AN ANALYSIS OF THE PREFERRED MANAGERIAL TACTICS OF HEALTH CARE ORGANIZATION EMPLOYEES

by

Krystianna K. Nguyen

ANTONIO SANTONASTASI, Ph.D., Faculty Mentor and Chair

WAYLAND SECREST, Ph.D., Committee Member

NANCY A. PIOTROWSKI, Ph.D., Committee Member

Deborah Bushway, Ph.D., Dean, Harold Abel School of Psychology

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Capella University

June 2009

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.
In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

Abstract

Health care managers often use various tactics as a way to influence employees' behavior to elevate productivity levels. Although the literature contains a plethora of articles on three broad tactics categories (e.g., soft, rational, hard), there is a dearth of research on the influence of sex and health care job categories on managerial tactics preferences. The present research focused on employees' perception of soft, rational, and hard management tactics of health care organizations. Specifically, this study examined the relationships of sex and health care job categories on managerial tactics preferences, controlling age, race, and tenure, among medical doctors, nurses, information technology, and ancillary personnel of health care organizations. Participants were derived from various healthcare settings through the convenience sampling technique. A revised questionnaire of Kipnis, Stuart, and Wilkinson (1980) served as the subscale for data collection. Internal consistency measures of the questionnaire were in the acceptable to very reliable range (Coefficient alphas ranging from .658 - .736). MANCOVA was used to determine if there were significant differences of preferences on soft tactics and rational tactics among occupational categories as well as between males and females. Due to unequal comparison group sizes and data distribution and shape issues, a non-parametric t-test (Mann-Whitney U) was used to compute preferred hard tactics for males and females, while a Kruskal-Wallis was used to compute preferred hard tactics for occupational categories. There was a significant difference of preferences in the hard tactics between males and females ($p \leq .002$). There were no significant differences of preferences on soft tactics and rational tactics between males and females. There were no significant differences of preferences on soft and hard tactics among occupational

categories. However, there was a significant difference of preferences on rational tactics among occupational categories with ($p \leq .017$). These findings suggest that the influence strategies managers use may need to depend on the organizational culture defined by occupational groups and sex of the workers. Future research would benefit from implementing recruitment strategies to increase sample size and/or target specific groups to be studied to as to have equal comparison group sizes.

Dedication

To my amazing parents (John Baptist Nhi & Martha Huong Nguyen)

Acknowledgments

I would like to thank my mentor, Dr. Antonio Santonastasi; my committee members, Dr. Nancy Piotrowski and Dr. Wayland Secrest, for their dedication, expertise, and patience. Without your guidance, I would not have been able to complete this dissertation. My very special thanks go to Dr. Stuart Schmidt, Dr. Thanh Le, Dr. William Hanschin, Dr. Thomas Gerst, Dr. Mark Larson, Dr. Mary Chen, Rev. Andrew S. Do, Rev. Jim K. Hoang, Rev. Paul T. Nguyen, Rev. Joseph T. Nguyen, Mr. Joseph K. Q. H. Nguyen, Rev. Brandon Nguyen, Rev. Hung Nguyen, Rev. Ken Lavan, Fere Thang Nguyen, Bao and KimAnh Tran, Andrea Baker, Jessica H. Nguyen, Liz C. Pham, Kristi T.D. Nguyen, Donna Kay Jenkins, Sheryl Hess, colleagues, and friends who have encouraged, advised, and inspired me. I would like to acknowledge my study participants who spent their precious time to participate in this study. Special thanks go to my nephews and nieces (Alyssa, Joseph, Stella, Neal, Grace, and Autumn) for their support, wit, and great sense of humor. I am grateful for my parents, sisters (Trina, Julie), and brothers (William, Tim, Hung, Corey, Duy, Linh) for their love because without their tremendous sacrifices, I would not be where I am today. Lastly, thank you God for the many blessings you provide each day.

Table of Contents

List of Tables

List of Figures

CHAPTER 1. INTRODUCTION

Introduction to the Problem

Somech and Drach-Zahavy (2002) suggest that there are three main influencing tactics (i.e., hard, rational, and soft strategy) used by leaders to sway their followers. According to researchers, "hard strategy may be described as the means whereby the agent expects compliance to be gained. It may be through direct assertive requests for compliance, or mediated through manipulative threats and aggression" (Somech & Drach-Zahavy, p. 168). Thus, a hard strategy is more likely forceful than tactful. A rational strategy as stated by Somech and Drach-Zahavy (2002) is a tactic that "involves the application of bargaining and logic." The approach consists of "the agent's appeal or attempt to elicit instrumental reasoning by the target" (p. 168). Hence, a rational tactic uses rational thoughts to persuade or influence others. The soft tactic described by Somech and Drach-Zahavy (2002) "is said to be invoked when the agent seeks compliance in a polite, friendly, or humble manner by flattering and sympathizing with the influence target" (p. 168). Therefore, soft strategy entails using psychological means rather than aggression or reason to influence others.

Schein (2004) states that organizational culture is each organization's norms, standards, values, climate, and rules. According to Schein, there is a cultural perspective for each profession, and people should be able to resolve various problems in their workplace. Many organizations have communication barriers among personnel from

misunderstandings within the organization as each department has its organizational culture differences (James & Ward, 2001). Therefore, in health care, it is extrapolated that medical doctors, nurses, information technology workers, and administrative support staff each have their own cultures. People in each occupational group listed have learned to adapt with their own cultures as well as ways to carry out their tasks. One may assume that managers need to use different influence tactics to persuade people in different occupations. Within health care settings, medical doctors, nurses, information technology workers, and support staff, each have their own cultures; consequently, they serve as the sample for this examination of preferences on influence tactics in health care settings.

Background of the Study

Farmer, Maslyn, Fedor, and Goodman (1997) found that the higher levels of education individuals had achieved the more different forms of influence strategies they use. Buttner and McEnally (1996) found that the effectiveness of using an influence tactic differed depending on the sex of the person who used it. Kipnis, Schmidt, and Wilkinson (1980) studied how people in the workplace influenced upward and how people influence downward using these influence tactics. Their findings suggest that managers use tactics similar to rational tactics most often and tactics parallel to hard tactics secondarily to influence their subordinates. Depending on the situation, people use different tactics to influence their managers, subordinates, and coworkers. For example, people have used rational tactics most when they would like others to accept their ideas. Secondly, Wayne and Ferris (1990) state that subordinates use soft tactics to influence their supervisors when they would like to make a good impression and when they would like to receive better reward in the future from their supervisors. Furthermore, when both supervisors

and subordinates are equally powerful, supervisors use hard tactics more to achieve organizational objectives. When supervisors and subordinates are not equally powerful, supervisors use both rational and soft tactics to influence their subordinates (Somech & Drach-Zahavy, 2002). Finally, "hard tactics can be useful for eliciting compliance, especially when combined with rational persuasion" (Falbe & Yukl, 1992, p. 648). These researchers, however, did not examine the employees' tactics preference and preferences for each profession (Kipnis et al., 1980).

Statement of the Problem

Though previous studies indicate that rational and soft tactics are usually more effective, little attention is placed on the actual preferences of employees receiving the tactics. Furthermore, there is virtually no literature on managerial tactics preferences by health care employees and any sex differences. There are limited studies similar to Kipnis et al. (1980), Somech and Drach-Zahavy (2002), and Higgins et al. (2003) providing information on how managers and subordinates use different influence tactics to influence others at workplace. Yet, none of these researchers reviewed subordinates' preferences on influence tactics from their managers and sex differences, in the health care professions. Given the dearth of literature on this topic, there is a need to examine the preferences of managerial influence tactics by health care employees and any related sex differences.

Purpose of the Study

The purpose of this study is to examine the preferences of management influence tactics of four employee categories: medical doctors, nurses, information technology, and

administrative support staff. This study identifies whether sex influences the degree of influence tactics preference of the employees under investigation.

Significance of the Study

More than 20 years ago, Kipnis et al. (1980) studied what tactics people employ to influence their managers, coworkers, or subordinates. The research participants of their study included 225 bosses, 285 coworkers, and 244 subordinates. The present study examines the preferences of different groups of occupations. To validate their findings, Kipnis et al. (1980) suggested future research on management influence tactics.

Consequently, the findings of Yukl and Tracey (1992) also suggested that managers who had used rational tactics to influence their subordinates were more effective than managers who had used pressure and coercion, which resemble hard tactics, to influence their subordinates. Yet neither of these studies assessed the preferences of particular occupational groups and their influence tactic preferences. Furthermore, these studies did not assess the preferences of these four occupations by sex and how they perceive their managers' influence tactics. The present study aims to identify (a) if there are significant differences of preferences among these four occupational groups: medical doctors, nurses, information technology workers, and support staff; and (b) if there are any significant differences between males and females of these four occupational groups and their preferences regarding managers' influence tactics. The practical significance of this study for the society or psychology community is that it indicates some understandings of the preferred tactics between males and females among doctors, nurses, IT professionals, and support staff from their managers in health care organizations. It also raised some more questions for more research on this

topic such as why certain occupations preferred to receive rational tactics from their managers than others. It helps managers in health care organizations to be more aware of the preferred tactics from these health care professionals—consequently, it can help build job satisfaction, reduce stress, get more productive or better working relationships.

Please note race, age, and tenure are controlled variables as suggested by literature. For example, Johnson, Morgeson, Ilgen, and Lloyd (2006) conducted a study on professions and their identities. They have selected age and tenure as controlled variables when analyzing their findings. Recently, Tanirala, Green, and Ramanujam (2007) studied relationships of employees and their supervisors in the workplace and selected age and tenure as controlled variables. Thus, the covariate variables or controlled variables of this study are race, age, and tenure. Therefore, the present study analyzes what influence tactics the four groups of occupations studied prefer their managers to use.

Research Questions

Many studies have researched various tactics that managers have used to influence their subordinates (Ceasar & William, 2004; Higgins, Judge, & Ferris, 2003; Kipnis et al.,1980; Ringer & Boss, 2000; Schriesheim & Hinkins, 1990). There is lack of research, however, on the perceived and preferred management tactics of these working groups. Therefore, this study responds to the following research questions: Are there significant differences in the dependent variables on preferences of soft tactics, rational tactics, and hard tactics preferences by sex? Are there significant differences in the dependent variables of preferences of soft tactics, rational tactics, and hard tactics among occupational categories (i.e., medical doctor, nurse, information technology, and support staff) for their managers' influence tactics after controlling for race, age, and tenure?

Assumptions and Limitations

One assumption is that the estimate of the sample is accurate. However, it is always less accurate than the population estimation (Breakwell, Hammond, & Fife-Schaw, 2003). In other words "it is important to recognize that any summary statistics, including statistics such as correlations, variances and regression, are best thought of as parameter estimate" (p. 93). Thus, according to these authors, the accuracy of these estimates will depend on how large the sample is, how well the researcher has done the sampling, and how constructs were measured. Another assumption is that the participants will respond to the questionnaires honestly.

There are some limitations to this research study. The researcher is unable to know the personalities of the subordinates or of the managers. The researcher feels that having an understanding of their personalities might have a great impact on which influence tactics managers might choose to use to influence their subordinates. Consequently, this study does not control for the differences of personalities of the managers nor of the four groups of workers. Moreover, the study does not cover the level of trust that each subordinate has with his or her manager. The managers' competence and expertise can not be realized through the completion of this study; nonetheless, these issues are very important because they play an important role when influencing others (Brehm, Kassin, & Fein, 2005).

Definition of Terms

In this section, operational definitions of major words or terms used in the study are provided:

Assertiveness — describes direct approach influence tactics such as using face-to-face confrontation or using anger to force others to comply to his or her request (Ringer & Boss, 2000).

Bargaining Tactics — tactics that influence others by using favors and bargaining to achieve desired outcome behaviors (Kipnis et al., 1980; McFarland, Ryan, & Kriska, 2002).

Blocking Tactics — tactics that people use to stop or slow down the target audience's working progress to gain their requests (Higgins et al., 2003; Schriesheim & Hinkins, 1990).

Coalition tactics — strategies that use other people to influence the target audience (Higgins et al., 2003; Schriesheim & Hinkins, 1990).

Employee — personnel between the age 18-75 years old who are employed by the organization.

Female — self-identified, female sex is reported by research participant at the time of participating in this research.

Hard tactics — include assertiveness or direct approach tactics and coalition tactics (Barry & Shapiro, 1992; Ceasar & William, 2004).

Health care organizations — include hospitals, clinics, and health care settings.

Information technology workers — workers who have received information technology degrees and/or worked in the information technology field within health care organizations.

Ingratiation Tactics — are influence tactics that use flattery to influence others (Kipnis et al., 1980).

Male — self-identified, male sex is reported by research participant at the time of participating in this research.

Manager — a person who has supervised an employee or employees directly in health care organizations.

Medical doctors — medical professionals who have received medical diplomas and practiced general medicine as well as any of the specialties in health care organizations.

Nurses — health care practitioners who have received nursing degrees and practiced in health care organizations.

Rational Tactics — are tactics using logic to convince others. For example, a person would use logical argument, facts, figures or critical information to ask others to comply with his or her request (Kipnis et al., 1980; Ringer & Boss, 2000).

Soft Tactics — are the combinations of inspirational tactics and ingratiation tactics (Tepper, Eisenbach, Kirby, & Potter, 1998).

Support Staff —ancillary workers within health care organizations.

Upward Appeal Tactics — are tactics using support from higher management to backup influence (Kipnis et al., 1980; Ringer & Boss, 2000).

Organization of the Reminder of the Study

Chapter 2 will discuss the appropriate literature related to the problem just described. Chapter 3 will describe and discuss the research methodology selected to respond to the problem. Chapter 4 will present and analyze the data collected, using the methodology described in chapter 3. The study will conclude with chapter 5, which will be a summary of conclusions drawn from data presented in chapter 4 and will present results and recommendations for future research.

CHAPTER 2. LITERATURE REVIEW

Introduction

There are many ways to influence others. Persuasive influence tactics have been used for a number of fields such as leadership training, marketing, advertising, psychotherapy, and jury selection. Studies have shown that employees prefer soft tactics more than hard tactics. According to Falbe and Yukl (1992), using a single soft tactic is more effective than using one hard tactic; using one soft tactic with another rational tactic is more effective than using a combination of hard tactics. Hollander and Offermann (1990) stated that there are three forms of leadership: power over (authority based), power to (power sharing or empowerment), and power from (can resist the power of others). Lower status leaders exhibit one or two of these forms, whereas higher leaders exhibit all three forms. Furthermore, these researchers have stated that subordinates have used coalition as well as rational tactics to influence their supervisors. Subordinates also tend to use rational tactics to influence male supervisors. Furthermore, these researchers stated that in order for an organization to have effective leadership, it depends on two-way influence and power sharing.

Some researchers have studied certain influence tactics between supervisors and subordinates within a particular industry. Treadway, Ferris, Duke, Adams, and Thatcher (2007) suggested that performance assessment objectivity could be biased by ingratiation influence tactics used by subordinates because it is the perception of the supervisor

toward subordinates' behaviors. The study included 150 participants from two retail service organizations. Consequently, these researchers suggested that in the service transaction industry, political skill and ingratiation influence tactics could affect customer service.

This chapter will discuss the theoretical orientation for the study and will review the dependent and independent variables as well as the chosen methodology. Finally, previous research findings and a critique of the previous research will be discussed.

Theoretical Orientation for the Study

Leadership has been an important topic in the past and especially important in the complexity of contemporary organizations. Vugt, Hogan, and Kaiser (2008) concluded that researchers who studied leadership skills had often ignored the importance of examining relations between leaders and followers. They suggested that leadership researchers need to connect psychology with other disciplines such as anthropology, biology, economics, neuroscience, and zoology because researchers can gain insights from these disciplines. They also suggested that those in applied psychology need to examine leadership patterns from pre-human leadership and tribal leadership to help contemporary leaders succeed. As stated by Vugt, Hogan, and Kaiser, leaders display many traits such as social intelligence, political skill, trustworthiness, generosity, and the ability to influence others. To apply some suggestions of these researchers on the topic of leadership, the present study is focused on the preference of the followers (medical doctors, nurses, information technology workers, and support staff) on influence tactics used by their managers.

The ability to influence others is critical for leaders to run effective organizations (Anderson, Flynn, & Spataro, 2008; Kipnis & Schmidt, 1988). Personal characteristics (personality) and person-organizational fit were tested for any relations with influence tactics in Anderson et al. The sample included 169 participants, with 53 from a consulting firm and 116 from an engineering firm. The Organizational Culture Diagnosis Survey and the Big Five Inventory were used to measure their person-organizational fit and their personality, respectively. To measure effectiveness of influence skill, researchers asked coworkers to rate their influence skills. To control the third variable, they controlled formal authority, sex, ethnicity, job performance, and socioeconomics while analyzing their data. They found employees with extraversion (sociability, activity, and assertiveness) were a good fit with the consulting firm and tended to use inspirational appeal tactics to influence others. Inspirational appeal tactics are also effective when used to influence extraverted consultants. They also found that conscientiousness (efficiency, precision, detail-orientation, high-quality task completion) characteristics were a good fit with the engineering firm. The conscientious employees have used rational influence tactics, and rational tactics are effective with conscientiousness employees. They did not find any strong predictors of *agreeableness*, *neuroticism*, or *openness to experience* with a strong person-organization fit in either the consulting or the engineering firm. Furthermore, they did not find any patterns on influence tactics with *agreeableness*, *neuroticism*, and *openness to experience* in the personalities of these employees. Thus, researchers concluded that if there is a good fit between a person and his or her organization then he or she has better attitudes, better job performance, and more commitment to the organization. The limitation of their research is that this is a cross-

sectional study of the two different industries. As a result—to avoid some of the variances that could have occurred if obtaining the sample of different industry that could lead to some variances of different industry culture—the present study included four different occupational groups within the same industry.

There were many studies on influence tactics but not many have focused on health care professionals and their preferences on influence tactics. What can be done to help reduce the stressful issues and complex environments that heath care professionals, particularly doctors, are facing every day? How can we help these caring, admirable professionals feel better at work or their work environment? One of the researcher's ideas is to understand how these health care professionals preferred to be treated at work. In other words, which influence tactics have they preferred their managers to use to influence them? Doctors' well-being is very important because their stress, sleep deprivation, and long working hours could lead to work-related accidents. Thus, it is helpful to know which influence tactics—such as hard, rational, or soft—these health care professionals would like to receive at work. Perhaps learning which tactics health care workers would like to receive from their managers would reduce some stress at work because stress can lead to physical and/or psychological health problems.

Health care professions are stressful in general and medical doctors have worked the most hours and their jobs are the most stressful. Kirkcaldy, Trimpop, and Levine (2002) surveyed 934 doctors between 26 to 78 years old and found that 73.9% had worked more than 42 hour per week and 9.9% worked more than 68 hour per week. They studied the correlations of the number of car accidents and lunch breaks of these doctors. They found that 57.4% of these doctors have reported having car accidents, and 8.1% had

reported they had work-related accidents in the last year. The significant findings were that doctors who had worked less than 48 hour per week reported having less car accidents than doctors who had worked more than 48 hour per week. Furthermore, they have found that doctors who had shorter lunch breaks and longer working hours experienced more stress than those who had longer lunch breaks and shorter working hours. The interesting findings were that job satisfaction is positively correlated for doctors with number of children and age. They also have less car accidents and stress. However, the limitation of this study was that they did not measure personality of these doctors to see if Type A (aggressive personality) might influence the number of car accidents.

Finally, the foundation framework theory studies that the present study is based on are the influence studies of Kipnis, Schmidt, and Wilkinson (1980). These researchers asked 165 managers from various industries to write about what they have done to get their way. They found that 370 influence tactics were identified, and they grouped them into 14 categories. Furthermore, they examined their internal consistency, and found there were some overlaps among these categories, which they then reduced to only eight dimensions. The eight dimensions are assertiveness, ingratiation, rationality, sanctions, exchange, upward appeals, blocking, and coalition. They also rewrote 370 influence tactics into a 58-item questionnaire to conduct a second study on the same year. The second study consisted of 225 bosses, 285 coworkers, and 244 subordinates. They found subordinates and coworkers used upward appeal, ingratiation, and exchange of benefits to influence other people more often than they used these tactics to influence their supervisors. Subordinates also used rational tactics to influence their supervisors more

often than they used them to influence their coworkers. Finally, assertiveness and sanctions tactics were used more often by supervisors to influence their subordinates than were used to influence their coworkers. These researchers concluded that the tactics people have chosen to use depend on their organizational status and the person target. As stated earlier, through their previous research, Kipnis et al. (1980) developed the 58-item questionnaire to test people on influence tactics. With permission from one of the main authors (Schmidt), the 28-item questionnaire, was modified from the original 58-item questionnaires of Kipnis et al. (1980) and used for the present study. Thus, the study of influence tactics conducted by Kipnis et al. in 1980 guides the focus, data analysis, and review of findings for the current study.

Review of Research Literature on Variables Specific to the Study

Independent Variables (Male and Female)

There are differences in communication styles for both men and women. For example, a study conducted by Arthur, Johnson, and Young (2007) on sex and the ability to identify accurately different colors found there was a significant difference between males and females. The sample included 68 males and 82 females from a university in Texas. These 150 students were asked to identify primary colors (red, yellow, blue), secondary colors (orange, green, violet), and tertiary colors (red-orange, red-violet, yellow-green, yellow-orange, blue-green, and blue-violet) and describe the colors identified. The results showed that females used more emotional terms and more frequently described the tertiary colors. Researchers concluded that females are more expressive than males when it comes to communication. The limitation of the study is that the age range was limited to college students. This study suggested that there are

differences in communication styles for men and women. Therefore, the present study needed to examine the sex issues on preferences of influence tactics from managers of doctors, nurses, information technology professionals, and support staff.

Another study that examined male and female leadership styles found no significant difference between males and females regarding leadership styles among 146 males and 60 females from a military leadership team as well as 49 male and 28 female assistant supervisors and supervisors from companies (Chapman, 1975). However, the research did not examine personality of these leaders.

Dependent Variables (Hard Tactics, Soft Tactics, Rational Tactics)

There are eight influence tactics that have been studied since the framework research of Kipnis et al. (1980): assertive (hard), bargaining, blocking, coalition, ingratiation, rational, soft, and upward appeal tactics. However, only three tactics (hard tactics, soft tactics, and rational tactics) are studied in this research. Somech and Drach-Zahavy (2002) concluded that their results from the research are consistent with previous studies. Their findings indicate that managers and supervisors practiced the rational strategy and soft strategy more often than the hard strategy. Many personnel in management positions refrain from using the hard strategy to influence their employees to prevent employee-manager resentment. However, these researchers found that when both supervisors and subordinates were powerful, supervisors used hard strategy more often to achieve their objectives.

Cable and Judge (2003) studied 189 managers in 140 different companies regarding their personality traits and their choice of influence tactics to influence their supervisors. They used one-way ANOVA to examine if there is a significant correlation

between each factor (personality) and the influence tactic. They used the Big-Five personality model: (a) openness (imaginative, artistic, nonconforming, and autonomous), (b) emotional stability (secure, emotionally adjusted, and calm), (c) agreeableness (likable, nurturing, adaptable and cooperative), (d) conscientiousness (achievement, organization, task-focus and dependability), and (e) extraversion (sociable, assertive, expressive, and active). Their results revealed that managers who have scored high on openness traits tend to use rational appeal (logic) to influence their supervisors. Managers who achieve high scores on emotional stability traits are inclined to use ingratiation appeal (waiting for the target to be in a good mood before requesting a favor) to influence their supervisors. Managers who attained high scores on agreeableness are apt to use personal appeal (feelings of loyalty and friendship before influencing the target) to influence their supervisors. Managers with high scores on conscientiousness have a propensity to use rational appeal (logic) to influence their supervisors. Finally, they found that managers who have scored high on extraversion are more likely to use inspirational appeal to influence their supervisors.

Furthermore, Cable and Judge (2003) found that women have a tendency to use rational influence tactics more than men do. African-Americans prefer to use exchange influence tactics more than others do. Older individuals favor influence exchange and legitimization tactics (claiming authority to influence others, using policies, rules, practices, and tradition) more than younger individuals. Sales and marketing individuals lean toward the use of inspirational appeal (values, ideas, aspirations) and personal and exchange (exchanging favors) influence tactics more than other occupational individuals. Finally, finance and accounting individuals are more likely to use consultation (seeking

participation from the target when planning), ingratiation, exchange, legitimization, and pressure (demands and threats) influence tactics more than other occupational individuals.

In examining different influence tactics at work, Higgins, Judge, and Ferris (2003) discovered that using a single soft tactic was more effective than just using a single hard tactic. According to these researchers, leaders can use personal power, power sharing, and consultation when applying soft tactics. On the other hand, leaders can use authority, position power, and self-promotion when applying hard tactics. Moreover, their findings show that combining (a) two soft tactics or (b) one soft tactic and one rational tactic is more effective the using one single tactic or combining one soft tactic and one hard tactic. Hence, it is better to use two specific kinds of tactics to influence others rather than just one. In addition, it is equally important to be cognizant of the different influence tactics used when dealing with different populations at work. For instance, Higgins et al. (2003) found that organizations have positive effects on workers' outcomes when supervisors use soft and rational tactics.

Other research, conducted by Ringer and Boss (2000), examined 192 hospital professionals' use of upward-influence tactics and the variables of why individuals used certain influential tactics to sway their managers. Ringer and Boss found that the two influence tactics that have been used most by people who are in power—such as managers when they want to influence their subordinates—are hard tactics and soft tactics. However, previous studies have not examined what influence tactics hospital professionals would like to receive from their managers. Thus, the present study focuses on the preference of influence tactics from employees of health care organizations.

Sample of the Study

The sample of the present study includes medical doctors, nurses, information technology professionals, and support staff working in health care organizations. In general, health care professionals seem to have more stress than workers in other professions. Within the health care professions, physicians seem to experience the most stress and depression symptoms. Thus, this background discussion will be focused mainly on medical doctors.

A survey conducted in 2006 indicated that nine out of 10 physician leaders have seen their colleagues with symptoms such as fatigue, emotional burn-out, family disruption, depression, maladaptive substance use, and suicidal thought (Weber, 2006). Furthermore, as stated by Weber, the National Institute of Mental Health estimated that at least one in four employees working in health care organizations will suffer significant psychological illness episodes during their working years. Additionally, the job categories that have higher-than-average suicide rates are physicians, nurses, chiropractors, health technologists, and dentists. Many medical doctors experienced more stress than other professionals due to many reasons including long working hours per week. Low morale issues found in a study with 1,205 physicians are low reimbursement, loss of autonomy, bureaucratic red tape, patient overload, loss of respect, and medical malpractice environment; these factors have contributed to nearly 60% of these physicians wanting to leave their medical practice (O'Connor & Fiol, 2006; Steiger, 2006). A longitudinal study of 170 junior doctors found that some contributions to their stress and clinical depression symptoms are self-criticism, separation or parental loss

when they were young, and feelings of lack of support from others (Firth-Cozens, 1992). Furthermore, medical training reinforced doctors to have perfectionist traits, and their rigorous training during their 20s and 30s prevented them from having the social contact and a balance of work/life they needed (Around-Thomas, 2006).

To help physicians overcome stress, Around-Thomas (2006) suggested that physicians need to manage perfectionism (accept mistakes and failures), empower themselves (take care of health and relationships), develop stress management skills (learn to say *no*, learn communication, conflict management, time and priority management skills, and take multiple real vacations), focus on what they want, not what they do not have, and finally, make decisions and take action (the best way to reduce stress). In 2006, Grenny stated that many doctors convinced themselves that when work issues or relationships are in trouble due to burnout and stress, to withdraw or run away is the only option. However, Grenny (a consultant with 30 years of experience) stated that doctors need to know that facing their issues is the only way to master their stressful issues and complex environment. Grenny concluded that when doctors are stressed, everyone else suffers; he suggested some steps to save doctors from getting burnout: (a) ask for support from the team, such as asking each other to make some adjustments that could make big differences; (b) address and confront issues such as work performance of peers if needed so they do not build up resentment for years; (c) take time to coach support staff or nurses to help; (d) build confidence and optimism to make time for important conversations with issues that they could influence; and (e) maintain primary relationships above all else. For some reasons, doctors do not ask for help when needed,

and they should know that when all things fail, asking for help will save their health, their patients' lives, and possibly their lives.

Review of Methodological Literature

Researchers have used quantitative as well as qualitative methodologies to study leadership and influence tactics. Barbuto, Fritz, Matkin, and Marx (2007) used Multivariate Analysis of Variance (MANOVA) to examine leadership behavior and leader use of influence tactics. The sample consisted of 56 leaders and 234 raters who are working in the governmental and educational agencies. Their research used the Multi-Factor Leadership Questionnaire to measure leader styles. The four styles of the leader transformational behavior included in the questionnaire are inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation. Yukl's Influence Behavior Questionnaire (IBQ) was also used to measure leaders' influence tactics. The IBQ consists of tactics such as legitimate, rational persuasion, personal appeals, pressure, exchange, ingratiation, consultation, inspirational appeals, and coalition. They studied the relations of sex, age, and education with leader styles and influence tactics. They found that at the high school level, male leaders were perceived by followers as showing more of transformational, inspirational appeal, idealized influence, intellectual stimulation, and individualized consideration behavior than were women. However, at the bachelor's and graduate degree levels, there is no significant between men and women on leadership styles. There was a significant finding of influence tactics on men and women regardless of their educational levels; however, women with high school, bachelor, or graduate degrees were rated by their followers as using more pressure tactics to influence their followers than were men. Additionally,

leader's age had no significant findings on influence tactics. However, there was a significant finding that leaders who are older than 46 were perceived by their followers as more transformational and exhibiting more idealized influence, intellectual stimulation, effectiveness, and individualized consideration.

In 1973, Runyon studied the interaction of personality variables and management styles of 110 supervisors and subordinates who had worked for a chemical company. The participants were between 21 and 64 years old. The independent variables were supervisory style, worker attitude, and end results (sales and worker behavior). The dependent variables were satisfaction with supervisors and job involvement. Four instruments were used to measure the four factors such as style of management, focus of control (internal or external), work involvement, and satisfaction with supervision. The results indicated that employees who tended to have a more internal personality preferred their supervisors to have participative management (the freedom to have responsibility and personal initiative) more than did external personality employees. More external employees preferred to have directive management styles than did internal employees. The researcher suggested that management style alone does not measure all of the variables for job satisfaction of employees. He suggested that future research should examine other variables that could contribute to job satisfaction factors. The study used ANOVA to analyze two dependent variables and three independent variables. The design of this study did not control one factor, the age of the participants. Thus, the age factor is one of the possible variants that could contribute to the internal or external personality styles due to some assumptions that older workers tend to be in the internal personality

style. Therefore, to reduce some of the possible variances, the present study used age as one of the covariates to control some possible variances.

Applying the methodological methods from the previous studies on leadership, the present study uses the statistical procedure of MANCOVA to examine if preferences for the two levels of preference influence tactics (soft tactics and rational tactics) varies among the four groups (medical doctors, nurses, informational technology professionals, and support staff) of employees working in health care organizations. Due to unequal comparison group sizes and data distribution issues, Mann-Whitney U and Kruskal-Wallis were used to compute the preferred hard tactics by sex and by occupational group, respectively. The present study uses MANCOVA for soft and rational tactics specifically because there is a need to control race, age, and tenure of the participants. This was based on two prior studies. First, Barbuto et al. (2007) found no significant correlation of influence tactics with age. However, they found that followers perceived that women leaders used more pressure tactics to influence them than did men. Additionally a study conducted by Anderson et al. (2008) testing the relationship among person-organizational fit, personality, and influence tactics established a need to control factors such as job performance, sex, ethnicity, and socioeconomics of the participants to reduce variances.

Synthesis of Research Findings

The findings of a study conducted by Barbuto et al. (2007) on leadership styles and influence tactics have provided an important foundation for the present study. They found that followers rated their leaders as more transformational if leaders are older than 46 years old. However, there was no significant finding concerning their influence tactics. On the other hand, women were perceived by their followers as using more

pressure tactics (hard tactics) than did men. The significant finding is that women with high school degrees were less transformational, and used less inspirational appeal, idealized influence, individualized consideration, and intellectual stimulation behaviors than did men with high school degrees. This is a significant finding. However, these researchers did not examine the educational levels of the followers of their sample. Did the followers have the same educational levels or not? It is not clear that researchers have tracked the number of followers who have high school degrees. It is more likely that leaders who have high school degrees also have followers with high school degrees. It is not clear if the followers have the same educational levels as their leaders.

In 2008, Zohar and Tenne-Gazit conducted a study with 1,108 soldiers to analyze the effects of influence of group leaders. ANOVA was used to analyze data that was gathered from administering the safety climate, transformational leadership, and social network questionnaires. The results indicated that the effects of influence of group leaders depended on the condition of their relationship. People were attracted to others who have similar values, action modes, and attitudes. Furthermore, they stated that leaders should develop different skills and different leadership styles to influence individuals as well as group members. One of the limitations of the study is that it was a cross-sectioned study and as a result, the data could not show if there would be any changes in the relationships and the effects of the influence. Moreover, the data were taken from a military service organization that had very strict rules and orders. Thus, it could be different with a corporate organization.

Barbuto, Fritz, and Marx (2002) studied leaders' influence tactics and their motivation, with a sample of 59 leaders and 219 subordinates from various industries

(agricultural, community, medical, and entrepreneurs). They used the IBQ to measure their influence tactics, the Job Choice Decision-Making Exercise (JCE) to measure their psychological needs, and the Motivation Sources Inventory to measure their motivations. Though the JCE did not provide significant findings, the study suggested that leaders who have high scores in intrinsic process motivation used more rational tactics and personal appeals (soft tactics) than did leaders who have low scores in intrinsic process motivation.

Critique of Previous Research

For decades, studies on influence tactics and leadership skills have been conducted in many industries and organizations. However, not many studies have focused on influence tactics and health care professionals. It could be because health care professionals, especially medical doctors, have limited time to volunteer as participants in any research. This, in turn, may be due to their stressful work schedule and environment. It could be because of the bureaucracy at the hospitals and the long working hours of health care professionals that researchers just wanted to focus their studies on those issues. Therefore, other factors that could affect stress and how to improve employees' job satisfaction by improving management styles of managers, as well as how to help these health care professionals to reduce stress have not been studied as much.

There are strengths of previous studies. Some previous studies have shown that conducting research within the same industries could help avoid some variances (Ringer & Boss, 2000; Treadway et al., 2007). Furthermore, the strengths of the previous studies have provided strong foundation theories regarding influence tactics and employees in organizations (Higgins et al., 2003; Kipnis et al., 1980; Somech & Drach-Zahavy, 2002).

Finally, there are some methodological strengths of the reviewed studies. Most of the studies on influence tactics have used robust statistical procedures such as ANOVA and MANOVA, large samples, and reliable instruments.

Most of the previous studies also have weaknesses. The weaknesses of these studies have helped to improve the research and focus of the present study. For example, a couple of studies have researched different industries. These have recommended future research to focus on the same industry to avoid some variances that might appear if conducted in a combination of different industries (Anderson et al., 2008; Burbuto et al., 2002). The previous studies also concluded that people with similar personalities tend to work in the same industry. Thus, the present study focuses only on employees in one industry—health care organizations.

Furthermore, there were some inconsistencies of findings on sex and influence tactics (Arthur et al., 2007; Cable & Judge, 2003; Chapman, 1975). Another weakness of some previous studies was the study design. Many studies have used ANOVA or MANOVA to analyze their research. However, some studies found that age and tenure factors have some significant differences whereas other studies did not find any significant differences (Barbuto et al., 2007; Cable & Judge, 2003; Runyon, 1973). To improve the present study, the research used MANCOVA method of data analysis to reduce any variances that age, race, and tenure factors could have on the studies.

Summary

The process of the literature review contributed to the formula of the research design, sample, and methodology of the present study. The most important thing is that

the literature review process has helped the present study to formulate a theory based on the framework and foundation of the previous influence tactic studies.

Additionally, the literature review has shown the weaknesses and strengths of the previous research, thereby improving the present study. For instance, it has focused the present study more on certain influence tactics such as soft, hard, and rational tactics rather than other influence tactics. It has also helped the present study to focus of different occupational categories within one industry—health care organizations. Furthermore, it has helped the present research to examine the differences of sex—male and female—in their preferences of influence tactics because a couple of studies have shown that there are differences in male and female management styles. Furthermore, it has helped the present study to design a methodology, MANCOVA for two dependent variables, to control variables that could affect the results of the research.

In conclusion, without the literature review process, the present study would not have had a direction to move forward as planned. Chapter 3 will discuss more in detail the methodological methods of the present study, as well as the steps of conducting research on preference of influence tactics of employees in health care organizations.

CHAPTER 3. METHODOLOGY

Introduction

The purpose of this study is to examine the differences in preferences of individuals by occupational category (e.g., medical doctor, nurse, information technology workers, and support staff) and by sex, regarding their managers' influence tactics (e.g., soft tactics, rational tactics, and hard tactics). The 28-items Modified Influence Tactics questionnaire was distributed to medical doctors, nurses, information technology workers, and support staff working in the health care industry, through a convenience sampling technique. The research design for this study is quantitative. The goal of this study is to determine if there are significant differences in the combined dependent variables of influence tactics preferences among health care professionals and sex. Finally, covariates are race, age, and tenure.

Research Design

The research design is causal comparative in nature and the research employs the MANCOVA quantitative methodology to assess multiple dependent variables and covariates. There are two independent variables. Occupation category is one independent variable and it has four levels. The four levels of occupation category are medical doctors, nurses, information technology workers, and administrative support staff. Another independent variable is sex. There are two levels of sex, male and female. There are three dependent variables in this study: preference ratings of soft tactics, rational tactics, and hard tactics. These dependent variables are measured with ratio scales. The

sample is composed of males and females in these four occupational categories. Age, race, and tenure are covariates rather than independent variables. Age, race, and tenure are covariates to reduce unwanted errors that could affect dependent variables.

The quantitative method is preferred because it utilizes published testing instruments of the Kipnis and Schmidt (1998) survey instrument and was modified for the present study. Moreover, authors such as Barbuto et al. (2007) and Somech and Drach-Zahavy (2002) have previously used the same quantitative methods for similar studies.

Although self-report is somewhat biased, a quantitative method will allow for scientific conclusions. An ordinal-level measurement survey is used to collect data. The demographic section at the top of the survey is the only part that has nominal measurement. More studies on the subject of influence tactics have used quantitative methods rather than qualitative methods. Qualitative methods in psychological research can be important, but these are not reliable methods for empirical research or knowledge production, as stated by Haig (2002). Utilizing quantitative methods does not mean their use will produce a perfect study. There may be internal validity issues as in any other quantitative study. Ross (2004) stated that one of the lessons he learned from a lifetime of applied social psychology research is to "never forget the importance of knowing the threats to the statistical, internal, construct, and external validity of your research" (p. 8). Despite some challenges for any quantitative research, this research is still a good match for utilizing quantitative methods with MANCOVA technique for soft and rational tactics.

Target Population and Participant Selection

The sample of this survey includes employees who are working in health care organizations in many states across the United States. The surveys were distributed to medical doctors, nurses, information technology workers, and support staff through a convenience sampling technique by recruiters who have worked in the health care organizations with which the researcher networked. The support staff includes employees who have worked as administrators, front desk clerks, laboratory workers, physician assistants, radiologists; excluding custodial personnel. The surveys were distributed to both male and female day shift and night shift personnel between the ages of 18 and 75 years. Sex is self-identified as determined by the participant at the time of participation in this research.

This study includes a grand total of 111 subjects. A desired power (.80) with the significance level (alpha = .01) and the degree of freedom of the main effects were taken into consideration to get a sample size for each cell and each sex for each occupation category. The study assumed a medium effect size of 111 participants based on three dependent variables and four occupational groups for MANCOVA. From this perspective, Cohen's formula was used to estimate the sample size (Cohen, 1988; Pauquet, n.d.).

Procedures

Through a convenience sampling technique, the researcher recruited one representative from each health care organization through networking. To select participants who are employed in health care organizations, the researcher networked by

sending out letters to health care organizations, and asking acquaintances to introduce the researcher to recruiters in health care organizations. The researcher contacted the recruiters to enlist research participants for this research. To protect research participants, instructions of how to distribute an Internet-based form were sent to each recruiter by e-mail. The researcher called each recruiter after three days from the date of the e-mail. The follow-up phone call asked the recruiter if he or she received the researcher's e-mail, and if the recruiter has any questions. The researcher contacted each recruiter by e-mail every two weeks to see if he or she has any questions. The researcher called the recruiter two weeks before the deadline to remind recruiters to send out another e-mail to their organization to remind employees of the participation deadline.

This research surveyed human participants and there are potential risks to those participating. To protect participants, the researcher asked them not to provide personal identification. The researcher has not provided any information to anyone else without the research participants' permission. Participants had the right to stop taking the instrument at any time. Participants were provided the researcher's contact information in case they had questions before or after taking the instrument. Participants were informed about the nature of the study and the topic of the study.

Each representative recruited and distributed the instrument by sending e-mails to recruit workers in his or her organization who would like to take the instrument online. In 2003, Thompson, Martin, and Sanders conducted a study with 403 research participants and found that when researchers distributed Web-based surveys, there was a 59% response rate versus a 54% response rate when they distributed paper-and-pencil surveys. Research participants were recruited by a representative of each private organization. The

organization could be a health care organization, clinic, or hospital. There were eight representatives from eight organizations helping to recruit research participants within his or her own organization.

The Web-based instrument showed instructions when each research participant clicks on the link received from a recruiter and/or representative. To complete the survey, each participant chose only one rating for each statement: never, seldom, occasionally, frequently, or almost always. Each statement had two questions: (a) how frequently does your manager use this tactic to influence you, and (b) how frequently do you prefer your manager to use this tactic to influence you?

The researcher sent an Internet link to each representative and the representative sent the link to his or her organization to ensure that participants take the survey online. The researcher also sent a letter to the recruiter's organization management asking for an approval for their employees to participate and/or for her recruiter to send out the link for their employees to participate in this study.

Instruments

Influence Tactics Instrument

The original instrument was tested by researchers (Kipnis, Schmidt & Wilkinson, 1980) with 754 subjects including bosses, coworkers, and subordinates and found the reliability for the "ingratiation" or soft category with coefficient alpha of (.70); the reliability for rationality with coefficient alpha of (.71) and the reliability for "assertiveness" or hard category with coefficient alpha of (.78). Furthermore, items were selected based on an examination of each item's correlation with other items representing the factor and their correlations with items in the remaining factors. The selected items

for this instrument were determined by high item intercorrelation within a factor, and low item intercorrelation with the remaining items were used as the final criteria for selecting items (Kipnis et al., 1980).

For this research, a modified version of the Kipnis et al. (1980) survey questionnaire was used. The researcher was authorized by the author of the survey, Dr. Schmidt, to use and modify 28 questions from the original questionnaire for dissertation purpose and also to have it as online format for distribution in an internet research survey. Only 28 items were pulled out of the 58-item original instruments because this study focused only on three variables--soft tactics, rational tactics, and hard tactics--whereas the original instruments measured all eight categories of tactics. There were 10 statements taken from the "assertive" category or as hard tactics in this present research. There were 11 statements taken from the "ingratiation" category or as soft tactics in this present study. There were seven statements taken from the "rationality" category. Each participant will rate each statement accordingly as the following: "never," "seldom," "occasionally," "frequently," and "almost always." In addition to the 28 questions, the survey contained a demographic section to seek data regarding age, race, and years working in the field (tenure).

Each statement had two questions: (a) how frequently does your manager use this tactic to influence you and (b) how frequently do you prefer your manager to use this tactic to influence you. The first question (how frequently does your manager use this tactic to influence you) was to keep track of how frequently in percentage do managers use certain tactics (hard, rational, and soft tactics) to influence males and females as well as different occupations and to compare the responses of the desired managerial tactics of

managers. The second question (how frequently do you prefer your manager to use this tactic to influence you) was to analyze preferences of tactics (hard, rational, and soft) of sex and occupational category. Therefore, MANCOVA was used to analyze the three dependent variables (preference ratings of soft tactics, rational tactics, and hard tactics) while controlling covariates (race, age, and tenure) from the data which were collected from responses of Modified Influence Tactics Instrument. These responses of preference ratings from all four occupational categories (medical doctor, nurse, information technology, and support staff) of both males and females were coded. Statistical Package for The Social Sciences (SPSS) version 15 was used to analyze data.

Demographic Data

Demographic information included participants' location (what region of the United States they live), age, race, tenure, sex, and occupation. The information was collected via an information page designed specifically for this study. All items were self-reported. Age was recorded as an ordinal category. Sex was recorded as a nominal categorical variable with two options (male, female). Tenure was record as an ordinal. Race was recorded as nominal category and occupation was recorded as nominal category.

Hypotheses

H01: There are no significant differences in the effect of sex on soft, hard, and rational managerial tactic preferences when race, age, and tenure are controlled.

H02: There are no significant differences in the effect of health care job categories on soft, hard, and rational managerial tactic preferences when race, age, and tenure are controlled.

Alternate Hypothesis

H1: There are significant differences in the effect of sex on managerial tactic preferences when race, age, and tenure are controlled.

H2: There are significant differences in the effect of health care job categories on managerial tactic preferences when race, age, and tenure are controlled.

Data Analysis

MANCOVA was used to analyze this data for two dependent variables (soft and rational tactics). MANCOVA is similar to MANOVA; however, MANCOVA uses the addition of covariates. Mann-Whitney U and Kruskal-Wallis were used to test the third dependent variable because violations related to the assumptions of MANOVA and a need to use non-parametric tests. If a study tests for just one dependent variable, then researchers can use ANOVA. The definition of ANOVA, analysis of variance, is "a statistical method for determining the existence of the difference among several population means" (Jaisingh, 2006, p. 373). Furthermore, Jaisingh noted that the purpose of using ANOVA is to determine whether there is a significant difference between the population means. However, this study was testing multiple dependent variables and controlling covariates; MANCOVA was used for two dependent variables. Thus, this research examined if there is a perception difference in preference of influence tactics between (a) occupational category such as medical doctors, nurses, information technology workers, and support staff, and (b) sex; male and female.

The effect of each treatment, occupational category or sex, is referred to as the *main effect*. The means for each variable's levels are called *marginal means* and represent the average separate effects of each independent variable, occupational category, or sex.

The *interaction effect* refers to combinations of levels of occupational category or sex said to interact if the difference between treatment means for two given levels of one factor, occupational category, is not equal for all levels of another factor, sex. To determine if there is an effect for each factor, occupational category or sex, the comparison of the marginal means within each factor indicates how much variability can be attributed to the overall effect of occupational category alone or sex alone.

The following are the methods for calculating variances for MANCOVA: (a) the error variance is calculated by summing the variances of each cell or combinations of factor levels such as occupational category (medical doctor, nurse, information technology worker, and support staff) or sex (male and female); (b) the variance of interaction effect of occupational category and sex is calculated by subtracting variance of occupational category, subtracting variance of sex, and subtracting error variance. Finally, the total of variance of this research is the combinations of occupational category variance, sex variance, the interaction effect variance of occupational category and sex, and the error variance.

According to power analysis, the sample size of this research was expected to have 110 subjects for medium size effect. However, the final total number of participants for this study is 111. The degree of freedom of the main effects was also taken into consideration to get a sample size for each occupation category. From this perspective, Cohen's formula was used to estimate the sample size (Cohen, 1988; Pauquet, n.d.).

The degrees of freedom of the between-subjects effects for occupation (u1) and for sex (u2) are as the following:

Occupation main effect, u1 = 4 – 1 = 3

Sex main effect, u2 = 2 – 1 = 1

To compute the cell size, this study has used the Cohen's formula:

nc = 1 + [(np - 1) (u + 1)]/c

Each letter of each group of letters in the formula above have the following meaning: "nc" is the number of subject per cell; "np" is the number of subjects assuming in one-way model; and "u" is the between subjects degree of freedom which is the number of groups minus 1. In this study, "c" is number of cells (4 x 2 = 8).

This research has the degree of freedom (occupation main effect), the degree of freedom (sex main effect), and a range of (*f)* values, this study can determine a range of sample sizes occupation category and sex from Table 8.4 in (Cohen, 1988, p.381). Additionally, Cohen (1988) gives solutions for effect sizes (*f*) ranging between .1 and .8.

According to Cohen (1998) in behavioral science, effective sizes are generally small and the range for (*f*) is usually between .00-.40. Based on the degree freedom of this study has with four occupation groups, the research method of the study is MANCOVA. The sample size was estimated of minimum of 25 research participants per occupation group or has a total of (*N* = 100) research participants at Cohen's effect size of (*f* = .40) with desired power at .80, and significance criterion (a =.01). These values are also shown in Table 1, column 1.

Table 1. Sample size calculations

Cohen's effect size	Sample based on one-way effect of Factor 1 (u=3)	Sample based on main effect of Factor 2 (u=1)	Cell size for main effect of Factor 1 (u=3)	Cell for main effect of Factor 1(u=3)
f	np1	np2	nc1	Nc2
0.10	388	568	195	147
0.15	175	259	88	66
0.20	98	148	50	38
0.25	63	95	32	25
0.30	44	67	23	18
0.35	33	49	17	13
0.40	25	38	13	10
0.50	17	25	9	7

Besides utilizing the Cohen's method, it is important to compare the sample size of the present study with other similar studies to verify if the sample size for the present study is consistent with other similar studies. The researcher found two similar studies on three influence tactics with four different occupation groups that have similar sample sizes. Wayne and Ferris (1990) conducted a research on impression management tactics and the effect of supervisor-subordinates with total N= 96 research participants. In 1990, Wayne and Ferris also conducted another research on three tactics: job-focused, self-focused, and supervisor-focused, and the supervisors' liking for subordinates with four work groups (tellers, bookkeeping, new accounts, and credits). They have found 84 subordinates (10 men and 74 women) and 23 supervisors (8 men and 15 women) to participate in this study creating a total N=107. The findings of these two studies are significant.

The present study uses parametric statistics and two non parametric tests (Mann-Whitney and Kruskal-Wallis). Summary statistics such as mean ratings for questions and

frequencies of certain responses are described along with e variability in the scores. Because this study collected the rating scores of each individual, it used an ordinal measurement; research participants were asked to rate their preferences on soft tactics, rational tactics, and hard tactics. Discrete variable technique was used to measure scores for this study. It was appropriate for this study to use discrete variables.

Once all data were in, the researcher first examined the data to ensure that its characteristics met the requirements of MANCOVA. Where they did not, the analyses were adjusted. This included testing MANCOVA with fewer dependent variables and use of non-parametric tests (Mann-Whitney U, Kruskal-Wallis) on the dependent variables removed from MANCOVA approaches. However, where the data met parametric requirements then researcher ran MANCOVA using SPSS. The researcher used SPSS, and selected MANOVA method to see if there was an interaction effect between IV1 sex, (male and female) and IV2 job categories (medical doctors, nurses, IT workers and support staff) on the DV1 preference of soft tactic, DV2 preference of hard tactic and DV3 preference of rational tactic. If there was no interaction effect, researcher examined the main effect. Measurements are never, seldom, occasionally, frequently, and almost always. The ratings were converted to numerical values for analyzing the data. Thus, 1 is "never", 2 is "seldom", 3 is "occasionally", 4 is "frequently", and 5 is "almost always." Covariates are age, race, and tenure. Because the majority of this sample is Caucasian, race variable was collapsed to two levels: Caucasian and non-Caucasian. For IV1 sex, 1 is "female", 2 is "male." For IV2 job categories, 1 is "medical doctor", 2 is "nurse", 3 is "information technology", and 4 is "support staff."

The researcher analyzed the data to see what influence tactics (soft, hard, rational) each job category worker prefers; and the researcher analyzed if there were any differences in preferences between male and female workers. Each statement of the 28-item Modified Influence Tactics questionnaire had two parts: part "a" and part "b". Part "a" of each statement is used to collect the frequency of certain tactics (how often a manager uses certain tactic). Descriptive statistics (e.g., tables, graphs, chart) were used to organize and summarize data to identify trends and other important characteristics of these data.

Expected Findings

The researcher predicted all four occupation categories would like to receive soft tactics and rational tactics from their managers. Another prediction was that males and females of these four occupational categories prefer to receive soft tactics or rational tactics from their managers. Ringer and Boss (2000) stated that hard tactics are less acceptable than soft tactics when used to influence others. Falbe and Yukl (1992) found that in general, managers who used a combination of soft tactics were more effective than when they used hard tactics to influence their subordinates. Tepper, Eisenbach, Kirby, and Potter (1998) found that managers who have used soft tactics and rational tactics have more respect and better relationships with their subordinates. Based on the previous study, researcher expected that if it is more effective to use soft tactics and rational tactics than hard tactics, then perhaps subordinates prefer their managers to use soft tactics and rational tactics more than hard tactics to influence them. Thus, the main prediction of the present study was that soft and rational tactics preferences are significantly higher than hard tactics. Medical doctors and information technology workers would have stronger

preferences for rational tactics. Nurses and support staff would have stronger preferences for soft tactics. Women would have stronger preferences for soft tactics; and men would have stronger preferences for rational tactics.

CHAPTER 4. DATA COLLECTION AND ANALYSIS

Introduction

The objective of this study was to determine if there were differences among occupational categories and groups based on sex on their preferences of hard, rational, and soft tactics. It also attempted to describe how employees in certain occupational categories preferred a variety of managerial tactics from their managers. Specifically this study seeks to identify whether there is a significant difference between how men and women perceived management tactics as identified by Somech and Drack-Zahavy (2002). Somech and Drack-Zahavy (2002) suggested that managers use hard, rational, and soft tactics to influence subordinates. Moreover, this study also analyzes any significant differences between the same management tactics and any occupational category of the organization under study. This chapter describes the results of these analyses. First, the chapter presents the hypothesis to refresh the reader and then demographic variables are presented. Second, it presents the reliability of measurement for dependent variables. Next, the chapter presents the discussion of characteristics of the data collected and appropriateness for evaluation in using MANOVA. Finally, the chapter presents the specific results of the analysis for each research question.

Null Hypothesis

H01: There are no significant differences in the effect of sex on soft, hard, and rational managerial tactic preferences when race, age, and tenure are controlled.

H02: There are no significant differences in the effect of health care job categories on soft, hard, and rational managerial tactic preferences when race, age, and tenure are controlled.

Alternate Hypothesis

H1: There are significant differences in the effect of sex on managerial tactic preferences when race, age, and tenure are controlled.

H2: There are significant differences in the effect of health care job categories on managerial tactic preferences when race, age, and tenure are controlled.

Three main variables were examined: sex, occupational category, and management tactics. Data for analysis was collected via surveys completed by personnel employed by health care organizations located in the United States.

Demographics

Researcher had received a total of 138 surveys from employees who are working in health care organizations located in the United States. However, only 111 participants completed all questions on the survey instruments, 74 of which were female (64%). Thus, the data for this study consisted of 111 surveys that were completed. Participants' occupational categories consisted of 26 doctors (23.6%), 34 nurses (34.6%), 26 information technology staff (23.4%), and 25 support staff (22.5%). These data are shown in Table 2, sex and occupational category are the independent variables used in the MANCOVA analysis. More demographic information is presented later in this section.

Table 2. Independent Variables

		Frequency	Percent
Sex	Female	71	64.0
	Male	40	36.0
Occupation	Doctor	26	23.4
	Female Doctor	13	18.3
	Male Doctor	13	32.5
	Nurse	34	30.6
	Female Nurse	33	46.5
	Male Nurse	1	2.5
	IT	26	23.4
	Female IT	7	9.9
	Male IT	19	47.5
	Support Staff	25	22.5
	Female Support Staff	18	25.4
	Male Support Staff	7	17.5

Demographic variables are summarized in Table 3 to have a better understanding on the controlled covariates (race, age, tenure) that were parts of the research questions of this study as stated above. Three of these variables are covariates in the analysis (age, tenure and race). The majority of the sample (60 or 54.1%) were Caucasian, followed by Asian-American (39 or 35.1%). The remaining 12 individuals were distributed among African-American, Hispanic, and other categories.

The group that has the highest number of participants of this sample was between the ages of 18-35 (52 or 46.8%), followed by 36-45 (30 or 27%), with the remaining split between the 46-55 age group and greater than 55 age group. Tenure statistics followed a

similar distribution, with the most participants having 1-5 years (41 or 36.9%), followed by 6-10 years (30 or 27%), and 11-20 years (22 or 19.8%), with the remaining over 20 years of tenure.

Finally, geographical location statistics indicated the regions that had the highest number of participants were the Midwest (43 or 38.7%), Southwest (25 or 22.5%), West Coast (California, Arizona) (17 or 15.3%), Northeast (12 or 10.8%), Southeast (9 or 8.1) and Northwest (Washington, Oregon, Alaska, Idaho) (4 or 3.6), with the other geographical areas making up the remaining 1%.

Table 3. Sample Demographic

		Frequency	Percent
Race	African American	5	4.5
	Asian American	39	35.1
	Caucasian	60	54.1
	Hispanic	3	2.7
	Other	4	3.6
Location	Midwest	43	38.7
	Southwest	25	22.5
	Southeast	9	8.1
	Northeast	12	10.8
	Northwest (OR, ID, AK, WA)	4	3.6
	West Coast (CA, AZ)	17	15.3
	Other	1	.9
Age	18-35 years	52	46.8
	36-45 years	30	27.0
	46-55 years	15	13.5
	56-65 years	14	12.6

Table 3. Sample Demographic (*continued*)

		Frequency	Percent
Tenure	1-5 years	41	36.9
	6-10 years	30	27.0
	11-20 years	22	19.8
	21-30 years	9	8.1
	31- 40 years	7	6.3
	41-50 years	2	1.8

Note: N = 111

Reliability of Survey Subscale

The researcher used the Cronbach's alpha method to test the reliability of the survey instruments applied in this study. Cronbach's alpha is the measure of the squared correlation between observed and true scores. Reliability is a measure of the ratio of the true score variance to the observed score variance (Nunnally, 1978). Computation of alpha is based on the reliability of a test relative to other tests with same number of items, and measuring the same construct of interest (Hatcher, 1994). Nunnally (1978) indicated 0.7 to be an acceptable reliability coefficient but lower thresholds are sometimes used in the literature. When data have a multidimensional structure, Cronbach's alpha will usually be low (Nunnally, 1978). Table 4 provides the Cronbach's coefficient alpha score and the meaning of reliability.

Table 4. Cronbach's Coefficient Alpha and Their Meaning Relative to Reliability

a	Meaning
0.00< *a* <0.30	Unreliable, non-believable
0.30< *a* <0.50	Somewhat reliable, a little believable
0.50< *a* <0.70	Generally reliable, believable
0.70< *a* <0.90	Very reliable, very believable
0.90< *a* <1.00	Extremely reliable, extremely believable

Grouped survey items combined into summary scores may pose problems when the included items do not have internal consistency. For example, items that do not correlate well with other items in the group may negatively impact the validity of the summary score and cause high variances of the summary score means. The degree of internal consistency of grouped items of a survey can be assessed using a reliability analysis technique called "inter-item correlation" (Portney & Watkins, 2000). As stated by these two authors, the analysis uses a correlation matrix of all the items in the group to arrive at a single summary "correlation" between all the items. The value is known as "Cronbach's alpha." Values close to .7 are generally considered acceptable, although the preference is to have internal consistency (>.7). Table 5 shows summary of Cronbach's alpha for the subscale used to measure preference tactics.

Table 5. Cronbach's Alpha Coefficient for Preferred Subscale

Survey for Preferred Subscale	Coefficients Alpha
Preference for Hard Tactics	.736
Preference for Soft Tactics	.695
Preference for Rational Tactics	.658

Note. $N = 111$

Description of Subscale Items and Reliability

The following tables present detailed information on the subscales used in this study. This information is presented relative to reliability because this study is using the subscales in populations where they had not been used before. It is important for the reader to see how items were answered and to understand how these responses may be related to alphas presents in Table 5. Tables 6, 7, and 8 summarized the response frequencies and percentages for each item that make up, respectively, participants' "preferences" for the use of hard, soft, and rational tactics by managers. The subscales appeared to be reasonably reliable.

Table 6. Preference for Hard Tactics

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q1B *Kept checking up on you* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	14	48	37	8	5
Percent	22.6	43.2	33.3	7.2	3.6
Q2B *Simply ordered you to do what was asked.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	35	42	21	7	6
Percent	31.5	37.8	18.9	6.3	5.4
Q7B *Demanded that you do what he or she requested.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	67	31	10	1	2
Percent	60.4	27.9	9.0	.9	1.8
Q10B *Set a time deadline for you to do what he or she asked.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	10	18	35	28	20
Percent	9.0	16.2	31.5	25.2	18.0
Q15B *Told you that the work must be done as ordered or you should propose a better way.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	48	32	20	8	3
Percent	43.2	28.8	18.0	7.2	2.7

Table 6. Preference for Hard Tactics (*continued*)

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q18B *Became a nuisance (kept bugging you until you did what he or she wanted).* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	79	21	3	6	2
Percent	71.2	18.9	2.7	5.4	1.8
Q22B *Repeatedly reminded you about what he or she wanted.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	50	40	15	5	1
Percent	45.0	36.0	13.5	4.5	.9
Q23B *Expressed his or her anger verbally.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	79	23	4	4	1
Percent	71.2	20.7	3.6	3.6	.9
Q26B *Had a showdown in which he or she confronted you face to face.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	84	18	6	1	2
Percent	75.7	16.2	5.4	.9	1.8

Table 6. Preference for Hard Tactics (*continued*)

1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always

Q27B *Pointed out that the rules required that you comply.*
How frequently do you prefer your manager to use this tactic?
(never/ seldom/ occasionally/ frequently/ almost always)

Frequency	50	34	19	6	2
Percent	45.0	30.6	17.1	5.4	1.8

Inter-item correlation: Cronbach's alpha = .736

Table 7. Preference for Soft Tactics

1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always

Q3B *Made you feel important ("only you have the brains, talent to do this").*
How frequently do you prefer your manager to use this tactic?
(never/ seldom/ occasionally/ frequently/ almost always)

Frequency	15	23	37	28	8
Percent	13.5	20.7	33.3	25.2	7.2

Q4B *Acted very humbly to you while making his or her request.*
How frequently do you prefer your manager to use this tactic?
(never/ seldom/ occasionally/ frequently/ almost always)

Frequency	18	22	28	29	4
Percent	16.2	19.8	25.2	26.1	2.6

Table 7. Preference for Soft Tactics (continued)

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q8B *Acted in a friendly manner prior to asking for what he or she wanted.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	16	15	27	32	21
Percent	14.4	13.5	24.3	28.8	18.9
Q11B *Made you feel good about him or her before making his or her request.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	38	33	21	15	4
Percent	34.2	29.7	18.9	13.5	3.6
Q12B *Inflated the importance of what he or she wanted you to do.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	49	32	21	7	2
Percent	44.1	28.8	18.9	6.3	1.8
Q16B *Praised you.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	5	12	41	39	14
Percent	4.5	10.8	36.9	35.1	12.6
Q19B *Sympathized with you about added problems that his or her request has caused.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	21	23	41	18	8
Percent	18.9	20.7	36.9	16.2	7.2

Table 7. Preference for Soft Tactics (continued)

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q21B *Waited until you appeared in a receptive mood before asking.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	40	27	27	12	5
Percent	36.0	24.3	24.3	10.8	4.5
Q24B *Showed his or her need for your help.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	7	11	63	23	7
Percent	6.3	9.9	56.8	20.7	6.3
Q25B *Asked in a polite way.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	0	2	9	32	68
Percent	0.0	1.8	8.1	28.8	61.3
Q28B *Pretended he or she was letting you decide to do what he or she wanted (act in a pseudo-democratic fashion).* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	67	28	12	3	1
Percent	60.4	25.2	10.8	2.7	.9

Inter-item correlation: Cronbach's alpha = .695

Table 8. Preference for Rational Tactics

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q5B *Wrote a detailed plan that justified his or her ideas.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	23	22	33	23	10
Percent	20.7	19.8	29.7	20.7	9.0
Q6B *Presented you with information in support of his or her point of view.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	3	12	47	30	19
Percent	2.7	10.8	42.3	27.0	17.1
Q9B *Explained the reasons for his or her request.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	1	2	19	45	44
Percent	.9	1.8	17.1	40.5	39.6
Q13B *Used logic to convince you.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	8	11	38	32	22
Percent	7.2	9.9	34.2	28.8	19.8
Q14B *Wrote a memo that described what he or she wanted.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	15	22	35	23	16
Percent	13.5	19.8	31.5	20.7	14.4

Table 8. Preference for Rational Tactics (*continued*)

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q17B *Offered a compromise over the issue (she or he gave in a little).* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	11	16	54	27	3
Percent	9.9	14.4	48.6	24.3	2.7
Q20B *Demonstrated his or her competence to you before making his or her request.* How frequently do you prefer your manager to use this tactic? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	36	25	24	19	7
Percent	32.4	22.5	21.6	17.1	6.3
Inter-item correlation: Cronbach's alpha = .658					

Tables 9, 10, and 11 similarly show, respectively, participants' perceptions of the hard, soft and rational tactics used by managers. Table 12 displays the summary scores, on a 0-100 scale, for each of the dependent variables (hard tactic, soft tactic, and rational tactic), for both preferred tactics and used tactics.

Table 9. Hard Tactics Used

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q1A *Kept checking up on you* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	25	50	26	10	0
Percent	22.5	45.0	23.4	9.0	0.0
Q2A *Simply ordered you to do what was asked.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	29	38	27	14	3
Percent	26.1	34.2	24.3	12.6	2.7
Q7A *Demanded that you do what he or she requested.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	57	32	14	5	3
Percent	51.4	28.8	12.6	4.5	2.7
Q10A *Set a time deadline for you to do what he or she asked.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	9	29	37	28	8
Percent	8.1	26.1	33.3	25.2	7.2
Q15A *Told you that the work must be done as ordered or you should propose a better way.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	53	32	20	4	2
Percent	47.7	28.8	18.0	3.6	1.8

Table 9. Hard Tactics Used (*continued*)

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q18A *Became a nuisance (kept bugging you until you did what he or she wanted).* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	65	25	14	4	3
Percent	58.6	22.5	12.6	3.6	2.7
Q22A *Repeatedly reminded you about what he or she wanted.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	37	46	25	1	2
Percent	33.3	41.4	22.5	.9	1.8
Q23A *Expressed his or her anger verbally.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	66	27	14	2	2
Percent	59.5	24.3	12.6	1.8	1.8
Q26A *Had a showdown in which he or she confronted you face to face.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	76	22	10	2	1
Percent	68.5	19.8	9.0	1.8	.9
Q27A *Pointed out that the rules required that you comply.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	45	33	27	3	3
Percent	40.5	29.7	24.3	2.7	2.7

Inter-item correlation: Cronbach's alpha = .768

Table 10. Soft Tactics Used

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q3A *Made you feel important ("only you have the brains, talent to do this").* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	22	31	36	16	6
Percent	19.8	27.9	32.4	14.4	5.4
Q4A *Acted very humbly to you while making his or her request.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	17	29	29	28	8
Percent	15.3	26.1	26.1	25.2	7.2
Q8A *Acted in a friendly manner prior to asking for what he or she wanted.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	8	13	32	38	20
Percent	7.2	11.7	28.8	34.2	18.0
Q11A *Made you feel good about him or her before making his or her request.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	28	46	24	7	6
Percent	25.2	41.4	21.6	6.3	5.4
Q12A *Inflated the importance of what he or she wanted you to do.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	28	38	23	18	4
Percent	25.2	34.2	20.7	16.2	3.6

Table 10. Soft Tactics Used (*continued*)

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q16A *Praised you.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	7	29	46	21	8
Percent	6.3	26.1	41.4	18.9	7.2
Q19A *Sympathized with you about added problems that his or her request has caused.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	21	31	39	16	4
Percent	18.9	27.9	35.1	14.4	3.6
Q21A *Waited until you appeared in a receptive mood before asking.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	43	38	23	7	0
Percent	38.7	34.2	20.7	6.3	0.0
Q24A *Showed his or her need for your help* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	10	19	56	21	5
Percent	9.0	17.1	50.5	18.9	4.5
Q25A *Asked in a polite way.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	3	5	19	30	54
Percent	2.7	4.5	17.1	27.0	48.6

Table 10. Soft Tactics Used (*continued*)

1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always

Q28A *Pretended he or she was letting you decide to do what he or she wanted (act in a pseudo-democratic fashion).*
How frequently does your manager use this tactic to influence you?
(never/ seldom/ occasionally/ frequently/ almost always)

Frequency	55	31	16	8	1
Percent	49.5	27.9	14.4	7.2	.9

Inter-item correlation: Cronbach's alpha = .689

Table 11. Rational Tactics Used

1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always

Q5A *Wrote a detailed plan that justified his or her ideas.*
How frequently does your manager use this tactic to influence you?
(never/ seldom/ occasionally/ frequently/ almost always)

Frequency	42	31	21	15	2
Percent	37.8	27.9	18.9	13.5	1.8

Q6A *Presented you with information in support of his or her point of view.*
How frequently does your manager use this tactic to influence you?
(never/ seldom/ occasionally/ frequently/ almost always)

Frequency	9	30	39	26	7
Percent	8.1	27.0	35.1	23.4	6.3

Q9A *Explained the reasons for his or her request.*
How frequently does your manager use this tactic to influence you?
(never/ seldom/ occasionally/ frequently/ almost always)

Frequency	1	12	31	36	31
Percent	.9	10.8	27.9	32.4	27.9

Table 11. Rational Tactics Used (*continued*)

	1 Never	2 Seldom	3 Occasionally	4 Frequently	5 Almost Always
Q13A *Used logic to convince you.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	11	16	43	34	7
Percent	9.9	14.4	38.7	30.6	6.3
Q14A *Wrote a memo that described what he or she wanted.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	21	28	24	25	13
Percent	18.9	25.2	21.6	22.5	11.7
Q17A *Offered a compromise over the issue (she or he gave in a little).* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	18	41	39	12	1
Percent	16.2	36.9	35.1	10.8	.9
Q20A *Demonstrated his or her competence to you before making his or her request.* How frequently does your manager use this tactic to influence you? (never/ seldom/ occasionally/ frequently/ almost always)					
Frequency	36	36	25	11	3
Percent	32.4	32.4	22.5	9.9	2.7

Inter-item correlation: Cronbach's alpha = .676

Table 12. Summary Scores (0-100) of Preferred and Used Tactics

		N	Minimum	Maximum	Mean	SD
Preferred tactics	Hard	111	.00	75.00	23.45	13.14
	Soft	111	11.36	79.55	45.13	13.42
	Rational	111	14.29	92.86	54.41	15.85
Used tactics	Hard	111	2.50	70.00	24.53	13.72
	Soft	111	15.91	70.45	42.79	13.07
	Rational	111	7.14	92.86	44.12	15.75

Preferred Tactics

The means presented in the Table 12 provided the reader with an overview of what employees report their preferred tactics are and what their experiences are of tactics used by their managers at work. The means are presented for information. Examination of differences by types of tactics for different groups examining this study (e.g., occupational groups, sex) will be discussed later in this chapter.

Evaluation of Data Characteristics of MANCOVA

The data collected were evaluated for appropriateness for evaluation by MANCOVA. According to Howell (1982), when using MANCOVA, the sample should have normal distribution. General requirements are that the comparison groups should have normal curves on the dependent variables (e.g., skewness and kurtosis are within normal range), equal sample sizes for comparison groups, and the variance among groups must be homogeneous. At the very least, two of these three parameters must be met for such parametric statistics to be robust, or the shapes of the data, if not normal, must be similar. Without meeting these criteria, non-parametric approaches are required.

For the current study, unfortunately the data did not, as a whole, meet these criteria. First, the group sizes were unequal for all planned analyses. Thus, the other required characteristics for parametric statistics had to be met to proceed with the planned analyses. The following tables present the reader with data demonstrating these findings and which serve as a basis for adjustments made to the planned analytic strategies for this work to provide the best fit for the original hypotheses.

Tables 13 and 14 first present information on tests of homogeneity of variance. To examine if variances are homogenous, a Levene statistics is computed. If the p-value associated with the Levene's test is equal to or less than .05, then variances are different; meaning variances are not homogeneous and do not meet the requirements for parametric statistics. Table 13 shows that the variances of hard tactics by groups defined by sex are not homogeneous, but rational and soft tactics are homogeneous. Thus for tests by sex, homogeneity of variance meets the requirements for rational and soft tactics, but not hard tactics.

Table 13. Tests of Homogeneity of Variances by Group Defined by Sex

Dependent Variables	Levene Statistic	df 1	df2	Sig.
Hard	4.346	1	109	.039
Rational	.246	1	109	.621
Soft	.123	1	109	.726

In contrast, Table 14 shows that the variances of rational, soft, and hard tactics for occupational groups are homogeneous, thus meeting requirements for analysis in terms of homogeneity of variance.

Table 14. Tests of Homogeneity of Variances for Groups Defined by Occupational Categories

Dependent Variables	Levene Statistic	df	df	Sig.
Hard	1.554	3	107	.205
Rational	1.017	3	107	.388
Soft	2.161	3	107	.097

Based on the differing sample sizes by contrast groups and these results testing only for homogeneity of variance across comparison groups, we already know that hard tactics will need to be examined using non-parametric to study differences by groups defined by sex.

To further evaluate the data for appropriateness, examination of the data by dependent variable for each of the respective group contrasts (e.g., dependent variables by sex, or by occupation group) was completed in terms of examining the shapes of the distributions. These analyses are presented in Table 15. To interpret the data presented there, the reader is reminded that Howell (1982) and Brown (1996) stated that if the absolute value of skewness is larger than two times the standard error of skewness then the skewness is not normal regardless of positive or negative sign. If the absolute value of kurtosis is larger than two times the standard error of the standard error of the kurtosis then the kurtosis is not normal regardless of positive or negative sign. Furthermore, Lei and Lomax (2005) stated that when absolute value of skewness is above .7 and absolute value of kurtosis is above 3.5 then the skewness and kurtosis are not normal. Thus if the data for the contrast groups are not normal or at least similar, the analyses cannot be done

and these indices for evaluating skewness and normality serve as the guidelines by which to interpret the findings presented in Table 15.

As shown in Table 15, for rational and soft, kurtosis and skewness are normal across the occupation groups and the groups defined by sex. For hard tactics, however, doctors, nurses, and females do not have normal kurtosis or skewness. Males have normal kurtosis but not normal skewness. Additionally, IT professionals and support staff have normal kurtosis and skewness. Thus, for hard tactics, some occupational groups have normal kurtosis and skewness while some do not show normal kurtosis and skewness. So the decision to use non-parametric statistics to evaluate differences by groups defined by sex on hard tactics was again affirmed. Additionally, it was discovered that non-parametric approaches must also be used for examining differences by occupational group for examining the data related to use of hard tactics.

Table 15. Summary of Skewness, Standard Error of Skewness, Kurtosis, Standard Error of Kurtosis, and Variance Information for Evaluating the Data Obtained for Appropriateness of MANCOVA

Sub groups	Independent Variables	Dependent Variables: Types of Preferred				
N's	(Occupational Groups)	Tactics Reported in Health Care Org. *Rational Tactics*				
		Skewness	SE Skewness	Kurtosis	SE Kurtosis	Variance
26	Doctors	-0.428+	.456	-0.179++	.887	0.444
34	Nurses	-0.306+	.403	-0.335++	-.335	0.401
26	IT	0.118+	.456	-0.748++	-.748	0.230
25	Sup. Staff	-0.208+	.464	-0.107++	.902	0.438
	Participant Sex					
71	Female	-0.014+	.285	-0.228++	.563	0.407
40	Male	-0.335+	.374	0.055++	.733	0.363
N's	(Occupational Groups)	Tactics Reported in Health Care Org. *Soft Tactics*				
		Skewness	SE Skewness	Kurtosis	SE Kurtosis	Variance
26	Doctors	0.547+	.456	-0.444++	.887	0.422
34	Nurses	-0.05+	.403	-0.641++	.788	0.337
26	IT	-0.475+	.456	0.086++	.887	0.162
25	Sup. Staff	0.305+	.464	0.576++	.902	0.182
	Participant Sex					
71	Female	-0.031+	.285	-0.636++	.563	0.275
40	Male	-0.335+	.374	0.565++	.733	0.293

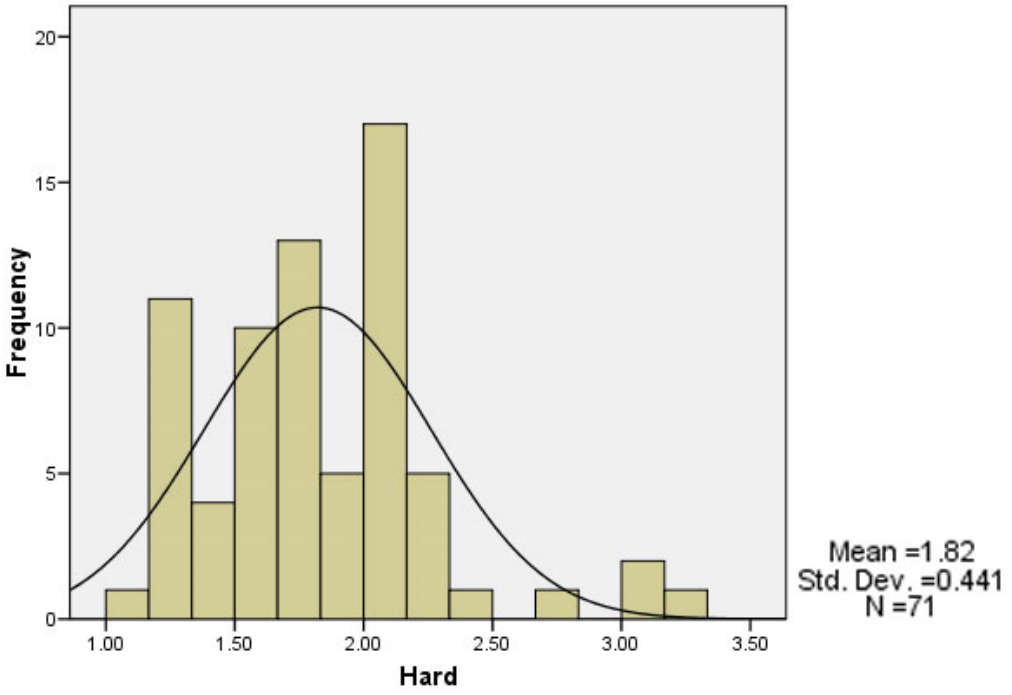
Table 15. Summary of Skewness, Standard Error of Skewness, Kurtosis, Standard Error of Kurtosis, and Variance Information for Evaluating the Data Obtained for Appropriateness of MANCOVA (*continued*)

Sub groups N's	Independent Variables (Occupational Groups)	Dependent Variables: Types of Preferred Tactics Reported in Health Care Org. *Hard Tactics*				
		Skewness	SE Skewness	Kurtosis	SE Kurtosis	Variance
26	Doctor	2.055⁻	.456	7.468⁻⁻	.887	0.304
34	Nurses	1.252⁻	.403	1.995⁻⁻	.788	0.254
26	IT	0.252+	.456	-.836++	.887	0.386
25	Sup. Staff	0.668+	.464	0.002++	.902	0.227
	Participant Sex					
71	Female	1.118⁻	.285	2.112⁻⁻	.563	0.195
40	Male	0.749⁻	.374	1.178++	.733	0.362

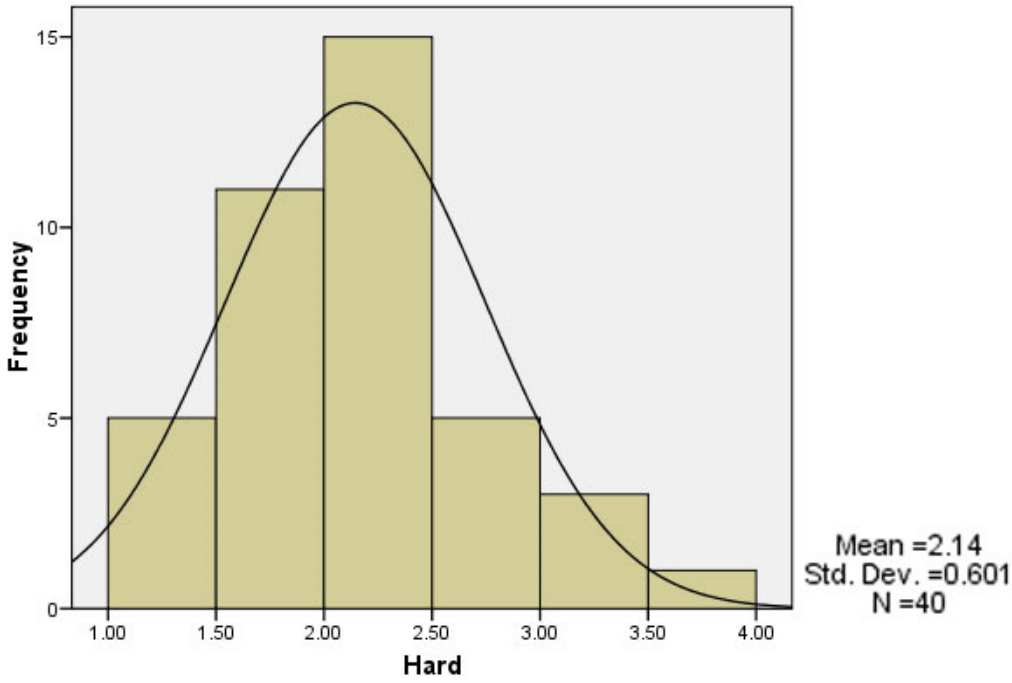
Note. N= 111
"+" if skewness is less than 2x the standard error of skewness, the distribution is normal
"++" if kurtosis is less than 2x the standard error of kurtosis, the distribution is normal
"-" if skewness is 2x or more the standard error of skewness, the distribution is not normal
"--" if kurtosis is 2x or more the standard error of kurtosis, the distribution is not normal

In addition to the summary provided in Table 15, the following figures present histograms of the distributions separately for each dependent variable by the groups defined by sex (Figures 1.1, 1.2, and 1.3) and by the groups defined by occupational group (Figures 2.1, 2.2, and 2.3).

Figure 1.1 Hard tactics histograms by groups defined by sex

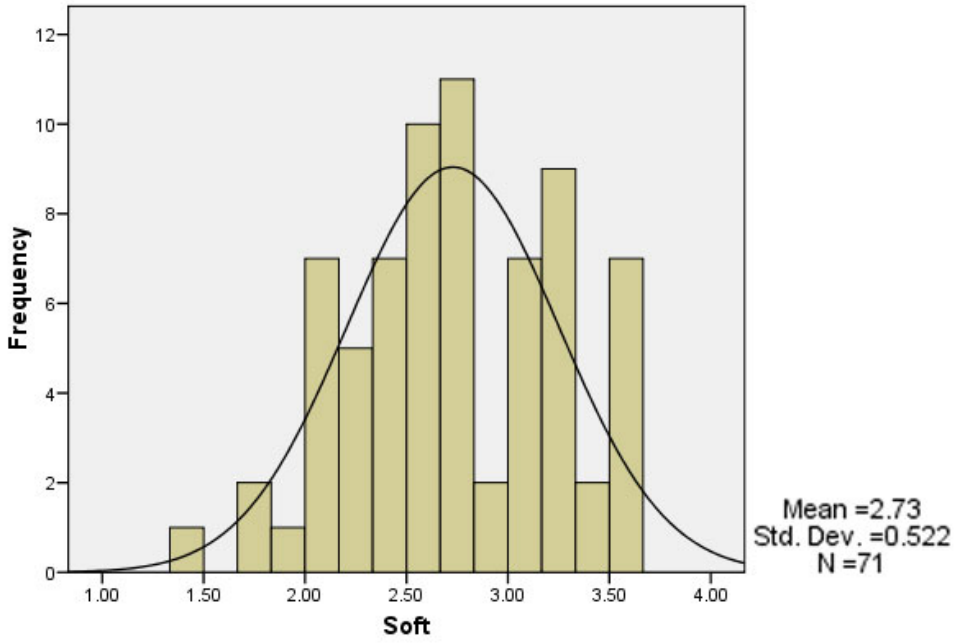


Preferred Hard Tactics for Females

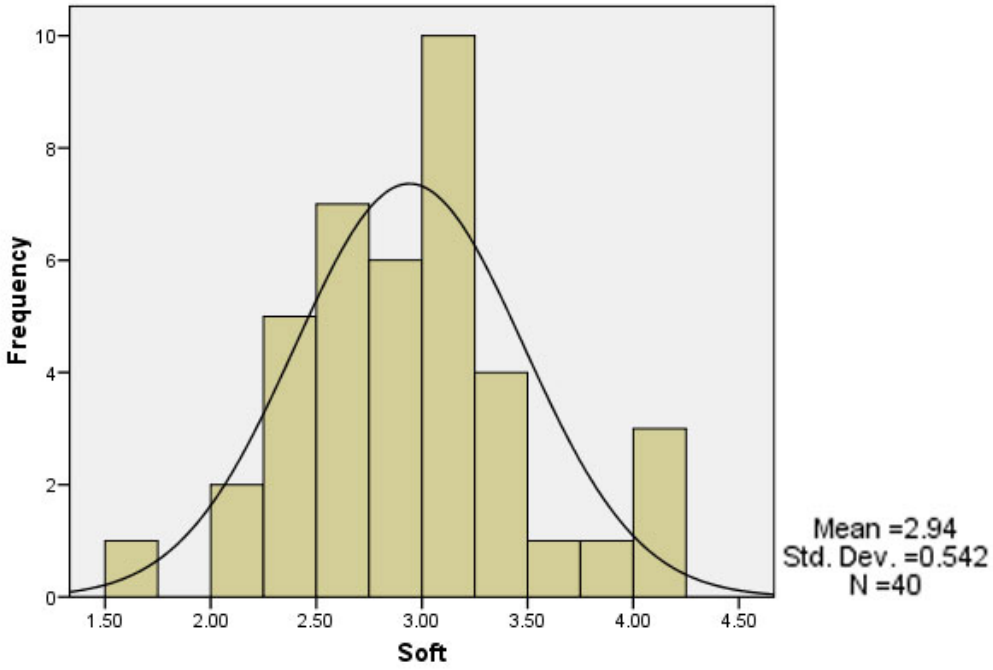


Preferred Hard Tactics for Males

Figure 1.2 Soft tactics histograms by groups defined by sex

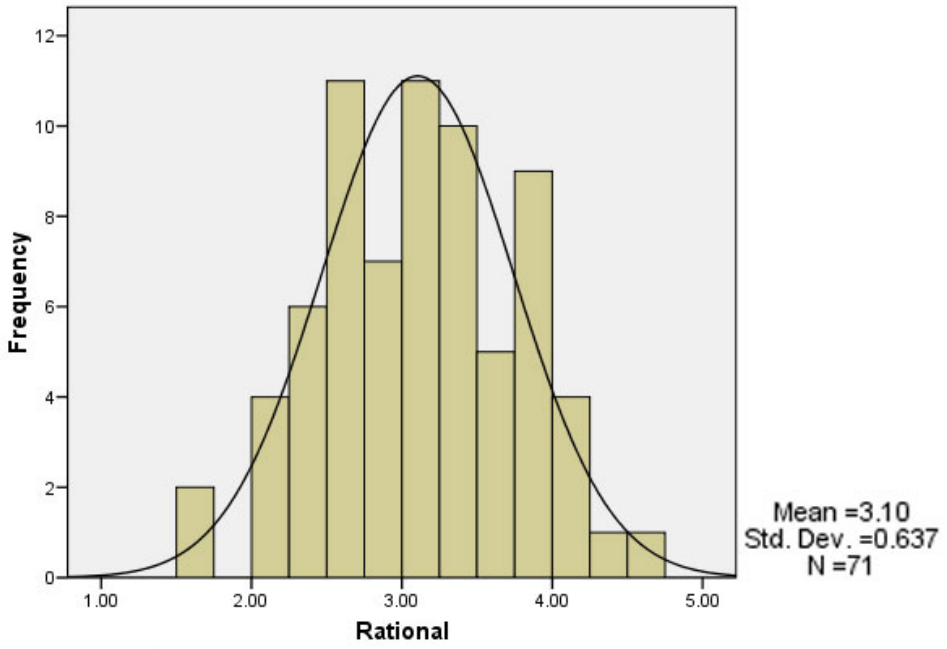


Preferred Soft Tactics for Females

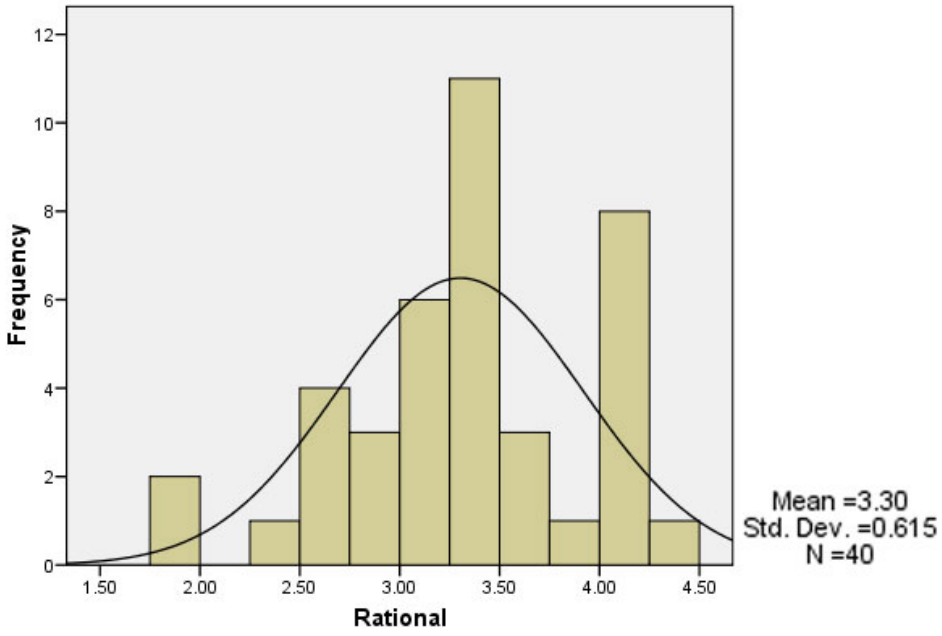


Preferred Soft Tactics for Males

Figure 1.3 Rational tactics histograms by groups defined by sex.

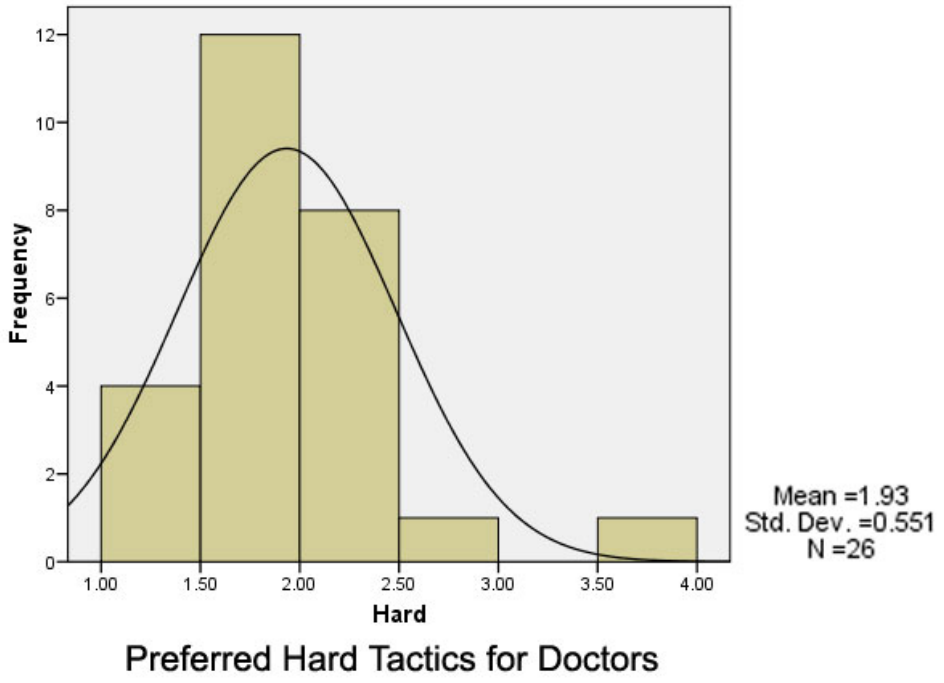


Preferred Rational Tactics for Females



Preferred Rational Tactics for Males

Figure 2.1 Hard tactics histograms by groups defined by occupation



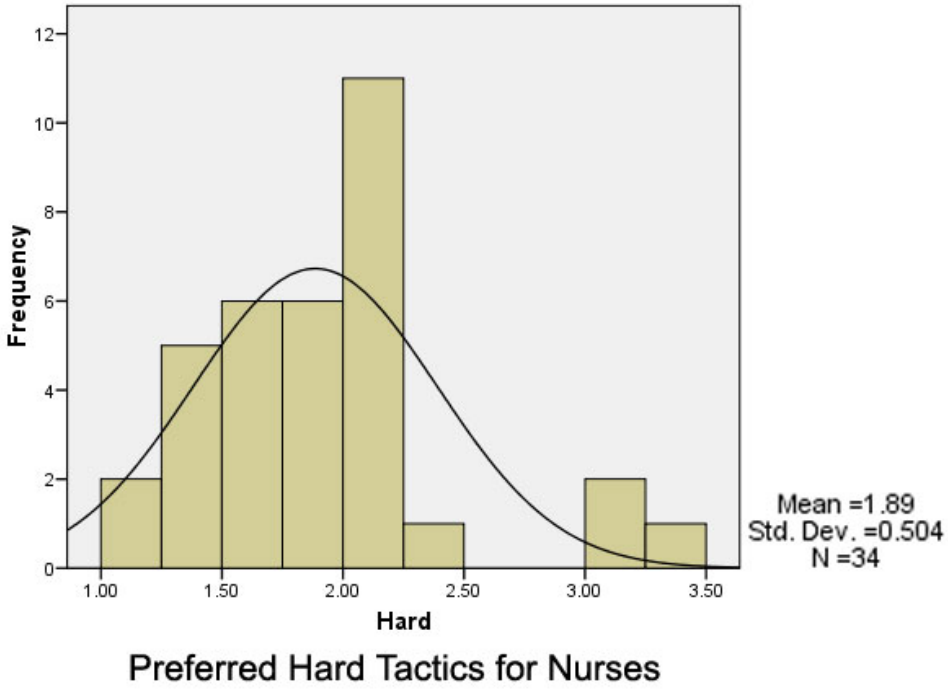
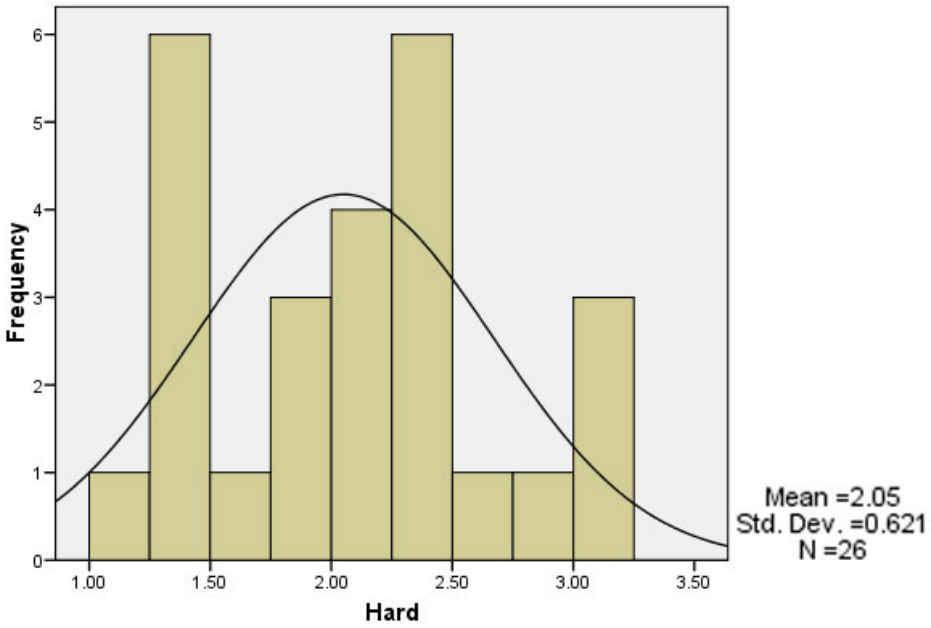
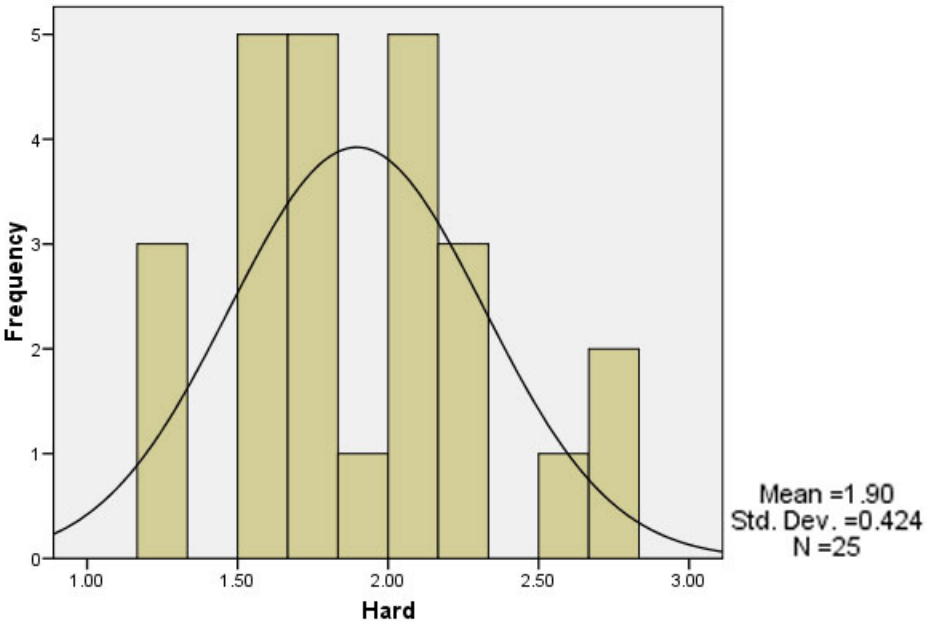


Figure 2.1 Hard tactics histograms by groups defined by occupation (*continued*)

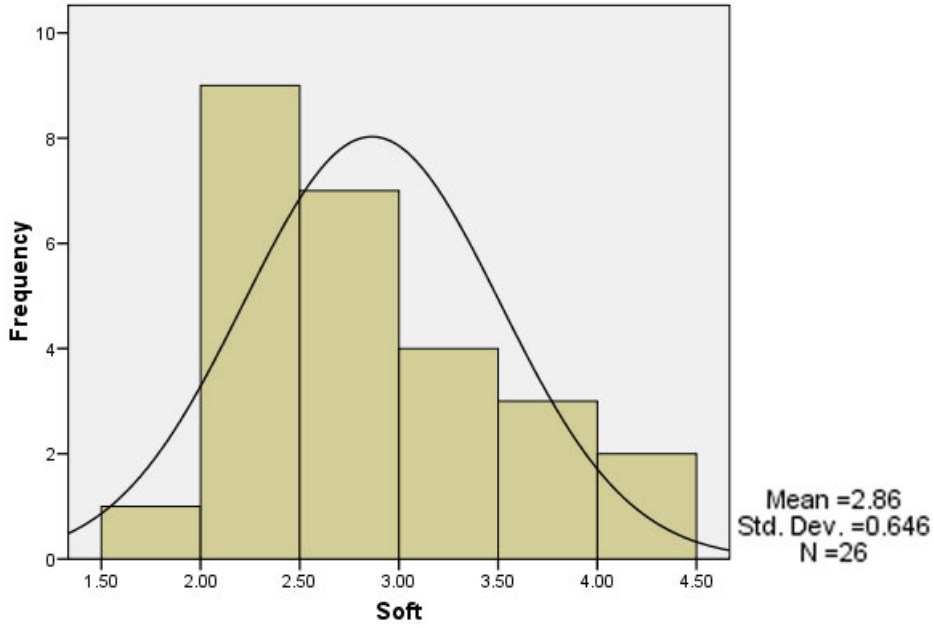


Preferred Hard Tactics for IT Professionals

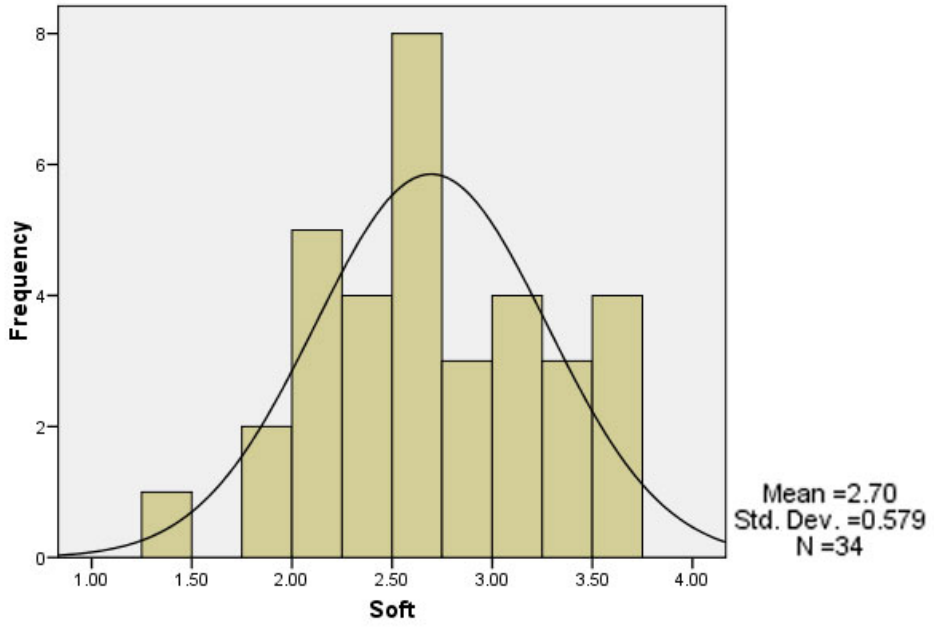


Preferred Hard Tactics for Support Staff

Figure 2.2 Soft tactics histograms by groups defined by occupation

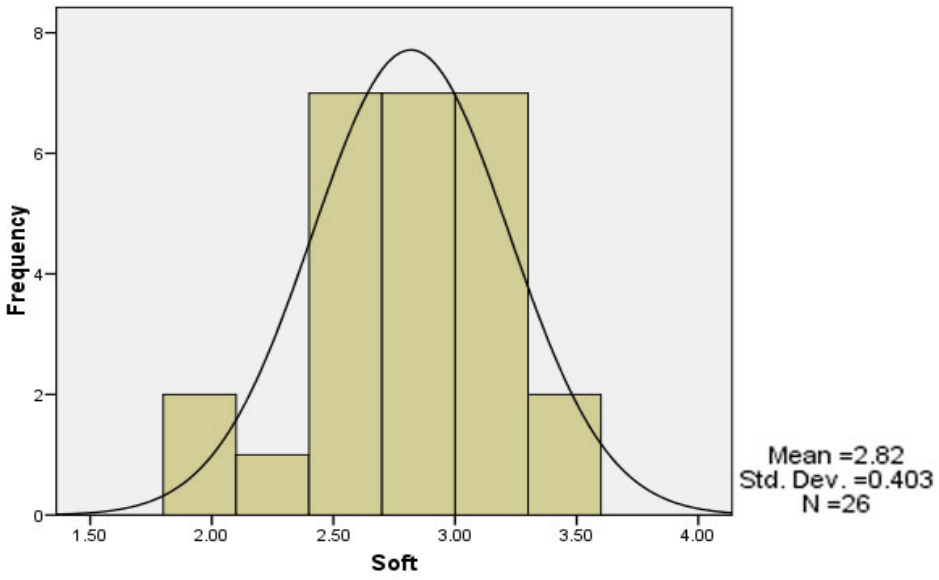


Preferred Soft Tactics for Doctors

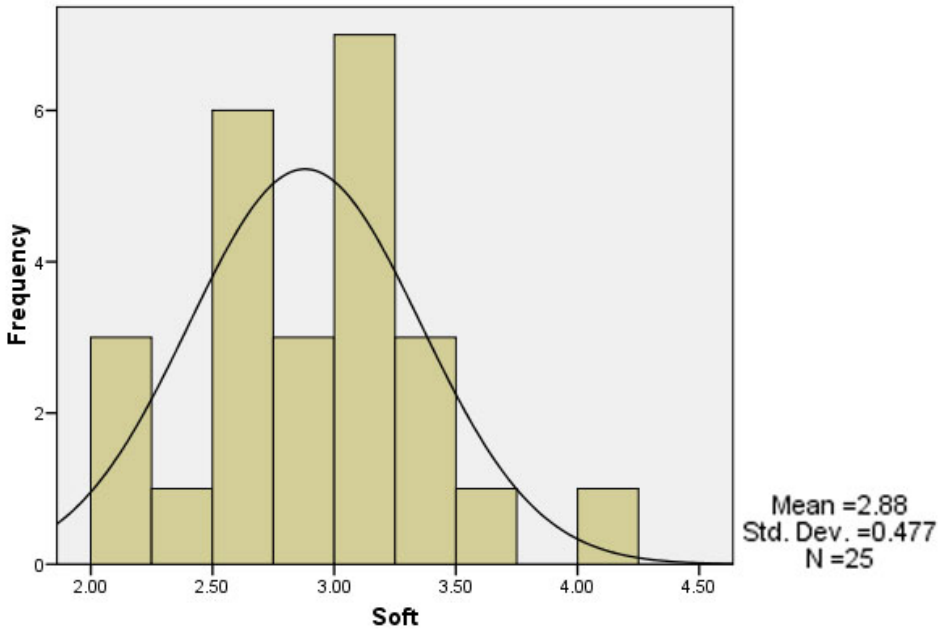


Preferred Soft Tactics for Nurses

Figure 2.2 Soft tactics histograms by groups defined by occupation (*continued*)



Preferred Soft Tactics for IT Professionals



Preferred Soft Tactics for Support Staff

Figure 2.3 Rational tactics histograms by groups defined by occupation

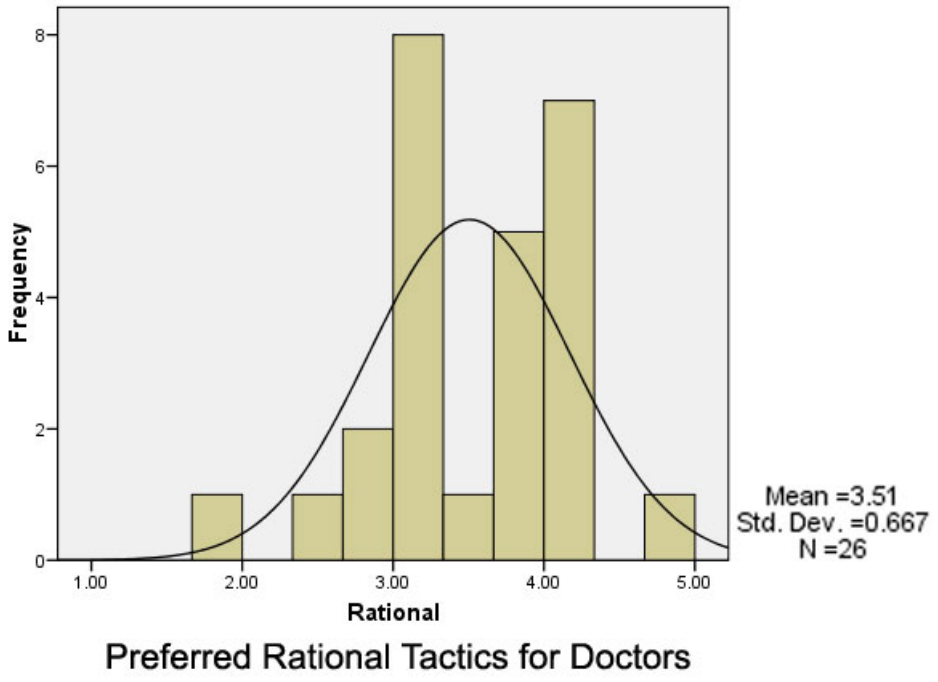
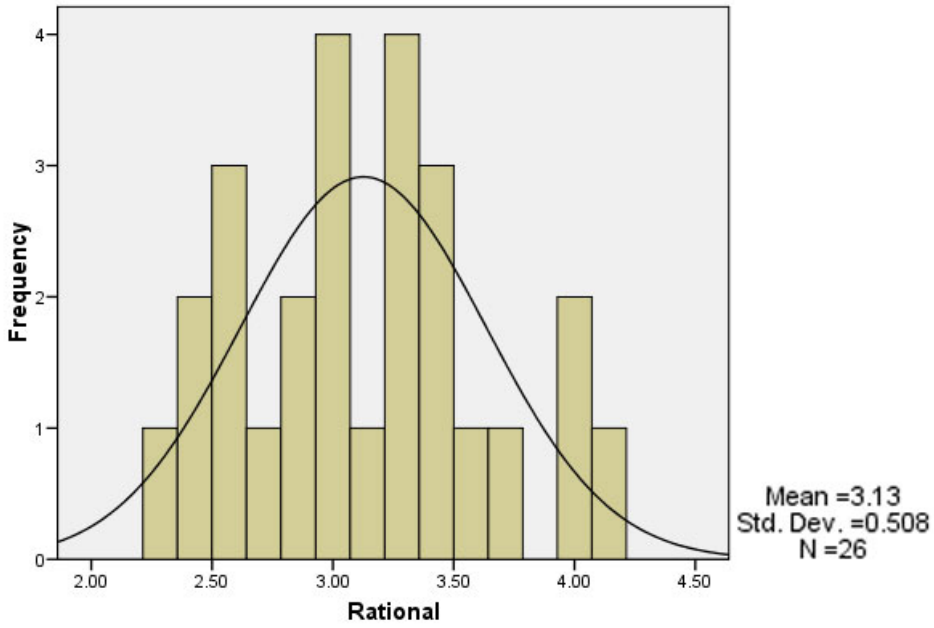
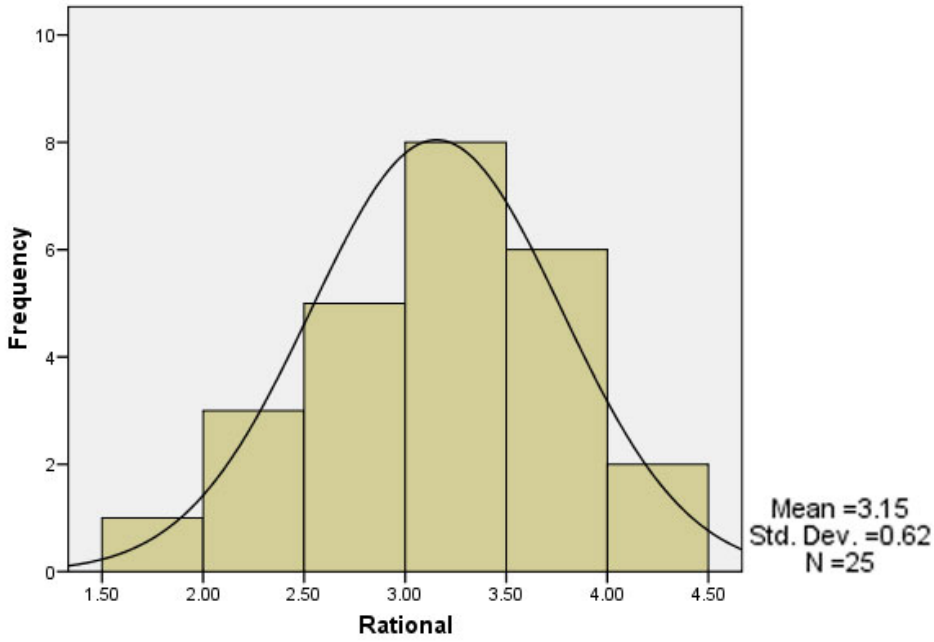


Figure 2.3 Rational tactics histograms by groups defined by occupation (*continued*)



Preferred Rational Tactics for IT Professionals



Preferred Rational Tactics for Support Staff

Details of Analysis and Results

Based on the evaluation of data characteristics previously presented, MANCOVA was computed for rational and soft tactics data for the groups defined by occupation and also by sex. The researcher calculated the sums of squares using Type III methods to account for unequal cell size (Mather, 2006; Tabachnick & Fidell, 1996). Due to the previously discussed characteristics of the hard tactics data, a Mann-Whitney U was used to compare mean differences on sex and Kruskal-Wallis was used to compare mean differences of four occupational groups for hard tactics for all four occupation categories.

The overall findings using these analytic approaches found no significant differences for rational and soft tactics preferences between males and females. There also were no significant differences for preferred soft tactics among occupational category (i.e., medical doctor, nurse, information technology professional, and support staff) after controlling for race, age, and tenure. However, there was a significant difference in the rational tactics among occupations and the p-value for preferred rational tactics is .017. The multivariate test shows sex independent variable (males and females) with Wilks' Lambda of .969 and observed power of .350. For occupational groups (doctors, nurses, IT, support staff), the Wilks' Lambda is .888 and observed power is .750. Furthermore, none of the covariates (age, race, tenure) appears to have any effects on dependent variables. Findings are presented in Tables 16 and 17.

Table 16. MANCOVA for Preferred Rational Tactics on Occupational Categories and Sex

	F.	Sig.
Occupational Groups	3.563	.017
	Covariates on Occupational Categories	
Age	1.542	.217
Tenure	1.511	.222
Race	.771	.382
	F	Sig
Sex	1.938	.167
	Covariates on Sex	
Age	1.235	.269
Tenure	.801	.373
Race	.868	.354

Table 17. MANCOVA for Preferred Soft Tactics on Occupational Categories and Sex

	F.	Sig.
Occupational Groups	.588	.624
	Covariates on Occupational Categories	
Age	3.756	.055
Tenure	1.982	.162
Race	.144	.705
	F	Sig
Sex	3.181	.077
	Covariates on Sex	
Age	3.381	.069
Tenure	1.440	.233
Race	.064	.800

Because this study did not have normal distribution for preferred hard tactics, Mann-Whitney U is used to compute the mean differences for males and females. As shown in Table 18, there was a significant difference for males and females on preferred hard tactics and the p-value is .002.

Table 18. Mann-Whitney U for Preferred Hard Tactics for Male and Female

Sex	N	Mean Rank	Sig.
Male	40	68.38	.002
Female	71	49.03	
Total N	111		

As stated above, preferred hard tactics did not have normal characteristics for occupational groups and so Kruskal-Wallis was used to compute the mean differences of four occupational groups (doctors, nurses, IT professionals, support staff). The data show no significant differences among these occupational categories and p-value is .643 as shown in Table 19.

Table 19. Kruskal-Wallis for Preferred Hard Tactics on Occupational Categories

Occupational Categories	N	Mean Rank	Sig
Doctors	26	55.56	.643
Nurses	34	52.38	
IT	26	62.79	
Support Staff	25	54.32	
Total N	111		

Hypothesis Tests

Due to the nature of the data collected, only two dependent variables (soft and rational tactics) qualified to be evaluated in the MANCOVA. Thus, at significant level alpha =.05, the researcher accepted H01 (and rejected H1) because there are no significant differences in the effect of sex on managerial tactics preferences for rational and soft tactics when race, age, and tenure are controlled since p= .161 for preferred rational and p = .077 for soft tactics. However, at the significant level alpha = .05, using a non-parametric test, the researcher rejected H01 (and accepted H1) for preferred hard tactics since the p-value for hard tactics is .002. Based on a Mann-Whitney U, there is a difference by groups defined by sex, with males reporting a greater preference for hard tactics (mean rank 68.38) than females (mean rank 49.03).

At the significant level of alpha = .05, the researcher accepted H02 (and rejected H2) for preferred soft and hard tactics because there are no significant differences in the effect of occupational group on managerial tactics preferences when race, age, and tenure are controlled. The p-value for soft tactics is .624 with covariates and hard tactics is .643. However, at the significant level alpha = .05, researcher rejected H02 (and accepted H1) for preferred rational tactics only because the p-value for preferred rational tactics among occupational groups is .017 with covariates. No post-hoc testing was done because no specific hypothesis contrasting any group to another or any combination of groups to another has been advanced.

Summary

With covariates, the data did not support the effect of sex on preference of soft and rational tactics. However, the data supported the effect of preference of hard tactics between males and females. The data did not support any significant differences of preferences on soft or hard tactics by occupational category after controlling for race, age, and tenure. However, the data supported the effect preferences of rational tactics by occupational categories after controlling for race, age, and tenure.

In conclusion, there was a significant difference between males and females for preferences for hard tactics. However, there was no significant difference among occupational groups. There was no significant difference by groups defined by sex or by occupation. For preferences of rational tactics, there was no significance between males and females. However, there was a significant difference among occupational categories.

Additional discussion on results and limitations of this research will be presented on the next chapter. Finally, recommendations for further research will be made to enrich the field of Industrial/Organizational psychology.

CHAPTER 5. DISCUSSION AND RECOMMENDATIONS

Introduction

Many researchers have studied influence tactics over the last two decades. For example, Kipnis and Schmidt (1988) studied upward influence tactics and performance relationships. Another well-known study, by Cable and Judge (2003), examined managers' upward influence tactics and leadership styles. Other researchers, such as Falbe and Yukl (1992), have studied the consequences for managers who have used both a single tactic and combinations of tactics.

The results of some of the studies mentioned above have inspired the researcher to focus on the present study. This research is focused on doctors, nurses, support staff, and information technology professionals working in U.S. health care organizations and their preferences relating to influence tactics of their managers. The objective of this chapter is to discuss in detail the results of the study sample, methodology, and variables of health care organizations' employee preferences regarding influence tactics used by their managers.

Moreover, how this research is related to the literature of industrial and organizational psychology as well as limitations on methodological design and sample of the population will also be discussed. Finally, recommendations for future study will be provided.

Summary of the Results

The purpose of this study was to examine if there were any significant differences between men and women, among occupational categories, working in health care organizations and their preferences regarding influence tactics their manager's use. A sample of 111 participants, medical doctors, nurses, information technology professionals, and support staff, completed the questionnaires on their preferences regarding managerial tactics.

Through MANCOVA computation for two dependent variables, this research did not show any significant differences in the effect of sex on managerial tactics preferences for soft and rational tactics when age, race, and tenure are controlled. Secondly, there were no significant differences for preferred soft tactics among occupational categories but there was a significant difference among occupational categories for preferred rational tactics. Third, when analyzing preferred hard tactics with Mann-Whitney U test for males and females, there was a significant difference between them. However, through Kruskal-Wallis test, there were no significant differences among occupational groups for preferred hard tactics.

The results of this study are related to a number of recent studies on sex and influence tactics. For example, a recent study by Barbuto et al. (2007) on effects of sex, education, and age upon leaders' use of influence tactics and leadership behaviors found that there are significant differences with the leader's sex and education in followers' ratings of leadership behaviors and influence tactics used by those leaders. Steensma (2007) found that managers preferred to use rational persuasion and soft tactics rather than hard tactics. Thus, there is a consistency of preferences for the use of rational tactics

between managers and subordinates (Steensma). This study showed that hard tactics definitely stand out in terms of issues related variance for how individuals describe their preferences both by sex and by occupational group.

Discussion of the Results

Results from this study suggest that males in health care industry occupations prefer hard tactics more than females in the same industry, but that there are not differences by sex in terms of preferences for soft and rational tactics or by occupational category. Secondly, individuals in different occupations in the healthcare industry do appear to be different in terms of their preference for rational tactics, though not by sex, even after controlling for factors such as race, age, and tenure in their work role. But this is not true for soft or hard tactics; no differences exist by occupational group. Fourth, measurements of tactics preferences are able to be measured with a reasonable degree of internal consistency.

Discussion of the Conclusions in Relation to the Literature and the Field

Studies of influence tactics and management styles have presented a variety of different results. The present study examined employee sex and preferences regarding receiving influence tactics in the health care organizations. Also, the present study found some similar results as have a number of studies on sex and influence tactics. For example, when using combined variables through MANOVA computation, Barbuto et al. (2007) found that leader's sex and education showed the most significant differences impact with followers' rating of leaders' behaviors including laissez-faire, pressure, inspirational appeal, idealized influence, exception, individualized consideration, intellectual stimulation, transformational, and effectiveness. However, when each of the

variables was studied separately, sex had no significant impact on ratings of transformational and/or transactional leadership behaviors. Furthermore, when studying each variable (management style) separately, there were significant ratings regarding sex and influence tactics preferences. Such studies found that subordinates were rating women to have used more pressure tactics (hard tactics) than men (Barbuto et al., 2007).

The present study focused on the preferences regarding influence tactics of subordinates in health care organizations. A study conducted by Steensma (2007) investigating why managers prefer some influence tactics to other tactics found that managers have actually preferred to use rational and soft tactics more frequently than hard tactics or pressure tactics but they have actually used more hard tactics than rational or soft tactics to influence their subordinates. Given the variability in response to hard tactics by employees, it is not surprising that the previous research by Steensma suggests that managers prefer to use rational tactics to hard tactics.

The main goal of this study was to research management styles while controlling for age, race, and tenure as covariates. Though this study did not find these employee characteristics to significantly relate to tactics preferences, it is interesting to know that age plays an important role in leadership. Oshagbemi (2004) found that age is influential regarding outcomes of an organization's philosophy and organizational culture, such as performance, conflict, and turnover. Additionally, findings suggest that older leaders tend to resist change and have the experience, maturity, and wisdom to make sound decisions. Moreover, education level is an important factor. People are influenced by their education level when it comes to values, needs, and wants. This suggests that education level has shaped them to think and behave differently (Oshagbemi). Therefore, age and education

are two factors that could influence leadership styles. Consequently, which leadership styles leaders have used could relate to which influence tactics leaders preferred to use. Examination of this in leaders may be very valuable, especially with regard to understanding how and when they use hard tactics because these are received with such variability in terms of preference.

Two studies conducted in 1988 by Kipnis and Schmidt regarding influence styles and employees who have worked in hospitals, found similar results. One study (Kipnis & Schmidt, 1988) focused on influence styles of *tactician managers* or CEOs who have employed an average of 178 doctors and 532 employees in hospitals. These tactician managers have more power and have used logic and reason to influence their organizations on issues such as budget, policy, and personnel. Another study (Kipnis & Schmidt, 1988) focused on influence styles of *bystander managers* or CEOs who have employed an average of 319 employees and 71 doctors in hospitals. These bystander managers have less power and have used less influence tactics to influence their organizations regarding budget, policy, and personnel. However, both of these separate studies found similar results: Influence styles of CEOs are based on their personal needs, wants, and organizational roles (Kipnis & Schmidt, 1988).

One significant finding of this study is that men (medical doctors, nurses, information technology professionals, and support staff) who are working in health care organizations have higher mean rank scores on preferred hard tactics than females. The implication of this finding is that men and women may give and receive communications differently. For example, women tend to be more expressive and have more skills on encoding and decoding emotions (Gallois & Callan, 1993) and therefore may make

different attributions in response to hard tactics. Furthermore, researchers have stated that women's language is more affective and elaborate, whereas men's language is more direct and instrumental (Arthur, Johnson, & Young, 2007). Men preferring to receive hard tactics more than women does not mean that men prefer to yell at each other but may culturally be more comfortable than women in response to frank and/or direct communications in a critical environment. However, it is important to note that this research did not suggest that men prefer to receive hard tactics more than rational or soft tactics. Instead, this is more about how men and women may be different in response to hard tactics in this particular industry.

Another significant finding of this study is that there is a significant difference among occupational groups (medical doctors, nurses, IT and administrative support staff) on preferred rational tactics. Previous research has also found that employees in certain occupational categories preferred to receive hard tactics rather than soft tactics. McFarland, Ryan, and Kriska (2002) stated that those in certain occupations, such as military or police officer, preferred to receive hard tactics compared to leaders of other occupational categories. The implications from the preponderance of null findings in this study is that certain occupational categories have the same interests and communication styles and thus may be likely to prefer to receive the same type of tactics. This has been supported by Armstrong, Smith, Donnay, and Rounds (2004), who grouped nurses and medical doctors into the same occupational cluster because they have the same interest (health services within medical science) after studying of 33,594 women and 32,421 men for a basic interest model of occupational structure. They grouped each occupational cluster based on the context of the job, the setting, objects of interest, and processes.

Moreover, each occupation has its own culture. Schein (2004) stated that when a group of individuals spend a number of years on a similar education and apprenticeship, they tend to share the same attitudes, values, and norms. They also reinforce each other within their work cultures through professional meetings and continuing education. Thus, based on the findings computed through MANCOVA, this researcher concluded that all the occupational groups such as medical doctors, nurses, IT and support staff prefer to receive the same tactics (rational) because they have the same occupational culture and or organizational health care culture. Based on the research of Kipnis and Schmidt (1998), managers' influence styles are based on their personal needs, wants, and organizational roles. Perhaps subordinates' preferences for tactics to receive also depended on personal needs, wants, and organizational roles. For instance, due to organizational roles such as working with life-and-death situation, medical doctors and nurses needed to be quick, calm, direct, rational, and able to meet objectives. Furthermore, Furst and Cable (2008) studied employee resistance to organizational change and the influence tactics of managers and their subordinates. They found that employees who have positive relationships with their managers are less likely to show resistance to organizational change, even when managers have used sanction tactics to influence them.

Health care organizations are in general a stressful place to work. People working in a health care organization tend to have similar personalities. Within the culture of health care organizations, especially in hospitals, employees have worked with critical matters such as not only life and death, but also the emotional issues patients and their families face; thus, some health care employees may prefer to have direct, rational influence tactics from managers.

Limitations

Similar to other studies, this research has limitations. First of all, the sample of this study is over the minimum sample size; however, the sample has a limited of number of respondents for one of occupational categories--nurses. There was only one male respondent and there were many more female respondents for the nursing category. The nursing category also had the most respondents, compared to the other three occupational categories.

Second, participants were asked to take the questionnaires online instead of in a paper-and-pencil format, and this method might have had some effects on the results because younger professionals might have participated more than older professionals. For instance, older professionals are more relaxed and easy going at the workplace than younger ones because they have a higher rate of job satisfaction (Runyon, 1973). Thus, had an equal number of younger and older professionals participated in this study, it might have captured the whole picture better regarding which tactics (hard, soft, rational) these professionals prefer to receive from their managers.

Third, the questionnaires were not specifically "custom made" for health care occupations such as doctors, nurses, information technology workers, and support staff. Perhaps some of the questions on this questionnaire did not apply to their occupations.

Fourth, this research did not capture the descriptive inputs via conversation. It might have been more valuable to interview the participants in person. No interactions between managers and employees were observed; instead, this study used only employee reports.

Fifth, this study did not measure personalities of subordinates and/or their managers. These factors and other characteristics of both groups may be relevant in terms of the delivery and receipt of different kinds of communications. For example, the personality of managers might play a significant role in what tactics they have preferred to use and which leadership style they would like to use. Moreover, personality of subordinates could also play a big part of which tactics they would like to receive. Additionally, the present study did not take into account cultural aspects such as social or economic background of these managers and/or subordinates. With all of the limitations mentioned, further research is needed to examine one or all of the limitations of the present study and to perfect the study of management styles in the workplace, specifically employees (doctors, nurses, information technology professionals, and support staff) who are working within health care organizations.

It is also important to note too that selection into and out of specific work environments may also play a role. To the effect that sustained employment in any one role or work environment demands tolerance for certain influence tactics, that also may contribute to null findings (e.g., consistency of preference for any one tactic) by occupational group from any employment site.

Recommendations for Further Study

The first recommendation for future research on this topic would be aware of how data characteristics may influence analytic strategies. For instance, future research may benefit by having equal sample sizes for each occupational group used in any group comparisons. Additionally, bigger sample sizes for groups compared would be helpful. Both of these might contribute to greater ease at using MANOVA through making

assumptions for parametric tests easier to meet either through satisfying requirements for equal sample size among contrast groups and/or through evening out variance and promoting greater homogeneity of variance if it exists. Further, MANOVA that better integrates sex and occupational category into an overall MANOVA with occupation and sex specific tests may be most useful.

It might also be beneficial for future research to try different methods of data collection. For instance, have one half of the sample take the online instrument and the other half take the paper instrument, to detect any significant differences.

Measurement issues in this area also might be fruitful. Better understanding of variance matters with regard to hard tactics would be important. Also, future research could revise the instrument used in this study to examine the effect of omitting or revising certain questions. Or perhaps the measures might be revised to make them more related to health care professionals and especially the managers' and subordinates' daily activities.

Another sampling issue that would prove useful in this area is increasing the number of male participants in the nursing sample to help in the analysis of results of future research. Special recruitment strategies may be needed to do outreach to this group.

Future research could also measure personalities of subordinates and managers to compare how subordinates' perceived influence tactics received from managers, how managers' personalities influence use of different influence tactics to influence their subordinates, and how certain personalities of subordinates might relate to preferences to receive certain influence tactics from their managers. For instance, Runyon (1973) stated

that older professionals are more internal in their personalities than are younger ones. Furthermore, he stated that subordinates' personalities are also an important factor of supervisor-subordinate relationship at the workplace. Another study showed that personality is an important factor when it comes to having positive, stronger, and lasting effects on interactions between supervisor and subordinate (Huang & Iun, 2006). As such, again, examination of personality factors may be very useful in this area.

Researchers can also study job satisfaction and effective use of influencing tactics with health care organization professionals. Future research can examine how different tactics can be effective with health care organization professionals, specifically doctors, nurses, informational technology workers, and support staff to influence job satisfaction in these groups. McFarland et al. (2002) found that certain occupational categories preferred to receive certain tactics.

Another recommendation for future research is to design this study as both quantitative and qualitative, to capture the whole picture of the preferences of medical doctors, nurses, information technology professionals, and support staff regarding influence tactics. Future research can also examine the social and economic backgrounds of managers and subordinates. Finally, further research is necessary to identify other hypotheses that are not covered in this study; for example, are there differences of perceived used and preferred influence tactics of managers among health care workers?

Conclusion

Health care organizations have their own organizational cultures. These cultural differences may interplay with worker sex and occupational group to affect preferences for various influence tactics. The findings of this study have shown that men in

healthcare work settings prefer hard tactics more than their female counterparts, while some groups defined by occupation also may prefer rational tactics more than others.

REFERENCES

Anderson, C., Flynn, F. J., & Spataro, S. E. (2008). Personality and organizational culture as determinants of influence. *Journal of Applied Psychology, 93*(3), 702-710.

Armstrong, P. I., Smith, T. J., Donnay, D. A. C., & Rounds, J. (2004). The strong ring: A basic interest model of occupational structure. *Journal of Counseling Psychology, 51*(3), 299-313.

Around-Thomas, M. (2006). Five keys to transforming stress into success. *The Physician Executive*, 44-45.

Arthur, H., John, G., & Young, A. (2007). Gender differences and color: Content and emotion of written descriptions. *Social Behavior and Personality, 35*(6), 827-833.

Barbuto, J. E., Fritz, S. M., & Marx, D. B. (2002). A field examination of two measures of work motivation as predictors of leaders' influence tactics. *The Journal of Social Psychology, 142*(5), 601-616.

Barbuto J. E., Fritz, S. M., Matkin, G. S., & Marx, D. B. (2007). Effects of gender, education, and age upon leaders' of influence tactics and full range leadership behaviors. *Sex Roles, 56*, 71-83.

Barry, B., & Shapiro, D. L. (1992). Influence tactics in combination: The interactive effects of soft versus hard tactics and rational exchange. *Journal of Applied Social Psychology*, *22*(18), 1429-1441.

Breakwell, G. M., Hammond, S., & Fife-Shaw, C. (2003). *Research methods in psychology.* Thousand Oaks, CA: SAGE Publications.

Brehm, S., Kassin, S., & Fein, S. (2005). *Social psychology* (6th ed.). Boston, MA: Houghton Mifflin.

Brown, J. D. (1996). *Testing in language programs*. Upper Saddle River, NJ: Prentice Hall.

Buttner, B. H., & McEnally, M. (1996). The interactive effective of influence tactic, applicant gender, and type of job on hiring recommendations. *Sex Roles*, *34*(7/8), 581-592.

Cable, D. M., & Judge, T. A. (2003). Managers' upward influence tactic strategies: The

role of manager personality and supervisor leadership style. *Journal of Organizational Behavior*, *24*(2), 197-218.

Ceasar, D., & William, G. (2004). Transition to self-directed work teams: Implications of transition time and self-monitoring for managers' use of influence tactics. *Journal of Organizational Behavior*, *25*(1), 47-60.

Chapman, J. B. (1975). Comparison of male and female leadership styles. *Academy of Management Journal, 18*(3), 645-651.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.

Falbe, C. M., & Yukl, G. (1992). Consequences for managers of using single influence tactics and combinations of tactics. *Academy of Management Journal, 3*(3), 638-653.

Farmer, S. M., Fedor, D. B., Maslyn, J., & Goodman, J. S. (1997). Putting upward influence strategies in context. *Journal of Organizational Behavior*, *18*, 17-42.

Firth-Cozens, J. (1992). The role of early family experiences in the perception of organizational stress: Fusing clinical and organizational perspectives. *Journal of Occupational and Organizational Psychology, 65*, 61-75.

Furst, S. A., & Cable, D. M. (2008). Employee resistance to organizational change: Managerial influence tactics and leader-member exchange. *Journal of Applied Psychology, 93*(2), 453-462.

Gallois, C., & Callan, V. J. (1986). Decoding emotional messages: Influence of ethnicity, sex, message type, and channel. *Journal of Personality and Social Psychology, 51*(4), 755-762.

Grenny, J. (2006). Speak up or burn out. *The Physician Executive*, *1,* 24-28.

Haig, B. D. (2002). Truth, method, and postmodern psychology. *American Psychologist, 57*(6-7), 457-458.

Hatcher, L. (1994). *A step-by-step approach to using the SAS(R) system for factor analysis and structural equation modeling*. Cary, NC: SAS Institute.

Higgins, C., Judge, T. A., & Ferris, G. R. (2003). Influence tactics and work outcomes: A meta-analysis. *Journal of Organizational Behavior*, *24*(1), 89-103.

Hollander, E. P., & Offerman, L. (1990). Power and leadership in organizations: Relationships in transition. *American Psychologist, 45,* 179-189.

Howell, D. C. (1982). *Statistical methods for psychology*. Boston, MA: Duxbury Press.

Huang, X., & Iun, J. (2006). The impact of subordinate-supervisor similarity in growth-need strength on work outcomes: The mediating role of perceived similarity. *Journal of Organizational Behavior, 27*, 1121-1148.

Jaisingh, L. (2006). *Statistics for the utterly confused* (2nd ed.). NY: McGraw-Hill.

James, M., & Ward, K, (2001). Leading a multinational team of change agent of Glaxo Welcome (now Glaxo SmithKline). *Journal of Change Management*, *2*(2), 148-159.

Johnson, M., Morgeson, F., Ilgen, D. R.., & Lloyd, J. (2006). Multiple professional identities: Examining differences in identification across work-related targets. *Journal of Applied Psychology*, 91, 498-506.

Kipnis, D., & Schmidt, S. M. (1988). Upward-influence styles: Relationship with performance evaluation. *Administrative Science Quarterly, 33*(4), 528-542.

Kipnis, D., Schmidt, S., & Wilkinson, I. (1980). Intraorganizational influence tactics: Exploration in getting one's way. *Journal of Applied Psychology*, *65*(4), 440-452.

Kirkcaldy, B., Trimpop, R., & Levine, R. (2002). The impact of work hours and schedules on the physical and psychological well-being in medical practices. *European Psychologist, 7*(2), 116-124.

Lei, M., & Lomax., R. C. (2005). The effect of varying degrees of nonnormality in structural equation modeling. *Structural Equation Modeling, 12* (1), 1-27.

Mather, R, D. (2006). Using evolutionary psychology to account for sex differences and similarities in psychological tendencies. *Journal of Scientific Psychology,* 1-5.

McFarland, L. A., Ryan, A. M., & Kriska, S. D. (2002). Field study investigation of applicant: Use of influence tactics in a selection interview. *The Journal of Psychology*, *136*(4), 383-399.

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

O'Connor, E. J., & Fiol, M. C. (2006). Reclaiming physician power: Your role as a physician executive. *The Physician Executive*, *1*, 46-50.

Oshagbemi, T. (2004). Age influence on the leadership styles and behavior of managers. *Employee Relations, 26*, 14-29.

Pauquet, S. (n.d.) *Power analysis*. Retrieved from www.sfsu.edu on November 29th, 2006.

Portney, L. G., & Watkins, M. P. (2000). *Foundations of clinical research: Application to practice* (2nd ed.). Upper Saddle River, NJ: Prentice Hall Health.

Ringer, R. C., & Boss, R. W. (2000). Hospital professionals' use of upward influence tactics. *Journal of Managerial Issues*, *12*(1), 92-109.

Ross, A. S. (2004). Lessons learned from a lifetime of applied social psychology research. *Canadian Psychology, 45*(1), 1-8.

Runyon, K. E. (1973). Some interactions between personality variables and management styles. *Journal of Applied Psychology, 57*(3), 288-294.

Schein, E. H. (2004). *Organizational culture and leadership* (3rd ed.). San Francisco, CA: Jossey-Bass.

Schriesheim, C. A., & Hinkins, T. R. (1990). Influence tactics used by subordinates: A theoretical and empirical analysis and refinement of the Kipnis, Schmidt, and Wilkinson subscales. *Journal of Applied Psychology*, *75*(3), 246-257.

Somech, A., & Drach-Zahavy, A. (2002). Relative power and influence strategy: The effects of agent-target organizational power on superiors' choices of influence strategies. *Journal of Organizational Behavior*, *23*(2), 167-177.

Steensma, H. (2007). Why managers prefer some influence tactics to other tactics: A net utility explanation. *Journal of Occupational and Organizational Psychology, 80*, 355-362.

Steiger, B. (2006). Doctors say morale is hurting. *The Physician Executive*, *1*, 6-15.

Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistical* (3rd ed.). New York: Harper Collins.

Tanirala, S., Green, S. G., & Ramanujam, R. (2007). In the shadow of the boss's boss: Effects of supervisors' upward exchange relationships on employee. *Journal of Applied Psychology*, *92*(2), 309-320.

Tepper, B. J., Eisenbach, R. J., Kirby, S. L., & Potter, P. W. (1998). Test of a justice-based model of subordinates' resistance to downward influence attempts. *Group and Organization Management, 23*(1), 144-160.

Thompson, L. F., Martin, S. D., & Sanders, M. G. (2003). From paper to pixels: Moving personnel surveys to the web. *Personnel Psychology, 56*(1), 197-227.

Treadway, D. C., Ferris, G. R., Duke, A. B., Adams, G. L., & Thatcher, J. B. (2007). The moderating role of subordinate political skill on supervisors' impressions of subordinate ingratiation and ratings of subordinate interpersonal facilitation. *Journal of Applied Psychology, 9*(3), 848-855.

Vugt, M. V., Hogan, R., & Kaiser, R. B. (2008). Leadership, followership, and evolution: Some lessons from the past. *American Psychologist, 63*(3), 182-196.

Wayne S. J., & Ferris, G. R. (1990). Influence tactics, affect, and exchange quality in supervisor-subordinate interactions: A laboratory experiment and field study. *Journal of Applied Psychology, 75*(5), 487-499.

Weber, D. O. (2006). Physicians offer prescriptions to boost low morale. *The Physician Executive, 1*, 16-22.

Yukl, G., & Tracey, J. B. (1992). Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of Applied Psychology*, *77*(4), 525-535.

Zohar, D., & Tenne-Gazit, O. (2008). Transformational leadership and group interaction as climate antecedents: A social network analysis. *Journal of Applied Psychology, 93*(4), 744-757.