

# The Relationship between Supervisor Dominant Leadership Style and Hospital Worker Job Satisfaction: Subordinate Perspective

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**Abstract:** The relationship between Supervisor Dominant Leadership Style and job satisfaction was investigated among 240 randomly selected non-managerial hospital personnel, between the ages of 20 – 65 years of age working in hospitals within the southern region of the United States. The Hersey's perspective of the Situational Leadership® Model and Spector's (1997) Job Satisfaction Scale were used in this investigation to obtain data for analysis. Results of the investigation revealed that the selling leadership style (S2 - 40%) and delegating leadership styles (S4 - 33.3%) were the dominant styles practiced by supervisors. However, multimodal leadership styles were also identified (S1S2S3, S2S3, and S2S4). Participants considered contingent reward the most important component of job satisfaction, while communications was considered the least. Sixty percent of the participants indicated their leader had a low level of adaptability (LAS < 24). Conversely, 10 percent reported that their leader had a high level of adaptability (LAS > 30); and 30 percent reported their leader had moderate adaptability (LAS ≥24≤30).

**Keywords:** Dominant Leadership Style, Job Satisfaction, Situational Leadership, Leadership Adaptability.

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## I. INTRODUCTION

The role of leadership in hospital administration is very critical to the success of any hospital, especially when it comes to effective decision-making, strategic planning, and organization. Charanjit (2017) suggested that for leadership to be effective, it must be built on a solid foundation that outlines a clear mission and vision for the hospital and setting a culture that is success oriented and success driven. Leadership plays a crucial role in many professions including critical hospital jobs, where the need for qualified and experienced personnel is a high priority (Batista, Furtado, & Sila, 2011). In order to attract and keep such personnel, hospital administrators must secure employee job satisfaction, while at the same time, encourage trained and qualified candidates to come on board. Employee job satisfaction is critical for retention. Many studies dealing with job satisfaction address mainly intrinsic and extrinsic job satisfaction, which comprise of many facets. Each of these facets are of varying importance to employees. As a result of this, many research studies into the subject yield mixed results. In this study, supervisor leadership style is examined relative to job satisfaction in order to advance recommendations that may be of significance to hospital administrators and their staffers.

Many researches into the subject has been conducted in Asia, United States, Europe, and Nigeria. Among these countries, very few studies into subordinate job satisfaction are conducted in the United States. Specifically, the researcher did not find any research conducted among hospital employees within the southern region of the United States that pertains to Situational Leadership® and job satisfaction. This shows a knowledge gap in literature pertaining to the relationship between Situational Leadership® and job satisfaction. Job satisfaction could mean different things to different employees. In this study, the researcher used Situational Leadership® model as a conceptual framework to study the relationship

between the four categories of leadership styles (i.e. telling, selling, participating, and delegating) and subordinate job satisfaction among hospital employees to help identify and bridge existing gaps in literature, and as well as to determine specific leadership dimensions that either do or do not increase subordinate job satisfaction. As a contribution to the body of knowledge in healthcare administration, the researcher aimed to provide a foundation in this work for further studies relating to leadership style and subordinate job satisfaction. Furthermore, he hoped that recommendations advanced in this study may help managers to effectively apply their leadership styles to subordinate task readiness, which may enhance subordinate productivity.

The purpose of this quantitative correlational research was to examine the relationship between Situational Leadership® and job satisfaction in hospitals located in the Southern region of the United States.

#### A. *Research Questions and Hypotheses*

This study will be guided by the following research questions and hypotheses:

*RQ1:* What is the relationship between the perceived leadership adaptability scale of supervisors and the job satisfaction of hospital workers located in the Southern region of the United States?

H1<sub>0</sub>: There is no significant relationship between perceived leadership adaptability scale of supervisors and the job satisfaction of hospital workers located in the Southern region of the United States.

H1<sub>A</sub>: There is a significant relationship between perceived leadership adaptability scale of supervisors and the job satisfaction of hospital workers located in the Southern region of the United States.

*RQ2:* How does hospital worker job satisfaction differ based on the perceived dominant leadership style of the supervisor?

H2<sub>0</sub>: Hospital worker job satisfaction does not significantly differ based on the perceived dominant leadership style of the supervisor.

H2<sub>A</sub>: Hospital worker job satisfaction significantly differs based on the perceived dominant leadership style of the supervisor.

## II. CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

### A. *Conceptual Framework*

In this study, the researcher drew solely upon the Situational Leadership® model of Paul Hersey and he did not include the changes made in Blanchard's Situational leadership® II. The use of Hersey's perspective of the Situational Leadership® model was a matter of choice on the side of the researcher.

#### A. *Situational Leadership® Model (SLM)*

Situational Leadership® contends that there is no one best way to influence people and that the most effective leadership style depends upon the performance readiness of the subordinates or followers. The SLM describes four leadership dimensions (S1 – S4) with their associated follower readiness levels:

1. Telling Leadership (S1): A leadership style in which the leader demonstrates high directive behavior and little supportive behavior.
2. Selling Leadership (S2): A leadership style in which is the leader shows high directive behavior and high supportive behavior.
3. Participating Leadership: A leadership style in which the leader exhibits little directive behavior and high supportive behavior.
4. Delegating Leadership: A leadership style in which the leader demonstrates little directive behavior and little supportive behavior.

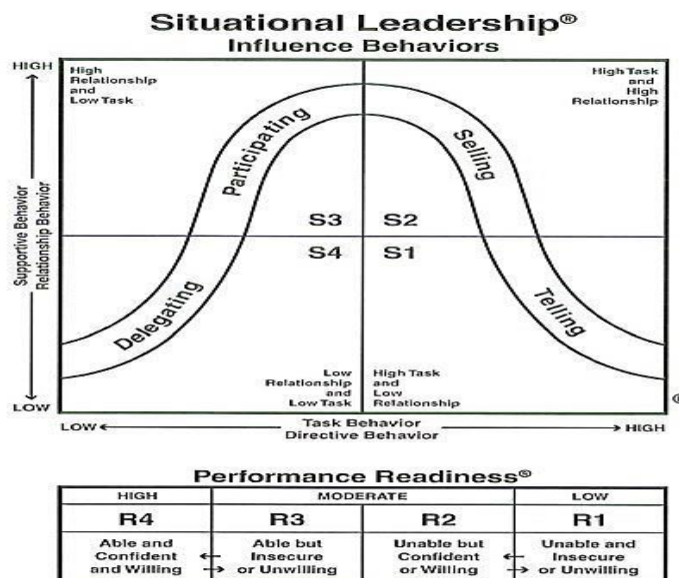
The corresponding readiness levels of the follower is represented by (R1 – R4). Hersey argued that the matching of the appropriate leadership style to the appropriate readiness level of the follower may yield effective results, including employee productive and performance.

The appropriate leader-follower match includes:

1. Telling leadership style (R1:S1) – For followers at Performance Readiness Level 1, the appropriate leadership style is telling. This style consists of above average amounts of task behavior and below average amounts of relationship behavior.
2. Selling leadership style (R2:S2) – For followers at Performance Readiness Level 2, the appropriate leadership style is selling. In this style, the leader uses above average amounts of both task and relationship behavior. The task behavior is to provide direction for the lack of skill, and the relationship behavior is to reinforce the individual for trying.
3. Participating leadership style (R3:S3) – The appropriate style for Performance Readiness Level 3 is called participating, which incorporates above average amounts of relationship behavior with below average amounts of task behavior. People at R3 not only know what, when, how, and where to do things, but also why they need to be doing those things; they just lack either confidence or willingness to go ahead and do them. The high relationship behavior is designed to encourage them to develop that willingness or confidence to perform on their own.
4. Delegating leadership style (R4:S4) – The appropriate style for Performance Readiness Level 4 is called delegating, which uses below average amounts of both relationship and task behavior. These individuals know what, how, where, and when to do their jobs, and have the willingness and confidence to accomplish the tasks. It is important at this stage to reward those efforts with increased autonomy and decreased relationship behavior because autonomy at this stage is viewed as a reward while continued high amounts of relationship behavior would be viewed by the follower as patronizing. A graphical presentation is shown in figure 1.

We

#### Addendum A



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**Figure 1.** The Situational leadership model. Adapted from Hersey, et al (2013). Management of organizational behavior: leading human resources (10 ed.) Englewood Cliffs, NJ: Prentice hall.

Hersey, et al (2013) suggest that a leader who effectively match the four leadership dimensions with their corresponding readiness levels has a better chance at becoming an effective leader. Based on this model, many researchers have conducted studies to either prove or disprove the model. Let us examines some of these studies.

## ***B. Literature Review***

### ***Leadership Styles***

Since the inception of the Situational Leadership® model, many researchers have used the SLM as conceptual framework to study organizational science and other areas of academia (Bodla & Hussain, 2010; Hersey et al. 2013; Jackson, Alberti & Snipes, 2014). For example, Mohamed, et al (2016) conducted a quantitative study to investigate senior teachers' readiness for applying the Situational Leadership® model to classroom instruction. The primary purpose of the study was to examine how faculty at California State University employed leadership strategies to transform their students, teams, and organization. Mohamed identified participants' perceptions of their leadership styles across 12 situations as outlined in the LEAD instrument. The researcher identified the primary leadership style as the Selling style (S2), amounting to 38% of the sample population. Mohamed et al then found out that Participating style (S3) was the second most common leadership style with responses amounting to 37% of the total survey answers. The third and fourth most popular responses were telling (S1), which received 19% and delegating style (S4) which received 6% of the total survey answers respectively. Mohamed et al's findings were similar to that of Bull (2010). In both studies, leadership played a critical role in shaping the behavior as perceived by the participants. Bull studied Situational Leadership® in relation to employee turnover intent among hospital employees. Turnover among employees have a correlation with job dissatisfaction in most cases. Bull found out that selling leadership was the most prominent leadership style displayed by supervisors, followed by participating. The study also revealed that supervisors had moderate leadership adaptability score, a pattern common among managers in the United States. Mohamed et al's study showed that the leadership style adaptability score of the participants was 23, which that fell within the low range of (0 – 23). Tsai and Su (2011) showed positive correlation among leadership styles, job satisfaction, and service-oriented organizational citizen behaviors (OCBs), with leadership styles having a stronger influence on job satisfaction. A similar result was shown by Donahue (2013) who studied the effect of Situational Leadership® theory on follower readiness among 62 participants. Donahue found a significant difference between leadership styles and follower readiness levels, but there were no significant differences between leadership styles and demographics. In another study, Arnold and Ukperere (2012) examined the Situational Leadership® model for appraising employees' readiness within a solidarity trade union in South Africa. Although the authors found results that were consistent with the Situational Leadership® model, they reported that not all subordinates were insecure as the model depicted. The Arnold and Ukperere report created a controversy in literature and required further studies to clear the controversy about the insecurity of the subordinates. Similarly, Bates (2014) used the Situational Leadership® model to study supervisors and managers in a distribution corporation with the objective to determine their primary and secondary leadership styles, as well as their leadership adaptability levels. Bates found that 75% of the participants fell in the S1 and S2 adaptability categories. Bates findings differed from other researchers who have reported that many managers in the United States show moderate adaptability. Researchers have recommended further research into leadership adaptability studies to help clear the controversy.

The SLM depicts that the most effective leader is one who remains versatile along the performance curve in the model. Many organizations prioritize the need to develop effective leadership (Roberts, 2015). Jackson et al. (2014) reported that management roles have effects on employee job satisfaction and workplace behaviors. The authors revealed that ineffective display of managerial roles have led to employee dissatisfaction and turnover. In response, consultants have stepped forward to assist in the process of developing effective leaders; a move that has helped alleviate the shortages of qualified and experienced workers in many organizations. Arayesh and Noori (2012) suggested that employee-oriented leadership style such as participatory leadership has scored high among employees, simply because it helps them feel they are part of the organization. This sense of belonging promotes job satisfaction and employee productivity. In another study, Arayesh and Noori (2012) investigated the relationship between participatory management and employees' productivity and satisfaction using a descriptive survey among 37 staff members of the Agricultural Extension Management of Ilam Province, Iran. The authors found that there was a considerable relationship between the variables of participatory management and employees' productivity. Specifically, Arayesh and Noori showed that variables such as increasing responsibility, increasing innovation, reduction of administration costs, and increasing efficiency were able to explain 99% of the variation among employees in terms of productivity and job satisfaction.

### *Job Satisfaction*

Many researchers agree that leadership and job satisfaction are significant predictors for organizationally relevant behavior such as employee turnover (Baig, et al., 2013; Bilal, Mansoor, & Rehman, 2012; Kaladeh, 2013; Pantouvakis & Bouranta, 2013). However, employees do not easily turnover. There is a temporal lag between elements of job dissatisfaction, low organizational commitment, intention to quit, perceived alternatives, ease of movement, and actual separation (Taplin & Winterton, 2007). Taplin and Winterton admonished that the link between dissatisfaction and turnover is very complicated, given the fact that dissatisfaction with work does not always immediately lead workers to quit. Bilal et al. (2012) argued that a dissatisfied employee might quit at any time given the slightest opportunity of a better job elsewhere. To help mitigate employee dissatisfaction, leaders need to deploy effective leadership styles in order to help mitigate turnover issues. Bormann (2013) reported that effective leadership in individual nursing units directly affects the nursing staff's job satisfaction. Ahmad, Nazir, Adi, Noor, Ghafar, Rahman, and Yushuang (2013) shared Borman's view and suggested that managers should spend more time on activities to enhance employee satisfaction. Ahmad et al.'s findings were also consistent with that of Koc (2011). Koc examined the impact of managers' leadership behavior on job satisfaction and performance of 266 employees in an industrial zone in Ankara Ostim, Turkey. Results of the study revealed a significant relation between managers' leadership behaviors, job satisfaction, and performance of employees. In the same study, the authors reported a positive relationship between job satisfaction and job performance of employees. Researchers have shown that employees who experience job satisfaction are more likely to be productive and stay on the job (Ahmad, Hussain, & Tariq, 2014; Ayob, Lo, Ngui, & Voon, 2011; Kaladeh, 2013; Koc, 2011; Malik, 2013). Most employees would rather take another opportunity than stay dissatisfied on a job. In most cases, inappropriate application of managerial leadership styles has resulted to employee dissatisfaction and subsequent turnover. Parveen and Tariq (2014) studied 350 faculty members in nine universities and revealed that leadership style of department heads had significant effect on job satisfaction of faculty members. The authors revealed that selling leadership style was the preferred method for department heads to make a decision. In addition to selling leadership style, the heads of departments in all the universities studied also reported they used participating leadership style. The telling and delegating leadership styles were almost non-existent among faculty heads and were not preferred as leadership styles in decision-making.

Ahmad, et al. (2010) examined the relationship between job satisfaction, attitude towards work, and organizational commitment among 310 employees of 15 advertising agencies of Islamabad, Pakistan. The results revealed a weak relationship between job satisfaction and performance, whereas they found organizational commitment had a strong positive relationship with performance. The authors also found employee attitude towards work had a strong positive relation with job satisfaction. In a similar study, Eka, Hadiwidjoko, & Slamet (2013) examined the influence of Situational Leadership® on job satisfaction among 444 employees in the Trans Jakarta public service agency in Indonesia. The authors found out that Situational Leadership® and job satisfaction can directly improve job performance. Contrary to the Eka, et al.'s (2013) study, Ahmad et al. (2010) discovered that organizational commitment had an insignificant impact on job satisfaction and attitude towards work. Mosadeghrad and Ferdosi (2013) examined the relationships between leadership behaviors of managers, and variables of job satisfaction and organizational commitment at public hospitals in Iran. The authors revealed that the dominant leadership style of hospital managers was participative style, and employees were moderately satisfied with their jobs and committed to their organization. Salaries, benefits, promotion, contingent rewards, interpersonal relationships, and working conditions were the best predictors of job satisfaction among hospitals employees. Leadership, job satisfaction, and commitment were closely interrelated.

### **III. METHODOLOGY**

The researcher adopted a non-experimental correlational research design to explore the relationship between Situational Leadership® style and subordinate job satisfaction. In addition, the researcher measured the influence of demographic attributes on both utilizing a survey among non-managerial hospital employees within the southern region of the United States.

#### **A. Population and Sample Selection**

In this study, the researcher limited the study's sample population to non-managerial personnel from participating hospitals. The hospitals were widely distributed geographically within the southern region of the United States. The



respondents were full-time employees between the age of 18 and 60 years old. The researcher assumed that in this age range, employees were able to make reliable decisions on different issues they faced. To determine the appropriate sample sizes for a given population under study, researchers have developed various methods, such as and Power Analysis (Cohen, 1992). There are approximately 6,000 full-time employees working in general and behavioral hospitals in the southern region of the United States. In this study, the researcher targeted four hospitals, which had 698 employees, all of whom the researcher invited to participate in the study, which made it possible for the researcher to achieve a sufficient sample size. For inferential testing, a researcher must consider three items: Type I errors, Type II errors, and estimated effect size. Type I errors occur when the researcher rejects the null hypothesis when it is true (Neuman, & Robson, 2015). In this study, the researcher set the Type I error at  $\alpha = .05$ . Type II errors occur when the researcher accepts the null hypothesis even though it is false (Neuman & Robson 2015). In this study, the research set the Type II error at  $\beta = .80$ . Regarding effect size, the researcher reviewed other academic studies to determine the estimated effect size to be found. Based on a meta-analysis of these studies, the researcher set the estimated effect size of  $r = .18$ . Using G\*Power (Faul, Erdfelder, Lang, & Buchner, 2009), an  $\alpha = .05$ , a  $\beta = .80$ , and estimated  $r = .18$ , a sample size of 239 was determined.

### **B. Instrumentation**

The researcher used a demographic questionnaire and two survey instruments: the LEAD – Other survey, Spector's (1997) Job Satisfaction Scale, and demographic survey. In this study, the researcher did not measure the conditional variable of subordinate performance readiness and psychological willingness to perform a specific task. The purpose of the demographic survey questionnaire was to solicit specific demographic information of gender, age, ethnicity, and education from the sample population:

#### *1) LEAD – Other Instrument*

The LEAD – Other instrument consists of 12 management situations in which subordinates identified from among four options their perceptions of their supervisor's leadership style. Using the LEAD – Other instrument enabled the researcher determined subordinate's perceptions of their supervisor's dominant leadership style and leadership adaptability. The ideal leadership would be an effective combination of all four leadership styles depending on the situation; however, many leaders may only have a multimodal leadership profile. Within the United States, the selling and participating profiles are the most common because the culture places a lot of emphasis on the supportive role of leaders (Bergold & Thomas, 2012; Van Vliet, 2012). To determine the dominant leadership style of supervisors, the respondent was instructed to select the answer that most closely matched how they think their supervisors would typically respond in a given situation. The researcher calculated the dominant leadership style by adding the number of selection in each category. The leadership style with the most responses was the dominant leadership style of the supervisor.

The degree to which an individual's leadership behaviors are appropriate to the demands of a given situation is known as style adaptability. The researcher awarded adaptability points for each situation, giving three points for choosing the appropriate leadership style and smaller scores for moving farther away from the appropriate choice. Therefore, a score of 30 - 36 range indicates a leader with a high degree of adaptability; 24 - 29 range reflects a moderate degree of adaptability; and if the adaptability is less than 24, it reflects the need for self-development to recognize subordinate performance readiness (Center for Leadership Studies, 2015). Numerous research studies have used the LEAD – Other with proven validity (Hersey et al., 2013). Aichia and Hui (2007) used the LEAD instrument to determine the dominant leadership styles of principals in private and public schools and their effects on teacher turnover in Taiwan. Additionally, Greene (1980) reported that the logical validity of the LEAD instrument has been established, and that the instrument remains stable across time as an effective tool to measure leadership styles. Greene therefore suggested that a user might rely on the results as a consistent indicator of an individual's leadership style.

#### *2) Job satisfaction scale.*

Many researchers have used Spector's (1997) job satisfaction scale with proven consistency (Astrauskaite, Perminas, & Vaitkevicius, 2011; Meade, Thompson, & Watson, 2007). The Job Satisfaction Scale is a 36-item scale, which measures subordinate attitudes nine facets of their job. The nine facets are pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, coworkers, nature of work, and communication (Spector, 1997). Four survey statements or items assess each facet and the researcher compute a total score from all survey items. The Job Satisfaction Scale has a

summated rating scale format with six choices per item ranging from “strongly disagree” to “strongly agree.” Given the Job Satisfaction Scale uses 6-point agree-disagree response choices, we can assume that agreement with positively worded items, and disagreement with negatively worded items would represent satisfaction, whereas disagreement with positive-worded items and agreement with negative-worded items represents dissatisfaction. For the 4-item subscales, as well as the 36-item total score, this means that scores with a mean item response (after reverse scoring the negatively worded items) of 4 or more represents satisfaction, whereas mean responses of 3 or less represents dissatisfaction. Mean scores between 3 and 4 are ambivalence. The researcher wrote items in both directions, so about one-half of the items were reverse scored, and he used the 36-item scores to interpret the scale.

### ***C. Validity of Instruments***

Researchers compare different scales on the same test subjects to demonstrate an instrument’s validity (Spector, 1997). Hersey et al. (2013) have reported the validity of the LEAD instrument over the years in several studies and have suggested that researchers can rely on this instrument for its consistency. Greene (1980) confirmed the logical validity of the LEAD instrument among a sample of 264 managers in North America. The instrument scores remained relatively stable across time. Many researchers have reported the validity of Spector’s (1997) Job Satisfaction Scale (Astrauskaite, et al., 2011; Dwyer, Jex, & Spector, 1988; Meade et al., 2007). Spector disclosed that his job satisfaction scale has correlated well with other job satisfaction scales (e.g., Job Descriptive Index) ranging from 0.61 for Coworkers to 0.80 for supervision, on subscales like pay, promotion, supervision, coworkers, and nature of work. In another study, Dwyer et al. (1988) asked supervisors to estimate the job satisfaction of their subordinates. The correlation was 0.54 between incumbents and supervisors, suggesting that supervisors were aware of the feelings of their subordinates towards the job. Based on their studies, Meade et al. (2007) has also maintained that Spector’s (1997) Job Satisfaction Scale is valid. As such, in this work the researcher re

### ***D. Reliability***

Reliability is the extent to which an experiment, test, or any measuring procedure is replicable and yields the same result with repeated trials (Neuman & Robson, 2015). Spector (1997) states that two types of reliability are important for evaluating survey instruments: (a) internal consistency reliability estimates, which measures how well items on a scale relate to one another, and (b) test-retest reliability, which reflects the stability of a scale over time. Caldwell, Marshall, and Walter (1980) indicated that the educational version of the LEAD has proven validity and reliability. To establish reliability, the authors asked 26 elementary school principals to respond to the LEAD. The results were that two measures of internal consistency yielded reliability coefficients of .810 and .613. Spector (1997) reported the internal consistency for the job satisfaction scale in terms of Alpha Coefficient and Test-Retest Reliability Scores. The Spector’s (1997) job satisfaction scale has shown moderate to strong reliability coefficient reliability over the years (Batura, Skordis-Worrall, Thapa, Basnvat, & Morrison, 2016; Paul & Seok, 2011).

### ***E. Data Collection Procedures***

Prior to beginning research, the researcher met with hospital administrators to seek permission to conduct the research. After the hospital administrators granted permission, the researcher met with hospital managers, including personnel from the human resources departments, to explain the nature of the research. Human resources officers at each facility provided records of full-time employees to the researcher, which was used to invite participants and, subsequently, distribute the survey instruments. The researcher provided his telephone number to each participant in the event that they want to exit the study or have further questions. Paper surveys were distributed by human resources offices to participants. Before accessing the survey, participants read and signed the informed consent form. Those who participated in the study returned the completed surveys to the human resource office within two weeks of receipt of the survey packets.

Once the surveys were collected by hospital personnel, they were transferred to the researcher who recorded the data in SPSS 24 for analysis.

### 1) *Descriptive Data Analysis*

To provide insight into the demographics of the sample population, the researcher will report statistics such as mean, median, and standard deviation for each demographic item. This reporting will allow a profile of the sample population to be developed.

### 2) *Reliability Analysis*

Since this research involves measuring unobservable, latent variables (e.g., job satisfaction), a reliability analysis of survey instruments was performed. For each survey instrument, the researcher will calculate the Cronbach's alpha ( $\alpha$ ) for each instrument. According to Gliem and Gliem (2003), an  $\alpha > .70$  is considered an acceptable level.

### 3) *Exploratory Data Analysis*

Once the reliability analysis is concluded, variables will be formed by collapsing items in each survey instrument. For the JSS instrument, ten scales will be created: an overall scale, consisting of Item 1-36, and nine subscales. Once the variables were formed, two tests were performed: Test of Outliers, and Test of Normality. For the LEAD – Other instrument, responses to each situation (1 – 12) will be converted from A – D to 0 – 3 based on guidance provided. Once the alpha-to-numeric coding is completed, two mathematical functions were performed. First, all LEAD – Other responses were summed to form the Leadership Adaptability Score. Second, the four leadership styles were counted to identify the Dominant Leadership Style. If no one leadership style was identified, a special multi-modal category was created.

*i) Test of Outliers.* Outliers in data can influence the placement and dispersion of the mean (Leedy & Ormrod, 2013). Outliers can be caused for many reasons (e.g., survey fatigue, survey disinterest, and data entry error). A researcher must evaluate outliers because it could influence the results in hypothesis testing. To identify outliers, the researcher will use a boxplot. A box plot is a method for graphically depicting groups of numerical data and display variations in a sample of statistical population with any assumptions of underlying statistical distribution (Babbie, 2015). If outliers are detected, the researcher will evaluate each outlier to determine whether the record will be retained or removed.

*ii) Test of Normality.* Some statistical tests require data to be normally distributed. As a result, a researcher must evaluate the distribution of variables. The researcher used the Kolmogoroff-Smirnov (K-S) test to evaluate each variables distribution. If variables used in hypothesis testing are not normally distributed, nonparametric tests will be used for hypothesis testing (Babbie, 2015).

## **H. Hypothesis Testing**

The first research question focused on the relationship between leadership adaptability and job satisfaction. If both variables are normally distributed, the Pearson Product-Moment Correlation Coefficient ( $r$ ) was used to measure the relationship. However, if either variables are not normally distributed, the non-parametric Spearman's Rank-Order Correlation Coefficient ( $r_s$ ) will be used as the measure of the relationship. Spearman differs from Pearson as it doesn't use the actual values; instead, it uses the ranked order of values (Neuman & Robson, 2015).

The second research question focuses on examining the differences in job satisfaction based on the dominant leadership style. If the job satisfaction variable is normally distributed, an Analysis of Variance (ANOVA) was used to measure the differences in job satisfaction based on style. However, if the job satisfaction variable is not normally distributed, then the nonparametric Kruskal-Wallis (K-W) H test will be used to measure the differences.

The significance level for the study was  $\alpha = 0.05$ , and the research results were significant when the  $p$ -value was less than the alpha value. Test values are highly significant when the  $p$ -values are less than 0.01 (Greenland, Senn, Rothman, Carlin, Poole, Goodman, & Altman, 2016), which shows that sufficient evidence exists to support the alternative hypothesis.

## **IV. RESULTS**

On October 2, 2015, human resources departments at four selected hospitals delivered survey packets to all 698 employees, thus enabling 100% contact with the target population. On October 16, 2015, the researcher received 256



survey responses, which represents a 36.6% response rate. Sixteen survey responses were discarded due failure to properly complete the informed consent form or not completing both instruments.

TABLE 1 shows the distribution of demographic characteristics of supervisors starting with age distribution. The age group (31 – 41) had more participants 96/240 (40%), followed by age group (42 – 52) years 64/240 (26.7%).

**Table 1. Demographic characteristics of participants**

Demographics characteristics	<i>n</i>	%
<i>Age</i>		
18 – 30	63	26.3
31 – 40	102	42.5
41 – 50	65	27.1
51 – 60	10	4.2
<i>Gender</i>		
Male	82	34.2
Female	158	66.0
<i>Educational level</i>		
High school	100	41.7
Associates	90	37.5
Bachelors	42	17.1
Masters	8	3.3
Doctorate	-	-
<i>Experience in years</i>		
0 – 3	105	43.8
4 – 7	85	35.4
8 – 11	35	14.6
> 12	13	5.4

The age group 64 –74 had the least number of participants 4/240 (1.7%) compared to all other age groups. The age group (20 – 30) years had 61/240 (25.4%) of the participants, while the age group (53 – 63) had 15/240 (6.2 %). The next demographic variable was gender. There were more female respondents 142/240 (59.2%) than males 98/240 (40.8%). With regard to the educational level, 79.2 % of the participants had high school diplomas or had earned an Associate Degree. Out of the 20.8% remaining, 17.1% had a bachelor’s degree, 3.3% had a master degree, and 0.4% had a doctorate degree. With regard to experience on the job, 77.9% had at least 10 years of experience on the job, 19.2% had at least 11 years on the job, and 2.5% had at least 25 years on the job.

#### *Data Analysis Procedures*

The researcher followed a three-step data analysis process, which involved examining the reliability of the survey instrument, exploring the distribution of variables formed by collapsing the survey individual items, and hypothesis testing.

*Reliability Analysis:* Since the JSS survey instrument measures job satisfaction, which is unobservable, the researcher performed a series of reliability analyses to validate the instrument. Prior to calculating the Cronbach’s alpha, specific

items had to be reverse-coded (Spector, 1997). Upon reverse coding, calculation of the Cronbach's alpha ( $\alpha$ ) showed a reliability of .80 ( $N = 36$ ). This exceeded the normally associated reliability of .70 (Mohamad, Sulaiman, Sern, & Salleh, 2015). Due to the quantity of items on the instrument, a split-half analysis was performed. In a split-half analysis, the Cronbach's alpha is calculated for each half of the instrument, and then a correlation analysis is performed between the forms (Gliem & Gliem, 2003). The Cronbach's alpha for the first 18 items was .70, while the Cronbach's alpha for the last 18 items was .56. The correlation between the two forms was .80. While the correlation also meets the minimum acceptable level, there is a concern that dimensions measured in the last half of the instrument may not be reliable due to survey disinterest or fatigue, or participant confusion.

A third analysis was performed on Item-Totals. Upon investigation, it was noted that several items had low or negative corrected item-total correlation values. Low or negative values influence overall reliability of the instrument. Removing low correlated items would increase the overall survey instrument reliability. However, since this instrument has been validated in many different scenarios over time, the researcher decided to maintain the integrity of the instrument but acknowledges this could have an influence on hypothesis testing.

*Exploratory Data Analysis:* Two exploratory data analyses were conducted; one for the JSS instrument, and one for the LEAD instrument.

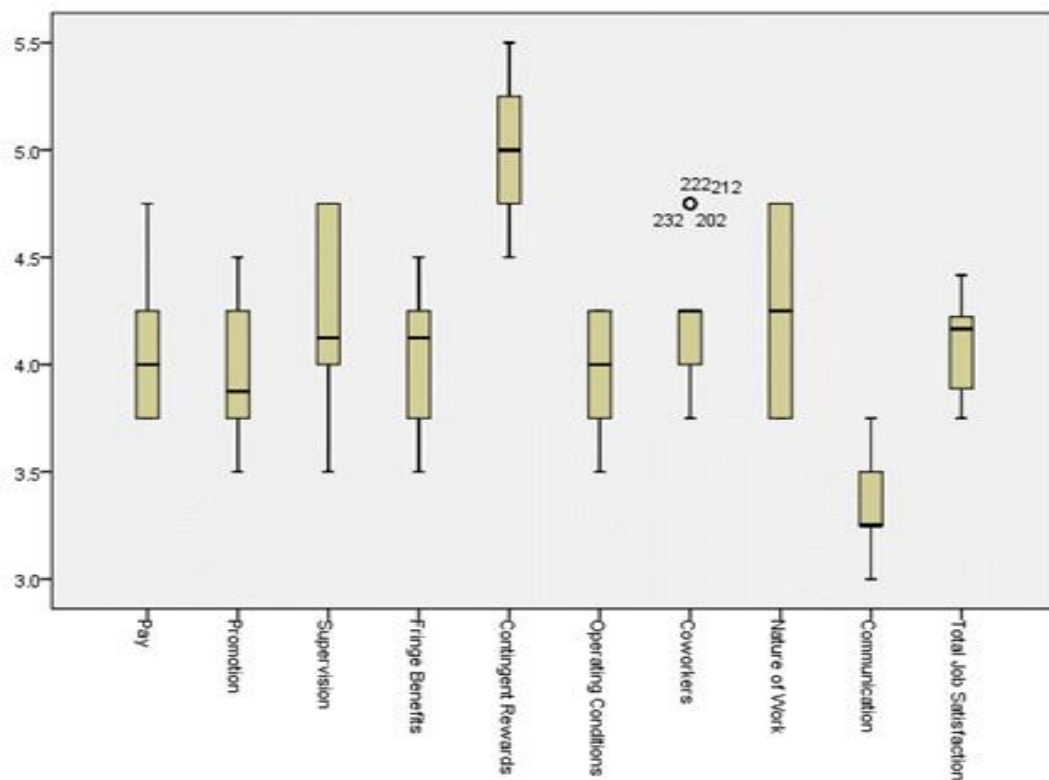
*JSS.* The 36-item instrument was collapsed to form an overall scale. Next, the researcher collapsed specific items associated with a priori dimensions to form the nine job satisfaction subscales. Table 2 depicts the descriptive analysis of this collapsing process. Participants considered Contingent Rewards the most important component of job satisfaction ( $M = 5.03$ ,  $SD = .33$ ), while Communication was considered the least important component ( $M = 3.33$ ,  $SD = .25$ ).

**Table 2. Descriptive statistics of the JSS scale**

JS Facets	Mean		SD
	Statistic	Std. Error	Statistic
Pay	4.0500	.01886	.29216
Promotion	3.9500	.01886	.29216
Supervision	4.2250	.02749	.42589
Fringe Benefits	4.0750	.02052	.31788
Contingent Rewards	5.0250	.02102	.32568
Operating Conditions	3.9750	.01688	.26155
Coworkers	4.1750	.01625	.25177
Nature of Work	4.2250	.02552	.39532
Communication	3.3250	.01625	.25177
Total Job Satisfaction	4.1139	.01365	.21142
Valid ( $N = 240$ )			

*Note:*  $SD$  = Standard Deviation

Next, the researcher used a boxplot to identify outliers in each of the nine JSS subscales and total JSS score. Four outliers were detected in the Coworker subscale. After investigating these records, no patterns could be discerned, and these records were retained in the dataset (Figure 3).



**Figure 2.** Outlier Detection in JSS Subscale and Total Scores

Next, the researcher calculated the Leadership Adaptability Score (LAS) for each participant. Sixty percent of the participants indicated their leader had a low level of adaptability ( $LAS < 24$ ). Conversely, 10 percent reported that their leader had a high level of adaptability ( $LAS > 30$ ); and 30 percent reported their leader had moderate adaptability ( $24 \leq LAS < 30$ ; TABLE 3).

**Table 3. Leadership Adaptability Scores**

<i>N</i>	<i>f</i>	%	Valid %	Cum. %
	16	24	10.0	10.0
	19	48	20.0	30.0
	20	72	30.0	60.0
	25	24	10.0	70.0
Valid	26	7	2.9	72.9
	27	41	17.1	90.0
	31	2	.8	90.8
	32	16	6.7	97.5
	33	6	2.5	100.0
Total	240	100.0	100.0	

Next, the researcher calculated the Dominant Leadership Style (DLS) by identifying the mode DLS for each participant. When the DLS was multi-modal, new categories were identified. Forty percent (40%) of the participants identified their supervisor as following a Selling leadership style, while 33.3% found a Delegating leadership style more dominant (Table 4).

**Table 4. Dominant Leadership Style**

	LS	<i>f</i>	%	Valid %	Cum. %
Valid	S1S2S3	24	10.0	10.0	10.0
	S2	96	40.0	40.0	50.0
	S2S4	24	10.0	10.0	60.0
	S3S4	16	6.7	6.7	66.7
	S4	80	33.3	33.3	100.0
	Total	240	100.0	100.0	

### Hypothesis Testing

This section describes the results of hypothesis testing.

#### 1) Job Satisfaction and Leadership Adaptability

The first research question focused on the relationship between leadership adaptability and job satisfaction. Since job satisfaction was not normally distributed, the nonparametric Spearman's Rank-Order Correlation Coefficient ( $r_s$ ) was used as the test statistic. The results of this test was significant,  $r_s(240) = .31, p < .01$ . This result represents a moderate effect size (Cohen, 1992). As a result of this test, the null hypothesis ( $H1_0$ ) can be rejected, and the alternative hypothesis that there is a relationship between job satisfaction and leadership adaptability can be accepted. A post-hoc test was performed to examine the relationship between leadership adaptability and components of job satisfaction. Since multiple tests are performed in isolation, Bonferroni correction was used. The Bonferroni correction is used to AVOID Type 1 errors when examining multiple relationships simultaneously (Posch & Futschik, 2012). An adjusted p-value of .006 (.05/9) was used to reject null hypotheses. Table 5 shows the results of the Spearman's Correlation between the Leadership Adaptability Score and the Job satisfaction scores. Three strong significant relationships were identified: Leadership Adaptability and Coworkers,  $r_s = .73, p < .000$ ; Leadership Adaptability and Supervision,  $r_s = .65, p < .000$ ; Leadership Adaptability and Contingent Rewards,  $r_s = .49, p < .000$ .

**Table 5. Spearman Correlation for DLS and JSS**

	PY	PR	SV	FB	CR	OC	CW	NW	CM
LAS									
SM rho	.13	.22	<b>.65</b>	-.13	<b>.49</b>	-.12	<b>.73</b>	-.13	-.08
Sig. (2-tailed)	.04	.00	.00	.05	.00	.06	.00	.05	.20

$N = 240$ , SM = Spearman rho, PY = Pay, PR = Promotion, SV = Supervision, FB = Fringe Benefits, CR = Contingent Rewards, OC = Operating Conditions, CW = Coworkers, NW = Nature of Work, CM = Communication.

2) *Job Satisfaction by Dominant Leadership Style*

The second research question focused on examining differences in job satisfaction based on dominant leadership style. Since job satisfaction was not normally distributed, the nonparametric K-W test was used to evaluate the ranked differences. The result of the K-W test was significant,  $X^2(4, N = 240) = 83.759, p < .01$ . Thus, the null hypotheses ( $H_20$ ) was rejected, and the alternative hypothesis that there are differences in job satisfaction based on dominant leadership style was accepted. However, the K-W test only identifies differences between groups; it doesn't identify which groups are different. Post-hoc tests, using Mann-Whitney's  $U$  test, are needed to identify differences between groups.

First, the group of participants where multi-modal dominant leadership group S1/S2/S3 was compared to the other groups (Table 6). As shown in Table 7, job satisfaction for the multi-model group S1/S2/S3 is significantly different than the job satisfaction for the other groups, and represents a large effect size (Cohen, 1992).

**Table 6. Difference between Multimodal DLS Groups and S1S2S3 and Other Groups**

DLS Group	M-W $U$	Wilcoxon $W$	$Z$	<i>Sig.</i>	$r$
S2 ( $n = 120$ )	.000	300.00	-7.71	<.01	.70
S2/S4 ( $n = 48$ )	.000	300.00	-6.86	<.01	.99
S3/S4 ( $n = 40$ )	.000	300.00	-6.25	<.01	.99
S4 ( $n = 104$ )	.000	300.00	-7.60	<.01	.74

A similar series of tests were performed between DLS groups S2 and the remaining groups (TABLE 7).

**Table 7. Difference between DLS, S2, and Other Groups**

DLS Group	M-W $U$	Wilcoxon $W$	$Z$	<i>Sig.</i>	$r$
S2/S4 ( $n = 120$ )	576.00	876.00	-3.86	<.01	.35
S3/S4 ( $n = 112$ )	384.00	520.00	-3.26	.001	.31
S4 ( $n = 176$ )	3360.00	6600.00	-1.45	.147	.11

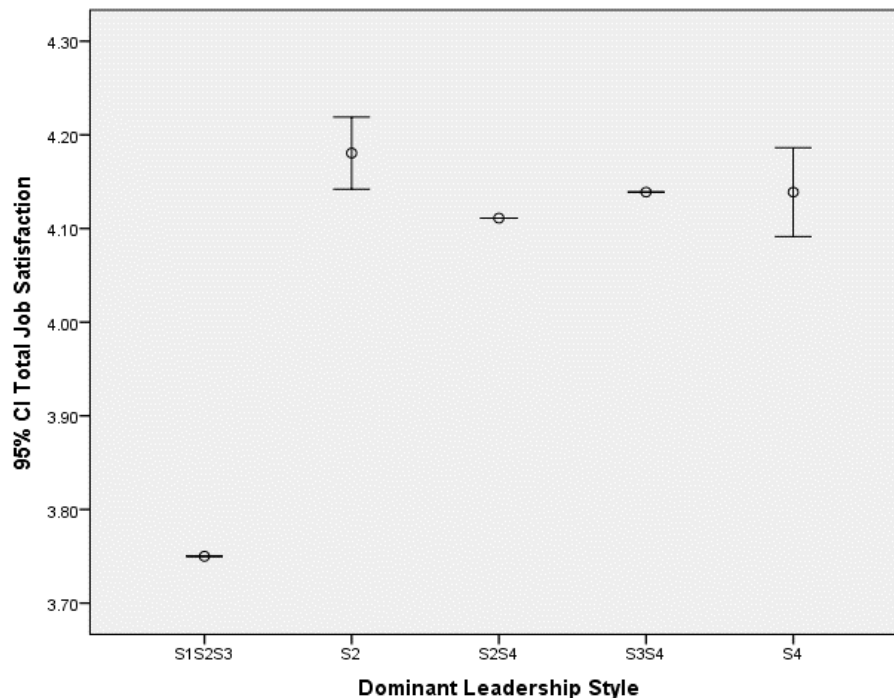
As noted by the table, significant, moderate differences were identified between DLS S2 and multi-modal groups S2/S4 and S3/S4; however, a small, but not statistically significant, difference was identified between DLS, S2, and DLS S4. Another series of tests were performed between the multi-model groups S2/S4 and the remaining two groups (Table 8). As noted by TABLE 8, a large significant difference was identified between S2/S4 and S3/S4, and moderate significant difference was identified between S2/S4 and S4. Finally, the difference between multi-modal group S3/S4 and S4 was examined and the result of the test was not significant,  $Z(96) = -1.949, p = .051, r = .20$ . This represents a small effect size (Cohen, 1992).

**Table 8. Difference between S3/S4 and S4**

DLS Group	M-W $U$	Wilcoxon $W$	$Z$	<i>Sig.</i>	$r$
S3/S4 ( $n = 40$ )	0.00	300.00	-6.245	<.01	.99
S4 ( $n = 104$ )	576.00	876.00	-3.039	.002	.30



A graphical representation supporting the statistical analyses can be found at Figure 3.



**Figure 3.** Job Satisfaction by Dominant Leadership Style with 95% CI

## V. DISCUSSION

The results implied a significant relationship between Supervisor Leadership Adaptability and job satisfaction. A post hoc test revealed strong relationships between Leadership Adaptability and Coworker; Leadership Adaptability and Supervision; and Leadership Adaptability and Contingent Rewards. Further analysis also revealed significant differences in job satisfaction among participants based on supervisor dominant leadership style. However, there was no significant difference identified between DLS S2 and DLS S4. The reason could be, participants perceived they received frequent training to build up job competencies and are therefore able to execute their duties with autonomy. Overall, based on the results, the researcher concluded that a relationship existed between Supervisor Dominant Leadership® style and subordinate job satisfaction among non-managerial hospital employees within the southern region of the United States.

### **Implications**

#### *Theoretical implications*

The role of effective leadership is very critical for the success of any organization including hospitals. In this study, the dominant leadership style was selling, followed by delegating leadership style. The identification of multimodal styles suggested that, aside from selling and delegating leadership styles, supervisors also used a combination of leadership styles to facilitate production. The researcher's findings were consistent with the main premise of the Situational Leadership model. The model depicts that no one leadership style is the best, and that effective leaders are those who practice a combination of leadership styles based on the presenting situation. In this study, subordinates perceived selling leadership style was predominantly practiced by their supervisors. In dynamic organizations like hospitals, selling or coaching leadership style is predominantly used to keep employees abreast of new practices and procedures. In healthcare, processes and methods change frequently, and employees are required to learn new methods as fast as possible.

The results of this study also revealed a significant moderate relationship between leadership adaptability and job satisfaction. These findings were similar to the findings of Parveen and Tariq (2014). They reported that the preferred style for making decisions by heads of departments was selling leadership style. They also reported that supervisors showed low to moderate adaptability. This view was also shared by Bergold and Thomas (2012) who reported that Americans culturally place a lot of emphasis on the supportive roles and share low to moderate adaptability. In this study,

more subordinates perceived their supervisors as having low adaptability. Very few participants perceived their supervisors as having high adaptability. This suggests that leaders must try to improve on their leadership adaptability to effectively impact subordinate productivity or performance. Leadership adaptability is associated with the degree to which a leader can vary his or her style to match the performance readiness of an individual in a specific situation (Hersey et al., 2013).

The nine JSS survey subscales were not clearly defined in this study. When the split-half analysis was conducted, the first half of the subscales showed an internal consistency of .70 which is acceptable for statistical analysis. However, the second half of the scale showed an internal consistency of .56 which raises some concerns. Six supplementary facets of the JSS were not supported in this study. The best JSS facets showing significantly high correlation with Supervisor Leadership Adaptability Scores were Coworker, Supervision, and Contingent Reward. There were other items with significantly negative correlations which may have influenced the results of the study. Based on those results, the researcher assumed that some of the JSS subscales did not measure job satisfaction well within the population of healthcare workers in the southern region of the United States. The researcher assumed that participant confusion, survey disinterest, or fatigue may be responsible. Or the instrument is not appropriate for this specific population. Spector had reported that the Job Satisfaction Scale is designed to measure specific items. These items relate to the nature of the discipline or the appropriateness of the instrument for the specific sample under study. He noted that the JSS was specifically designed to measure both global job satisfaction, as well as its dimensions (Spector, 1997).

Contingent Rewards was highly correlated with job satisfaction, while Communication showed the least correlation. A simple explanation could be differences in individual perceptions of job satisfaction. Job satisfaction meant different things to different people, and most of the Job Satisfaction Scales measured different facets of job satisfaction (Astrauskaite, Vaikevicius, & Perminas, 2010). In this study, participants revealed that they were more motivated by the reward system put in place by management. This reward system may have been the driving force behind many employees meeting their assigned goals. Reward systems come in diverse forms including employee of the month designations, promotions, or salary increases. Aside from meeting assigned goals, Contingent Reward system may have resulted in increased interactions between employees and management. Hence the strong relationship between the two variables.

With regard to communication, participants did not place more importance on formal communication when it came to their job satisfaction. It is possible that employees knew what their responsibilities were and have been on the job for at least three or more years and have gained competencies to perform their duties without much direction or involvement of management. This may account for the fact that delegating leadership was significantly correlated with subordinate job satisfaction. This finding was consistent with the findings of Butt (2010) who revealed that studies regarding communication and job satisfaction have produced mixed results. Butt reported that while some studies found a correlation between the two variables, like the case of the present study, others do not.

Leadership Adaptability was also highly associated with Coworkers, both scoring very low this study. The simple explanation for this is that, over time, employees have developed high competencies in performing their job responsibilities developing autonomy. Even though Coworker support is encouraged in many organizations, in this study, Coworker support was very low partly due to competition generated by their reliance on Contingent Reward and partly due to employees been competent to perform their duties. Leadership Adaptability was also had a strong relationship with Supervision. They both had low scores. The practice of delegating leadership explains the low score for Supervision. In delegating leadership, there is less supervision, with subordinate exerting autonomy. Many employees show satisfaction with job autonomy and hate been micromanaged on the job. They see no need for intense job supervision when they can effectively perform the various tasks assigned to them. Increased job supervision by any supervisor in a case where an employee show competency in completing assigned task, often results in a leadership style-subordinate readiness mismatch as depicted by the Situational Leadership Model. The result will not imply an effective leadership.

#### *Practical implications*

Hersey et al. (2013) advanced that effective practical application of the Situational Leadership® model enhances employee retention, job satisfaction, and employee productivity, while it reduces absenteeism, and turnover. In this present study, the researcher found that respondents perceived their supervisor's dominant leadership style is selling, followed by delegating leadership style. The results were consistent with earlier studies (Kaladeh, 2013; Parveen & Tariq, 2012; Eka, Hadiwidjojo, & Slamet, 2013). Eka, et al. found that managers improved employee job satisfaction using

Situational Leadership® either directly or indirectly. The overall impact was a significant positive influence on job performance. Based on this study and work of others, the implication for healthcare managers is to deploy selling leadership as their primary leadership style, followed by delegating leadership style as their secondary style. In addition, managers may also impact subordinate job satisfaction by practicing multimodal or a combination of leadership styles as needed. The appropriate application of leadership behavior forms the basis of the Situational Leadership® model. Regrettably, according to Henochowicz and Hentherington (2006), even though selling methods have been of great utility for physicians and non-medical managerial leadership, healthcare executives have underutilized the selling leadership style in most of their training sessions and practices. Tsai and Su (2011) also shared Eka, et al.'s (2013) views. Tsai and Su noted that understanding employee satisfaction is critical to organizational success. The authors suggested that managers who employ appropriate leadership behaviors including a multimodal leadership styles, could increase job satisfaction and encourage organizational citizenship behaviors.

Healthcare administrators may find it valuable to use the selling, delegating, and multimodal leadership styles in hospitals, based on the specific job responsibilities. For example, nurses in Intensive Care Units (ICUs) are trained to care for patients with autonomy during their respective shifts. An effective leader should apply a delegating leadership style in this situation. Managers experiencing high staff attrition, low productivity, and excessive use of agency staff, may rely on the results of this study and focus on using the Situational Leadership® approach to help improve the behavioral performance of their employees, and hence organizational productivity.

#### *Future implications*

Healthcare managers may use the results of this study to provide a strong foundation for examining and improving their leadership behaviors. This implies not only in hospitals, but also in any establishment where they exercise authority. Findings of this study could help senior managers to augment existing supervisory or staffing schedules to better match subordinates to appropriate supervisors. Managers may also use the researcher's findings to augment in-service training curricula, policies, and procedures, and other managerial documents to enhance effective leadership skills and foster employee job satisfaction and productivity. Proactive leaders seeking to continue their professional development mid-career may find this study useful in improving their leadership skills. Organizational leaders must know that their employees are the most valuable assets they have. Effective leaders should inform themselves of specific job enhancing facets useful for production.

#### **Recommendations**

##### *Recommendations for future research*

Researchers should determine the relationship between multimodal leadership and job satisfaction. From the literature review, we examined studies with conflicting results about the relationship between specific leadership dimensions such as participating and delegating leadership styles and job satisfaction. The researcher recommends deeper investigation into subordinate job satisfaction and leadership styles, especially telling, participating, and multimodal leadership styles, to help towards making a concrete determination into job satisfaction and leadership styles. The researcher framed the relationship between job satisfaction and the independent variables of telling, selling, participating, delegating leadership. Other researchers could extend these results by studying more independent variables associated with leadership styles, or using different theories related to the situational perspective. This could provide greater insight into the link between non-managerial hospital personnel's job satisfaction and their managers' leadership styles. A researcher could also further study the role of demographic factors such as education level, gender, age, ethnicity, and experience to provide greater insight into leadership and job satisfaction issues. The researcher would examine the perceptions of both supervisors and their subordinates, and what role these demographic factors play in job satisfaction among employees. Furthermore, the leadership adaptability should be re-investigated. In this study, low leadership adaptability was highly associated with subordinates perceived job satisfaction. Generally, it is expected that leaders exhibit high leadership adaptability, that is, the ability for the leader to vary his or her leadership style based on change within the organization. However, low adaptability has shown a high degree of association in this study. Researchers could determine if any correlation existed between Supervisor Dominant Leadership® style and job satisfaction, to help increase the deployment of the Situational Leadership® model in different organizations. The researcher has explored non-managerial personnel; a sub group in the healthcare industry, specifically hospitals. Other researchers may explore managerial personnel with a similar study. The

researcher recommends that more studies are needed using larger samples, more subgroups, and different environments to confirm the results of this investigation.

#### *Recommendations for practice*

*First*, the researcher recommends the practice selling and delegating leadership styles primarily, and multimodal leadership styles based on the appropriate situation. Managers who used selling, delegating, and multimodal leadership styles were highly associated with job satisfaction scores. Supervisor Leadership Adaptability was significantly positively correlated to job satisfaction. Hersey et al. claimed that if leaders applied the Situational Leadership® model correctly, then they could reduce employee turnover, absenteeism, and increase employee retention, job satisfaction, and productivity. Healthcare managers could use this information as decision-making input for healthcare managerial strategies.

*Second*, many organizations have a problem with retaining employees. Employee turnover causes organizations to lose valuable knowledge of business processes and systems that are essential for maintaining a competitive advantage. To alleviate this problem, the researcher makes the following recommendations: healthcare organizations must emphasize on strategies that could improve job satisfaction, including focusing on the manager's dominant leadership style. In addition, managers must be held accountable for high turnover rates.

## VI. CONCLUSION

The results implied a significant relationship between Supervisor Leadership Adaptability and job satisfaction. A post hoc test revealed strong relationships between Leadership Adaptability and Coworker; Leadership Adaptability and Supervision; and Leadership Adaptability and Contingent Rewards. Further analysis also revealed significant differences in job satisfaction among participants based on supervisor dominant leadership style. However, there was no significant difference identified between DLS S2 and DLS S4. The reason could be, participants perceived they received frequent training to build up job competencies and are therefore able to execute their duties with autonomy. Overall, based on the results, the researcher concluded that a relationship existed between Supervisor Dominant Leadership® style and subordinate job satisfaction among non-managerial hospital employees within the southern region of the United States. Exploring this relationship may help healthcare administrators and other businesses to make formidable leadership decisions.

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