such errors (Tejeda et al.). In MBEP, the leadership style is to passively wait for deviances, mistakes, and errors to occur and then to take corrective action only after standards have not been met or problems arise (Northouse, 2004).

Laissez-faire leadership describes passive leaders who are reluctant to control

subordinates or give direction, refraining from participating in group or individual decision making (Bass, 1981). In general, the laissez-faire leader abdicates their leadership role, allowing considerable freedom of action to subordinates (Deluga, 1990; Stoner, 1982). The laissez-faire leadership style of avoidance or absence of leadership is considered by Bass and Avolio (1998) as the most ineffective. Laissez-faire leadership may become the norm as organizations create larger supervisory spans of control, forcing the supervisor into a hands-off leadership style. The advantage to the ambitious subordinate is the ability to maximize their influence with little regard for the laissez-faire leader's opposition (Deluga). When considering leadership styles, Bass (1985) argues that a leader could exhibit both transformational and transactional styles, however transformational leadership has the greatest power to prompt loyalty and commitment (Bass, 1990).

The Multifactor Leadership Questionnaire (MLQ) is a widely used instrument to measure leadership styles, including transformational, transactional and laissez-faire leadership behaviors. The MLQ has evolved over time (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1993b; Bass & Avolio, 1995). Tejada et al. (2001) find that a reduced set of 27 items from the MLQ is more appropriate, and this shorter MLQ emerges as a reasonable version of the Bass and Avolio (1993) use of the MLQ. This instrument comprises subscales that directly represent the components of Multifactor Leadership Theory, which include:

Transformational leadership

- 1 Attributed charisma
- 2 Idealized influence
- 3 Inspirational leadership
- 4 Individual consideration
- 5 Intellectual stimulation

Transactional leadership

- 1 Contingent reward
- 2 Management by exemption (active)

3 Management by exemption (passive)

Laissez-faire

1 Laissez-faire

These subscales are important components that let researchers further break down Multifactor Leadership Theory into workable subsets. By using these subscales, the research will be better able to determine how leadership style may affect work satisfaction.

Locus of Control

Individual differences in perceptions of how environmental events are within one's control, or outside of one's control, is described as locus of control (Bogg & Cooper, 1995; Boone et al., 2000; Rotter (1966); Kren, 1992; Lewin and Stephens, 1994; Newton and Keenan, 1990; Schilit, 1986). The degree to which individuals believe that they control their lives' outcomes is internal locus of control (Rotter, 1966). Rotter describes how the environment or fate controls events in one's life as external locus of control. Locus of control is concerned with the confidence in being able to control one's outcomes (Locke, Durham, & Kluger, 1998) or one's environment (Bono & Judge, 2003). It is assumed (Kirkcaldy, Shaepard, & Furnham, 2002) that each employee develops a general concept concerning their personal ability to control all facets of their lives.

Individuals with internal locus of control adopt a more active role than those with external locus of control in terms of their perception of their ability to affect their job or organization outcomes, because they are more sensitive to work relationships (Lewin & Stephens, 1994). In differentiating between internal and external locus of control, Blau (1987) showed that internals put forth greater efforts personally to control their work environments. Restated, internals are more likely to take an active approach with respect to their organization, as they identify themselves as having greater control over their environment (Kren, 1992; Spector, 1982). Job satisfaction may be moderated by locus of control through the concept that internals view success and failure as stemming first and foremost from their own efforts and actions, while externals view events in their lives as being the fallout of uncontrollable forces

(Boone & De Brabander, 1997). Consistent with this theory, individuals with an internal locus of control perceive more control of situations, and are more satisfied with their jobs (Andrisani and Nestel, 1976; Locke et al., 1998; Lu, Kao, Cooper, & Spector, 2000; Muhonen & Torkelson, 2004; Organ and Greene, 1974; Spector, 1986; Sujan, 1986).

Furnham and Drakeley (1993) maintain that those subordinates who have infrequent contact with power, opportunity or material advantage will most likely develop external expectancies which imply that the subordinate's locus-of-control beliefs could develop differently due to environmental factors. In organizations, the access to power and opportunity is often through a subordinate's direct supervisor. Having increased or decreased levels of access to supervision may be one factor that could influence subordinates' work locus-of-control beliefs, and ultimately, increased or decreased job satisfaction (Furnham & Drakeley).

Investigations put forward that subordinates who are external in their orientation are more alienated from the work setting (Neal & Seeman, 1964; Seeman, 1967). This may be one reason why researchers have found that internally oriented employees are more satisfied with the work setting than externally oriented employees are (Mitchell, Smyser, and Weed, 1975; Organ & Greene, 1974). However, leadership styles do impact these results. Runyon (1973) investigated the relationship between subordinates that are internally oriented and externally oriented in their satisfaction with supervision. What Runyon found was that participative supervisors made a significantly positive impact on internal subordinate's satisfaction, while external subordinates were significantly more satisfied with directive supervisors. The findings of Mitchell et al. and Runyon indicate that both internal and external subordinates are more satisfied under a high-participation management style than under low participation. Rodriguez, Bravo, Peiro, and Schaufeli (2001) found correlations which indicated that the higher work demands, the lower work control, the lower supervisor or social support, the more external LOC, and the higher is job satisfaction. These findings indicate that increasing or decreasing access to supervisors may have an impact on satisfaction with supervision for subordinates with internal and external orientations.

Rodriguez et al. (2001) indicates that there may be a 'ceiling effect' to the limits of the impact of supervisory support on job satisfaction when considering LOC: Employees with the most dissatisfaction are those with low supervisory support, low job control, and an external LOC, and altering these variables reduces job dissatisfaction. High supervisory support changes these results; for external LOC, the relationship is additive, while for internal LOC, high supervisory support and high job demand increase job dissatisfaction (Rodriguez et al.). They conclude that the moderator function of LOC, together with the fact that supervisory support seems to have a favorable effect on job satisfaction.

The potential moderating effects of LOC on job satisfaction have been studied by Chiu, Lin, Tsai, and Hsiao (2005) and by Johnson, Luthan, and Hennessey (1984), who found that LOC has a significant moderating influence on the relationship between supervisor influence on productivity and subordinate satisfaction with supervision. Specifically, this work examines the moderating effect of LOC on the relationship between POS and job satisfaction.

Organization Commitment

Organizational commitment (OC) represents individual employee concern for the organization (Shore & Wayne, 1993). OC is further defined by Mowday, Porter, and Steers (1982) as the perception of the strength of an individual's identification and involvement with the goals of an organization's culture. OC is viewed by Steers (1977) as an employee attitude and as a set of behavioral intentions: the readiness to put forth considerable effort on behalf of the organization and a strong desire to preserve membership in the organization. Malhotra and Mukherjee (2004) explain OC as the attitudes of people towards their company. OC is considered generally to be a useful measure of organizational effectiveness (Steers, 1975). Organizational outcomes such as supervisory trust, job involvement, and job satisfaction have been shown to have a positive relationship with OC (Jermine & Berkes, 1979).

While job satisfaction has been extensively studied, there has been comparatively little research examining the link between OC and supervisor span of control. Research has shown that work group size is inversely related to work satisfaction and organizational commitment

(Burke, 1996; Mullen, Sumons, Hu, & Salas, 1989; Zeffane, 1994). Individuals interact with supervisors, peers, and other members of their organization in ways that develop into relationships in which both parties give and receive or in some way exchange in return for opportunities and benefits (Blau, 1964; Organ, 1988; Tansky & Cohen, 2001). With these opportunities and benefits, Tansky and Cohen find that employees may feel obligated to reciprocate and may become more committed to the organization. A genuine mutual commitment between organization and employee is optimal (Kochan & Dyer, 1993). When developing OC, employees must meet the instructions of the organization as well as the instructions of the supervisor (Brewer, 1993). How supervisory span of control impacts these opportunities and benefits are not well understood.

The traditional employment relationship that offered workers security in exchange for commitment is no longer valid in today's marketplace, where workers understand that job security is no longer part of management's capacity (Tansky & Cohen, 2001). The interaction between supervisor and subordinate now takes on more importance as supervisor relationships enhance workers security. Tansky and Cohen find that supervisors, who are involved with subordinates on a daily basis, are in a better position to assist the subordinates' development of new competencies in the workplace. By developing these competencies, subordinates may make themselves more valuable to their present organization, and at the same time, they may make themselves more valuable in the external labor marketplace (Feldman, 1996).

Employee commitment improves when line managers are actively involved in developing high-quality personnel through coaching, team-building, and employee involvement, according to Thornhill and Saunders (1998). This could explain the positive association between transformational leadership and organizational commitment found in nursing staffs by Avolio, Zhu, Koh, and Puja (2004). Findings by Loke (2001) and Morrison, Jones, and Fuller (1997) indicate that both transformational and transactional leadership styles are positively related to job satisfaction.

Transformational leadership in particular is well-researched and it has been suggested that

there is a positive association with OC in a variety of organizational settings and cultures (Avolio et al., 2004; Bono & Judge, 2003; Dum Dum, Lowe, & Avolio, 2002; Koh, Steers, & Terborg, 1995; Lowe, Kroeck, & Sivasubramaniam, 1996; Walumbwa & Lawler, 2003). How transformational leadership exerts an influence on subordinates' OC has not been adequately addressed in the literature. However, research indicates that leadership is a key determinant of OC (Mowday et al., 1982). Specifically, OC is higher for subordinates whose leaders are supportive and concerned for the subordinates' development (Allen & Meyer, 1990). Wide spans of supervision might reduce the ability for leaders to participate in the subordinates' development.

Avolio et al. (2004) examined the impact of direct versus indirect reporting upon the relationship between subordinate and transformational leader. Antonakis and Atwater (2002) identified this moderator as structural distance, which could be physical distance, hierarchical level, span of management control, or frequency of leader-follower interaction. Avolio et al. found that structural distance did moderate the relationship between transformational leadership and the OC of the subordinate.

OC and job satisfaction are relational (Chiu et al., 2005) but with distinguishable attitudes, in that OC is an affective response to the entire organization, whereas job satisfaction represents an affective response to particular aspects of the job. OC and job satisfaction have been statistically correlated to leadership behaviors in the nursing field (Loke, 2001) and in the retail sales field (Darden, Hampton, & Howell, 1989). Interestingly, a number of studies have acknowledged job satisfaction as a precursor of OC (Blau, 1987; Tett & Meyer, 1993).

OC is further broken down into three types, as explained by Meyer and Allen (1991, p. 67):

Affective Commitment refers to the employee's emotional attachment to, identification with, and involvement with the organization. Employees with a strong affective commitment continue employment with the organization because they want to do so.

Continuance Commitment refers to an awareness of the cost associated with leaving the

organization. Employees whose primary link to the organization is based on continuance commitment remain because they need to do so. Finally, Normative Commitment reflects a feeling of obligation to continue employment. Employees with a high level of normative commitment feel that they ought to remain with the organization.

While investigating job satisfaction, Irving, Coleman, and Cooper (1997) found the relationship between affective, continuance, and normative commitment revealed that job satisfaction was positively related to both affective and normative commitment. Interestingly, continuance commitment was negatively related to job satisfaction. Effectively, Allen and Meyer (1990) suggest, subordinates who were staying with organizations because they wanted to (affective) or felt they ought to (normative) had greater job satisfaction than those who remained at organizations because they felt they needed to (continuance). Given these conceptual differences, the researcher believes OC should be examined as affective, normative, and continuance commitments.

Any organization's success will be put at risk if its employees fail to value the organization's missions, goals and objectives and fail to believe in what the organization stands for (Congram & Friedman, 1991; Unzicker, Clow, & Babakus, 2000).

Perceived Organization Support

The degree to which individual employees consider that their employer values their contribution and is concerned with their welfare is perceived organization support (POS) which is influenced by aspects of the organization's treatment of the employee (Eisenberger, Cummings, Armeli, & Lynch, 1997; Shore & Wayne, 1993; Rhoades & Eisenberger, 2002; Shore & Tetrick, 1991; Tansky and Cohen, 2001). Employees' tendency to assign the organization humanlike characteristics encourages the development of POS (Eisenberger, Huntington, Hutchison, & Sowa, 1986). This is the idea behind the old saying, you can love the company, but the company cannot love you. The measures taken by agents of the organization are frequently viewed as indications of the organization's purpose rather than attributed solely to the agent (Levinson, 1965). The personification of the organization, Levinson suggests, is supported by the

organizations' legal, moral, and financial responsibility and by the policies, norms and culture giving the organization's agent power over the employee. Using organizational personification, employees view their treatment at the organization as an indication that the organization favors or disfavors them (Rhoades & Eisenberger).

Resources received from others, social exchange theorists argue, are more highly valued if they are based on choice (Rhoades & Eisenberger, 2002). Organizational rewards and favorable job conditions such as pay, promotions, and job enrichment can contribute to more POS if the employee believes that they result from choice rather than from external constraints such as union contracts or government regulations (Eisenberger et al., 1986; Rhoades and Eisenberger). This is not to say that when favorable external constraints arise, increased POS is not possible. In fact, Eisenberger et al. (1997) indicate that even failure to receive an expected benefit due to external constraints may reduce job satisfaction without having an impact on POS.

Because supervisors act as organizational agents, subordinates' reception of favorable conditions from a supervisor should contribute to POS (Rhoades & Eisenberger, 2002). Additionally, employees understand that evaluations of job performance are frequently conveyed to top management, further contributing to employees' connection of supervisor support with POS (Eisenberger et al., 1997; Levinson, 1965).

Organizational size has also been argued to reduce POS as individuals experience less significance in large organizations, where highly formalized policies and procedures might reduce flexibility in dealing with employees' unique needs (Dekker & Barling, 1995). How supervisory span of supervision may impact POS as it relates to large organizations is not well understood, however favorable treatment received from supervisors shows strong relationships with POS.

POS is an important influencer of job satisfaction, according to Chiu et al. (2005), who find that without adequate POS, employees may view their responsibilities negatively and be more dissatisfied. In fact, POS has been found to positively influence both job satisfaction and OC in the hospitality industry by Susskind, Borchgrevink, Kacmar, and Brymer (2000). Job satisfaction is a function of the interaction among the personality characteristics of the individual

and organizational support, according to Downey, Hellriegel, and Slocum (1975). However, personality characteristics or, more relevant, LOC also moderates this relationship. POS influences both job satisfaction and OC more strongly for subordinates with external LOC tendencies versus those subordinates with internal LOC tendencies (Chiu et al., 2005). The thought process that external-LOC individuals have that no matter what they do, they have no influence on outcomes, make leadership support a key factor in external-LOC subordinates' job satisfaction (Chiu et al.).

Figure 5. Perceived organizational support and organizational commitment have different and distinct relationships.

Observed relationships between POS and OC are strong (Shore & Tetrick, 1991) but distinctive, as POS focuses on the employee accounts of an organization's concern for the employee, while OC focuses on the employee's concern for the organization (Shore & Wayne, 1993), as shown in Figure 5. Studies by Eisenberger et al. (1986) and Tansky and Cohen (2001), indicate that POS influences OC. One way an employer can increase the POS is by facilitating employee development activities that groom an individual for further advancement, promotion, raises, job delegation, and empowerment according to Chiu et al. (2005). Additionally, employee job satisfaction has increased with the perception of positive coaching practices (Ellinger et al., 2003).

POS is found to be correlated to, yet distinctive from, organizational commitment (Eisenberger et al., 1986; Settoon, Bennett, & Liden, 1996; Rhoades & Eisenberger, 2002), LMX (Settoon et al.; Wayne, Shore, & Liden, 1997), supervisor support (Kottke & Sharafinski, 1988; Shore & Tetrick, 1991), and job satisfaction (Eisenberger et al.; Rhoades and Eisenberger; Shore & Tetrick).

New Knowledge in Human Resource Development

Changes in workforce requirements now mean that many human resource development (HRD) practices that have customarily been performed by HRD professionals are being transferred to supervisors and line managers (De Jong, Leeders, & Thijssen, 1999; Ellinger et al., 2003; Hall and Torrington, 1998; McGovern, Gratton, Hope-Hailey, Stiles, & Truss, 1997; Mindell, 1995; Thornhill & Saunders, 1998; Yarnall, 1998). These new responsibilities mean that line managers and supervisors have to motivate, reward, recognize, train, educate, improve subordinates and now serve and satisfy them (Webber, 1993). Monitoring supervisor-subordinate relationships may help to increase work satisfaction.

The logic that satisfied employees become productive employees has previously been invalidated in HRD. Swanson (1997) notes that fairly treated, productive employees who achieve excellence will be satisfied employees who in turn will maintain productivity. The struggle in HRD, according to Swanson, should be for developing excellence, not satisfaction. Excellence in the workplace creates a work environment that develops satisfied employees. Putman and Tejada (2006) and (Putman et al., 2006) find no direct relationship between span of supervision and satisfaction with supervision, and no direct relationship between span of supervision and satisfaction with work. HRD professionals should not fixate on span of supervision, but it should be an integrated part of the leadership component for developing excellence. As a HRD tool, leadership can be used in helping people achieve excellence, which should yield increased satisfaction.

Interestingly, Putman and Tejada (2006) show that respondents with high LMX and high span-of-supervision conditions report the lowest satisfaction. The researchers indicate that respondents with the lowest satisfaction have high LMX and high span-of-supervision conditions, while respondents with the highest satisfaction are those with high LMX and low span of supervision. In figure 6, this relationship is shown. This may indicate that respondents enjoy a high-LMX relationship and the benefits achieved from this relationship, but want more access to their supervisor.

HRD professionals familiar with the work of Senge (1990) may relate this finding with

holding creative tension, or the gap between our vision and our reality. Given a high LMX, that person should understand the vision and goals of his superior and he or she should have the desire to achieve that vision and goals. If the reality is high span of supervision, however, one may not have the capacity, tools, or power to achieve the vision and goals, thus staining the high-LMX relationship. Senge shows that increased creative tension often leads to work characteristics associated with reduced job satisfaction. HRD outcomes influence organizational effectiveness and profitability. HRD professionals should consider variables such as LMX and supervisory span of supervision when developing performance outcomes for organizations to yield improved worker satisfaction (Putman & Tejada, 2006).

Figure 6. Work satisfaction, LMX, and span of supervision are relational.

HRD currently is considering “person-organization fit” as it compares to the reliance on “person-job fit” in today’s work environments (Ripley, 2003). How one fits into an organization, and a job, depends on many factors including career decidedness and career development. Tatum, Chambers, Owens, and Gibson (1999) have found that while career decidedness is a relatively new construct which measures a specific stage of career development, it is significantly related to core personality constructs, measured both in terms of general personality dispositions and as work-based personality traits.

Employees with many employers, Cherry (1976) offers, were more dissatisfied with their job in comparison to those with a smaller number of employers. It may be that those with a smaller number of employers are more satisfied due to variables such as leader-subordinate relationships. Cherry indicates a consistent relationship is found between persistent job changing and personal problems. HRD practices that focus on individual perceptions of work and promote an employee-friendly environment in the organization may modify the negative reactions of

larger work groups (Chiu et al., 2005).

Henderson (2000, p. 306) wonders, “How it is that one person's epiphany in optimal experience can be another person's utter boredom?” Nichols (1990) argues that a significant emotional response to any given experience is generated by the degree of congruence or conflict that the event accords with one's deep-seated emotional goals. Nichols' research revealed that these fundamental goals, termed core goals, are linked to the very deepest emotions and have particular identifiable characteristics. According to Nichols, these "core goals" (e.g., the quest for constant learning, for security or for personal growth), whatever they might be, tend to be few in number, internally generated from a lifetime of experiences, and apply similarly across many contexts of experience (e.g., home, work, school, leisure, relationships).

Participants in a study on job freedom were able to articulate the specific aspects of their work environments that facilitated their happiness (Henderson, 2000). Despite the varied nature of their work settings, there was a striking uniformity in the way the participants described their individual work environments. Henderson indicates the participants unanimously discussed the sense of freedom that they enjoyed as an overriding positive in their work environment. This freedom was described in terms of the autonomy that the participants felt, their ability to choose how they approached their work, as well as the latitude they had to design their individual areas of specialty. These are components that are consistent with a LMX in-group relationship.

In addition, Henderson (2000) indicated that research participants unanimously spoke of the high level of challenge that their work offered which offered them a context in which to fully exercise their minds, their skills, and their creative potential in designing new solutions, presenting new ideas, and implementing new approaches. All participants stated the importance of the stimulation afforded by the diversity in their work, as well as the work environment itself

(Henderson). However, in terms of meaning, all participants derived a strong measure of purpose, not from the income they earned, but from the work that they accomplished. Each individual expressed pride in the products or services with which they were associated.

Henderson points out there is a body of literature indicating that positive personality styles, such as optimistic philosophy (Seligman, 1991), resourcefulness (Rosenbaum, 1990; Wheaton, 1985), and single-mindedness (Funk, 1992; Kobasa, Maddi, & Kahn, 1982) are among the behavior fundamentals that influence general happiness in both personal and career situations.

Additionally, Campbell (1988) and Csikszentmihalyi (1990) suggest that happiness results from a combination of satisfying work and life experiences.

Summary

The literature review specifically examines supervisory span of supervision, span of supervision, work satisfaction, Leader-Member Exchange theory, leadership styles, locus of control, organizational commitment and perceived organizational support. The researcher hopes that by completing an extensive literature review, the foundation for the dissertation has been built. The search for new knowledge is an important component of this dissertation.

CHAPTER THREE

METHODOLOGY

Introduction

Airline crewmembers think and communicate quantitatively. They enjoy numbers, measurements, and all things quantifiable. As this is a study of airline crewmembers and their relationship with their supervisors as much as it is research on work satisfaction, quantitative research is appropriate. In surveying airline crewmembers, the questions will generally be closed-ended as this is a comfortable format for the participants. The completed surveys are carefully documented, and an analysis of the results is examined to see if the hypotheses can be supported.

Population Sample

In this quantitative study, data is collected from groups of airline pilots who work in both large and smaller crew bases. The first participants come from a large pilot group of 2200. The second groups of participants work in two distinct smaller crew bases of 200-300 pilots. To compare participants that are homogeneous, the researcher has reduced the total population of 2,700 pilots to a sample group of 500. In finding a homogeneous comparison, the researcher compared work contracts, pay, job description, and work schedules to create a workable sample. By factoring out of as many confounding variables as possible, the researcher is hoping to reduce biases and increase reliability in this study.

The crew bases consist of two distinct groups working for the same U.S.-based Fortune 500 Corporation. One crew base consists of approximately 2200 pilots to one chief pilot, in the central portion of the United States. The other crew bases consist of a small group, approximately 200 pilots to one chief pilot, living in a southeastern state or in southern California. The pilots of each group have a choice as to where they live and work. The pilots described as the smaller group at one time worked in the larger crew base. There is opportunity for those working in the smaller crew base to transfer back to the larger crew base and vice versa. Pilots are free to select crew bases according to negotiated constraints of the pilot's union

collective bargaining agreement.

The ability to select one's crew base is important in considering the reliability of this study. The researcher understands that in quasi-experimental research, participants are pre-assigned to groups (Salkind, 2003), in this case by where they are crew based. As the selection of crew-base location has taken place before the survey questionnaire begins, the researcher has no control over who is in what crew base.

The researcher considers the ability of participants to select their work location an important factor in work satisfaction. A participant that does not like cold weather and is forced to move to Alaska, one would expect, would have a different score on job satisfaction than if they lived in Florida. In the case of the participants of this study, they each have free choice on where they wish to live, which the researcher hopes reduces some bias in this dissertation.

In both groups, income ranges from \$26,000 to above one-quarter of a million dollars per year. Each crew-base includes married, single, and divorced males and females and various ethnic groups. All pilots work under the same labor work agreement through their pilot's union. Aircraft are flown both domestically and internationally and both day and night in both crew bases.

In the larger group, the pilot ages range from early twenties to early seventies. In the smaller group, the ages range from mid-20s to age 60. At age 60, pilots are required through the labor agreement to return to the larger base. The reason for this is that the FAA age limit that applies to the aircraft flown out of the smaller base is 60 years old. Aircraft flown in the larger group consist of Boeing 727, 747, 757 and 767, MD11, Airbus 300, DC 8, while on the smaller bases only Boeing 757 and 767 aircraft are used.

Union participation is also required. The sample group is taken from union members who are active and in good standing. Selecting participants working under union-negotiated contracts reduces biases caused by side deals or special considerations. The participants in this study work under the same work rules and the same management restrictions. Management pilots are not asked to participate in this survey. They work under different work and pay rules.

Instrumentation

The survey instrument used in this dissertation utilizes significant components of well-established and published instruments. Through this survey, the researcher will attempt to study directly the characteristics of the participants in this research. The survey questions cover the areas of satisfaction with supervision and supervisory span of supervision, satisfaction with supervision and perceived supervisory span of supervision, satisfaction with work and supervisory span of supervision, LMX, LS, OS and POS. The survey will be broken down into parts using open- and closed-ended questions:

- 1 General question on participants' background
- 2 Components of the Minnesota Satisfaction Questionnaire or MSQ
- 3 7-item LMX measure from Scandura and Graen (1984)
- 4 A question on perceived supervisory span of supervision
- 5 Components on OC from Allen and Meyer (1990)
- 6 Components on POS from Eisenberger et al. (1990)
- 7 27-item reduced version of the MLQ from Tejada et al. (2001)

The structure of the survey allows for completion in approximately 10 minutes. The participants receive a survey and are asked to complete it and return via the internet to the researcher. Participants are not asked to disclose names or other identifying methods such as social security numbers or employee numbers. It is the researcher's intention to keep all collected data confidential by not including identifying components to the survey.

General questions on the participants' background are asked. These will include age, gender, race, and general seniority range. Although not directly related to the hypothesis, this data may be useful in further breaking down the data in more specific categories.

A carefully constructed and well-known job satisfaction instrument, the Minnesota Satisfaction Questionnaire or MSQ (Weiss, England, & Lofquist, 1967) is used to ascertain a satisfaction with work component. The MSQ has been used frequently in the study of job satisfaction. The MSQ instrument is distributed by Vocational Psychology Research for use in

accordance with the American Psychological Association ethical standards. One of the major advantages of the MSQ questions is that it has been used in many research studies in several areas of employment. Occupational group differences can be examined using the results of this research. Researchers using this study have conducted surveys in various vocations, including accountants, buyers, engineers, field representatives, managers, nurses, social workers, teachers, bookkeepers, clerks, secretaries, food service workers, housekeeping aides, assemblers, laborers, packers, truck drivers, warehousemen, employed disabled, and employed non-disabled. Questions in this section will include, “On my present job, this is how I feel about the way my supervisor and I understand each other,” and, “On my present job, this is how I feel about being able to do things that don’t go against my conscience.”

Leader-member exchange (LMX) is measured using the LMX-7 measure (Graen et al., 1982). This measure is consistent with prior research on LMX and is recommended and regarded as the preferred measure for the LMX construct (Putman & Tejada, 2006). This measure consists of seven items, with a four-point response scale. The scale is scored from 1 = low LMX to 4 = high LMX. The scale is advocated by Graen and Uhl-Bien (1995) and has been used for the past 20 years in many research studies, including Schriesheim et al. (2000).

The widely used MLQ instrument measures leadership styles including transformational, transactional and laissez-faire leadership behaviors, Tejada et al. (2001) indicates that a reduced set of items from the MLQ may be more appropriate. The MLQ has been revised several times (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1993b; Bass & Avolio, 1995). The MLQ reduced to 27 items by Tejada et al. appears to be a reasonable representation of the Bass and Avolio (1993b) use of the MLQ. The reduced version of the MLQ has reliability and constructs validity with the Multifactor Leadership Theory. Sample questions include: “My supervisor goes beyond his/her own self-interest for the good of our group,” “My supervisor talks enthusiastically about what needs to be accomplished,” “My supervisor keeps track of my mistakes,” and, “My supervisor takes no action even when problems become chronic.”

Organizational commitment; Meyer and Allen's (1991) three-component model links each component of organizational commitment to specific work outcomes such as employee retention and on-the-job behavior, and each component of organizational commitment has different behavior outcomes. The three-component OC model includes affective commitment, normative commitment, and continuance commitment (Allen & Meyer, 1990). Affective commitment refers to an employee's emotional link to, identification with, and connection in the organization (Malhotra & Mukherjee, 2004). Malhotra and Mukherjee describe normative commitment as employees' feelings of obligation to stay with the organization, and continuance commitment is based on what the costs of leaving are for the employee.

The new Organizational Commitment Questionnaire (OCQ) scale developed by Allen and Meyer (1990) uses a three-component scale of affective, normative and continuance commitment, which is linked to a five-point Likert scale ranging from strongly agree to strongly disagree. The scale has 24 items and has been extensively used in research (Jacobsen, 2000; Malhotra & Mukherjee, 2004; McDonald & Makin, 2000; Meyer, Allen, & Smith, 1993). Sample questions include, "I enjoy discussing my organization with people outside it," "It would be very hard for me to leave my organization right now, even if I wanted to," and, "I think that people these days move from company to company too often."

Perceived organizational support; the 18-item scale developed by Eisenberger et al. (1990) is used in this research. Questions such as, "Working at ___ has a lot of personal meaning for me," and, "My immediate supervisor at ___ gives me more recognition when I get a lot of work done," are characteristic of the questions asked. The work by Eisenberger is well-known in the field of perceived organizational support (Eisenberger et al., 1986; Eisenberger et al., 1990; Eisenberger et al., 1997; Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002)

The perceived supervisory span of supervision is measured from the questions, "What is your estimate of the number of other crewmembers assigned to your supervisor," and, "In addition to you, how many other pilots do you think your manager supervises?" Table 1

illustrates the instrument uses, variables and scales.

TABLE 1
DEPENDENT AND INDEPENDENT MEASURES

Dependent Measures		
Instrument	Variables	Scales
MSQ supervision section MSQ general satisfaction section	Satisfaction with supervision. Satisfaction with work in general	Satisfaction with supervision General satisfaction scale
POS	Perceived organizational support	Affective attachment Recognition, influence, expectations
OCQ	Organizational commitment	Affective commitment Continuance commitment Normative commitment
Independent Measures		
The MLQ reduced to 27 items	Transformational	Attributed charisma Idealized influence Inspirational leadership Intellectual stimulation Individualized consideration
	Transactional	Contingent reward Management by exception (active) Management by exception (passive)
	Laissez-faire	Laissez-faire
LMX-7	Leader-member exchanges	Supervisor support Supervisor recognition Supervisor relationship
Span of control	Span	Upper management Direct supervisor
Perceived span of control	Perceived span	Large crew-base Small crew-base

Data Gathering Procedure

There are 2,700 pilots, of which 500 were offered an anonymous survey administered over the Internet. These participants were selected from the group of pilots that most closely represented participants of the two study groups, as stated earlier. These participants, other than being from a large and small group, are very similar. Each of the participants received a cover letter along with the email survey instructions and packet. Each participant was asked to submit the survey using computer technology. Additionally, the email had a direct link to the survey for

easy access. The participants provided answers to inquiries on work satisfaction, satisfaction with supervision, span of supervision, organizational commitment, and perceived organizational support. Participation was completely voluntary. The data received will be kept confidential and stored in an Internet storage facility for a period of 5 years, and then destroyed.

Data Analysis Design

The casual-comparative research method looks at the two different crew bases' styles, examining different relationships. The casual-comparative design assigns participants to groups based on a characteristic beyond the control of the researcher. In this case, the characteristics include where a flight crewmember lives, his or her crew base, the type of aircraft flown, or the seniority number assigned. Casual-comparative design is also known as post hoc or quasi-experimental research by other researchers (Salkind, 2003).

Post hoc theory is the use of gathered data in an attempt to create new theory (Pedhazur & Schmelkin, 1991). Post hoc theory uses data to test hypotheses which caused a difference that has been observed between groups and has already occurred (Salkind, 2003). Additionally, in a post hoc test, one can test the combined mean of two or more groups against the mean of one other group (Kerlinger & Lee, 2000). Creswell (2005) describes the use of quasi-experimental design when situations dictate that researchers assign, but not randomly, participants into groups since the experimenter cannot artificially fashion groups that fit into the research design.

Data will be entered using the computer software SPSS version 13.0. To use the SPSS program for data analysis, one starts by defining variables using the required format (Cronk, 2004). In this study, the data will be analyzed in eight sections:

- 8 General question on participants' background
- 9 Components of the Minnesota Satisfaction Questionnaire or MSQ
- 10 7-item LMX measure (Scandura & Graen, 1984)
- 11 A question on perceived supervisory span of supervision
- 12 Components on OC from Allen and Meyer (1990)
- 13 Components on POS from Eisenberger et al. (1990)

14 27-item reduced version of the MLQ (Tejeda et al., 2001)

The coding of the defining variables is an important part of this research. A code is a set of symbols assigned to a set of objects (Kerlinger & Lee, 2000), and in this study the researcher will be assigning a code number to the members of the sample and to their characteristics. The transferred data from the original survey is then put into a format that lends itself to data analysis (Salkind, 2003).

Basic Descriptive Statistics

The use of descriptive statistics is important for describing some of the characteristics of the distribution of scores for the researcher's survey. Salkind (2003) indicates describing data is the first step in the analysis of data. Descriptive statistics allow the researcher to get a bird's eye view or first impression of what the data is explaining. Descriptive statistics, according to Creswell (2005), are used to indicate general tendencies in the data by use of the mean, mode, and median along with the spread of scores, calculations of variance, standard deviation, and range or the comparative of z -scores or percentile ranks. The researcher may use descriptive statistics to describe the independent variable, the dependent variable, or any of the confounding variables.

Inferential statistics can supply some very powerful decision-making tools. In collecting the survey data and carefully coding the answers and running statistical analysis, the researcher will look for patterns, differences, and relationships that may explain the relationships between satisfaction with work, satisfaction with supervision, crew-base size, and LMX.

CHAPTER FOUR

RESULTS AND ADDITIONAL FINDINGS

Sample

Data for the current study were collected through a large provider of courier services in the United States. A total of 500 employees were offered the survey, resulting in $N=222$ employees responding for an overall response rate of 44.4%. The sample is 89.6% male and 82% married. The racial and ethnic distribution of the sample is 86.9% white, 4.1% black and approximately 5.9% Hispanic or other. Senior-ranking employees comprised 70.1% of the sample, and all of the respondents were employed under a collective bargaining agreement. SPSS outcome tables for this section are available in Appendix A.

Measures

Job satisfaction. Consistent with prior research on job satisfaction and recommendations regarding preferred measures for job satisfaction construct, the researcher administered the Minnesota Satisfaction Questionnaire, general satisfaction scale, reproduced by permission of Vocational Psychology Research, University of Minnesota Copyright 1977. This measure has been widely studied and has consistently demonstrated high validity and reliability. Respondents completed the measure concerning their general job satisfaction. In the current study, internal consistency for satisfaction with supervision was $\alpha.92$.

Leader-member exchange (LMX). Consistent with prior research on LMX and recommendations regarding preferred measures for the LMX construct, the 7-item LMX measure (Scandura & Graen, 1984) was administered. This measure has been widely studied and has consistently demonstrated high validity and reliability. Respondents completed the measure about their relationship with their supervisors. In the current study, internal consistency for LMX was $\alpha.92$.

Multifactor Leadership. Consistent with prior research on multifactor leadership theory and recommendations regarding preferred measures for the multifactor leadership construct, the 27-item reduced version of the MLQ (Tejeda et al., 2001) was administered. The principle

instrument for Multifactor Leadership Theory, the 90-item Multifactor Leadership Questionnaire (MLQ), has limitations which make the 27-item reduced version of the MLQ more appropriate. According to Tejeda et al., this reduced version appears to be a reasonable representation of the Bass and Avolio (1993) first-order and second-order structures of the full-item MLQ set. This 27-item, reduced- version measure has demonstrated high validity and reliability. Permission was obtained from the 27-item reduced version of the MLQ developer to use their scale for the purpose of this research. Respondents completed the measure about their relationship with their supervisors. In the current study, internal consistency for multifactor leadership was $\alpha .81$.

Satisfaction with supervision. Consistent with prior research on satisfaction with supervision and recommendations regarding preferred measures for satisfaction with supervision construct, the Minnesota Satisfaction Questionnaire, specifically related to supervision of human relations, reproduced by permission of Vocational Psychology Research, University of Minnesota Copyright 1977 was administered. This measure has been widely studied and has consistently demonstrated high validity and reliability. Respondents completed the measure about their satisfaction with supervision. In the current study, internal consistency for satisfaction with supervision was $\alpha .96$.

Span of supervision. The perceived span of supervision was measured with the question, “What is your estimate of the number of other crewmembers assigned to your supervisor?” A second verification question was asked: “In addition to you, how many other pilots do you think your direct supervisor supervises?” The sample reported a range of subordinates from 10 to 500, with a median span of supervision of 40 ($x = 67$, $s.d. = 77.24$) subordinates. This number was further broken down into large and small crew bases, with the large crew base having a perceived span of supervision of 80 and the small crew base having a perceived span of supervision of 51. In the current study, internal consistency for satisfaction with supervision was $\alpha = .98$.

Results

To examine hypothesis 1a that the researcher expects a negative significant relationship

between satisfaction with supervision and perceived span of supervision, the researcher conducted a simple bivariate correlation as shown in Table 2.

Table 2

A Basic Paired Wise Pearson Correlation Between Span of Supervision and Satisfaction with Supervision

		Span of Supervision	Satisfaction with Supervision
Span of Supervision	Pearson Correlation	1	-.103
	Sig. (2-tailed)		.215
	N	177	146
Satisfaction with Supervision	Pearson Correlation	-.103	1
	Sig. (2-tailed)	.215	
	N	146	166

A paired wise Pearson correlation was calculated, examining the relationship between perceived span of supervision and satisfaction with supervision. A negative weak correlation that was not significant was found ($r(144) = -.103, p = .215$), indicating that perceived span of supervision is not related to satisfaction with supervision, as seen in Figure 7.

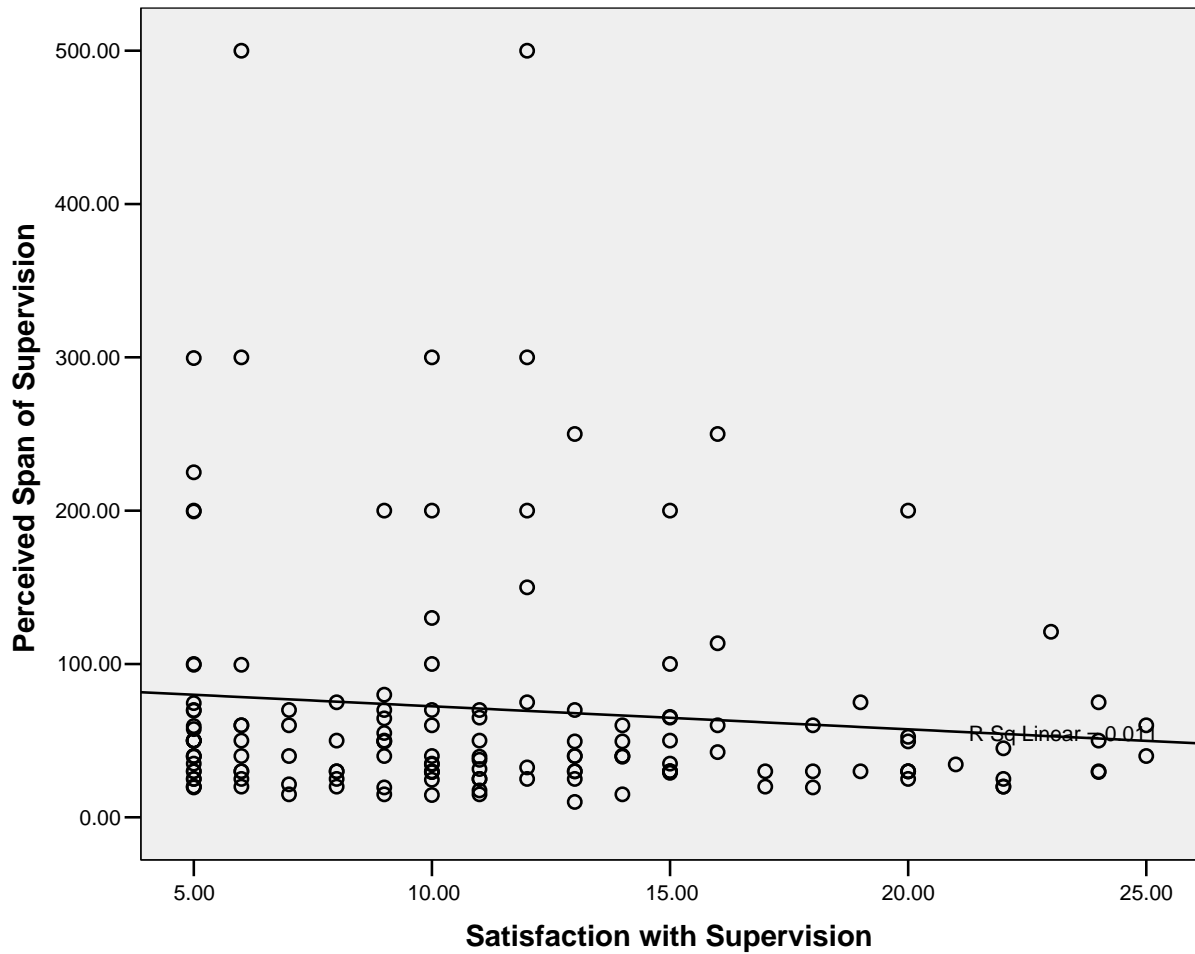


Figure 7. The weak relationships of span of supervision and satisfaction with supervision.

To examine hypothesis 1b, that the researcher expects a negative significant relationship between satisfaction with supervision and access to senior-level supervision, the researcher conducted a simple bivariate correlation. A paired wise Pearson correlation coefficient was calculated for the relationship between access to senior-level supervision and satisfaction with supervision, as shown in Table 3.

TABLE 3

SENIOR-LEVEL SUPERVISION AND SATISFACTION WITH SUPERVISION

Correlations

		Satisfaction with Supervision	Senior Level Supervision
Satisfaction with Supervision	Pearson Correlation	1	-.216**
	Sig. (2-tailed)		.005
	N	166	166
Senior Level Supervision	Pearson Correlation	-.216**	1
	Sig. (2-tailed)	.005	
	N	166	221

** . Correlation is significant at the 0.01 level (2-tailed).

As the number of subordinates are reduced, access to supervision is increased, thus the negative indication. A weak negative correlation was found ($r(164) = -.216, p < .01$), indicating a significant linear relationship between the two variables. Subordinates with more access to senior-level supervision tend to be more satisfied with supervision.

To examine hypothesis 1c that the researcher expects a negative significant relationship between satisfaction with work and perceived span of supervision, the researcher conducted a simple bivariate correlation. A paired wise Pearson correlation was calculated, examining the relationship between subjects' satisfaction with work and subjects' perceived span of supervision. A weak negative correlation that was not significant was found ($r(138) = -.097, p = .252$), as shown in Table 4. Satisfaction with work is not related to perceived span of supervision, as seen in Figure 8.

TABLE 4

SATISFACTION WITH WORK AND SPAN OF SUPERVISION

Correlations

		Satisfaction with Work	Span of Supervision
Satisfaction with Work	Pearson Correlation	1	-.097
	Sig. (2-tailed)		.252
	N	159	140
Span of Supervision	Pearson Correlation	-.097	1
	Sig. (2-tailed)	.252	
	N	140	177

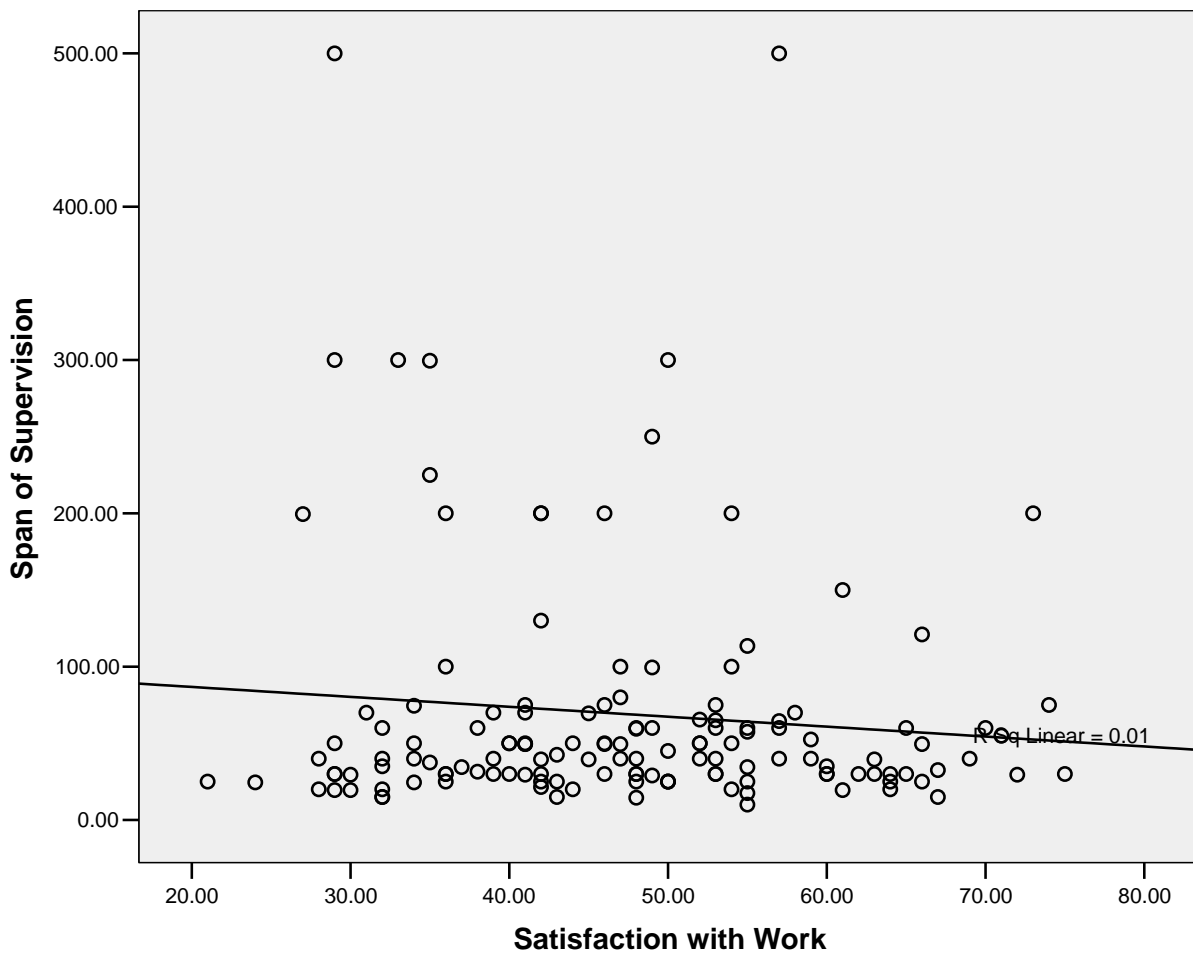


Figure 8. Satisfaction with Work and Span of Supervision

To examine hypothesis 1d that the researcher expects a negative significant relationship between satisfaction with work and access to senior-level supervision, the researcher conducted a simple bivariate correlation. A paired wise Pearson correlation coefficient was calculated for the relationship between subjects' satisfaction with work and access to senior-level supervision. As the number of subordinates with access to supervision decreases, access to senior-level supervision increases, thus the negative relationship. A weak negative correlation was found ($r(157) = -.225, p < .01$), indicating a significant linear relationship between the two variables as shown in Table 5 Subordinates with more access to senior-level supervision tend to be more satisfied with work.

TABLE 5
SATISFACTION WITH WORK AND SENIOR-LEVEL SUPERVISION

		Correlations	
		Senior Level Supervision	Satisfaction with Work
Senior Level Supervision	Pearson Correlation	1	-.225**
	Sig. (2-tailed)		.004
	N	221	159
Satisfaction with Work	Pearson Correlation	-.225**	1
	Sig. (2-tailed)	.004	
	N	159	159

** . Correlation is significant at the 0.01 level (2-tailed).

To examine hypothesis 2a, the LMX relationship is now examined to see how LMX moderates the relationship between satisfaction with supervision and perceived span of supervision. A multiple linear regression was calculated to predict subjects' satisfaction with supervision based on their LMX relationship and their perceived span of supervision. A significant regression equation was found ($F(2,139) = 260.524, p < .001$), with an R^2 of .789. Subjects' predicted satisfaction with supervision is equal to $-1.080 + .698 (\text{LMX}) - .003 (\text{span of supervision})$. Only LMX is a significant predictor.

To examine hypothesis 2b, the LMX relationship is now examined to see how LMX

moderates the relationship between satisfaction with supervision and access to senior-level supervision. A multiple linear regression was calculated to predict subjects' satisfaction with supervision based on their LMX relationship and participants' access to senior-level supervision. A significant regression equation was found ($F(2,158) = 268.251, p < .001$), with an R^2 of .772. Subjects predicted satisfaction with supervision is equal to $-2.032 + .685 (\text{LMX}) + .611$ (senior-level supervision). Only LMX is a significant predictor.

To examine hypothesis 2c, the LMX relationship is now examined to see how LMX moderates the relationship between satisfaction with work and perceived span of supervision. A multiple linear regression was calculated to predict subjects' satisfaction with work based on their LMX relationship and their perceived span of supervision. A significant regression equation was found ($F(2,133) = 3948.801, p < .001$), with an R^2 of .401. Subjects predicted satisfaction with work is equal to $27.739 + 1.095 (\text{LMX}) - .007$ (span of supervision). Only LMX is a significant predictor.

To examine hypothesis 2d, the LMX relationship is now examined to see how LMX moderates the relationship between satisfaction with work and access to senior-level supervision. A multiple linear regression was calculated to predict subjects' satisfaction with work based on their LMX relationship and their access to senior-level supervision. A significant regression equation was found ($F(2,151) = 3742.363, p < .001$), with an R^2 of .336. Subjects' predicted satisfaction with work is equal to $29.737 + .991 (\text{LMX}) - .603$ (senior-level supervision). As shown in Table 6, only LMX is a significant predictor in hypotheses 2a, 2b, 2c, and 2d.

TABLE 6

SUMMARY OF LINEAR REGRESSION ANALYSIS FOR VARIABLES PREDICTING LMX AS A MODERATOR

Variables	<i>B</i>	<i>SE B</i>	β
<u>Satisfaction with Supervision</u>			
Step 1			
LMX	.698	.031	.884***
Span of Supervision	-.003	.003	-.044
Step 2			
LMX	.685	.030	.894***
Senior-level supervision	.611	.430	.056
<u>General Satisfaction</u>			
Step 3			
LMX	1.095	.117	.628***
Span of Supervision	-.007	.010	-.047
Step 4			
LMX	.991	.121	.572***
Senior-level supervision	-.603	1.701	-.025

Note. R^2 of .789 for Step 1; R^2 of .772 for Step 2; R^2 of .401 for Step 3; R^2 of .336 for Step 4.

*** $p < .001$.

Additional Findings

The research indicated in hypothesis 1a that perceived span of supervision is not related to satisfaction with supervision. Supporting research shows, however, that this does not apply to all management relationships. The researcher calculated a multiple linear regression examining satisfaction with supervision as the dependent variable and estimated span of supervision and

various leadership behaviors, as discussed in multifactor leadership style, as predictor variables.

These leadership styles include:

- 1 Attributed Charisma: ($F(2,139) = 251.907, p < .001$), with an R^2 of .784
- 2 Idealized Influence: ($F(2,138) = 83.474, p < .001$), with an R^2 of .547.
- 3 Inspirational Leadership: ($F(2,136) = 85.130, p < .001$), with an R^2 of .556.
- 4 Intellectual Stimulation: ($F(2,138) = 95.464, p < .001$), with an R^2 of .580.
- 5 Individual Consideration: ($F(2,138) = 78.459, p < .001$), with an R^2 of .532.
- 6 Contingent Reward: ($F(2,141) = 61.082, p < .001$), with an R^2 of .464.
- 7 Management by Exception (Active): ($F(2,137) = 33.236, p < .001$), with an R^2 of .327.
- 8 Management by Exception (Passive): ($F(2,138) = 30.394, p < .001$), with an R^2 of .306.
- 9 Laissez-faire: ($F(2,139) = 56.252, p < .001$), with an R^2 of .447.

Only two leadership styles presented significant results with estimated span of supervision as an independent variable: management by exception (passive) and laissez-faire. A multiple linear regression was calculated to predict subjects' satisfaction with supervision based on their management by exception (passive) relationship and their estimated span of supervision. A significant regression equation was found ($F(2,138) = 30.394, p < .001$), with an R^2 of .306. Subjects' predicted satisfaction with supervision is equal to $19.406 - .790$ (management by exception passive) $-.011$ (estimated span of supervision). Both management by exception (passive) and estimated span of supervision were significant.

A multiple linear regression was calculated to predict subjects' satisfaction with supervision based on their laissez-faire relationship and their estimated span of supervision. A significant regression equation was found ($F(2,139) = 56.252, p < .001$), with an R^2 of .447. Subjects' predicted satisfaction with supervision is equal to $19.420 - 1.146$ (Laissez-faire) $-.010$ (Estimated span of supervision). Both laissez-faire relationship and estimated span of supervision were significant. As shown in Table 7, estimated span of supervision is a significant variable

under certain management styles.

TABLE 7
SUMMARY OF LINEAR REGRESSION ANALYSIS FOR VARIABLES PREDICTING
SATISFACTION WITH SUPERVISION BASED ON MANAGEMENT STYLES

Variables	<i>B</i>	<i>SE B</i>	β
Step 1			
Management by Exception (P)	-.790	.104	-.540***
Estimated Span of Supervision	-.011	.005	-.159*
Step 2			
Laissez-faire Supervision	-1.146	.109	-.662***
Estimated Span of Supervision	-.010	.005	-.133*

Note. R^2 of .306 for Step 1; R^2 of .447 for Step 2.
* $p < .05$. *** $p < .001$.

The findings in Hypothesis 1b indicate that subordinates with more access to senior-level supervision tend to be more satisfied with supervision. To examine why subordinates with more access to senior-level supervision tend to be more satisfied with supervision, the researcher conducted a multiple linear regression analysis using satisfaction with supervision as the dependent variable, and senior-level span of supervision as one independent variable and perceived organizational support as an additional independent variable. Table 8 shows this

relationship.

TABLE 8
SUMMARY OF LINEAR REGRESSION ANALYSIS FOR VARIABLES PREDICTING
SATISFACTION WITH SUPERVISION BASED ON SENIOR-LEVEL ACCESS AND
PERCEIVED ORGANIZATIONAL SUPPORT.

Variables	<i>B</i>	<i>SE B</i>	β
Senior-level access	-1.738	.775	-.159*
Perceived organizational support	.286	.048	.424***

Note. R^2 of .223; * $p < .05$. *** $p < .001$.

A multiple linear regression was calculated to predict subjects' satisfaction with supervision based on their access to senior-level supervision and perceived organizational support. A significant regression equation was found ($F(2,158) = 22.676, p < .001$), with an R^2 of .223. Subjects' predicted satisfaction with supervision is equal to $4.529 - 1.738$ (senior-level access to supervision) + $.286$ (perceived organizational support). Both senior-level access to supervision and perceived organizational support were significant predictors.

The research indicates in hypothesis 1d that subordinates with more access to senior-level supervision tend to be more satisfied with work. In examining why subordinates with more access to senior-level supervision tend to be more satisfied with work, the researcher conducted a multiple linear regression analysis using satisfaction with work as the dependent variable, and

access to senior-level supervision as one independent variable and perceived organizational support as an additional independent variable. See Table 9.

TABLE 9
SUMMARY OF LINEAR REGRESSION ANALYSIS FOR VARIABLES PREDICTING
SATISFACTION WITH WORK BASED ON ACCESS TO SENIOR-LEVEL SUPERVISION
AND PERCEIVED ORGANIZATIONAL SUPPORT

Variables	<i>B</i>	<i>SE B</i>	<i>β</i>
Senior-level supervision	-3.254	1.580	-.132*
Perceived organizational support	.879	.096	.588

Note. R^2 of .387; * $p < .05$. *** $p < .001$.

A multiple linear regression was calculated to predict subjects' satisfaction with work based on their access to senior-level supervision and perceived organizational support. A significant regression equation was found ($F(2,152) = 47.999, p < .001$), with an R^2 of .387. Subjects predicted satisfaction with supervision is equal to $23.070 - 3.254$ (access to senior-level supervision) + $.879$ (perceived organizational support). Both access to senior-level supervision and perceived organizational support were significant predictors.

Prior research has suggested that job satisfaction and satisfaction with supervision are related to LMX (Graen & Uhl-Bien, 1995), which is supported in this data from participants working under a collective bargaining agreement. To verify these findings, the researcher

conducted a simple bivariate correlation on satisfaction with supervision and LMX, and also on satisfaction with work and LMX. Table 10 shows the result of a Pearson correlation with satisfaction with supervision, satisfaction with work, and LMX.

TABLE 10
CORRELATIONS OF SATISFACTION WITH SUPERVISION, SATISFACTION IN WORK
IN GENERAL AND LMX

		Supervision	General	LMX
Supervision	Pearson Correlation	1	.660**	.877**
	Sig. (2-tailed)		.000	.000
	N	166	156	161
General	Pearson Correlation	.660**	1	.579**
	Sig. (2-tailed)	.000		.000
	N	156	159	154
LMX	Pearson Correlation	.877**	.579**	1
	Sig. (2-tailed)	.000	.000	
	N	161	154	198

**

Correlation is significant at the .01 level (two-tailed)

In this Pearson correlation coefficient, the relationship between subjects' satisfaction with supervision (Supervision) and LMX is calculated. A strong positive correlation was found

($r(159) = .877, p < .01$), indicating a significant linear relationship between the two variables.

The participants, working under a collective bargaining agreement, tend to be more satisfied with supervision as LMX relationships increase.

In this Pearson correlation coefficient, the relationship between subjects' satisfaction with work (General) and LMX is calculated. A moderate positive correlation was found ($r(152) = .579, p < .01$), indicating a significant linear relationship between the two variables. The participants, working under a collective bargaining agreement, tend to be more satisfied with work as LMX relationships increase.

To examine how perceived span of supervision is related to satisfaction with work and satisfaction with supervision, an examination was conducted using an independent sample *t* test comparing means of two sample groups, those of a small crew base and those of a large crew base. See Table 11. The results are discussed below.

TABLE 11

CREW BASE SIZE AND SPAN OF SUPERVISION, SATISFACTION WITH WORK IN GENERAL, AND SATISFACTION WITH SUPERVISION

Crew base	N	Mean	Standard Deviation	Standard Error Mean
Span Small Base	80	51.2250	28.63751	3.20177
Span Large Base	97	80.6598	99.33759	10.08620
Sat General				

Small Base	68	49.8529	11.76545	1.42677
Sat General Large Base	91	44.3516	11.95117	1.25282
Supervision Small Base	74	12.5541	5.63779	.65538
Supervision Large Base	92	10.1957	5.04755	.52624

An independent-sample *t* test comparing the mean score of the small crew base and the large crew base, as shown in Table 12, found a significant difference between means of the two groups for perceived span of supervision ($t(175) = -2.563, p < .05$). The mean of the small crew base was significantly lower ($m = 51.2, sd = 28.6$) than the mean of the larger crew base ($m = 80.6, sd = 99.3$). The examination of the satisfaction with work (general satisfaction) also found a significant difference between the means of the two groups ($t(157) = 2.891, p < .01$). The mean of the small crew base was significantly higher ($m = 49.8, sd = 11.7$) than the mean of the larger crew base ($m = 44.3, sd = 11.9$).

TABLE 12

AN INDEPENDENT SAMPLE T-TEST WITH SPAN OF SUPERVISION, SATISFACTION WITH WORK IN GENERAL, AND SATISFACTION WITH SUPERVISION

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Span	Equal variances assumed	41.016	.000	-2.563	175	.011	-29.43479	11.48553	-52.10278	-6.76681
	Equal variances not assumed			-2.782	114.905	.006	-29.43479	10.58219	-50.39627	-8.47332
SatGen	Equal variances assumed	.101	.751	2.891	157	.004	5.50129	1.90308	1.74235	9.26024
	Equal variances not assumed			2.897	145.677	.004	5.50129	1.89875	1.74864	9.25394
SatSup	Equal variances assumed	1.936	.166	2.840	164	.005	2.35840	.83047	.71861	3.99819
	Equal variances not assumed			2.806	148.094	.006	2.35840	.84051	.69746	4.01934

The examination of the satisfaction with work (SatGen) also found a significant difference between the means of the two groups ($t(157) = 2.891, p < .01$). The mean of the small crew base was significantly higher ($m = 49.8, sd = 11.7$) than the mean of the larger crew base ($m = 44.3, sd = 11.9$). The examination of the satisfaction with supervision (SatSup) also found a significant difference between the means of the two groups ($t(164) = 2.840, p < .01$). The mean of the small crew base was significantly higher ($m = 12.5, sd = 5.6$) than the mean of the larger crew base ($m = 10.1, sd = 5.0$).

The data indicate that those participants in the smaller crew bases perceive a lower span of supervision, and that they maintain a higher degree of satisfaction with work and a higher degree of satisfaction with supervision. The researcher is interested in how these results may impact the hypotheses.

Previously the researcher examined why smaller crew bases tended to have crew members with more satisfaction both with their supervisor and work in general. The multiple linear regression analysis used satisfaction(s) as dependent variables and senior-level span of supervision as one independent variable and perceived organizational support as the second independent variable. Both senior-level span of supervision and perceived organizational support

were significant predictors of satisfaction(s). The researcher used the same independent variables, but changed the dependent variable to organizational commitment. The following Table 13 shows the multiple linear regression analysis that was conducted.

TABLE 13
SUMMARY OF LINEAR REGRESSION ANALYSIS FOR VARIABLES PREDICTING ORGANIZATIONAL COMMITMENT BASED ON PERCEIVED ORGANIZATIONAL SUPPORT AND SENIOR-LEVEL SPAN OF SUPERVISION

Variables	<i>B</i>	<i>SE B</i>	<i>β</i>
Senior-level span of supervision	2.076	1.023	.110*
Perceived organizational support	.869	.062	.756***

Note. R^2 of .558; * $p < .05$. *** $p < .001$.

A multiple linear regression was calculated to predict subjects' organizational commitment based on their senior-level span of supervision and perceived organizational support. A significant regression equation was found ($F(2,153) = 96.719, p, < .001$), with an R^2 of .558. Subjects predicted organizational commitment is equal to $38.358 + 2.076$ (senior-level span of supervision) + $.869$ (perceived organizational support). Both senior-level span of supervision and perceived organizational support were significant predictors. As senior-level span of supervision is increased, improving perceived organizational support is a significant factor for increasing organizational commitment.

This Collective Bargaining Sample

Unionized subordinates, those working under a collective bargaining agreement put great limitations on a supervisor's ability to increase satisfaction with work and satisfaction with supervision. To better understand these limitations, the researcher examines factors for relationships with span of supervision, senior-level span supervision, satisfaction with work, and satisfaction with supervision: age, area of the world working (from domestic to international), union seniority, and race. Table 14 is an examination of these correlations.

TABLE 14

THE EXAMINATION OF SATISFACTION FACTORS

Subscale	1	2	3	4	5	6	7	8
1. Supervision Span	-	.190*	-.103	-.097	-.156*	-.008	.142	.019
2. Senior Access		-	-.216*	-.225*	-.076	.071	.069	.061
3. Supervision Satisfaction			-	.660*	.041	.011	.028	.111
4. General Satisfaction				-	.069	-.014	-.076	.222*
5. Age					-	-.071	-.509*	-.007
6. Region						-	.113	.098
7. Seniority							-	.041
8. Race								-

Note: * $p < .05$.

A Pearson correlation was calculated for the relationship between subjects' span of supervision, senior-level span of supervision, satisfaction with supervision, and satisfaction with work relationships under a collective bargaining agreement, and the following factors, as shown in Table 14:

Age and satisfaction with supervision. A weak positive correlation that was not significant was found ($r(164) = .041, p > .05$). Age is not related to satisfaction with supervision. In examining age and satisfaction with work, a weak positive correlation that was not significant was found ($r(157) = .069, p > .05$). Age is not related to

satisfaction with work in this population.

Region and satisfaction with supervision. A weak positive correlation that was not significant was found ($r(163) = .011, p > .05$). The region of the world in which a participant works is not related to satisfaction with supervision. In examining region and satisfaction with work, a weak negative correlation that was not significant was found ($r(156) = -.014, p > .05$). The region of the world in which a participant works is not related to satisfaction with work in this population.

Seniority and satisfaction with supervision. A weak positive correlation that was not significant was found ($r(164) = .028, p > .05$). The union seniority is not related to satisfaction with supervision. In examining union seniority and satisfaction with work, a weak negative correlation that was not significant was found ($r(157) = -.076, p > .05$). The union seniority is not related to satisfaction with work in this population.

Race and satisfaction with supervision. A weak positive correlation that was not significant was found ($r(163) = .111, p > .05$). Race is not related to satisfaction with supervision. In examining race and satisfaction with work, a weak positive correlation was found ($r(156) = .222, p < .01$), indicating a significant linear relationship between race and satisfaction with work. Race is related to satisfaction with work in this population.

The researcher then calculated a multiple linear regression to predict subjects' general satisfaction with work based on independent variables:

- 1 Span of supervision
- 2 Senior-level supervision
- 3 Seniority

4 Leader-member exchange

5 Perceived organizational support

Seniority is a union-assigned function, while leader-member exchange and perceived organizational support are functions within the scope of management or a human resource development professional. Table 15 shows these results.

A multiple linear regression was calculated to predict subjects' general satisfaction with work based on their seniority, LMX relationship, and perceived organizational support. A significant regression equation was found ($F(5,126) = 31.373, p, < .001$), with an R^2 of .555. Subjects' general work satisfaction was equal to $15.816 - .005$ (span of supervision) + $.644$ (senior-level supervision) - 1.347 (seniority) + $.761$ (LMX) + $.624$ (Perceived organizational support). Seniority, LMX, and perceived organizational support were significant predictors.

TABLE 15

SUMMARY OF LINEAR REGRESSION ANALYSIS FOR VARIABLES PREDICTING SATISFACTION WITH WORK BASED ON SPAN OF SUPERVISION, SENIOR-LEVEL SUPERVISION, PERCEIVED ORGANIZATIONAL SUPPORT, CREWMEMBER SENIORITY, AND LMX

Variables	<i>B</i>	<i>SE B</i>	β
Span of supervision	-.005	.009	-.035
Senior-level supervision	.644	1.551	.027
—			
Seniority	-1.347	.614	-.133*
—			
LMX		.761	.124
—			
Perceived organizational support	.624	.099	.430***

Note. R^2 of .555; * $p < .05$. *** $p < .001$.

A Pearson correlation was calculated for the relationship between subjects' span of supervision, senior-level supervision, and LMX relationship and the following factors, as shown in Table 16:

A multiple linear regression was calculated to predict subjects' general satisfaction with work based on their seniority, LMX relationship, and perceived organizational support. A

significant regression equation was found ($F(5,126) = 31.373, p, < .001$), with an R^2 of .555.

Subjects general work satisfaction is equal to $15.816 - .005$ (Span of supervision) + $.644$ (Senior level supervision) - 1.347 (Seniority) + $.761$ (LMX) + $.624$ (Perceived organizational support).

Seniority, LMX, and perceived organizational support were significant predictors.

TABLE 16

SPAN OF SUPERVISION CORRELATION

Subscale	1	2	3	4	5	6	7	8	9	10
1. Span	-	.190*	-.067	-.043	-.024	-.019	-.018	-.039	-.103	-.097
2. Supervision		-	-.248*	-.030	-.082	-.267*	.102	-.156*	-.216*	-.225*
3. LMX			-	.309*	.358*	.496*	.218*	.163*	.877*	.579*
4. OC				-	.761*	.419*	-.082	.121	.273*	.382*
5. POS AA					-	.536*	.001	.175*	.364*	.578*
6. POS RIE						-	.002	.140	.517*	.475*
7. Gender							-	.282*	.121	.099
8. Marriage								-	.110	.139
9. Supervision Satisfaction									-	.660*
10. General Satisfaction										-

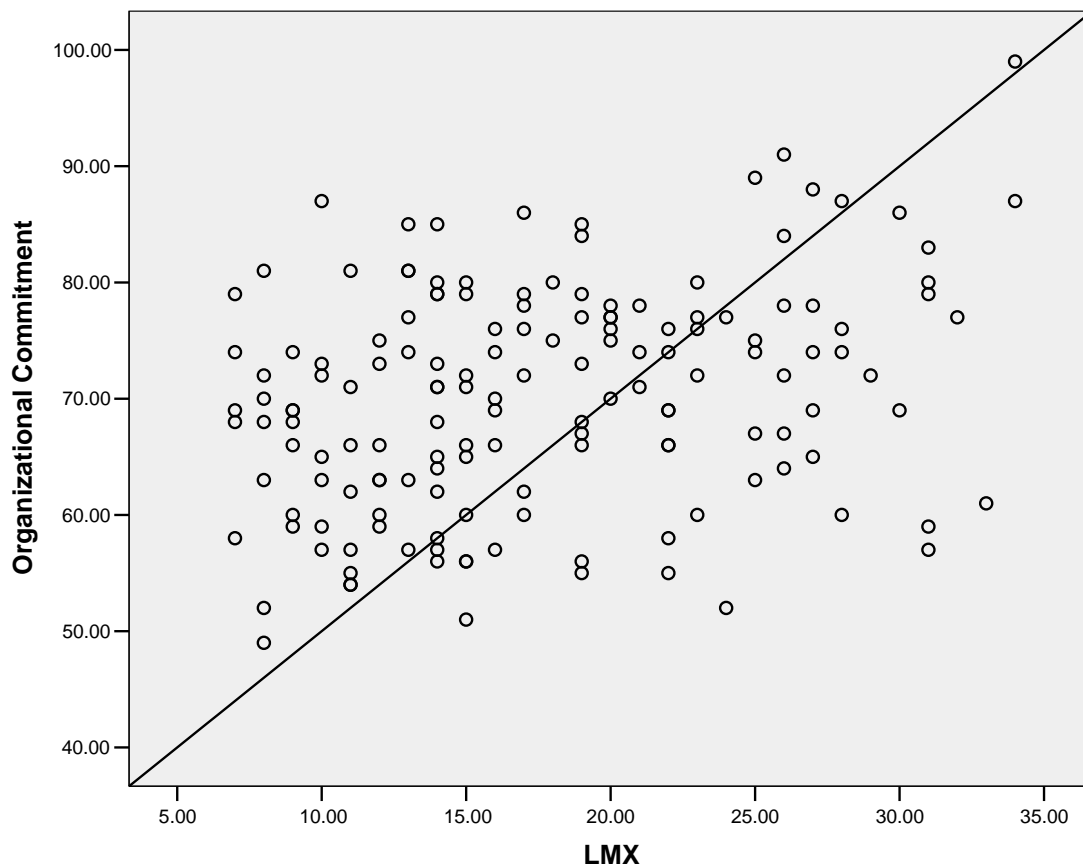
*Note: * $p < .05$.*

A Pearson correlation was calculated for the relationship between subjects' span of supervision, senior level supervision, LMX relationship under a collective bargaining agreement and the

following factors as shown in Table 16:

Organizational commitment. A moderate positive correlation was found ($r(151) = .309, p < .01$), indicating a significant linear relationship between LMX and organizational commitment. Increasing LMX relationships, increases organizational commitment as shown in figure 9.

Figure 9 Organizational Commitment and LMX



Perceived organizational support, affective attachment. A moderate positive correlation between LMX and perceived organizational support, affective attachment variables was found ($r(157) = .358, p < .01$), indicating that increasing LMX will increase the affective attachment component of perceived organizational support, as shown in Figure 10.

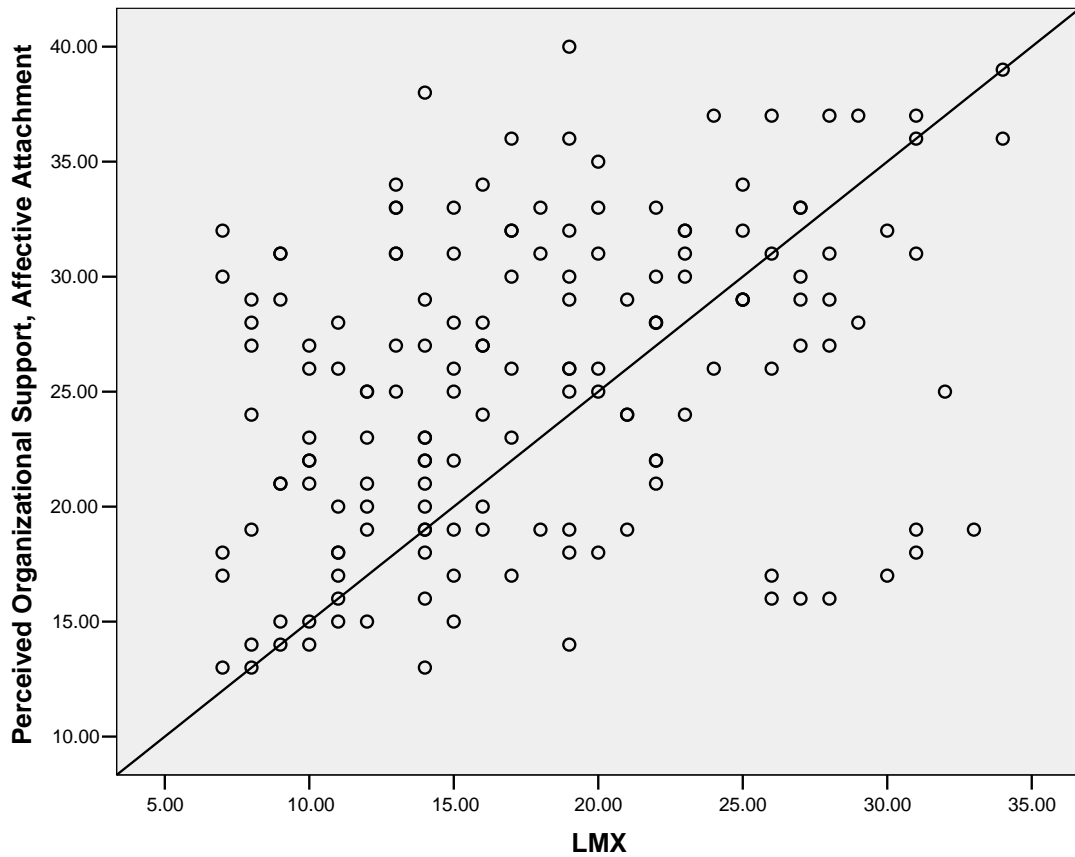


Figure 10. Perceived organizational support AA and LMX

Perceived organizational support, recognition, influence, and expectations. A moderate positive correlation between LMX and the recognition, influence, and expectations variable of perceived organizational support was found($r(164) = .496, p < .01$), indicating that increasing LMX will increase the recognition, influence, and expectations variables of perceived organizational support as seen in Figure 11.

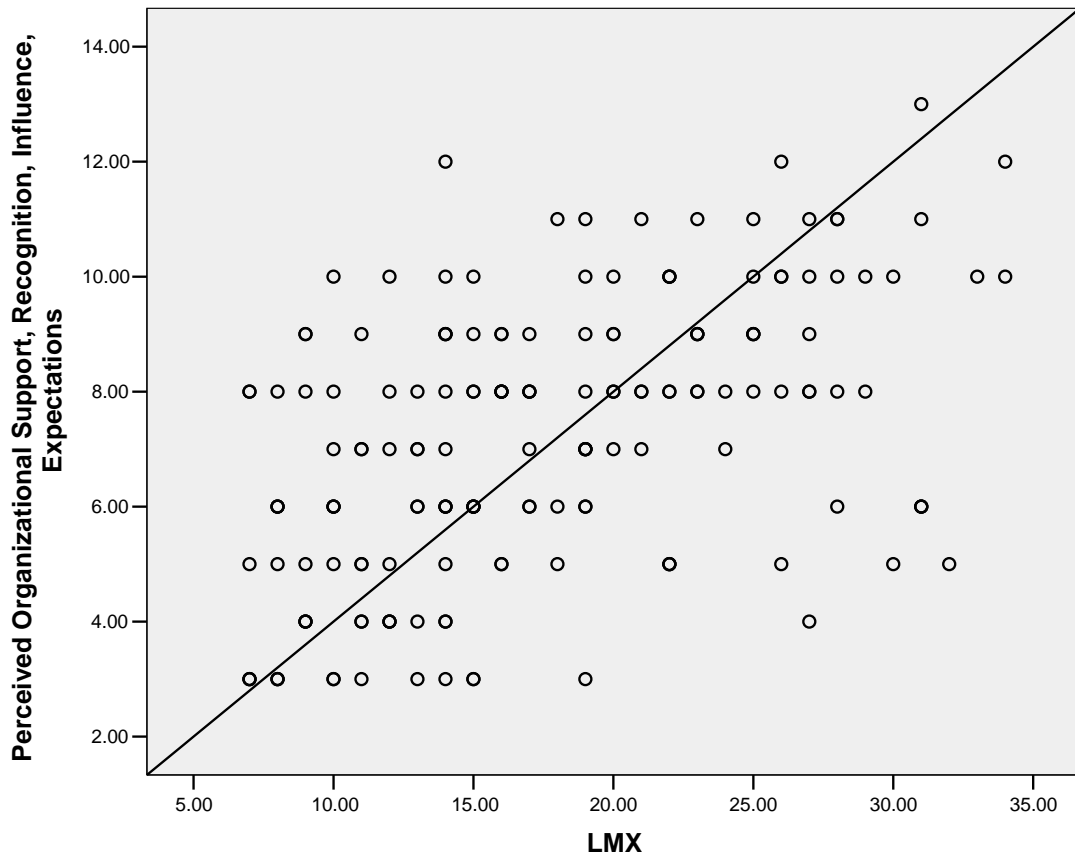


Figure 11. Perceived organizational support and RIE and LMX

Gender. A weak positive correlation was found ($r(196) = .218, p < .01$) between the two variables. Female subordinates tend to appreciate LMX relationships more than male subordinates. Additionally, gender and satisfaction with supervision show a weak positive correlation that was not significant ($r(164) = .121, p > .05$). Gender is not related to satisfaction with supervision. In examining gender and satisfaction with work, a weak positive correlation that was not significant was found ($r(157) = .099, p > .05$). Gender is not related to satisfaction with work in this population.

Partner relationships. A weak positive correlation was found ($r(196) = .163, p < .05$), indicating that single subordinates appreciate LMX relationships more than married subordinates. Additionally, partner relationship and satisfaction with supervision show a

weak positive correlation that was not significant ($r(164) = .110, p > .05$). Partner relationship is not related to satisfaction with supervision. In examining partner relationship and satisfaction with work, a weak positive correlation that was not significant was found ($r(157) = .139, p > .05$). Partner relationship is not related to satisfaction with work in this population.

Satisfaction with supervision. A strong positive correlation was found ($r(159) = .877, p < .01$), indicating a significant linear relationship between LMX and satisfaction with supervision. Increasing LMX relationships increases satisfaction with supervision. Although these findings were stated earlier in this research, the researcher has restated them in the context of the variables OC, gender, partnerships, and POS, as shown in Figure 12.

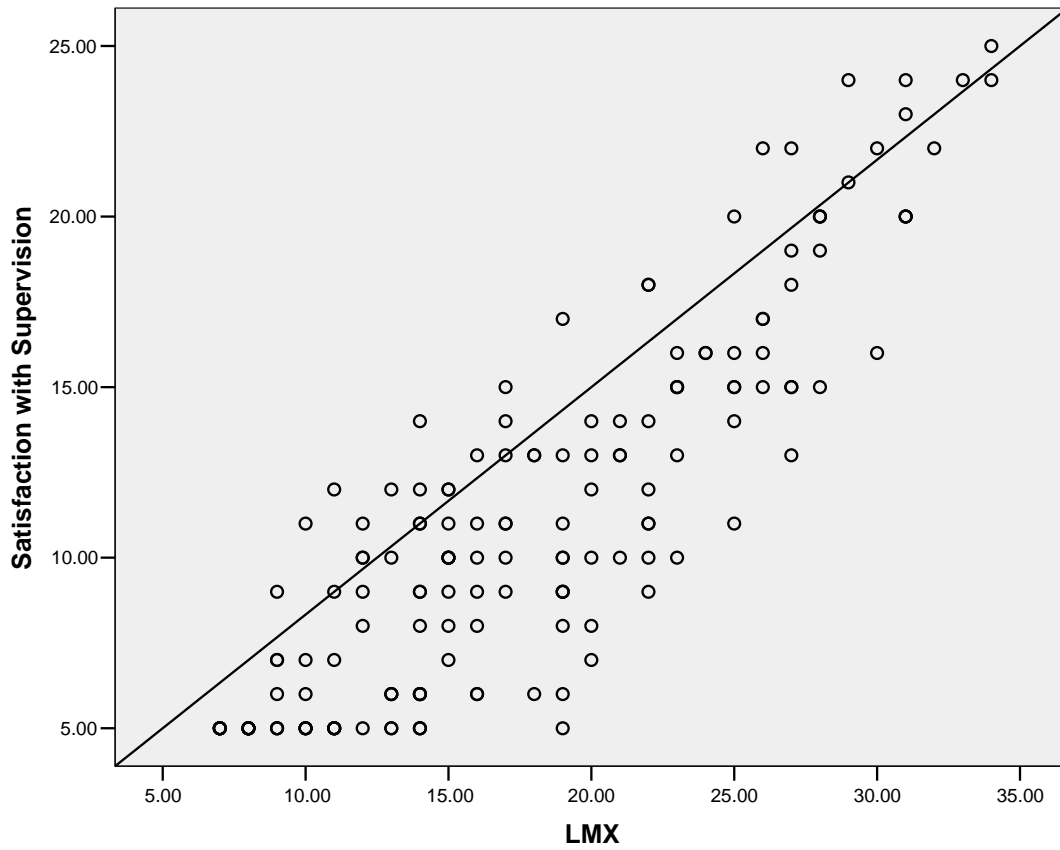


Figure 12. Satisfaction with supervision and LMX

Satisfaction with work in general. A moderate positive correlation was found ($r(152) = .579, p < .01$), indicating a significant linear relationship between LMX relationships and satisfaction with work in general. Although these findings were stated earlier in this research, the researcher has restated them in the context of the variables OC, gender, partnerships, and POS. See Figure 13.

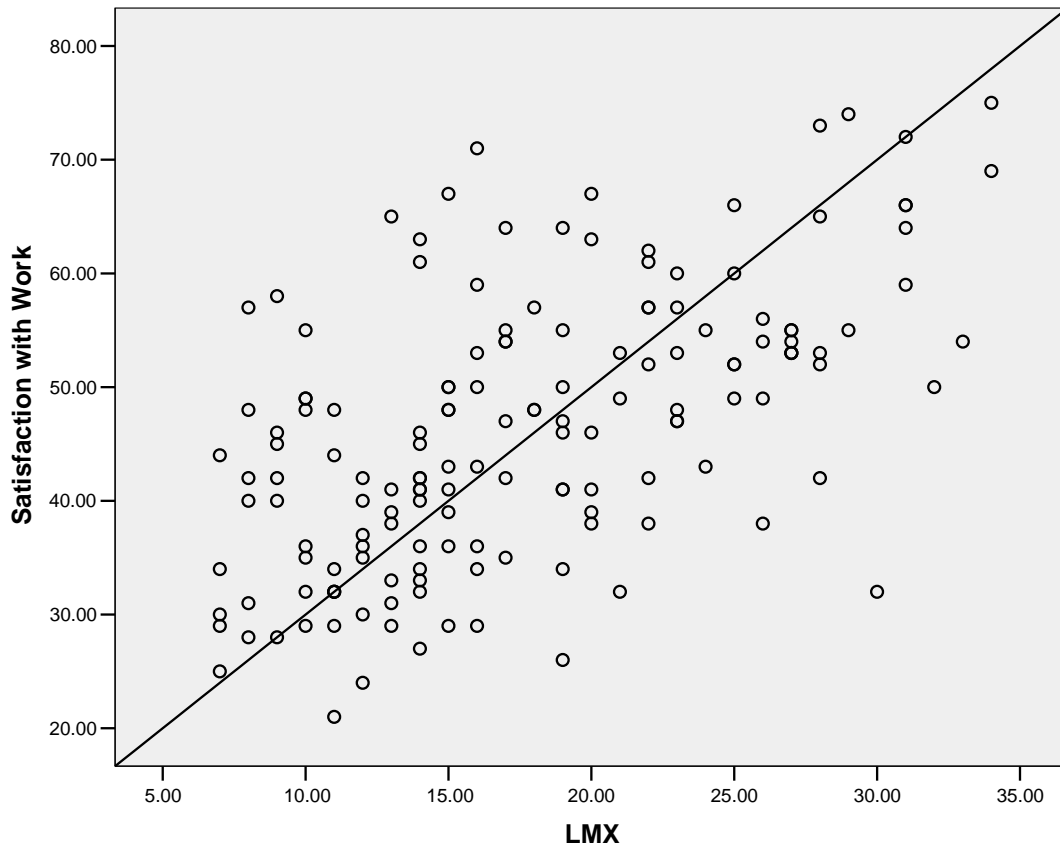


Figure 13. Satisfaction with work and LMX

The following statistical analyses were run to see if there is a significant interaction using the following combination of independent variables. The researcher examined first the relationship between satisfaction with work as a dependent variable and perceived span of supervision, LMX relationship, and a new variable (perceived span of supervision multiplied by the LMX relationship) as three independent variables. Then the researcher examined the relationship between satisfaction with supervision as a dependent variable and estimated span of supervision, LMX relationship, and a new variable (estimated span of supervision multiplied by the LMX relationship) as three independent variables.

A multiple linear regression was calculated to predict subjects' work satisfaction based on their perceived span of supervision, their LMX relationship, and a factor of perceived span of

supervision multiplied by the LMX relationship. A significant regression equation was found ($F(3,129) = 33.560, p < .001$), with an R^2 of .438. Subjects' predicted work satisfaction is equal to $36.921 - .004$ (perceived span of supervision) + .102 (LMX relationship) + .036 (perceived span of supervision multiplied by the LMX relationship). Only the perceived span of supervision multiplied by the LMX relationship was significant.

A multiple linear regression was calculated to predict subjects' satisfaction with supervision based on their estimated span of supervision, their LMX relationship, and a factor of estimated span of supervision multiplied by the LMX relationship. A significant regression equation was found ($F(3,138) = 174.303, p < .001$), with an R^2 of .791. Subjects' predicted work satisfaction is equal to $-1.614 + .004$ (estimated span of supervision) + .729 (LMX relationship) - .001 (estimated span of supervision multiplied by the LMX relationship). Only the LMX relationship was significant.

When high levels of LMX exist, Graen et al. (1982) indicate, subordinates view themselves as in a good working relationship. The LMX theory is centered on the interactions between supervisor and subordinate (Northouse, 2004), described as a dyadic relationship. It is reasonable to assume that different management styles impact these relationships. The Multifactor Leadership Theory (Bass, 1985) includes a wide range of leadership styles. A collective bargaining agreement, however, puts limits on the supervisors' abilities to access the rewards functions that are traditionally available in a non-unionized environment. Table 17 shows how the MLQ divides leadership styles.

TABLE 17

THE MLQ LEADERSHIP STYLES ARE DIVIDED INTO THREE GROUPS

Transformational leadership

Attributed charisma
Idealized influence
Inspirational leadership
Intellectual stimulation
Individualized consideration

Transactional leadership

Contingent reward
Management by exception (active)
Management by exception (passive)

Laissez-faire

Laissez-faire

The following data indicates that transformational leadership styles have a moderate-to-strong positive relationship with subordinates' LMX relationship. The data also indicates that transactional leadership and laissez-faire leadership styles have a negative moderate relationship with subordinates' LMX relationships, with one exception. As seen in Table 18 the contingent reward leadership style for unionized subordinates does not align with the traditional transactional leadership styles, but surprisingly aligns with transformational leadership styles.

Note: * $p < .05$.

A Pearson correlation was calculated for the relationship between subjects' span of supervision, senior-level supervision, LMX relationship under a collective bargaining agreement, and the following Multifactor Leadership Theory components:

Attributed charisma (mlqAC). A strong positive correlation was found ($r(164) = .867$, $p < .05$), indicating a significant linear relationship between LMX and attributed charisma. A powerful charisma management style enhances the LMX relationship.

Idealized influence (mlqII). A strong positive correlation was found ($r(161) = .725$, $p < .05$), indicating a significant linear relationship between LMX and idealized influence management style. A strong idealized influence style enhances the LMX relationship.

Inspirational leadership (mlqINSP). A strong positive correlation was found ($r(158) = .732$, $p < .05$), indicating a significant linear relationship between LMX and inspirational leadership. A dominant inspirational leadership style enhances the LMX relationship.

Intellectual stimulation (mlqIST). A strong positive correlation was found ($r(162) = .741$, $p < .05$), indicating a significant linear relationship between LMX and intellectual stimulation leadership style. An intellectually stimulating style of leadership increases the LMX relationship.

Individual consideration (mlqIC). A strong positive correlation was found ($r(161) = .701$, $p < .05$), indicating a significant linear relationship between LMX and individual consideration. Increasing individual consideration will increase the LMX relationship.

Contingent reward (mlqCR). A moderate positive correlation was found ($r(164) = .619$, p

< .05), indicating a significant linear relationship between LMX and contingent reward leadership style in a unionized workforce. Increasing contingent reward leadership style in a unionized workforce increases the LMX relationship.

Management by exception-active (mlqMBEA). A moderate negative correlation was found ($r(162) = -.491, p < .05$), indicating a significant linear relationship between LMX and management by exception-active. Decreasing management by exception-active management styles increases LMX relationships.

Management by exception-passive (mlqMBEP). A moderate negative correlation was found ($r(160) = -.486, p < .05$), indicating a significant linear relationship between LMX and management by exception-passive. Decreasing management by exception-passive management styles increases LMX relationships.

Laissez-faire (mlqLF). A moderate negative correlation was found ($r(160) = -.560, p < .05$), indicating a significant linear relationship between LMX and laissez-faire management style. Decreasing laissez-faire management styles increases LMX relationships.

As noted earlier, the contingent reward management style does not align itself with traditional transactional leadership results. These results may reenergize the argument that contingent reward management style is not transactional, but a transformational behavior in unionized workforces. The data indicates there is an interesting difference in the transactional leadership responses. The bell curve for contingent reward responses is quite different than those responding to management-by-exception questions as shown in Figure 14.

Management-by-exception is the management style that is most often associated with this group of unionized subordinates. The highest responses to the Multifactor Leadership Theory are

associated with the answer, "frequently, if not always." Management-by-exception received strong responses in this area and is indicated as the preferred management style used, as viewed by the subordinated. Subordinates indicate that by increasing contingent reward leadership style in a unionized workforce, the benefits of LMX relationship are increased; however, contingent reward leadership style received the lowest response component of all management styles in this work group. As discussed earlier, contingent reward management style is directly related to labor and management collective bargaining agreements.

Transactional Leadership includes: Attributed charisma, inspirational leadership, individual consideration, idealized influence, and intellectual stimulation.

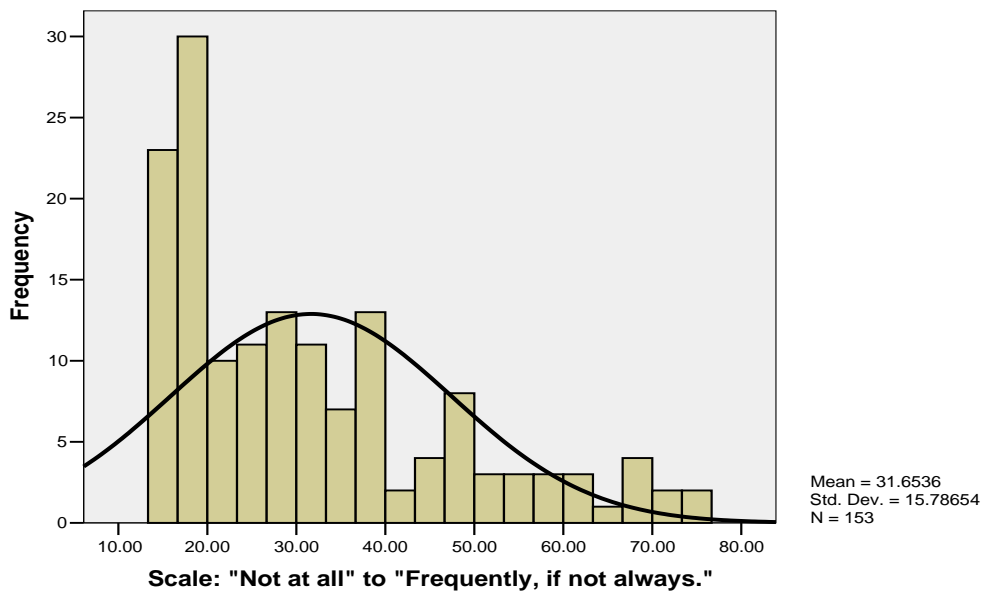
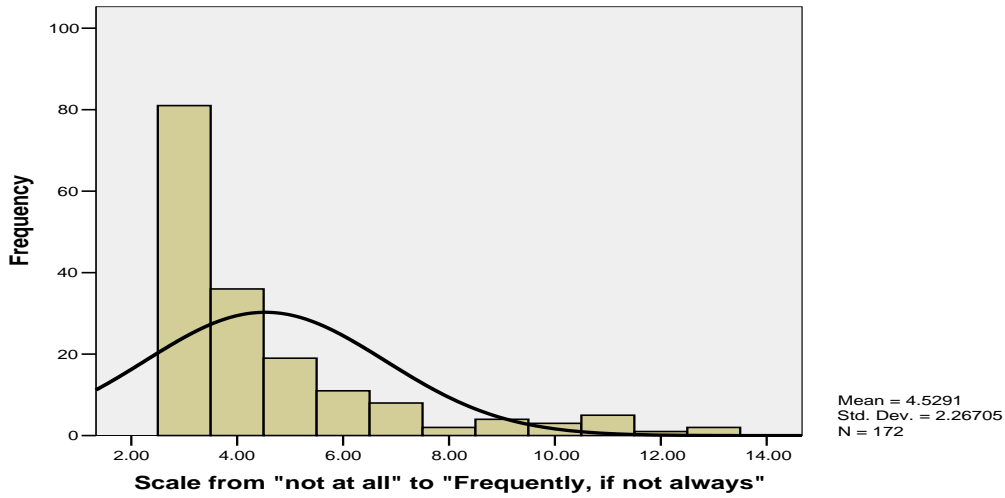
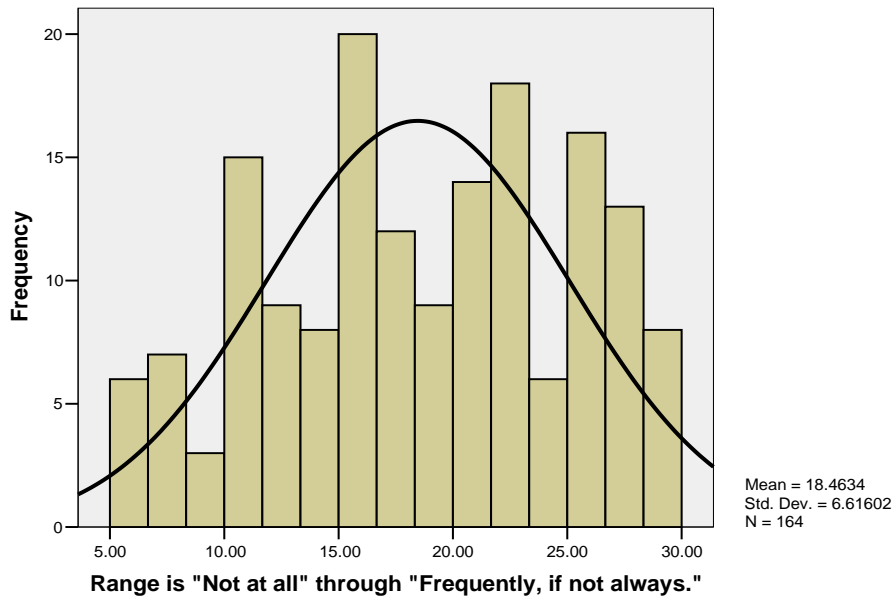


Figure 14. Leadership styles plotted

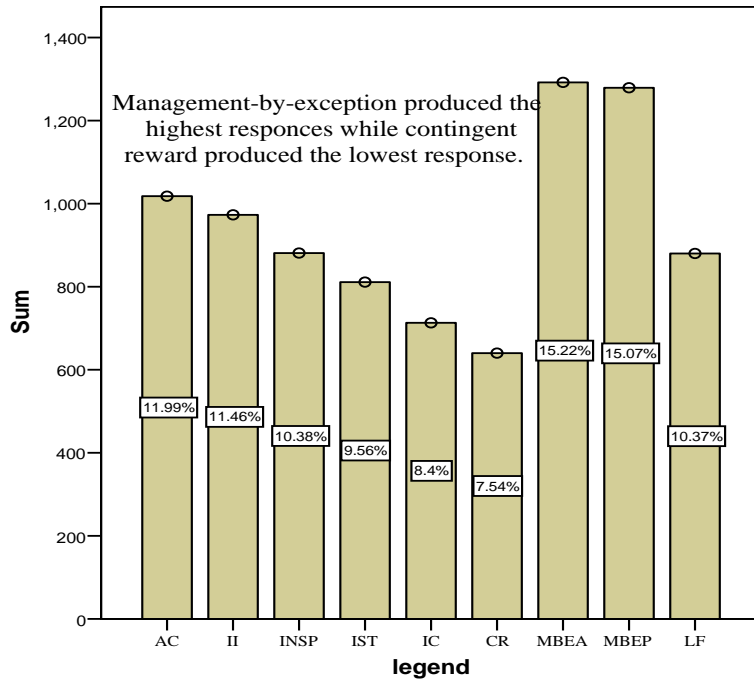
Contingent Reward respondents rate their reactions to such statements as, "My supervisor tells me what to do to be rewarded for my efforts."



Mangement-by-exception active and passive questions include: "My supervisor directs his/her attention towards failure to meet standards" and "Problems must become chronic before my supervisor will take action."



Multifactor Leadership Components



CHAPTER FIVE

DISCUSSION

There are many factors that can influence satisfaction with supervision and satisfaction with work. By focusing on span of supervision, the researcher intended to determine the relationship between span of supervision and satisfaction. Optimum supervision continues to be an area in which organizations struggle. While organizations seek to become leaner and flatter, the data on the U.S. workforce show that managers and supervisors have consistently increased rather than decreased as a proportion of the work force from the 1950s through the 1990s, according to Gordon (1996). This research shows the impact of managements' span of supervision on work satisfaction and satisfaction with supervision.

In addition to span of supervision, a closer look into LMX and how LMX relationships are impacted by the collective bargaining process was conducted. Previous research on LMX provided insight into the importance of dyadic relationships when a supervisor has traditional incentive options available to improve supervisor-subordinate relationships. These incentives included possible pay increase, work schedules, promotion opportunities, and company perks. Under a collective bargaining agreement, these incentive options are often not available to the immediate supervisor. By using participants of a collective bargaining agreement, the LMX relationship becomes a true relationship process theory uncorrupted by incentive variables.

Research Questions

The purpose of this research was to investigate the relationship between a subordinate's satisfaction with supervision and satisfaction with work as impacted by span of supervision and moderated by LMX and the relationship with senior-level span of supervision. Beyond these questions, the research data provided additional findings in the area of perceived organizational

support, the impact of Multifactor Leadership Theory, and how organizational commitment is affected.

Findings and Conclusions

The specific conclusions are as follows:

Hypothesis 1a: The author expects a negative significant relationship between satisfaction with supervision and perceived span of supervision. The data indicates that perceived span of supervision is not related to satisfaction with supervision; however there are two exceptions to these findings, which support the hypothesis, within this group of participants.

There is a negative significant relationship between estimated span of supervision and satisfaction with supervision when the supervision style is management-by-exception passive or laissez-faire.

Both management-by-exception (passive) and laissez-faire relationships are important to the subordinates working under a collective bargaining agreement in this sample group.

Although management-by-exception (passive) and laissez-faire are only two of the nine relationships in the MLQ, they are major management styles for these unionized employees. See Figure 15 for details. Flight crewmembers, because of the nature of where they work, are mostly autonomous. Several comments by participants noted that the style of management was such an extreme laissez-faire relationship that they did not even know their supervisor.

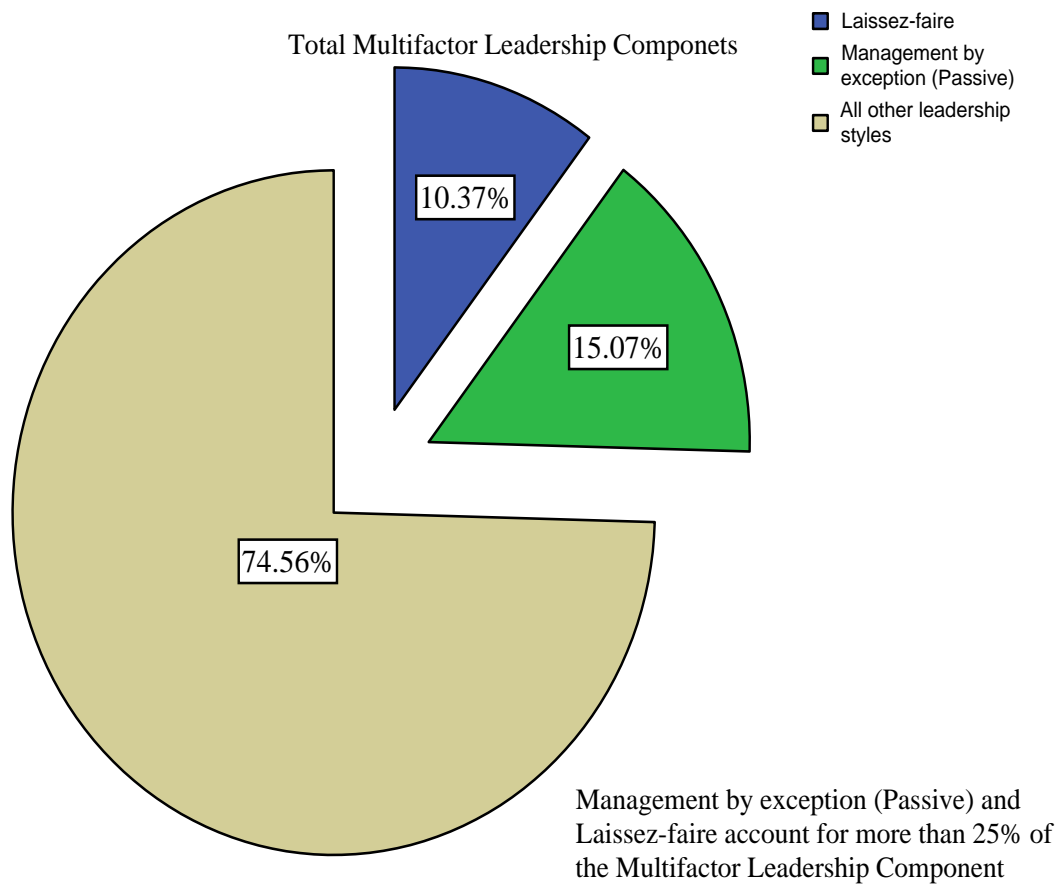


Figure 15. Total multifactor leadership component

For the majority of situations, satisfaction with supervision is not related to perceived span of supervision, implying that management is free to adjust spans as needed without significantly impacting satisfaction. The two management styles to which this does not apply, management by exception (passive) and laissez-faire, are important styles to this work group of unionized employees. For this sample group, increasing perceived span of supervision will reduce satisfaction with supervision. If the true vision of this organization is to create an atmosphere in which subordinates enjoy coming to work, then reducing perceived span of supervision may be one element in meeting this vision.

If the organization wishes to keep management at current levels, they may be able to increase satisfaction with supervision and perceived organizational support in the large management units by making sub-units within the larger management units. For example, reducing the crew base of 2,200 subordinates into 9 sub-units of approximately 245 each may yield positive results without increasing management numbers. Sub-units may be a simple and effective solution to increasing satisfaction while maintaining the current management levels. Although management is limited by the collective bargaining process, this is one area in which easy adjustments can be made, within the constraints of the union contract, which will yield positive results.

Hypothesis 1b: The author expects a negative significant relationship between satisfaction with supervision and access to senior-level supervision. This hypothesis was supported by the data; crewmembers with more access to senior supervision tend to be more satisfied with supervision. In examining why this occurs, the data indicate that as more access to senior supervision is available, the subordinates' perceived' organizational support increases. The findings show that as perceived organizational support increases, satisfaction with direct supervision also increases.

Hypothesis 1c: The author expects a negative significant relationship between satisfaction with work and perceived span of supervision. The findings did not support the hypothesis; satisfaction with work is not related to perceived span of supervision.

This may be good news to managers wishing to increase perceived span of supervision without taking a satisfaction-with-work penalty. In this group of participants, increasing perceived organizational support from 51 to 80 had no impact on satisfaction with work. These findings are consistent with the findings of Putman and Tejada (2006) and Putman et al.

Hypothesis 1d: The author expects a negative significant relationship between satisfaction with work and access to senior-level supervision. This hypothesis was supported by the data. Crew members in smaller management units tend to be more satisfied with work. In examining why this occurs, the data indicates that as a management unit gets smaller, the subordinates' perceived organizational support increases. The findings are similar to those in hypothesis 1b, which shows that as perceived organizational support increases, satisfaction with supervision also increases.

Once again, the importance of management utilization and access is supported. The ratio of management to subordinates is not as important as the perception of this relationship when examining satisfaction with work. As discussed in hypothesis 1b, increasing access to senior-level supervision should increase satisfaction with work. Managers who wish to increase satisfaction with work should focus on how access to management is perceived by subordinates.

Hypothesis 2: The author expects that LMX is a moderator to hypotheses 1a, 1b, 1c, and 1d. The research indicates that LMX does not significantly moderate these relationships. In actuality, LMX in itself is a significant predictor to satisfaction with supervision. The benefits of LMX relationships will be discussed under additional findings.

Additional Results

An examination was conducted of subjects' organizational commitment based on their senior-level span of supervision and perceived organizational support. A significant relationship was found. Both senior-level span of supervision and perceived organizational support were significant predictors of organizational commitment. The findings indicate that as a management unit gets larger, increasing perceived organizational support is a significant factor for increasing organizational commitment.

Collective bargaining agreements put great limitations on a supervisor's ability to increase a subordinate's satisfaction with work and satisfaction with supervision through traditional means of pay, work schedule, perks, etc. The researcher calculated a Pearson correlation using the following factors: age, region of the world flying (from domestic to international), union seniority, race, gender, and partner status. Only race is related to general satisfaction with work in this population.

The researcher examined subjects' general satisfaction with work based on three independent variables:

6 Seniority

7 Leader-member exchange

8 Perceived organizational support

It is important to consider that subordinate seniority is a union-assigned function, while leader-member exchange and perceived organizational support are functions within the scope of management or a human resource development professional. Seniority, LMX, and perceived organizational support were all significant predictors of satisfaction with work.

Prior research has suggested that job satisfaction and satisfaction with supervision are related to LMX (Graen & Uhl-Bien, 1995), which is supported in this data from participants working under a collective bargaining agreement. The participants, working under a collective bargaining agreement, tend to be more satisfied with supervision and more satisfied with work in general as LMX relationships increase.

LMX theory has been shown to have many benefits to the subordinate, the supervisor, and the organization supporting it. The findings in this research support the idea that LMX exchanges have positive benefits. The LMX theory still is a viable management theory for

unionized subordinates.

LMX relationships in this study have shown that increasing LMX relationships increases satisfaction with supervision and satisfaction with work in general. Additionally, improving relationships using LMX theory is shown to increase organizational commitment, perceived organizational support in both affective attachment, and the combination of recognition, influence, and expectations. A positive correlation is also presented indicating that female subordinates tend to appreciate LMX relationships more than male subordinates and that single subordinates appreciate LMX relationships more than married subordinates.

These findings are important to the expansion of knowledge in the area of LMX. The use of LMX theory in a collective bargaining agreement process is supported by this data. Good supervisor-subordinate relationships are important and productive to today's workers. It is well-noted in the research that management styles are also important to the modern-day employee.

The data shows that transformational leadership behaviors have a strong positive correlation to LMX. In each style - attributed charisma, inspirational leadership, individual consideration, idealized influence, and intellectual stimulation - this strong positive correlation with LMX indicates that subordinates thrive on constructive relationships. The data also indicate that transactional leadership behaviors of management by exception (both active and passive) and laissez-faire relationships have a moderate negative correlation with LMX behaviors. The results of data analysis indicate the subordinates' negative response to these leadership behaviors. This data supports previous research in this area.

One of the most interesting findings in this research is the correlation of contingent reward to LMX for unionized subordinates. The data indicates that transformational leadership

styles produce a strong positive correlation with LMX, and transactional leadership styles produce a moderate negative correlation with LMX. When examining the data, this area of the MLQ produced the most dramatic responses. When asked if their supervisor makes sure that they received appropriate rewards for achieving performance targets, 80% stated, "not at all." When asked if their supervisor explains what to do to be rewarded for effort, 88% stated, "not at all." The contingent reward questions had the strongest negative response rate of any exploratory questions.

As stated earlier, contingent reward has a moderate positive correlation with LMX, indicating a significant linear relationship between LMX and contingent-reward leadership style in a unionized workforce. Increasing contingent-reward leadership style in a unionized workforce increases the quality of the LMX relationship. Because contingent reward leadership is a process of bargaining for mutually beneficial outcomes, the leadership is supportive of subordinates that accomplish goals (Tejeda et al., 2001).

A union contract is extremely important to a subordinate working under the collective bargaining process. In essence, it is the contingent-reward process made into a legal procedure. Supervisors who adhere to the contract are respected by subordinates, while those supervisors violating the contract require that subordinates go through the grievance process or accept the violation. Supervisors violating work contracts alienate subordinates. Employers who want the benefits of LMX relationships should adhere to unionized contracts. The correlation between contingent reward and LMX make an interesting outcome for this research. The data indicates that in this area, the strong negative responses (over 80%) indicate that although contingent reward is important, this group of employees is not satisfied with management's responses.

Limitations

The sample group is limited to those subordinates working under a collective bargaining agreement for a U.S.-based corporation. Although this is an international corporation, the participants are all U.S. employees. This may limit the use of this data to U.S.-based corporations or management practices in U.S. based corporations.

Of the 222 participants of this study, 25% did not answer the questions related to supervisor subordinate relationships. At first, this was of great concern; however, the open comments made by the participants at the completion of the survey shed some light. Comments included:

- 1 “Many questions assume some relationship with the supervisor. I rarely, if ever have any interaction with him/her.”
- 2 “To be honest about the supervisor questions, I really don't know, or even had the opportunity to talk with my supervisor.”
- 3 “Interaction with one's supervisor is nearly non-existent and might therefore skew your data to suggest a closer and continuing relationship that does not exist.”
- 4 “The questions regarding supervisors; I have not even personally met my last two supervisors, nor have had any communication from them regarding any work performances. I don't need them to do my job successfully.”
- 5 “In the last 3 years that I have been assigned a supervisor I have never spoken to him. If I do my job he leaves me alone, and that is fine with me.”
- 6 “Most of the questions about my supervisor are not very relevant, since I almost never interact with him. In 18 years here, the few times I have interacted with a supervisor it has just been the one on duty, not the one I am assigned to. Our jobs are unusual in that unless something goes wrong, we can go for years without receiving direct supervision from a superior.”

It is apparent that for many of the participants that did not answer questions on supervisor and subordinate relationships, the reason is the lack of any relationship. Unfortunately, the

instrument used does not provide an opportunity for those without supervisor relationships to participate.

The instrument used to calculate perceived organizational support normally collects data in three areas: affective attachment, pay and promotion expectations, and the area of recognition, influence, and expectations. Data on pay and promotion expectations do not apply to this heavily unionized industry because these items are contractual issues over which the individual subordinate has no control. For these reasons, questions on the perceived organizational support measure related to pay and promotion expectations were not asked, which may impact the validity of the POS questionnaire.

Further Research Needed

Span of supervision and the impact on satisfaction with work and satisfaction with supervision have been covered in great detail. LMX continues to be a management theory that is supported by the data from this research. There is, however, a need to look further into the relationship between span of supervision and perceived organizational support and organizational commitment. Although this dissertation did examine these areas, further study is warranted.

The impact of LMX as it relates to subordinates working under a collective bargaining agreement supports the importance of LMX relationships. The researcher does not find any additional data source that includes specifically those subordinates in a unionized environment. It is the researcher's hope that others will examine how the collective bargaining process strengthens the LMX theory.

Some interesting questions arise from this research that warrant more investigation. Perceived span of supervision does not impact the relationship with satisfaction with supervision on the immediate supervisory level; however access to senior-level supervision does impact satisfaction with supervision. Additionally, perceived span of supervision does not impact satisfaction with

work significantly on an immediate supervisory level; however, access to senior-level supervision does impact satisfaction with work. This area of the research requires future inquiry.

REFERENCES

- Allen, N. J., & Meyer, J. P. (1990). The measure and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Allinson, C. W., Armstrong, S. J., & Hayes, J. (2001). The effects of cognitive styles on leader-member exchange: A study of manager-subordinate dyads. *Journal of Occupational & Organizational Psychology*, 74(2), 50-107.
- Altaffer, A. (1998). First-line managers: Measuring their supervisory span of control. *Nursing Management*, 29(7), 36-40.
- Andrisani, P. J., & Nestel, G. (1976). Internal-external control as contributor to and outcome of work experience. *Journal of Applied Psychology*, 61, 156-165.
- Antonakis, J., & Atwater, L. E. (2002). Leadership distance: are view and proposed theory. *Leadership Quarterly*, 13, 673-704.
- Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. *Leadership Quarterly*, 6(2), 199-218.
- Avolio, B. J., Zhu, W., Koh, W., & Puja, B. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior*, 24, 1-18.
- Bailey, R. L. (2005). Span of no control. *Rough Notes*, 148(3), 68-69.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barling, J., Weber, T., & Kelloway, E. K. (1996). Effects of transformational leadership training and attitudinal and fiscal outcomes: A field experiment. *Journal of Applied Psychology*, 81(6), 827-832.
- Bass, B. M. (1981). *Stogdill's handbook of leadership: A survey of theory and research*. New York: Free Press.

- Bass, B. (1985). *Leadership and performance beyond expectations*. New York: The Free Press.
- Bass, B. (1998). *Transformational leadership: Industrial, military, and educational impact*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc..
- Bass, B. (1990). From transactional to transformational leadership: learning to share the vision. *Organizational Dynamics*, 18(3), 19-31.
- Bass, B., & Avolio, B. (1990). *Transformational leadership development: Manual for the multifactor leadership questionnaire*. Palo Alto, CA: Consulting Psychologists Press.
- Bass, B. M., & Avolio, B. J. (1993a). Transformational leadership: a response to critiques. In: *Leadership: Theory and research perspectives and directions* (pp. 49-80). New York: Academic Press.
- Bass, B. M., & Avolio, B. J. (1993b). *Manual: The multifactor leadership questionnaire*. Palo Alto, CA: Consulting Psychologist Press.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage.
- Bass, B. M., & Avolio, B. J. (1995). *Multifactor leadership questionnaire: Manual leader form, rater, and scoring key for MLO, Form 5x-Short*. Redwood City, CA: Mind Garden.
- Bass, B. M., & Avolio, B. J. (1998). Improving organizational effectiveness through transformational leadership. In G. Hickman (Ed.), *Leading organizations* (pp. 135-140). Thousand Oaks, CA: Sage Publications.
- Blau, G. J. (1987). Locus of control as a potential moderator of the turnover process. *Journal of Occupational Psychology*, 60, 21-29.
- Blau, P. (1964). *Exchange and power in social life*. New York: Wiley.
- Bogg, J., & Cooper, C. (1995). Job satisfaction, mental health, and occupational stress among senior civil servants. *Human Relations*, 48, 327-341.
- Bono, J. E., & Judge, T. A. (2003). Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *European Journal of Personality*, 17, S5-S18.

- Boone, C., & De Brabander, D. (1997). Self-reports and CEO locus of control research: A note. *Organizational Studies, 18*, 949-971.
- Boone, C., De Brabander, B., & Hellemans, J. (2000). Research note: CEO locus of control and small firm performance. *Organization Studies, 21*, 641-646.
- Brewer, A. M. (1993). *Managing for Employee Commitment*. Sydney: Longman Cheshire.
- Brewer, D. P. (1995). The effects of supervisory support, counselor characteristics, the work setting, and social influences on burnout in mental health counselors. *Dissertation Abstracts International, 55*, 4100.
- Brewer, M. B. (1979). In-group bias in the minimal inter-group situation: A cognitive-motivational analysis. *Psychological Bulletin, 86*, 307-324.
- Burke, R. (1996). Unit size, work experience and satisfaction: An exploratory study. *Psychological Reports, 78*, 763-767.
- Burke, R. J. (1976). Occupational stresses and job satisfaction. *The Journal of Social Psychology, 10*, 235-244.
- Burns, J. M. (1978). *Leadership*. New York: Harper.
- Campbell, J. (1988). *The power of myth*. New York: Doubleday.
- Carver, C. S. (1979). A cybernetic model of self-attention process. *Journal of Personality and Social Psychology, 37*, 1251-1281.
- Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control theory approach to human behavior*. New York: Springer-Verlag.
- Chalofsky, N. (2003). Meaningful Work. *T & D, 57*(12), 52.
- Cherry, N. (1976). Persistent job changing: Is it a problem? *Journal of Occupational Psychology, 49*, 203-221.
- Chiu, C. K., Lin, C. P., Tsai, Y. H., & Hsiao, C. y. (2005). Modeling turnover intentions and their antecedents using locus of control as a moderator: a case of customer service employees. *Human Resource Development Quarterly, 16*(4), 481-499.

- Clinebell, S., & Shadwick, G. (2005). The importance of organizational context on employees' attitudes: An examination of working in main offices versus branch offices. *Journal of Leadership & Organizational Studies*, 11(2), 89-100.
- Congram, C. A., & Friedman, M. L. (1991). The quality leadership connection in service businesses. In C. Congram (Ed.), *The AMA handbook of marketing for the service industries* (pp. 3-19). New York: American Management Association.
- Cotton, J. L., Vollrath, D. A., Froggatt, K. L., Lengnick-Hall, M. L., & Jennings, K. R. (1988). Employee participation: Diverse forms and different outcomes. *Academy of Management*, 13, 8-22.
- Cox, K. B. (2003). The effects of intrapersonal, intragroup, and intergroup conflict on team performance effectiveness and work satisfaction. *Nurse Administration Quarterly*, 27(2), 153-163.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Cronk, B. C. (2004). *How to use SPSS* (3rd ed.). Glendale, CA: Pyrczak Publishing.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper Perennial.
- Dansereau, F., Cashman, J., & Graen, G. (1973). Instrumentality theory and equity theory as complementary approaches in predicting the relationship of leadership and turnover amongst managers. *Organizational Behavior and Human Performance*, 10, 184-200.
- Dansereau, F., Graen, G. B., & Haga, W. (1975). A vertical dyad linkage approach to leadership in formal organizations. *Organizational Behavior and Human Performance*, 13, 46-78.
- Darden, W. R., Hampton, R., & Howell, R. D. (1989). Career versus organizational commitment: antecedents and consequences of retail sales peoples' commitment. *Journal of Retailing*, 65, 80-106.
- De Jong, J. A., Leeders, F. J., & Thijssen, J. G. (1999). HRD tasks of first-level managers. *Journal of Workplace Learning*, 11(5), 176-183.

- De Vries, R. E., Roe, R. A., & Tallieu, T. C. (1998). Need for supervision: Its impact on leadership effectiveness. *The Journal of Applied Behavioral Science*, 34(4), 486-501.
- Dekker, I., & Barling, J. (1995). Workforce size and work-related role stress. *Work and Stress*, 9, 45-54.
- Dekker, I., Barling, J., & Kelloway, E. K. (1996). Work force size and multifaceted job satisfaction: A cross-national study. *The Journal of Social Psychology*, 136(2), 201-208.
- Deluga, R. J. (1990). The effects of transformational, transactional, and Laissez-faire leadership characteristics on subordinate influencing behavior. *Basic and Applied Social Psychology*, 11(2), 191-203.
- Dobbins, G. H., Cardy, R. L., & Platz-Vieno, S. J. (1990). A contingency approach to appraisal satisfaction: An initial investigation of the joint effects of organizational variables and appraisal characteristics. *Journal of Management*, 16(3), 619-632.
- Doran, D., McCutcheon, A. S., Evans, M. G., MacMillan, K., Hall, L. M., Pringle, D., et al. (2004, September). *Impact of the manager's span of control on leadership and performance*. Retrieved January 11, 2006 from <http://www.chrsf.ca>
- Downey, H. K., Hellriegel, D., & Slocum, J. (1975). Congruence between individual needs, organizational climate, job satisfaction, and performance. *Academy of Management Journal*, 18, 149-154.
- Dual, S., & Wicklund, R. A. (1972). *A theory of objective self-awareness*. New York: Academic Press.
- Dumdum, U. R., Lowe, K. B., & Avolio, B. (2002). A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension. In B. Avolio & F. Yammarino (Eds.), *Transformational and charismatic leadership: the road ahead* (pp. 35-66). Oxford, UK: Elsevier Science.
- Eisenberger, R., Cummings, J., Armeli, S., & Lynch, P. (1997). Perceived organizational support, discretionary treatment, and job satisfaction. *Journal of Applied Psychology*, 82(5), 812-820.

- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology*, 75(1), 51-59.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500-507.
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565-573.
- Ellinger, A. D., Ellinger, A. E., & Keller, S. B. (2003). Supervisory coaching behavior, employee satisfaction, and warehouse employee performance: A dyadic perspective in the distribution industry. *Human Resource Development Quarterly*, 14(4), 435-458.
- Evans, W. N., & Hohenshil, T. H. (1997). Job satisfaction of substance abuse counselors. *Alcohol Treatment Quarterly*, 15, 1-13.
- Feldman, D. C. (1996). Managing careers in downsizing firms. *Human Resource Management*, 35(2), 145-161.
- Firth, L., Mellor, D. J., Moore, K. A., & Loquet, C. (2004). How can managers reduce employee intention to quit? *Journal of Managerial Psychology*, 19(2), 170-187.
- Free, M. D. (1990). Demographic, organizational and economic determinants of work satisfaction. *Sociological Spectrum*, 10, 79-103.
- Funk, S. C. (1992). Hardness: a review of theory and research. *Health Psychology*, 11(5), 335-345.
- Furnham, A., & Drakeley, R. J. (1993). Work locus of control and perceived organizational climate. *European Work and Organizational Psychologist*, 3, 1-9.
- Gagnon, M. A., & Judd, H. M. (2004). Outcomes of perceived supervisor support for wood production employees. *Forest Products Journal*, 54(12), 172-177.
- Gartner, S. (2000). Structural determinants of job satisfaction and organizational commitment in turnover models. *Human Resource Management Review*, 9(4), 479-493.

- Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of Leader-Member Exchange Theory: Correlates and construct issues. *Journal of Applied Psychology*, 82, 827-844.
- Gittell, J. H. (2000). Paradox of coordination and control. *California Management Review*, 42(3), 101-117.
- Gittell, J. H. (2001). Supervisory span, relational coordination, and flight departure performance: A reassessment of post-bureaucracy theory. *Organization Science*, 12(4), 468-483.
- Goleman, D. (2000, March-April). Leadership that gets results. *Harvard Business Review*, 78-90.
- Gordon, D. (1996). *Fat and mean: The corporate squeeze of working Americans and the myth of managerial "downsizing."* New York: Free Press.
- Graen, G. B. (1976). Role making processes within complex organizations. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1201-1245). Chicago: Rand-McNally.
- Graen, G. B. (1989). *Unwritten rules for your career: 15 secrets for fast-track success.* New York: Wiley.
- Graen, G. B., & Cashman, J. (1975). A role-making model of leadership in formal organization: a developmental approach. In J. G. Hunt & L. L. Larson (Eds.), *Leadership frontiers* (pp. 143-166). Kent, OH: Kent State University Press.
- Graen, G., Novak, M., & Sommerkamp, P. (1982). The effects of leader-member exchange and job design on productivity and job satisfaction: Testing a dual attachment model. *Organizational Behavior and Human Performance*, 30, 109-131.
- Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. In L. Cummings & B. Staw (Eds.), *Research in organizational behavior* (pp. 175-208). Greenwich, CT: JAI Press.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly*, 6, 219-247.

- Granrose, C. S., & Portwood, J. D. (1987). Matching individual career plans and organizational career management. *Academy of Management Journal*, 30, 699-720.
- Green, S., Anderson, S., & Shivers, S. (1996). Demographic and organizational influences on leader-member exchange and related work attitudes. *Organizational Behavior and Human Decision Processes*, 66(2), 203-214.
- Gulick, L. (1937). Notes on the theory of organization. In L. Gulick & L. Urwick (Eds.), *Papers on the science of administration*. New York: Institute of Public Administration, Columbia University.
- Hall, L., & Torrington, D. (1998). Letting go or holding on: The devolution of operational personnel activities. *Human Resource Management Journal*, 8(1), 41-55.
- Hatton, C., & Emmerson, E. (1998). Brief report: organizational predictors of actual staff turnover in a service for people with multiple disabilities. *Journal of Applied Research in Intellectual Disabilities*, 11, 166-171.
- Henderson, S. J. (2000). Follow your bliss: A process for career happiness. *Journal of Counseling & Development*, 7(3), 305-316.
- Hodson, R. (1984). Corporate structure and job satisfaction: A focus on employer characteristics. *Sociology and Social Research*, 69, 22-49.
- Hodson, R. (1989). Gender differences in job satisfaction: Why aren't women more dissatisfied? *The Sociological Quarterly*, 30, 385-399.
- Hogg, M. A., Cooper-Shaw, L., & Holzworth, D. W. (1993). Studies of group prototypicality and depersonalized attraction in small interactive groups. *Personality and Social Psychology Bulletin*, 19, 452-462.
- Hogg, M. A., Hardie, E. A., & Reynolds, K. J. (1995). Prototypical similarity, self-categorization, and depersonalized attraction: A perspective on group cohesiveness. *European Journal of Social Psychology*, 25, 159-177.
- Hollander, E. P. (1978). *Leadership dynamics: A practical guide to effective relationships*. New York: Free Press.

- Honey, P. (1995, September). Everyday experiences are opportunities for learning. *People Management*, 55.
- House, R. J., & Aditya, R. N. (1997). The social scientific study of leadership: quo vadis? *Journal of Management*, 23(3), 409-474.
- Hunt, J. M., & Weintraub, J. R. (2002). How coaching can enhance your brand as a manager. *Journal of Organizational Excellence*, 21(2), 39-44.
- Hyman, J., & Cunningham, I. (1998). Managers as developers: Some reflections on the contribution of empowerment in Britain. *International Journal of Training and Development*, 2(2), 91-107.
- Ingham, G. K. (1970). *Size of industrial organization and worker behavior*. Cambridge: Cambridge University Press.
- Irving, P., Coleman, D., & Cooper, C. (1997). Further assessments of a three-component model of occupational commitment: Generalizability and differences across occupations. *Journal of Applied Psychology*, 83(3), 444-452.
- Jacobsen, D. I. (2000). Managing increased part-time: does part time work imply part-time commitment? *Managing Service Quality*, 10(3), 187-201.
- Jermine, J., & Berkes, L. (1979). Leader behavior in a police command bureaucracy: a closer look at the quasi-military model. *Administrative Science Quarterly*, 24, 1-23.
- Johnson, A. L., Luthan, F., & Hennessey, H. W. (1984). The role of locus of control in leader influence behavior. *Personnel Psychology*, 37, 61-75.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluation traits-self-esteem, generalized self-efficacy, locus of control, and emotional stability-with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, 86, 80-92.
- Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluation approach. *Research in Organizational Behavior*, 19, 151-188.

Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology*, 83, 17-34.

Kalliath, T. J., & Beck, A. (2001). Is the path to burnout and turnover paved by a lack of supervisory support: a structural equations test. *New Zealand Journal of Psychology*, 30, 72-78.

Kavanagh, D. J., Spence, S. H., Wilson, J., & Crow, N. (2002). Achieving effective supervision. *Drug and Alcohol Review*, 21, 247-252.

Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4th ed.). Orlando, FL: Harcourt College Publishers.

Kerr, S., Schriesheim, C. A., Murphy, C. J., & Stogdill, R. M. (1974). Toward a contingency theory of leadership based upon the consideration and initiating structure literature. *Organizational Behavior and Human Performance*, 12(1), 62.

Kirkcaldy, B. D., Shaepard, R. J., & Furnham, A. F. (2002). The influence of type: A behavior and locus of control upon job satisfaction and occupational health. *Personal and Individual Differences*, 33, 1361-1371.

Kobasa, S. C., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: A prospective study. *Journal of Personality and Social Psychology*, 42, 168-177.

Kochan, T. A., & Dyer, L. (1993). Managing transformational change. *International Journal of Human Resource Management*, 4(3), 569-590.

Koh, W. L., Steers, R. M., & Terborg, J. R. (1995). The effects of transformational leadership on teacher attitudes and student performance in Singapore. *Journal of Organizational Behavior*, 16, 319-333.

Kottke, J. L., & Sharafinski, C. E. (1988). Measuring perceived supervisory and organizational support. *Educational and Psychological Measurement*, 48, 1075-1079.

Kren, L. (1992). The moderating effects of locus of control on performance incentives and participation. *Human Relations*, 45, 991-1003.

- Kunin, T. (1955). The construction of a new type of attitude measure. *Personal Psychology*, 8, 65-78.
- Lang, J. R., & Johnson, N. B. (1994). Job satisfaction and firm size: An interactionist perspective. *Journal of Socio-Economics*, 23(4), 405-424.
- Larsen, H. H. (1997). Do high flyer programs facilitate organizational learning? *Journal of Managerial Psychology*, 12(1), 48-59.
- Levinson, H. (1965). Reciprocation: The relationship between man and organization. *Administrative Science Quarterly*, 9, 370-390.
- Lewin, A. Y., & Stephens, C. U. (1994). CEO attitudes as determinants of organization design: An integrated model. *Organization Studies*, 15, 183-212.
- Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader-member exchange theory: The past and potential for the future. *Research in Personnel and Human Resources Management*, 15, 47-119.
- Locke, E. A. (1976). The nature and causes of job satisfaction. In M. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1350). Chicago: Rand McNally.
- Locke, E. A. (1983). The nature and causes of job satisfaction. In M. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1349). New York, NY: Wiley.
- Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job satisfaction: The role of core evaluations. *Journal of Applied Psychology*, 83(1), 17-34.
- Loke, J. C. (2001). Leadership behaviors: effects on job satisfaction, productivity and organizational commitment. *Journal of Nursing Management*, 9, 191-204.
- London, M., Polzer, J. T., & Omeregic, H. (2005). Interpersonal congruence, transactive memory, and feedback process: An integrative model of group learning. *Human Resource Development Review*, 4(9), 114-135.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytical review of the literature. *Leadership Quarterly*, 7, 385-425.

- Lu, L., Kao, S. F., Cooper, C. L., & Spector, P. E. (2000). Managerial stress, locus of control, and job strain on Taiwan and UK: A comparative study. *International Journal of Stress Management*, 7, 209-226.
- Malhotra, N., & Mukherjee, A. (2004). The relative influence of organizational commitment and job satisfaction on service quality of customer contact employees in banking call centers. *The Journal of Services Marketing*, 18(3), 162-174.
- Maritz, S. (1983). *Managing without managers: Alternative work arrangements in public organizations*. Beverly Hills, CA: Sage.
- Martin, R., Thomas, G., Charles, K., Epitropaki, O., & McNamara, R. (2005). The role of leader-member exchanges in mediating the relationship between locus of control and work reactions. *Journal of Occupational and Organizational Psychology*, 78, 141-147.
- Martin, U., & Schinke, S. P. (1998). Organizational and individual factors influencing job satisfaction and burnout of mental health workers. *Social Work in Health Care*, 28(2), 51-62.
- Mayo, E. (1933). *The human problems of an industrial civilization* (2nd ed., Rev.). Cambridge, MA: The Murray Printing Company.
- McDonald, D. J., & Makin, P. J. (2000). The psychological contract, organizational commitment and job satisfaction of temporary staff. *The Leadership & Organization Development Journal*, 21(2), 84-91.
- McGovern, P., Gratton, L., Hope-Hailey, V., Stiles, P., & Truss, C. (1997). Human resource management on the line? *Human Resource Management Journal*, 7(4), 12-29.
- McGregor, D. (1960). *The human side of enterprise*. New York: McGraw-Hill.
- Meier, K. J., & Bohte, J. (2000). Ode to Luther Gulick: Supervisory span of control and organizational performance. *Administration & Society*, 32(2), 115-137.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.

- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538-551.
- Mindell, N. (1995). Devolving training and development to line managers. *Management Development Review*, 8(2), 16-21.
- Mitchell, T. R., Smyser, C. M., & Weed, S. E. (1975). Locus of control: supervision and work satisfaction. *Academy of Management Journal*, 18(3), 623-631.
- Moore, K. A. (2002). Hospital restructuring: impact on nurses mediated by social support and a perception of challenge. *Journal of Health and Human Services Administration*.
- Morrison, R. (2004). Informal relationships in the workplace: Associations with job satisfaction, organizational commitment and turnover intentions. *New Zealand Journal of Psychology*, 33(3), 114-128.
- Morrison, R. S., Jones, L., & Fuller, B. (1997). The relation between leadership style and empowerment on job satisfaction of nurses. *Journal of Nursing Administration*, 27, 27-34.
- Moshavi, D., Brown, F., & Doss, N. G. (2003). Leader self-awareness and its relationship to subordinate attitudes and performance. *Leadership & Organization Development*, 24(7/8), 407-418.
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee organization linkage: The psychology of commitment, absenteeism and turnover*. New York: Academic Press.
- Muhonen, T., & Torkelson, E. (2004). Work locus of control and its relationship to health and job satisfaction from a gender perspective. *John Wiley & Sons, Ltd.*, 20, 21-28. Retrieved February 1, 2006, from Wiley Inter Science Web Site: <http://interscience.wiley.com>
- Mullen, B. (1983). Operationalizing the effect of the group on the individual: A self-attention perspective. *Journal of Experimental Social Psychology*, 19, 295-322.
- Mullen, B. (1987). Self-attention theory. In B. Mullen & G. Goethals (Eds.), *Theories of group behavior* (pp. 125-146). New York: Springer-Verlag.

- Mullen, B., Cynthia, S., Hu, L. T., & Salas, E. (1988). Group size, leadership behavior and subordinate satisfaction. *Journal of General Psychology*, 116(2), 155-169.
- Mullen, B., Johnson, D. A., & Drake, S. D. (1986). Organizational productivity as a function of group composition: a self-attention perspective. *Journal of Social Psychology*, 127(2), 143-150.
- Mullen, B., Sumons, C., Hu, L., & Salas, E. (1989). Group size, leadership behavior and subordinate satisfaction. *Journal of General Psychology*, 116, 155-170.
- Munn, E. K., Barber, C. E., & Fritz, J. J. (1996). Factors affecting the professional well-being of child life specialists. *Children's Health Care*, 25, 71-91.
- Nagy, M. S. (2002). Using a single-item approach to measure facet job satisfaction. *Journal of Occupational and Organizational Psychology*, 75(1), 77-86
- Neal, A. G., & Seeman, M. (1964). Organizations and powerlessness: a test of the mediation hypothesis. *American Sociological Review*, 28, 216-226.
- Newsome, M., & Pillari, V. (1991). Job satisfaction and the worker/supervisor relationship. *Clinical Supervisor*, 9, 119-129.
- Newton, T. J., & Keenan, A. (1990). The moderating effect of the Type A behavior pattern and locus of control upon the relationship between change in job demands and change in psychological strain. *Human Relations*, 43, 1229-1255.
- Nichols, C. W. (1990). *An analysis of the source of dissatisfaction at work*. Redwood, CA: Dissertation Abstracts International.
- Nielsen, I. K., Jex, S. M., & Adams, G. A. (2000). Development and validation of scores on a two dimensional workplace friendship scale. *Educational & Psychological Measurement*, 60(4), 628-643.
- Northouse, P. G. (2004). *Leadership theory and practice* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Numerof, R. E., Abrams, M., & Ott, B. (2004). What works...and who doesn't. *Recruitment & Retention Report*, 3, 18.

- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. San Francisco: New Lexington Press.
- Organ, D. W., & Greene, C. N. (1974). Role ambiguity, locus of control, and work satisfaction. *Journal of Applied Psychology*, 59, 101-102.
- Orpen, C. (1984). The effect of job tenure on the relationship between perceived tasks attributes and job satisfaction. *Journal of Social Psychology*, 124, 135-136.
- Osborne, R. N., & Hunt, J. G. (1972). Relations between leadership, size, and subordinate satisfaction in a voluntary organization. *Journal of Applied Psychology*, 60, 730-735.
- Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, Design, and Analysis*. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Porter, L., & Lawler, E. (1964). The effects of 'tall' versus 'flat' organization structures on managerial job satisfaction. *Personnel Psychology*, 17(2), 135-148.
- Price, J. S., & Mueller, C. W. (1986). *Handbook of organizational measurement*. Marshfield, MA: Pitman Publishing, Inc.
- Probst, T. M. (2003). Development and validation of the job security index and the job security satisfaction scale: A classical test theory and IRT approach. *Journal of Occupational and Organizational Psychology*, 76, 451-467.
- Putman, S. H., & Tejada, M. J. (2006). Is span of supervision related to work satisfaction? In F. M. Nafukho (Ed.), *2006 Academy of Human Resource Development Conference Proceedings* (pp. 686-692). Bowling Green, OH: Academy of Human Resource Development.
- Putman, S. H., Tejada, M. T., & Hubschman, B. (2006). Quality supervisor-subordinate relationships moderate work outcomes. In R. Poell (Ed.), *Seventh International Conference on HRD Research and Practice Across Europe*, 17(2), 1-10. Tilburg, Netherlands: Academy of Human Resource Development.
- Redshaw, B. (2000). Do we really understand coaching? How can we make it work better? *Industrial and Commercial Training*, 32(3), 106-108.

- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*(4), 698-714.
- Riordan, C. M., & Griffeth, R. W. (1995). The opportunity for friendship in the workplace: An under explored construct. *Journal of Business & Psychology, 10*(2), 141-154.
- Ripley, D. (2003). Methodology for determining employee perceptions of factors in the work environment that impact on employee development and performance. *Human Resource Development International, 6*(1), 85-100.
- Rodriguez, I., Bravo, M. J., Peiro, J. M., & Schaufeli, W. (2001). The demands - control - support model, locus of control and job dissatisfaction: a longitudinal study. *Work & Stress, 15*(2), 97-114.
- Rosenbaum, M. (1990). *Learned resource fullness on coping skills, self control, and adaptive behavior*. New York: Springer.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monograph, 80*(1), 609.
- Rump, E. E. (1979). Size of psychiatric hospital and nurses job satisfaction. *Journal of Occupational Psychology, 52*, 225-265.
- Runyon, K. E. (1973). Some interactions between personality variables and management styles. *Journal of Applied Psychology, 57*, 288-294.
- Salkind, N. J. (2003). *Exploring research* (5th ed.). Upper Saddle River, NJ: Pearson, Prentice Hall.
- Scandura, T. A., & Graen, G. B. (1984). Moderating effects of initial leader-member exchange status on the effects of a leadership intervention. *Journal of Applied Psychology, 69*(3), 428-437.
- Scandura, T. A., Graen, G. B., & Novak, M. A. (1986). When managers decide not to decide autocratically: An investigation of leader-member exchange and decision influence. *Journal of Applied Psychology, 71*(4), 579-584.

- Scandura, T. A., & Schriesheim, C. A. (1994). Leader-member exchange and supervisor career mentoring as complementary constructs in leadership research. *Academy of Management Journal*, 37(6), 1588-1602.
- Scandura, T. A., Tejeda, M. J., Werther, W. B., & Lankau, M. J. (1996). Perspectives on mentoring. *Leadership & Organization Development Journal*, 17(3), 50-58.
- Scarpello, V., & Campbell, J. P. (1983). Job satisfaction and the fit between individual needs and organizational rewards. *Journal of Occupational Psychology*, 56, 315-328.
- Schilit, W. K. (1986). An examination of individual differences as moderators of upward influence activity in strategic decisions. *Human Relations*, 39, 933-953.
- Schriesheim, C. A. (1982). The great high consideration-high initiating structure leadership myth: evidence on its generalizability. *Journal of Social Psychology*, 116, 221-228.
- Schriesheim, C. A., Castro, S. L., & Cogliser, C. C. (1999). Leader-member exchange (LMX) research: A comprehensive review of theory, measurement, and data-analytic practices. *Leadership Quarterly*, 10, 63-113.
- Schriesheim, C. A., Castro, S. L., & Yammarina, F. J. (2000). Investigating contingencies: an examination of the impact of span of supervision and upward controllingness on leader-member exchange using traditional and multivariate within- and between- entities analysis. *Journal of Applied Psychology*, 85(5), 659-677.
- Schriesheim, C. A., Neider, L. L., & Scandura, T. A. (1998). Delegation and leader-member exchange: Main effects, moderators, and measurement issues. *Academy of Management*, 41(3), 298-318.
- Schroffel, A. E. (1999). To what extent does the availability, quality, and style of supervision correlate with the degree of clinician job satisfaction? *Dissertation Abstracts International*, 59, 3212.
- Schriesheim, C. A., & Murphy, C. J. (1976). Relationships between leader behavior and subordinate satisfaction and performance: A test of some situational moderators. *Journal of Applied Psychology*, 61(5), 634.

- Seeman, M. (1967). On the personal consequences of alienation in work. *American Sociological Review*, 32, 973-977.
- Seligman, M. (1991). *Learned optimism*. New York: Knopf.
- Senge, P. M. (1990). *The fifth discipline*. New York: Currency Doubleday.
- Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of Applied Psychology*, 81, 219-227.
- Shore, L. M., & Tetrick, L. E. (1991). A construct validity study of the survey of perceived organizational support. *Journal of Applied Psychology*, 78, 637-643.
- Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology*, 78(5), 774-780.
- Simon, H. (1946). The proverbs of administration. *Public Administration Review*, 4(1), 16-30.
- Smucker, M. K., & Kent, A. (2004). The influence of referent selection on pay, promotion, supervision, work, and co-worker satisfaction across three distinct sport industry segments. *International Sports Journal*, 1, 27-43.
- Spector, P. (1986). Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations*, 11, 1005-1016.
- Spector, P. E. (1982). Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin*, 91, 482-497.
- Spector, P. E. (1987). Method variance as an artifact in self-reported affect and perceptions of work: myth or significant problem. *Journal of Applied Psychology*, 72, 438-443.
- Steers, R. (1975). Problems in the measurement of organizational effectiveness. *Administrative Science Quarterly*, 20, 546-558.
- Steers, R. M. (1977). Antecedents and outcomes of organizational commitment. *Administrative Science Quarterly*, 22, 46-56.
- Stoner, J. A. (1982). *Management*. Englewood Cliffs, NJ: Prentice-Hall.

- Sujan, H. (1986). Smarter versus harder: an exploratory attributional analysis of sales people's motivation. *Journal of Marketing Research*, 23, 41-49.
- Susskind, A. M., Borchgrevink, C. P., Kacmar, K. M., & Brymer, R. A. (2000). Customer service employees' behavioral intentions and attitudes: an examination of construct validity and a path model. *International Journal of Hospitality Management*, 19(1), 53-77.
- Swann, W. B., Milton, L. P., & Polzer, J. T. (2000). Should we create a niche or fall in line? Identity negotiation and small group effectiveness. *Journal of personality and social psychology*, 79(2), 238-250.
- Swanson, R. A. (1997). HRD research don't go to work without it! In R. Swanson & E. Holton (Eds.), *Human Resource Development Research Handbook, Linking Research and Practice* (pp. 3-20). San Francisco: Berrett-Koehler Publishers.
- Sweeney, A. P., Hohenshil, T. H., & Fortune, J. C. (2002). Job satisfaction among employee assistance professionals: a national study. *Journal of Employment Counseling*, 39, 50-60.
- Talacchi, S. (1960). Organizational size, individual attitudes and behavior: An empirical study. *Administrative Science Quarterly*, 5, 398-420.
- Tansky, J. W., & Cohen, D. J. (2001). The relationship between organizational support, employee development, and organizational commitment: An empirical study. *Human Resource Development Quarterly*, 12, 285-300.
- Tatum, H. E., Chambers, W., Owens, K. S., & Gibson, L. W. (1999). An investigation of career decidedness in relation to "Big Five" personality constructs and life satisfaction. *College Student Journal*, 33(4), 646-652.
- Tejeda, M. J., Scandura, T. A., & Pillai, R. (2001). The MLQ revisited psychometric properties and recommendations. *The Leadership Quarterly*, 12, 31-52.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259-291.

- Thornhill, A., & Saunders, M. N. (1998). What if line managers don't realize they're responsible for HR? Lessons from an organization experiencing rapid change. *Personnel Review*, 27(6), 460-476.
- Tichy, N. M., & Devanna, M. A. (1986). *The transformational leader*. New York: Wiley.
- Unzicker, D., Clow, K. E., & Babakus, E. (2000). The role of organizational communications on employee perceptions of a firm. *Journal of Professional Service Marketing*, 21(2), 87-103.
- Urwick, L. F. (1956). The manager's supervisory span of control. *Harvard Business Review*, May-June, 39-47.
- Valenstein, P. N., Souers, R., & Wilkinson, D. S. (2005). Staffing benchmarks for clinical laboratories: A college of American pathologists Q-Probe study of staffing at 151 institutions. *American Pathologist Laboratory Medicine*, 129, 467-473.
- Wagner, J. A. (1994). Participation's effect on performance and satisfaction: A reconsideration of research evidence. *Academy of Management*, 19(2), 312-330.
- Walumbwa, F. O., & Lawler, J. J. (2003). Building effective organizations: Transformational leadership, collectivist orientation, work-related attitudes, and withdrawal behaviors in three emerging economies. *International Journal of Human Resource Management*, 14(7), 1083-1101.
- Walumbwa, F. O., Orwa, B., Wang, P., & Lawler, J. J. (2005). Transformational leadership, organizational commitment, and job satisfaction: a comparative study of Kenyan and U.S. financial firms. *Human Resource Development Quarterly*, 16(2), 235-256.
- Walumbwa, F. O., Wang, P., Lawler, J. J., & Shi, K. (2004). The role of collective efficacy in the relations between transformational leadership and work outcomes. *Journal of Organizational and Occupational Psychology*, 77(4), 515-530.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82(2), 247-252.

- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: a social exchange perspective. *Academy of Management Journal*, 40, 82-111.
- Webber, A. M. (1993, January-February). What's so new about the new economy? *Harvard Business Review*, 24-42.
- Weiss, D. J., Davis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota satisfaction questionnaire*. Minneapolis: University of Minnesota, Industrial Relations Center.
- Wheaton, B. (1985). Personal resources and mental health: can there be too much of a good thing? *Research in Community and Mental Health*, 5, 139-184.
- Yarnall, J. (1998). Line managers as career developers: Rhetoric or reality? *Personnel Review*, 27(5), 378-395.
- Yrle, A. C., Hartman, S. J., & Galle, W. P. (2003). Examining communication style and leader-member exchange: Considerations and concerns for managers. *International Journal of Management*, 20(1), 92-100.
- Yukl, G. A. (1994). *Leadership in organizations* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Zeffane, R. (1994). Patterns of organizational commitment and perceived management style: A comparison of public and private sector employees. *Human Relations*, 47, 977-1010.
- Zipp, J. F. (1991). The quality of jobs in small business. *Economic Development Quarterly*, 5, 9-22.

APPENDIX A
SPSS OUTPUTS

Sample Group Coding

Gender: Male = 1, Female = 2

Married: Married = 1, Single = 2

Race: White = 1, African American = 2, Hispanic = 3, Other = 4, I prefer not to answer = 5.

Seniority number: 1-500 = 1, 501-1000 = 2, 1001-1500 = 3,

1501-2000 = 4, 2001-2500 = 5, 2500+ = 6

Crew base: 1 = small crew base, 2 = large crew base

Statistics

		Gender	Seniority	Race	Married
N	Valid	221	221	220	221
	Missing	1	1	2	1

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	199	89.6	90.0	90.0
	2.00	22	9.9	10.0	100.0
	Total	221	99.5	100.0	
Missing	System	1	.5		
Total		222	100.0		

Married

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	182	82.0	82.4	82.4
	2.00	39	17.6	17.6	100.0
	Total	221	99.5	100.0	
Missing	System	1	.5		
Total		222	100.0		

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	193	86.9	87.7	87.7
	2.00	9	4.1	4.1	91.8
	3.00	8	3.6	3.6	95.5
	4.00	5	2.3	2.3	97.7
	5.00	5	2.3	2.3	100.0
	Total		220	99.1	100.0
Missing	System	2	.9		
Total		222	100.0		

Seniority

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	37	16.7	16.7	16.7
	2.00	63	28.4	28.5	45.2
	3.00	55	24.8	24.9	70.1
	4.00	35	15.8	15.8	86.0
	5.00	26	11.7	11.8	97.7
	6.00	5	2.3	2.3	100.0
	Total		221	99.5	100.0
Missing	System	1	.5		
Total		222	100.0		

APPENDIX B

VITA

STEPHEN H. PUTMAN

CAPTAIN, CHECK AIRMEN BOEING 757, BOEING 767

United Parcel Service

PERSONAL

<u>Name</u>	<u>Phone- Home</u>	<u>Phone- Cellular</u>
<u>Stephen H. Putman</u>	<u>305-665-4375</u>	<u>305-984-4822</u>

<u>Address (Home)</u>	<u>E-mail</u>
<u>7461 SW Miller Drive Miami, FL 33155-5505</u>	<u>putmans@mail.barry.edu</u>

Higher Education

2003 – 2006 PhD expected August 2006. Leadership and Education, in Human Resource Development: Dissertation: The effects of span of control on work satisfaction: exploring the moderating effects of leader-member exchange on unionized subordinates. Barry University, Miami Shores, FL

- 1) 1984-1985 Master of Aeronautical Science, _____
- 2) Embry-Riddle Aeronautical University, Daytona Beach, FL. _____
- 3) _____

1982-1984 Master of Business Administration in Aviation Embry-Riddle Aeronautical University, Daytona Beach, FL. _____

1977-1980 Bachelor of Science, Air Commerce Flight Technology Florida Institute of Technology, Melbourne, FL

Certification and Licensures

FAA Boeing 757, Boeing 767 Company Check Airmen
FAA Certified Operation Experience Instructor
FAA Airline Transport Pilot:
Boeing 727, Boeing 757, Boeing 767
FAA First Class Medical

EXPERIENCE

Non-Academic

1994-2006: United Parcel Service

Training department, Airline Division

- Educate airline crewmembers and airline management in airline operations
- Member of team which created an education package on South America and South American MEL requirements
- Training flight crewmembers in cockpit resource management

1990-2006: United Parcel Service Boeing 757-767 Captain

RESEARCH

Under Review

Putman, S. H., Tejada, M. T., & Hubschman, B. (2006). Quality supervisor-subordinate relationships moderate work outcomes. In F. M. Nafukho (Ed.), 2006 Academy of Human Resource Development Conference Proceedings. Tilburg, Netherlands: Academy of Human Resource Development. Submitted to: Human Relations.

Refereed Conference Proceedings

Putman, S. H., & Tejada, M. J., (2006) Do spans of supervision affect subordinate satisfaction or is it still all LMX? A correlational study in a sample of health administrators. Southern Management Association.

Putman, S. H., & Tejada, M. J. (2006). Is span of supervision related to work satisfaction? In F. M. Nafukho (Ed.), 2006 Academy of Human Resource Development Conference Proceedings (pp. 686-692). Bowling Green, OH: Academy of Human Resource Development.

Articles in Non-Refereed Journals, Newsletters, etc.

Putman, S. H. (2006). Wide span of supervision means you're the boss. *IPA Flight Times*, 11(11),3.

Putman, S. H. (2005). Professional standards, what are yours? *IPA Flight Times*, 10(8), 8.

Putman, S. H. (2005). IPA well represented at 2005 HIMS seminar. *IPA Flight Times*, 10(19), 4.

Putman, S. H. (2005). Occupational health, Viagra and your pilot certificate. *IPA Flight Times*, 10(19), 4.

SERVICE

Professional Organizations

Academy of Human Resource Development (AHRD)

American Society for Training & Development (ASTD)

Human Intervention and Motivation Study (HIMS)

Professional and Community Service

2003 - 2006, President's Board, St. Thomas University

1 Work directly with the President of St. Thomas University and board members to build corporate and university partnerships

2 Chair, recruitment committee for the expansion of the President's Board

3 Member of the intern committee which provided intern opportunities to university students

2004- 2006, Independent Pilot Association drug and alcohol committee volunteer and pilot mentor

1988- 2006, United Way volunteer and participant

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