The Relationship of Servant Leadership Attributes to Sales Performance of Salespersons in the Healthcare Industry in 2011

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ABSTRACT

THE RELATIONSHIP OF SERVANT LEADERSHIP ATTRIBUTES TO SALES PERFORMANCE OF SALESPERSONS IN THE HEALTHCARE INDUSTRY IN 2011

by

William R. Auxier

Chair: Sylvia Gonzalez
ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: THE RELATIONSHIP OF SERVANT LEADERSHIP ATTRIBUTES TO SALES PERFORMANCE OF SALESPERSONS IN THE HEALTHCARE INDUSTRY IN 2011

Name of researcher: William R. Auxier

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Problem

Servant leadership scholars have claimed that servant-led business organizations are more financially viable, but these claims are based on anecdotal evidence. This quantitative study examines the relationship of servant leadership to revenue generation in business organizations by analyzing the predictability of servant leadership attributes on sales performance. This was accomplished by studying salespersons in the healthcare industry.

Method

One hundred ninety-four study participants completed questionnaires providing quantitative measurements of the seven factors of servant leadership: (a) developing and
empowering others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership, utilizing the Servant Leadership Profile—Revised (SLPR). Sales performance was measured by sales ranking within each respective salesperson’s company, and broken down into three categories; (a) Top 20%, (b) 21% - 40% and (c) 41% and below.

Results

Discriminant function analysis generated two discriminant functions that were significant. The first discriminant function was labeled Voice and had the strongest relationship with the following factors of servant leadership: developing and empowering others, authentic leadership, and visionary leadership. The first discriminant function was a good predictor of sales performance. The second discriminant function was labeled Human Resource Management and had the strongest relationship with the following factors of servant leadership: open participatory leadership, courageous leadership, and inspiring leadership. The second discriminant function predicted membership in the 21% - 40% sales-ranking group, mediocre sales performance. One factor of servant leadership, humility, was eliminated as a predictor of sales performance.

Conclusions

Developing and empowering others, authentic leadership, and visionary leadership are good predictors of sales performance. Open participatory leadership, courageous leadership, and inspiring leadership predict mediocre sales performance. Humility was eliminated as a predictor of sales performance. Business leaders with high mean scores for developing and empowering others, authentic leadership, and visionary
leadership are likely to have a positive impact on the financial viability of a business organization.
Andrews University
School of Education

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A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by
William R. Auxier
March 2013
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TABLE OF CONTENTS

LIST OF TABLES ........................................................................................................ v

Chapter

1. INTRODUCTION ............................................................................................ 1
   Statement of the Problem ............................................................................ 3
   Purpose of the Study ................................................................................... 4
   Research Question and Null Hypothesis..................................................... 5
   Theoretical Framework ............................................................................... 5
   Significance of the Study ............................................................................ 6
   Definition of Terms..................................................................................... 7
   Assumptions................................................................................................ 9
   General Methodology ................................................................................ 9
   Limitations .................................................................................................. 10
   Delimitations ............................................................................................... 11
   Summary ..................................................................................................... 11

2. LITERATURE REVIEW ................................................................................. 13
   Servant Leadership...................................................................................... 14
   Defining Servant Leadership .................................................................... 17
   Servant Leadership in Business Organizations ......................................... 18
   Seven Factors of Servant Leadership......................................................... 30
   Servant Leadership and Sales Performance .............................................. 31
   Sales Performance ....................................................................................... 32
   Salespersons and Leadership .................................................................... 35
   Instruments of Servant Leadership ............................................................ 40
   Summary ..................................................................................................... 41

3. METHODOLOGY ........................................................................................... 43
   General Introduction ................................................................................... 43
   Type of Research ........................................................................................ 43
   Population and Sample .............................................................................. 44
   Hypothesis .................................................................................................. 45
   Definition of Variables .............................................................................. 45
   Instrumentation ........................................................................................... 48
   Data Collection ............................................................................................ 49
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Analysis</td>
<td>49</td>
</tr>
<tr>
<td>Summary</td>
<td>51</td>
</tr>
<tr>
<td>4. DATA ANALYSIS</td>
<td>52</td>
</tr>
<tr>
<td>Participants’ Description</td>
<td>52</td>
</tr>
<tr>
<td>Variables Description</td>
<td>54</td>
</tr>
<tr>
<td>Hypothesis Testing</td>
<td>58</td>
</tr>
<tr>
<td>Conclusion</td>
<td>67</td>
</tr>
<tr>
<td>5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS</td>
<td>69</td>
</tr>
<tr>
<td>Introduction and Literature</td>
<td>69</td>
</tr>
<tr>
<td>Background and Literature</td>
<td>69</td>
</tr>
<tr>
<td>Summary of the Study</td>
<td>72</td>
</tr>
<tr>
<td>Problem</td>
<td>72</td>
</tr>
<tr>
<td>Purpose</td>
<td>73</td>
</tr>
<tr>
<td>Research Question</td>
<td>73</td>
</tr>
<tr>
<td>Research Design and Procedures</td>
<td>74</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>75</td>
</tr>
<tr>
<td>Descriptive Statistics</td>
<td>75</td>
</tr>
<tr>
<td>Variables</td>
<td>76</td>
</tr>
<tr>
<td>Primary Findings</td>
<td>80</td>
</tr>
<tr>
<td>Discussion</td>
<td>85</td>
</tr>
<tr>
<td>Interpretations</td>
<td>91</td>
</tr>
<tr>
<td>Limitations</td>
<td>94</td>
</tr>
<tr>
<td>Conclusions and Recommendations</td>
<td>95</td>
</tr>
<tr>
<td>Recommendations for Practice</td>
<td>96</td>
</tr>
<tr>
<td>Recommendations for Research</td>
<td>97</td>
</tr>
<tr>
<td>Final Thoughts</td>
<td>98</td>
</tr>
<tr>
<td>Appendix</td>
<td></td>
</tr>
<tr>
<td>A  TABLE OF VARIABLES</td>
<td>100</td>
</tr>
<tr>
<td>B  SLPR PERMISSION</td>
<td>108</td>
</tr>
<tr>
<td>C  SURVEY</td>
<td>111</td>
</tr>
<tr>
<td>D  IRB LETTER OF APPROVAL</td>
<td>126</td>
</tr>
<tr>
<td>REFERENCE LIST</td>
<td>128</td>
</tr>
<tr>
<td>VITA</td>
<td>140</td>
</tr>
</tbody>
</table>
LIST OF TABLES

1. Leadership Characteristics and Traits .............................................................. 39
2. Descriptive Statistics of Study Participants ..................................................... 53
3. Gender Frequencies of Study Participants ....................................................... 53
4. Level of Education Frequencies of Study Participants ................................. 54
5. Seven Factors of Servant Leadership ............................................................... 55
6. Servant Leadership Mean Scores and Sales Performance/Sales Ranking .......... 56
7. Means and Standard Deviations of Predictor Variables as a Function of Sales Performance .............................................................. 57
8. Tests of Equality and Group Means ................................................................. 58
9. Wilks’s Lambda ............................................................................................... 60
10. Eigenvalues for Sales Ranking ........................................................................ 61
11. Standardized Coefficients and Correlations of Predictor Variables .............. 61
12. Classification Results for All Sales-Ranking Categories ................................. 64
13. Functions at Group Centroids ......................................................................... 65
14. Analysis of Variance (ANOVA) ..................................................................... 66
15. Games-Howell Test for Discriminant Scores from Function 1 for Analysis 1 ........................................................................................................ 66
16. Games-Howell Test for Discriminant Scores from Function 2 for Analysis 1 ........................................................................................................ 67
17. Standardized Coefficients and Correlations of Predictor Variables of Function 1, Voice ........................................................................................... 81
CHAPTER I

INTRODUCTION

The current global economic crisis has organizations around the world fighting for survival. Such organizations as Roman Gladiators of Yesteryear are in a battle of life or death. For-profits and non-profits alike cannot survive long term if the revenue going out exceeds revenue coming in (Gale & Orszag, 2003). Even governments are at risk (Pollin, 2012). According to the United States Department of Labor, the October 2009 unemployment rate was 10.1% (Bureau of Labor Statistics Data, 2012). Since 1948, the United States has experienced unemployment at or near this level only one time, and that was in the winter of 1982. In response to high unemployment, the United States government approved a stimulus package of unprecedented proportions in January 2009. In spite of this colossal attempt to stimulate the economy, some, like the Mackinac Center for Public Policy, a nonpartisan economic think tank, argued that the stimulus package would not make a substantial impact. In December 2011, the United States Department of Labor reported the unemployment rate as 8.5%, down from 10.1% in October 2009, but still historically high (Bureau of Labor Statistics Data, 2012). If there was ever a need for effective leadership, the time is now.

Effective leadership has numerous definitions. Servant leadership scholars would argue that servant leadership is effective leadership. “Servant leadership is an understanding and practice of leadership that places the good of those led over the self-
interest of the leader” (Laub, 1999, p. 81). Servant leaders serve first. Servant leaders value people, develop people, build community, display authenticity, and provide and share leadership. Servant leader advocates claim that servant leadership leads to a more viable organization (Autry, 2001; Blanchard, 2007; Bragdon, 2006; Covey, 2004; Greenleaf, 1977; Hunter, 2004; McGee-Cooper & Looper, 2001; Spears, 2005). A viable organization is an organization that has the ability to grow, to expand, to develop, and to adapt to its environment. In business, viability is most often measured in terms of revenue and profitability. Claims of organizational viability through servant leadership are based on anecdotal evidence (Eicher-Catt, 2005; Farling, Stone, & Winston, 1999; Rennaker & Novak, 2007; Russell & Stone, 2002; Sendjaya & Sarros, 2002; Smith, Montagno, & Kuzmenko, 2004; Washington, Sutton, & Field, 2006); therefore, business leaders may hesitate to adapt a leadership style promising greater revenue and profitability without empirical data to substantiate such claims (Walgenbach & Hegele, 2001). This study addresses this issue by empirically studying the relationship, or lack thereof, between servant leadership attributes and sales performance. This will be accomplished by studying salespersons in the healthcare industry in the United States by comparing their servant leadership attribute mean scores to their respective 2011 sales performance.

There are several reasons to focus on salespeople. Salesmanship is a form of leadership (Friedman, 2004). According to Friedman, many people stereotype salespersons negatively due to a lack of understanding of what salespersons do. Yet, professional salespeople make a living by providing leadership and implementing change within organizations. They are typically the front line of income and customer contact for an organization. Their leadership influences organizational success for both the customer
and the organization they represent. An understanding and awareness of salesmanship “is crucial for understanding the history of American economic and social change” (p. 269). Many salespersons take on more advanced leadership roles within an organization. The majority of chief executive officers have spent part of their career in sales (Mattson & Parinello, 2009). Quite simply, salesmanship is leadership; therefore, measuring servant leadership attributes in salespersons will allow conclusions to be drawn about servant leadership and business viability.

**Statement of the Problem**

Business organizations spend a great deal of money searching for proven leadership paradigms. It has been estimated that 86% of the companies in the United States offer some form of leadership training (Boyett & Boyett, 1998; Zhu, May, & Avolio, 2004). While making a substantial investment in leadership training, it is difficult for business organizations to verify how this investment affects business performance. At the same time, much of the leadership research indicates that leadership is critical to organizational performance and profitability (Bass, 1985, 1990; Clark, Clark, & Campbell, 1992; Kotter, 1990a, 1990b; Meindl & Ehrlich, 1987; Rottenberg & Saloner, 1993; Yukl & Van Fleet, 1992; Zhu et al., 2004). Sales success is critical to the success of business organizations (Bryant, 2005; Wang, 2000); therefore, business performance as measured by sales performance and its relationship to leadership needs verification.

As mentioned, anecdotal evidence suggests that servant leadership contributes to the financial viability of an organization (Autry, 2001; Blanchard, 2007; Bragdon, 2006; Covey, 2004; Greenleaf, 1977; Hunter, 2004; McGee-Cooper & Looper, 2001; Spears, 2005). To date, no study has examined the relationship between servant leadership and
sales performance in a business organization. With limited empirical research on servant leadership, a great opportunity exists to identify outcomes related to servant leadership (Barbuto & Wheeler, 2002). Studying servant leadership to see whether there is a significant relationship with sales performance in a for-profit business will provide the groundwork to begin learning how servant leadership can be instrumental in achieving desired outcomes in an organization, and, therefore, a more viable organization.

The question this study attempted to answer was: Are the seven factors of servant leadership: (a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open, participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership, significant predictors of sales performance among salespersons in the healthcare industry in 2011?

**Purpose of the Study**

Although previous servant leadership studies have examined the relationship of servant leadership with other variables; job satisfaction, (Svoboda, 2008), team effectiveness (Rauch, 2007), attitudes (Daubert, 2007), culture (Herndon, 2007), trust (Dimitrova, 2008), psychological hardiness (McClellan, 2008), perceptions (Arfsten, 2006), and team commitment (Dannhauser & Boshoff, 2006), none examine the relationship between servant leadership and sales performance. The purpose of this study was to look at the predictability of servant leadership attributes on sales performance among salespersons in the healthcare industry in 2011.

**Research Questions and Null Hypothesis**

The research question guiding this study was: Are the seven factors of servant leadership: (a) developing and empowering others, (b) humility, (c) authentic leadership,
(d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership, significant predictors of sales performance among salespersons in the healthcare industry in 2011?

The following null hypothesis was tested:

H10: Developing and empowering others, humility, authentic leadership, open participatory leadership, inspiring leadership, visionary leadership, and courageous leadership, as measured by the Servant Leadership Profile—Revised (SLPR) were not significant predictors of sales performance among salesperson in the healthcare industry in 2011.

**Theoretical Framework**

Many servant leadership scholars claim that servant leadership results in a more viable business organization and that servant-led organizations are more competitive and more viable (Autry, 2001; Covey, 1989; Greenleaf, 1977; Newsom, 2000). Robert Greenleaf, a business executive, helped create the concept of servant leadership and predicted that, “to the extent that this principle prevails in the future, the only truly viable institutions will be those that are predominantly servant-led” (Greenleaf, 1977, p. 24). Greenleaf identified commitment to people within the organization as key to organizational viability. According to Greenleaf, “A hopeful sign of the times, in the sector of society where it seems least expected—highly competitive business—is that people-building institutions are holding their own while they struggle successfully in the market place” (p. 29).

Servant leadership provides a concept of leadership that appeals to many. Sendjaya and Sarros (2002) credit Jesus Christ as the original teacher of servant
leadership. Fawell (2007) maintains that servant leadership combines several religious views, not just Christianity. Regardless of its origin, interest in servant leadership is growing; yet, empirical evidence is lacking. Many articles note that there is only anecdotal evidence to support an understanding of servant leadership (Eicher-Catt, 2005; Farling et al., 1999; Sendjaya & Sarros, 2002; Rennaker & Novak, 2007; Russell & Stone, 2002; Smith et al., 2004; Washington et al., 2006).

**Significance of the Study**

This study contributes to the knowledge base of servant leadership theory and the possible effect of servant leadership with regard to a business organization’s viability. Empirical evidence determined whether there was any predictability between servant leadership and sales performance. Successful sales performance generates sales revenue, a key economic indicator of a business’s financial viability (Mooney, 2008). Literature has indicated that servant leadership contributes to a more viable organization; yet, an examination of servant leadership in a business organization to determine if there is a relationship with sales performance has not been investigated.

Regarding sales performance, this research has pragmatic significance because of its implication for a more financially viable organization. Previous servant leadership research focused on the relationships between leaders and followers and the attributes of servant leaders (Abel, 2000; Arfsten, 2006; Autry, 2001; Bartholomew, 2006). Although good relationships between leaders and followers and a leader’s attributes are all important to the understanding of servant leadership and leadership studies in general, no studies have focused on the relationship of servant leadership and sales performance in a business organization. If a significant relationship exists between servant leadership
attributes and sales performance, this would indicate that servant leadership may lead to a more viable organization.

Finally, this study focused on salespersons employed by companies in the healthcare industry. Previous empirical inquiry into servant leadership theory focused mostly on non-profit organizations, primarily spiritual and educational organizations (Dillman, 2004; Dimitrova, 2008; Drury, 2004; Hebert, 2003; Hill, 2008; Ilken, 2005; Joseph, 2006; McClellan, 2008; Moore, 2008; Svoboda, 2008; Van Kuik, 1998; Vidic, 2007; Walker, 1997); therefore, this study offsets this imbalance. The tendency to study non-profit organizations might lead some to conclude that servant leadership theory is contextually constrained. By focusing on business organizations, this study has the potential to increase interest in servant leadership.

**Definition of Terms**

*Follower:* Followers voluntarily and actively engage in the leadership process by responding to the leader’s initiative to identify shared purpose, vision, and action toward change (Laub, 2004).

*Leader:* A leader is a person who sees a vision, takes action toward the vision, and mobilizes others to become partners in pursuing change (Laub, 2004).

*Leadership:* Leadership is the process by which an individual or group influences another individual or group for the purpose of achieving a common vision (Laub, 2004).

*Management:* Management is the attainment of organizational goals in an effective and efficient manner through planning, organizing, staffing, directing, and controlling organizational resources (Draft, 2005).
**Outcome Variable:** A variable whose values we are trying to predict from one or more predictor variables. Outcome variable is synonymous with dependent variable (Field, 2009).

**Predictor Variable:** A variable that is used to predict values of another variable known as an outcome variable. Predictor variable is synonymous with independent variable (Field, 2009).

**Revenue:** Increases in income from the main business activities of a company measured as dollar amounts received for activities such as selling products or services. When a sale takes place, a company earns revenue. Revenue is synonymous with sales revenue (Mooney, 2008).

**Sale:** An exchange transaction between two parties, each party gives up and receives something of value. Sales are the purpose of doing business (Mooney, 2008).

**Sales performance:** What salespersons do that can be measured and observed in terms of each salesperson’s proficiency of contributing to the economic benefit or profitability of the organization (Pulakos, Arad, Donovan, & Plamondaon, 2000).

**Sales revenue:** Increases in income from the main business activities of a company measured as dollar amounts received for activities such as selling products or services. When a sale takes place, a company earns revenue. Sales revenue is synonymous with revenue (Mooney, 2008).

**Servant Leadership:** Servant leadership is an understanding and practice of leadership that places the good of those led over the self-interest of the leader (Laub, 1999). Servant leadership can be categorized into seven factors or attributes: (a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open,
participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership (Wong & Page, 2003). These seven factors stand as the main constructs that describe servant leadership in action as measured by the Servant Leadership Profile—Revised (SLPR), which provides a quantified numeric value indicating servant leadership.

SLPR: This acronym refers to the Servant Leadership Profile—Revised developed by Wong and Page (2003) used in this study to measure servant leadership.

Assumptions

The salespersons in this study were the employees from multiple companies in the healthcare industry. That sales techniques, philosophies, and business practices of these companies are comparable was assumed. For the purpose of this study, it was also assumed that sales performance was based on the interaction of the salesperson with the customer. That sales performance results in profitability for each respective company and, therefore, a more viable organization was assumed. Another assumption was that the self-reported responses would be legitimate perceptions.

General Methodology

The objective of this study was to determine the relationship of certain variables expressed as numeric values; therefore, this was a quantitative study (Field, 2009). Data were collected utilizing a survey that participants completed online. Completed surveys provided descriptive variables, predictor variables, and an outcome variable with three categories. Discriminant function analysis or discriminant analysis predicts outcome variables that are categorical (Field, 2009). Discriminant analysis determined the relationship between the predictor variables, the seven factors of servant leadership.
(developing and empowering others, humility, authentic leadership, open participatory leadership, inspiring leadership, visionary leadership and courageous leadership) and the outcome variables, the three sales-ranking categories (Top 20%, 21%-40%, and 41% or below).

Sample size is important to statistical significance. Field (2009) suggests a range of 10 to 15 participants for each predictor variable whereas Stevens (2001) suggests 20 study participants per variable. This study has seven predictor variables. Combining Field’s and Stevens’s suggestions, we have a range of 70 to 140 as the minimum number of study participants. My sample size was 194; therefore, the criterion for sample size was exceeded.

Study participants were from companies in the healthcare industry in the United States. Each participant received and completed the SLPR, which provided a mean score for each servant leadership attribute predictor variable. Each salesperson’s 2011 sales performance, based on sales ranking, was the outcome variable. Data was collected to describe the sample. These included gender, number of years in healthcare sales, number of years in current sales position, level of education, and age.

Limitations

This study depended on voluntary respondents to complete and return the servant leadership instrument. Efforts to determine why people decided not to respond were not feasible. In addition, servant leadership and sales performance were measured by self-reporting and respondents may not answer truthfully.
Delimitations

This study focused on salespersons in the healthcare industry. Focusing on salespersons from multiple companies within one industry provided greater clarity and a solid knowledge base for further empirical research. In addition, focusing on a business or for-profit organization instead of a non-profit organization helps fill a void in current servant-leadership research.

Summary

Today’s economy has organizations around the world fighting for survival. Servant leader advocates claim that servant leadership results in a more viable organization with the ability to grow, expand, develop, and adapt. Claims of organizational viability through servant leadership are based on anecdotal evidence, and business leaders may hesitate to adapt a leadership style promising greater revenue and profitability without empirical data to substantiate such claims. This quantitative study determined if there was any predictability between servant leadership attributes and salesperson sales performance in 2011. Salesmanship is leadership; therefore, a study of sales performance is a study of leadership performance.

This study flows in the following manner: Chapter 1 provides the framework for this study and the need to study the relationship between servant leadership attributes and sales performance. Chapter 2 provides an in-depth review of the literature on servant leadership; defining servant leadership; servant leadership in business organizations; the seven factors of servant leadership; servant leadership and sales performance; sales performance; salespersons and leadership, and finally; instruments of servant leadership. Chapter 3 describes the methodology of the study. Chapter 4 consists of data analysis.
Lastly, Chapter 5 consists of a summary of the findings, conclusions, and recommendations for further study.
CHAPTER 2

LITERATURE REVIEW

That servant-led organizations are more competitive and more viable has been stated over and over again for over 30 years by servant leader advocates. The lack of empirical research to support this premise causes some researchers to question this claim. The purpose of this study was to examine the significance of the relationship between servant leadership attributes and sales performance of salespersons in business organizations. Measuring the servant leadership attributes of salespersons and studying the level of correlation with sales performance would empirically determine if a significant relationship exists. The question this study answered is: Are the seven factors of servant leadership, (a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership, significant predictors of sales performance among salespersons in the healthcare industry in 2011?

Literature reviewed covered eight areas: servant leadership; defining servant leadership; servant leadership in business organizations; the seven factors of servant leadership; servant leadership and sales performance; sales performance; salespersons and leadership; and, finally; instruments of servant leadership.
Servant Leadership

Robert Greenleaf created the concept of servant leadership over 30 years ago. “The great leader is seen as servant first, and that simple fact is the key to his greatness” (Greenleaf, 1977, p. 21). Greenleaf predicted that, “to the extent that this principle prevails in the future, the only truly viable institutions will be those that are predominantly servant-led” (p. 24). Servant leaders are leaders who put other people’s needs, aspirations, and interests above their own. The servant leader deliberately chooses to serve others; “The servant-leader is servant first” (p. 27). Commitment to people within the organization was identified as key to organizational viability. According to Greenleaf, “a hopeful sign of the times, in the sector of society where it seems least expected—highly competitive business—is that people-building institutions are holding their own while they struggle successfully in the market place” (p. 29).

Greenleaf believed in the concept he named servant leadership. After spending 38 years with American Telephone and Telegraph, which, at the time, was the largest business organization in the world, Greenleaf understood the influence of leadership in a business organization. When he retired in 1964, he began consulting with both for-profit and non-profit organizations, with an emphasis on educational institutions. He also established the Center for Applied Ethics, later renamed the Robert K. Greenleaf Center for Servant Leadership. During this time, he reflected upon his life experiences and began to write.

His writing provides a collection of his thoughts and essays introducing a new leadership paradigm. Greenleaf’s first book, The Servant as Leader, was written in 1969. Greenleaf’s concept was the servant as leader. The concept he was developing stated that
leaders should be servants first with a conscious choice later to lead others. Focusing first on serving rather than leading was a novel view of leadership.

Inspired by Hermann Hesse’s (1956) novel, Journey to the East, the story of a mythical journey by a group of people on a spiritual quest, Greenleaf’s entire work is anecdotesly based. In Journey to the East, the main character is Leo, a servant, who took care of the group. Along the journey, Leo served the group in small unnoticeable ways. When Leo disappears, his absence causes the group to realize what a powerful leader he had become through his service to them. Upon his return, Leo described the importance of service, and how leaders who focused on ruling rather than serving lacked understanding. Leo was perceived as a great leader because he focused on serving others instead of power and prestige. Leo was the leader the entire journey.

Combining his personal experience, his beliefs, and the lessons of Journey to the East, Greenleaf articulated the concepts of servant leadership. He believed that servant leadership was a more effective approach than leadership focused on power. Coercive power would last only while the enforcer was watching. Servant leadership provides greater effectiveness through the power of gentle persuasion. Servant leadership has a long-lasting effect.

Greenleaf’s work is well written, easy to understand, addresses how servant leadership is applicable to all kinds of organizations, and serves as a key foundation to servant leadership theory. Greenleaf is a vital resource for research on servant leadership.

Servant leadership provides a concept that appeals to many, particularly Christians, who credit Jesus Christ as the original teacher of servant leadership (Sendjaya & Sarros, 2002). Jesus constantly placed the needs of others first.
Jesus called them together and said, “You know that those who are regarded as rulers of the Gentiles lord it over them, and their high officials exercise authority over them. Not so with you. Instead, whoever wants to become great among you must be your servant, and whoever wants to be first must be slave of all. For even the Son of Man did not come to be served, but to serve, and to give his life as a ransom for many.” (Mark 10:42-45, NIV)

Jesus used the term servant as a synonym for greatness. He taught that a leader’s greatness is measured by his commitment to serve others. Not only did Jesus talk about serving others, he demonstrated it by engaging in the humble act of washing his disciples’ feet. During Jesus’ time, foot washing was not a ceremonial custom, but more a necessity because people walked in sandals through dusty, muddy, manure-filled streets (Ford, 1991). People’s feet were most often dirty and smelly. Washing someone’s feet was considered a demeaning task delegated to a lowly servant. In the absence of a servant, it was common for the lowest-ranking guest to wash the feet of others. Jesus and his disciples entered a house for a meal with dirty, smelly feet. Shortly after the evening meal was served, Jesus got up from the meal, took off his outer clothing, and wrapped a towel around his waist. After that, he poured water into a basin and began to wash his disciples’ feet, drying them with the towel that was wrapped around him. (John 13:4-5, NIV)

Jesus set the example that a leader could be both strong and effective while at the same time being humble and caring.

Fawell (2007) maintains that servant leadership combines several religious views, not just Christianity. He maintains that Greenleaf’s writings on servant leadership are best described as a rise in consciousness or “individual spirituality” (p. 217). Focusing on the concept of love, Fawell links current or recent leaders from various religious and spiritual traditions, including Robert Greenleaf, Gandhi, Martin Luther King, Nelson
Mandela, Vaclav Havel, and Bishop Tutu. Fawell argues that all these leaders, while not all Christian, share servant leader attributes.

In an attempt to more clearly define servant leadership, Spears (2005) identified 10 characteristics of servant leaders: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and building community. Spears did note that these 10 attributes are not exhaustive, leaving open the opportunity for further refinement. Greenleaf’s writings are the source of Spears’s list of characteristics, which is a narrative analysis of Greenleaf’s work. Spears’s characteristics of servant leadership have been referenced in many studies and have provided a framework to identify servant leadership traits (Girard, 2000; Jennings, 2002; Rude, 2004; Strickland, 2006; Thompson, 2006).

**Defining Servant Leadership**

Although interest in servant leadership continues to grow, it suffers from a lack of a clear definition. Leadership studies in general suffer from this same lack of clarity (Laub, 2004). The question for servant-leadership scholars becomes, How can research be conducted on a topic that has not been clearly defined? Leadership studies have a culture of definitional permissiveness and relativity (Rost, 1993). Confusion over definitions and what different terms mean does not provide a solid foundation for research. The terms of leadership and servant leadership can be confusing. Is servant leadership leadership? Are leader and leadership synonymous terms? If servant leadership is an understanding and practice of leadership, then what is leadership? One scholar’s concept becomes another scholar’s definition. Greenleaf’s (1970) test of servant leadership has been used in this way.
The best test, and difficult to administer, is: Do those served grow as persons? Do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants? And, what is the effect on the least privileged in society; will they benefit, or, at least, not be further deprived? (Greenleaf, 1970, p. 7)

While Greenleaf’s “test” is a wonderful description of servant leadership, it is not a definition. The following definition of leadership was utilized in this study: Servant leadership is an understanding and practice of leadership that places the good of those led over the self-interest of the leader (Laub, 1999). Servant leadership can be categorized into seven attributes: (a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open, participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership (Wong & Page, 2003). These seven factors stand as the main constructs that describe servant leadership in action as measured by the Servant Leadership Profile—Revised (SLPR), which provides a quantified numeric value indicating servant leadership.

**Servant Leadership in Business Organizations**

Many studies of servant leadership note that anecdotal evidence is the primary method utilized to develop an understanding of servant leadership (Eicher-Catt, 2005; Farling et al., 1999; Rennaker & Novak, 2007; Russell & Stone, 2002; Sendjaya & Sarros, 2002; Smith et al., 2004; Washington et al., 2006). These studies call for empirical research on servant leadership. As a result, recent quantitative studies have been conducted in education and non-profits examining the relationship between servant leadership and environmental attitudes (Daubert, 2007), agape love, humility, altruism, trust, empowerment and service (Dimitrova, 2008), school culture and student achievement (Herndon, 2007), negotiation strategy (Joseph, 2006), leader trust and
organizational trust (Joseph & Winston, 2005), psychological hardiness (McClellan, 2008), effectiveness of teams (Irving, 2005), and job satisfaction (Svoboda, 2008).

Whereas the above mentioned research is a great addition to the knowledge base of servant leadership, all focus on educational or non-profit institutions. What about business organizations?

Stephen Covey is an advocate of servant leadership in business organizations. Covey (2004) identifies the pain in organizations caused by the idea that most people are neither fulfilled nor excited. More than likely they are frustrated and uninvolved in the organization’s goals. The problem is that most management practices come from the industrial age, which focuses on controlling employees. The solution is for leadership to find its voice and help others to find theirs. Voice is defined as a unique personal significance that is revealed as one faces challenges. Talent, passion, need, and conscience are the elements that make up voice. For an organization and its members to move from effectiveness to greatness requires servant leadership. Covey (2006) states that “organizations are only sustainable when they serve human needs” (p. 6). He goes on to say that “the top people of great organizations are servant-leaders” (p. 6). He cites Collins (2001) regarding the humbleness, reverence, openness, teaching, respectfulness, and caring of level-five leaders. Level-five leaders channel their ego needs away from themselves and into the larger goal of building a great company. It is not that level-five leaders have no ego or self-interest. In fact, they are incredibly ambitious, but their ambition is focused on the organization, not themselves. The inference is that level-five leaders are servant leaders. This is reinforced by Hamilton and Knoche (2007) who
interviewed level-five leaders and concluded that most of the characteristics identified by Greenleaf were observed in the people they interviewed.

Smith et al. (2004) concluded that when organizations find themselves in dynamic, challenging environments, transformational leadership is preferred over servant leadership. In their study, the authors contrasted transformational and servant leadership, looking for similarities and analysis of both leadership concepts’ contributions to the organization. They concluded, “The servant leadership model works better in a more stable external environment and serves evolutionary development purposes, whereas transformational leadership is the model for organizations facing intense external pressure where revolutionary change is a necessity for survival” (p. 87). They reach their conclusion by creating a comparative model, contrasting various aspects of the two leadership models. Their conclusion casts doubt on the universal application of servant leadership to all organizations, especially business organizations.

A different approach to leadership that considered the concept of personalism was developed by Whetstone (2002). Personalism is defined as a position which views persons and personal relationships as the starting point of social theory and practice. Although Whetstone concluded that servant leadership is the most consistent leadership style, he also noted that servant leaders could be susceptible to manipulation when considering personalism. Johnson (2001) suggests changing the name of servant leadership due to a possible negative connotation of the term servant, which can be equated to the term slave. Johnson suggests a name change that more accurately reflects the positive attributes of servant leadership such as altruism and compassion. Followers may try to take advantage of a leader if they perceive a weakness. Bowie (2000) goes so
far as to suggest that servant leaders are more susceptible than other leader types to manipulation by followers.

Servant leadership is a myth. Eicher-Catt’s study (2005) notes how servant leadership has quickly gained popularity across the business community in America in spite of the lack of support from research and a clear definition. She states, “Servant leadership appears to be the panacea to precluded corporate corruptions and scandal, employee dissatisfaction, and lagging company profits” (p. 17). Utilizing semiotic analysis, Eicher-Catt draws her conclusions by reviewing the rhetoric of servant leadership. O’Leary (2005) recognizes semiotics as an accepted qualitative data analysis strategy; however, I question the author’s motivation. Eicher-Catt (2005) argues that the words servant and leadership fail to create a gender-neutral concept, suggesting that the idea of service has feminine characteristics and the idea of leadership has masculine characteristics. She furthers her argument by stating that most senior managers are male and most lower-level managers are female. Eicher-Catt argues that the organizational chain of command could enact “leadership” roles while encouraging lower management staff to exhibit more “servant” characteristics. In this context, servant leadership could become a means to seek submission on the part of others, especially the feminine.

In addition, a great deal of emphasis is placed on the religious theme of servant leadership, which is an admitted part of the servant leadership philosophy. While I question Eicher-Catt’s motivation and, therefore, the possibility of bias, she does make some valid conclusions as a result of her analysis, which she uses to refute the effectiveness of servant leadership. At best, whereas not everyone may agree that servant
leadership is a myth, Laub (2004) notes that “leaders instinctively know that there is a high risk in taking on a true servant approach to leadership in organizations” (p. 2).

Servant leadership literature claims that a leader who is grounded in values (Behr, 1998; Berry, 1999, Farling et al., 1999; Patterson, 2003), managed by values (Blanchard & O’Connor, 1997; Covey, 1991) and vision (Farling et al., 1999; Patterson, 2003; Senge, 1995; Vaill, 1998) will enhance economic performance using service-oriented leadership (Covey, 1989; Heskett, Sasser, & Hart, 1990; Newsom, 2000). Leadership is vital to organizational success (Karp, 2006; Rendall, 2004). Servant leader advocates often reference well-known companies that are servant-led (Autry, 2001; Blanchard, 2007; Hunter, 2004; Spears, 2005). Companies such as TDIndustries have been consistently ranked in the top 10 of Fortune magazine’s 100 Best Companies to Work for in America. Other companies include the Container Store, Toro Company, Walmart, Synovus Financial Corporation, Herman Miller, Pella, Nestlé USA, ServiceMaster Company, Marriott International, Men’s Wearhouse, Southwest Airlines, and Starbucks.

The Fortune 2009 annual survey of top employers ranked Starbucks 24th, Container Store 32nd, TDIndustries 37th, Men’s Wearhouse 71st, Marriott International 78th, Herman Miller 89th, and FedEx 90th (Levering & Moskowitz, 2009). By practicing shared power and high employee involvement, these companies demonstrate the results of servant leadership with their strong financial performance (Hunter, 2004). This message is wonderful; however, the evidence is anecdotal and without a concise definition of servant leadership. It is strongly insinuated that each of these companies’ success is at least partly due to the embracing of the servant-leadership philosophy, but the lack of a clear definition of servant leadership weakens the insinuation.
In his book *The Servant Leader: How to Build a Creative Team, Develop Great Morale, and Improve Bottom-Line Performance*, James Autry (2001) describes servant leadership and provides a practical guide to implementing the principles of servant leadership. Reviewing the concepts of respect, honesty, love, and spirituality, Autry suggests that servant leaders who embrace these management concepts can empower employees and, therefore, benefit the organization. As the title of this book indicates, the inference is that servant leadership affects the bottom line of an organization in a positive way. Improving bottom-line performance equates to a more financially viable organization. Yet in the introduction, Autry states, “Sure, you have to make a profit to keep your business going and it’s nice to live a comfortable life, but that can’t be the primary objective” (p. xii). The emphasis on empowering employees and serving others is what servant leadership is about. To dismiss profitability and financial viability seems contradictory in a book where bottom-line performance is part of its title. A few pages later Autry states, “It [servant leadership] will enhance productivity, encourage creativity, and benefit the bottom line” (p. xix). These comments seem contradictory and confusing.

“If there is a time when it’s particularly challenging for servant leaders to stay the course, it is in the face of crisis or failure” (Autry, 2001, p. 223). I like that Autry acknowledges the challenges a servant leader faces, especially in difficult economic times. His solution, however, refers to a time when as a leader in a business organization, the chief executive officer asked him to reduce his budget by $3 million. Utilizing a participative management approach, Autry’s employees collaborated to do just that. Although this is a great story about empowered employees, Autry even admits that at the time, he had never heard of servant leadership, yet he uses this example to demonstrate
the economic power of servant leadership. “There are lessons here that go to the heart of servant leadership (a term which, at the time, I’d not even heard yet)” (p. 226). What concerns me most is that Autry (2001) never provides a concise definition of servant leadership. Not only does he provide examples of the effectiveness of servant leadership when he admittedly did not even know the concept, he never crystallizes the concept definitively.

Combining profitability, growth over time, and economic stability with trust in the company and a sense of its integrity enables an organization to measure success, a term Blanchard (2007) calls organizational vitality. Organizational vitality indicates that an organization is the provider of choice, the employer of choice, and the investment of choice. Servant leadership produces organizational vitality. Servant leadership strongly impacts financial results. To reinforce this idea, Blanchard cites a study conducted by Huselid (1995) where participative management practices significantly improved employee retention, increased productivity, and improved financial performance. Quantifying his results, Huselid concluded that each standard deviation in the use of participative management practices increased the company’s market value between $35,000 and $78,000 per employee. Herein lies the problem. Huselid studied participative management practices, not servant leadership. While participative management may be a component of servant leadership, participative management is not servant leadership. It does not seem legitimate to apply the findings of a study on participative management to justify and reinforce the value of servant leadership. This is another case of an unclear definition of servant leadership.
Corporations with a more holistic approach have proven to be more financially viable over the long term (Bragdon, 2006). Bragdon argues that publicly traded companies that concern themselves with both their internal and external environments and look at their employees as living assets have outperformed the stock market for the last 30 years. Part of his model of these outstanding companies is that they are servant-led. When asked how he determined the organizations were servant-led, Bragdon stated that “you could tell just by looking at what they were doing” (J. Bragdon, personal communication, June 30, 2007). Clearly, Bragdon did not define servant leadership. Although Bragdon states that his research is empirically based, the relationship of long-term financial viability and its link with servant leadership is clearly based on assumptions.

This lack of a clear definition of servant leadership adds to the confusion of studies and literature. Laub (2004) notes that the lack of clear and concise definitions for both servant leadership and the larger field of leadership studies in general adds to the confusion. Both suffer due to a lack of clearly defined definitions. This void leads to confusion in how leadership, management, and servant leadership are discussed. To conduct scholarly research, clearly stated definitions for key leadership and servant leadership terms must be established.

As servant leadership research has increased, arguments have been made that servant leadership appears less viable than other leadership styles. For example, short-run profit maximization is inconsistent with servant leadership (Giampetro-Meyer, Brown, Browne, & Kubasek, 1998). Although servant leadership appears to result in an improved corporate culture, “if global competitiveness requires short-run efficiency, servant leaders
will hinder corporate financial success” (p. 1734). Servant leadership is not about power, fame, or any self-serving goal, it is more about responsible reflection. Traits of servant leaders include integrity, vulnerability, discernment, awareness of the human spirit, courage in relationships, sense of humor, intellectual energy and curiosity, respect for the future, regard for the present, understanding of past, predictability, breadth, comfort with ambiguity, and presence. Leaders with these characteristics are more likely to engage in responsible reflection, which leads the organization toward goals that demonstrate respect for employees, consumers, and members of the community.

Stakeholders may be hurt by a servant leader (Giampetro-Meyer et al., 1998). Shareholders want results and would be impatient with the servant leader. Large corporations, like those listed in Fortune magazine’s 100 Best Companies to Work for in America, may be able to afford a leader who engages in servant leadership while giving up short-run profits due to their sheer size and multiple divisions. The corporate bottom line would not suffer significantly. Smaller business organizations might not be able or willing to take that chance. In short, an organization and its stakeholders must consider how much short-run profit they are willing to give up in exchange for a more ethical corporate culture provided by servant leadership.

A multi-case study was conducted by Rennaker and Novak (2007) to answer the question: What are the contextual factors within which servant leadership appears to function? They concluded that organizations using servant leadership are typically located in a conservative geographic location and conducting business in a consumer-oriented industry. They further conclude that “organizations steeped in an individualistic mindset or with a social responsibility focus might be identified incorrectly as servant-
led” (p. 321). Additionally, the context for servant leadership must be considered when examining performance outcomes. For example, it may be easier to be both generous and member focused when profits are flowing and company stock is consistently on the rise. Collins (2001) suggests that people like to be part of a winning team and that success and momentum drive continued success and momentum. Success and momentum also drive profits, which affect employee compensations and benefits. Studies examining servant leadership and organizational effectiveness published during a robust economy can lead to false conclusions. During the economic downturn of 2002, companies that were considered to be servant-led closed plants, outsourced manufacturing overseas, laid off employees, and entered difficult labor negotiations with unions (Smith et al., 2004).

Ostrem (2006) studied employees at a business in the Midwest and concluded that there is a significant relationship between servant leadership with altruistic calling and comprehensibility, meaningfulness, trust in supervisor, and engagement. Actively engaged employees are more empowered, more motivated, and more action oriented, which in turn leads to improvement in productivity. Business outcomes that are measurable attract interest because they can be related to revenue growth or reduction in expenses.

Although quantitative studies on servant leadership in business organizations are lacking, a body of research appears to be growing. Arfsten (2006) studied the perceptions of employees at a Christian-based, for-profit organization to determine the perceptions of the presence of servant leadership characteristics within the organization. The outcome variables were characteristics of servant leadership: valuing people, developing people, building community, displaying authenticity, providing leadership, and sharing
leadership. The study revealed that there was some evidence of the servant leadership characteristics studied at some levels of the organization, but not evident throughout the entire organization.

Another study looked at salespersons in the automotive industry and their perceptions as to the level of servant leadership of their supervisors as well as their own level of trust and team commitment (Dannhauser & Boshoff, 2006). The outcome variable was servant leadership and the predictor variables were trust, team commitment, and demographic and organizational variables. Dannhauser and Boshoff concluded that servant leadership, trust, and team commitment are related; however, the relationships between each of these are not equally strong. Servant leadership shares more variance with trust in the organization and the manager than with trust in colleagues. Protestants and Catholics had higher trust scores than did individuals from other religions; therefore one may surmise that Christian religions influence trust.

Team effectiveness and its association with servant leadership was the basis of a study conducted at a manufacturing facility (Rauch, 2007). Team effectiveness was measured by five predictor variables: absenteeism, accident severity rates, attrition rates, defective parts-produced rates, and recordable accident rates. Rauch found that servant leadership had no relationship with recordable accident rates, accident severity rates, or defective parts-produced rates; however, there was a significant relationship between servant leadership and a reduction in both absenteeism and attrition rates. Absenteeism was shown to decrease by over 40% for each increase of one unit on the five unit scale of servant leadership. Attrition decreased over 20% for each increase of one unit in servant
leadership. Both decreasing absenteeism and attrition contribute to organizational performance; hence, servant leadership makes a significant contribution in this area.

What is the relationship between servant leadership and transformational leadership, transactional leadership, job satisfaction, and organizational commitment (Washington, 2007)? Washington concluded that servant leadership was related to job satisfaction and organizational commitment. What is interesting in this study was the conclusion that job satisfaction and organizational commitment were also related to transformational leadership and transactional leadership.

The literature on servant leadership in business organizations ranges from one extreme to another. Evidence that supports the positive impact of servant leadership within a business organization is often anecdotal and lacks a concise definition of servant leadership. Quantitative research has studied the relationship of servant leadership in business organizations with trust and team commitment (Dannhauser & Boshoff, 2006), team effectiveness (Rausch, 2007), altruistic calling and comprehensibility, meaningfulness, trust in supervisor, and engagement (Ostrem, 2006), and transformational leadership, transactional leadership, job satisfaction, and organizational commitment (Washington, 2007). Servant leadership skeptics claim that servant-led organizations will sacrifice short-run profits (Giampetro-Meyer et al., 1998), only work in a stable environment (Smith et al., 2004), may be prone to manipulation by followers (Bowie, 2000), and are contextually based (Rennaker & Novak, 2007). Eicher-Catt (2005) goes as far as saying that servant leadership is a myth. With such far-ranging conclusions, this quantitative study provides a more solid footing to the knowledge base.
of servant leadership theory by determining if there is any predictability between servant leadership and sales performance in business organizations.

**Seven Factors of Servant Leadership**

The seven factors of servant leadership are: (a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership (Wong & Page, 2003). Page and Wong (2000) developed this original model of servant leadership and a survey instrument to measure servant leader characteristics based on prior conceptual analysis. They later revised their model and the Servant Leadership Profile based on empirical research. Based on a sample size of more than 1,000 subjects, Wong and Page (2003) identified the seven factors of servant leadership. The Servant Leadership Profile—Revised (SLPR) measures these seven factors or attributes of servant leadership providing a numeric score of 1 to 7. A score of 5 or higher indicates servant leadership; therefore, the higher the score for each factor, the greater the likelihood of being a servant leader. The mean score of each of the seven factors can be averaged to calculate an overall score of servant leadership. An overall score of 5 or more indicates servant leadership; therefore, a higher overall score indicates servant leadership whereas a lower score indicates a lack of servant leadership.

Numerous studies have utilized the SLPR (Bartholomew, 2006; McClellan, 2008; Reuschel, 2007); however, the majority of these studies focus on the overall servant leadership score instead of the seven factors. Stephen (2007) utilized the seven factors of servant leadership as predictors of principals nominated for Principals of the Year, along
with gender, principles of elementary schools, principles of secondary schools, and ethnic backgrounds. No significant relationships were identified.

**Servant Leadership and Sales Performance**

To date, sales performance and servant leadership have not been studied. Beaver (2007) studied a form of revenue generation by looking at the relationship of servant leadership and revenue generation at a non-profit religious congregation. In her study, she examined the relationship between servant leadership and donations per capita. She concluded that servant-led congregations did not generate more donations or revenue than did non-servant-led congregations. Joseph (2006) examined the relationship of servant leadership and negotiation strategy, which is somewhat related to sales performance, and concluded that relationships do exist between servant leadership and various negotiation strategies. This relationship does not indicate the success or failure of the negotiation, only the strategy. Listening and persuasion are necessary communication skills for salespersons to be successful. Rennaker (2008) found a significant relationship between these two skills, listening and persuasion, to servant leadership.

A plethora of research exists examining a variety of variables as predictors of sales performance (Bissell, 2008; Bryant, 2005; Chipain, 2003; Davis, 2008; Gonzales, 2003; Kauffman, 2007; Killian, 2011; Mulligan, 2003; Tabbiner, 2000; Wang, 2000). The results of these studies are inconsistent. To date, no study has considered the possibility that servant leadership attributes could be used to predict sales performance. In addition, little attention has been given to the interrelatedness of salesmanship and leadership. This presents an opportunity to examine the significance of servant leadership attributes with
sales performance as a new lens with which to examine the effectiveness of servant leadership and how servant-led organizations are more viable.

Sales Performance

The viability of a business organization is directly linked to sales performance (Wang, 2000). Sales performance directly affects a company’s profitability, both short and long term. Understanding predictors of sales performance is, therefore, an important issue for business leaders.

Sales performance, like servant leadership, has numerous definitions. Business organizations often emphasize different aspects of sales performance. Behram and Perreault (1982) separate sales performance into two categories: objective and subjective. Objective sales performance is measured in sales metrics such as revenue, profitability, sales ranking, etc. Subjective sales performance is based on the opinions of others. For the purpose of this study, an objective definition of sales performance was utilized. Sales performance is defined as what salespersons do that can be measured and observed in terms of each salesperson’s proficiency of contributing to the economic benefit or profitability of the organization (Pulakos et al., 2000).

Early research on sales performance first appeared in the early 1900s (Plank & Greene, 1996). Oschrin (1918) is credited for conducting the first quantitative study on sales performance. Personality traits were the focus of that early work, which proved inconclusive. A review of the research on sales performance from the early 1900s to 1982 was documented by Churchill, Ford, Hartley, and Walker (1985). Their analysis of this body of work indicated that no one variable was a significant predictor of sales performance. The body of knowledge and level of interest in predictors of sales performance...
performance were growing in the early 1980s, but the understanding of predictor variables was lacking.

In the 1960s the concept of perceived similarity was introduced by Evans (1963). Evans focused on the dynamic interchange between the salesperson and the customer instead of the salesperson’s characteristics or traits. Evans concluded that the greater the similarity of the salesperson to the customer, the greater the possibility to achieve effective sales performance. Evan’s work inspired research on the predictability of adaptive selling and sales performance that continues today (Bush, Rose, Gilbert, & Ingram, 2001; Eckert, 2006; Robinson, Marshall, Moncrieff, & Lassk, 2002).

Sales performance research has considered a variety of predictor variables. Personality variables have proven to be inconsistent (Barrick & Mount, 1991; Hunter & Hunter, 1984; Vinchur, Schippmann, Switzer, & Roth, 1998). For example, intuitively it would seem that empathy would be a predictor of sales performance, but study results are inconsistent (Comer & Drollinger, 1999; Plank, Greene, & Reid, 1993). Skill level, such as cognitive perceptual and psychomotor abilities (Hunter & Hunter, 1984); vocational, presentation, and interpersonal skills (Ford, Walker, Churchill, & Hartley, 1987); and information collection and analysis skills (Weitz, Sujan, & Sujan, 1986) have all proven to be inconsistent predictors of sales performance. Plank and Reid (1994) examined a salesperson’s effectiveness at exchanging information as a predictor of sales performance. They concluded that effective information exchange (giving, getting, and using information) influences sales performance by creating a perception of empathy, which enhances sales success.
A study conducted by Dixon and Adamson (2011) examined top performing salespersons in an attempt to understand what differentiated them from salespersons who were not top performers. They examined skills, behaviors, knowledge, and attitudes that matter most for high sales performance. Five distinct profiles were developed: (a) The Hard Worker, (b) The Challenger, (c) The Relationship Builder, (d) The Lone Wolf, and (e) The Reactive Problem Solver. Hard Workers put in many hours and extra effort to succeed. They are very self-motivated, do not give up, are highly productive, and are always looking for ways to improve. Challengers have a deep understanding of their customer’s business and push their customers to consider different solutions. They are assertive debaters with customers and internal organizational members alike. Relationship Builders “are all about building and nurturing strong personal and professional relationships” (p. 20). They work hard to make sure the customer’s needs are met. The Lone Wolf is self-confident and follows his or her own instincts even if that means breaking the rules. Reactive Problem Solvers are very reliable and detail oriented, focused on solving customer problems. Top sales performers were defined as salespersons ranking in the top 20% of their sales force. Overwhelmingly, The Challenger finished at the top; The Lone Wolf, Hard Worker, and Problem Solver in the middle; and The Relationship Builder finished at the bottom. They concluded that relationship building is a losing approach, particularly when selling complex solutions. Regardless of whether you agree with the findings or not, this study is thought-provoking as to what determines sales success and what factors predict sales performance.

Although no study to date has examined the relationship of servant leadership attributes with sales performance, Davis (2008) did consider the predictability of
leadership behavior and sales performance. Davis considered five leadership theories: leader-member exchange theory, transactional leadership, transformational leadership, charismatic leadership, and laissez-faire leadership. He concluded that certain leadership behaviors—idealized influence, inspirational motivation, intellectual stimulation and individual consideration—positively affect sales performance. Davis’s findings further support the examination of the predictability of servant leadership attributes on sales performance.

**Salespersons and Leadership**

Salesmanship is a form of leadership (Friedman, 2004). Professional salespersons make a living implementing change within organizations. Typically, they are the front line of income and customer contact for a business organization, therefore being a major influence on organizational success. Furthermore, many salespersons often take on more advanced leadership roles within an organization, with approximately 85% of the chief executive officers in business organizations having spent part of their career in sales (Mattson & Parinello, 2009). Quite simply, salesmanship is leadership; therefore, measuring servant leadership in salespersons will allow conclusions to be drawn about servant leadership and business viability as measured by sales revenue determined by sales revenue.

David Sandler built a global sales training organization and created the Sandler Selling System (Sandler and Hayes, 1996). Many different selling systems have been developed over the years to better enable salespersons in their sales careers. From personal experience, I believe that the Sandler Selling System is one of the best selling systems. A selling system is a communication paradigm designed to persuade others. In
addition to an effective selling system, Sandler provides a pragmatic and effective knowledge base on salesmanship based on personal experience and research.

According to Sandler, there are 11 advantages of a selling career (Deep & Sussman, 1999). First, selling solves problems and fulfills needs. Second, only your efforts and creativity limit your potential. Third, selling provides an opportunity to work with people. Fourth, selling may be the purest form of empowerment. A salesperson often has to resolve customer problems or issues on the spot. Fifth, selling is a psychological high. Talk to any salesperson who has just closed a sale, established a new account, or solved a customer’s problem, and you will discover a person who is feeling positive about him/herself. Sixth, selling makes you test your mettle every day. Salespersons have to perform every day. Seventh, selling provides immediate feedback on your performance. Feedback from buyers and customers leaves no doubt about performance. Eighth, selling generates revenue. A company makes money only when a customer decides to buy. Ninth, selling is the direct communication link between the customer and the company. Tenth, selling provides a path for upward mobility. Sales success attracts attention within the company as well as the attention of competing companies. Sales success and opportunities for advancement are directly related. Finally, a career in sales prepares you for other careers, including other leadership roles.

A salesperson is someone who uses salesmanship to sell a product or service. Salesmanship is defined as “adeptness at creating interest in new ideas, products, [and] methods” (“Salesmanship,” n.d.). A salesperson must create this interest without legitimate authority because he is not a member of the organization he is attempting to affect; therefore, it is essential that a salesperson serve others. Considering Spears’s
10 characteristics of servant leadership mentioned previously (listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and building community) an argument can be made that studying a salesperson is a study of leadership.

To further emphasize that studying salespersons is a study of leadership, Mattson and Parinello (2009) identified 10 critical values of business leaders that shape everything they do and 10 common leadership traits by interviewing over 120 business leaders. To succeed in sales, Mattson and Parinello suggest that salespersons must understand and embrace these business leader values and traits.

Above all, business leaders are people of character, are driven by values, and display powerful leadership traits. The 10 guiding values of business leaders come to life in business dealings. First, business leaders have integrity. They do what they say they are going to do. Second, business leaders are honest. They tell it like it is. Third, business leaders know how to protect relationships and maintain commitments by being trustworthy and loyal. Fourth, business leaders have compassion, showing strong concern and empathy for the people they deal with, and have a sincere desire to understand both situations and individuals. The fifth value is congruency. Business leaders are the same at work as they are at home. Sixth, business leaders are altruistic, giving back in an unselfish way and often anonymously. Seventh, business leaders are persistent and do not give up. Eighth, business leaders are pragmatic. Ninth, business leaders are self-assured, believing in themselves and in the mission of their organizations. Finally, business leaders have faith, believing in a higher power, but are likely to shy away from defining that higher power explicitly or discussing it with others (Mattson & Parinello, 2009).
The 10 leadership traits that drive business relationships identified by Mattson and Parinello’s (2009) are: competitive, opinionated, brief and direct communication, passionate, knowledgeable, decisive, creative, image-conscious, street-smart, and results-driven. Business leaders are competitive, passionately preferring to win, hating to lose. Business leaders are opinionated and ego driven as well as brief and direct in their communication. Often perceived as being impatient, this trait is more focused on getting to the point with a focused communication style. Business leaders are passionate. They love what they do. Business leaders are knowledgeable. They are informed about their business and their industry at multiple levels. Business leaders are decisive. Decisions are made quickly. Business leaders are creative, always looking for new means for problem solving. Business leaders are image-conscious with an awareness of their outward appearance and how they come across to others. Business leaders are street-smart. Simple, easy-to-understand explanations and descriptions are utilized to deal with real-world situations. Finally, business leaders are results-driven.

Table 1 lists Spears’s (2005) 10 characteristics of servant leadership and Mattson and Parinello’s (2009) business leaders’ 10 guiding values and leadership traits that drive business relationships. By comparing and contrasting the characteristics of servant leadership with the values and traits of business leaders, one can see the interrelatedness. For example, for a business leader to be brief and direct in communication (trait), to be knowledgeable (trait), decisive (trait), and creative (trait), one must be a good listener (characteristic). Awareness (characteristic) and image-conscious (trait) are directly related. Persuasion (characteristic) and decisiveness (trait) are related, as are foresight (characteristic) and being results-driven (trait). Compassion (value) may yield empathy
characteristic) and stewardship (characteristic). Altruism (value) may result in stewardship (characteristic), commitment to grow people (characteristic), and/or building community (characteristic). What is important is not to try to match or compare Spears’s 10 characteristics to Mattson and Parinello’s 10 leadership values and traits, but to realize the interrelatedness of salesmanship and leadership.

Table 1

Leadership Characteristics and Traits

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Characteristics</td>
<td>10 Guiding Values</td>
</tr>
<tr>
<td>Listening</td>
<td>Integrity</td>
</tr>
<tr>
<td>Empathy</td>
<td>Honesty</td>
</tr>
<tr>
<td>Healing</td>
<td>Trustworthiness</td>
</tr>
<tr>
<td>Awareness</td>
<td>Compassion</td>
</tr>
<tr>
<td>Persuasion</td>
<td>Congruency</td>
</tr>
<tr>
<td>Conceptualization</td>
<td>Altruism</td>
</tr>
<tr>
<td>Foresight</td>
<td>Persistence</td>
</tr>
<tr>
<td>Stewardship</td>
<td>Pragmatism</td>
</tr>
<tr>
<td>Commitment to grow people</td>
<td>Self-assurance</td>
</tr>
<tr>
<td>Building community</td>
<td>Faith</td>
</tr>
</tbody>
</table>

A sales paradigm that focuses on helping buyers discover exactly what they need is presented by Morgen (1997). In Morgen’s model, there are three things a buyer needs to make a purchasing decision: information, a decision-making strategy, and help coming up with the right solutions. People buy only when they have their own answers. Utilization of this methodology provides greater efficiency and effectiveness for better business outcomes. An overriding theme is seller as servant.
Morgen (1997) considers sales the preeminent business skill. As such, salespersons have learned to serve themselves. “I propose that the seller become the servant to the buyer” (p. 59). By serving the client first, sellers must lead the buyer through the process of discovering what the buyer needs. Buyers know what they need, but need leadership to go through the discovery process. By serving the buyer rather than the product, sellers can truly assist the customer in receiving what he needs. According to Morgen, serving the customer will increase sales, decrease turnover, increase work enjoyment, shorten the sales cycle, align salespersons’ personal values with their sales job, and salespersons will close three to five times more business.

Katsantonis (2006) reports on a sales process that embraces the servant leader concept. The No Excuses Sales Culture developed by sales consultant Danita Bye recognizes seven pillars of servant leadership: is a person of character, puts people first, is a skilled communicator, is a compassionate collaborator, has foresight, is a systems thinker, and leads with moral authority. Bye incorporates these seven pillars into her sales consulting and sales training where she claims to build high performance sales teams that achieve bottom-line results with sales growth and higher profit margins.

**Instruments of Servant Leadership**

Prior to 1998, there was no instrument that empirically measured servant leadership (Taylor, 2002). Since then, several instruments have been developed. Abel (2000) identified work environments where servant leaders are effective or ineffective. Empirical validation was not conducted to confirm validity. Erhart (2001) developed an instrument to measure servant leadership based on a literature review and validated by a field test consisting of 254 college students with limited work experience and an average
This study will utilize the Servant Leadership Profile—Revised (SLPR) created by Wong and Page (2003). The SLPR is a shortened version of the original instrument developed by Page and Wong (2000). The SLPR is a self-assessment that measures the seven factors of servant leadership: (a) empowering and developing others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership. Self-assessment is important to measuring servant leadership because only an individual can understand his or her motivation. Although others may identify whether or not a person’s behavior appears consistent with servant leadership, they cannot completely understand another’s motivation for his or her behavior. Evidence does suggest that self-assessment can lead to higher scores (Rude, 2004); however, that does not indicate less accuracy. In addition, self-assessment ensures consistency regarding the means of evaluation within all of the instruments used.

Summary

Servant leadership claims to help create a more viable organization. Sales performance directly affects a company’s bottom line. By examining the relationship between servant leadership and sales performance, this study will focus on how servant leadership may help create a more financially viable organization. The philosophy of servant leadership appeals to some leaders because it appeals to their values. Anecdotally, servant leadership may make sense, but in the business world, sales revenue and
profitability equal viability, and when it comes to putting revenue and profitability on the line, empirical evidence to support or not support this claim is sorely needed. In fact, upon review of the literature, empirical evidence somewhat supports this claim, but this will be the first study to examine the relationship between servant leadership and sales performance. Measuring the predictability of servant leadership attributes with sales performance of salespersons in the healthcare industry will help determine if servant leadership does in fact impact organizational viability.
CHAPTER 3

METHODOLOGY

General Introduction

The purpose of this study is to determine whether the seven factors of servant leadership—(a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership—are significant predictors of sales performance among salespersons in the healthcare industry in 2011. This chapter will cover the following areas: type of research, population and sample, hypothesis, definition of variables, instrumentation, data collection, and data analysis.

Type of Research

This study examined the predictability of servant leader attributes for sales performance among salespersons in the healthcare industry in 2011. Creswell (2008) recommends a quantitative approach when attempting to relate one or more predictor variables to an outcome variable; therefore, a quantitative design and method was utilized. Field (2009) states that correlational research observes what is taking place without influencing that process. Correlation is a measure of relationship between variables (Hinkle, Wiersma, & Jurs, 2003; Howell, 2007). As previously stated, my interest was in determining the naturally occurring relationships between servant
leadership attributes as predictor variables, and levels of sales performance as measured by sales ranking as the outcome variable.

Discriminant function analysis or discriminant analysis was utilized to measure the relationship or predictability of sales performance as determined by servant leadership attributes. Discriminant analysis is the preferred statistical analysis to study the predictor outcome variables that are categorical when there are more than two categories (Field, 2009; Mertler & Vannatta, 2010). This was accomplished by measuring the servant leadership attributes of salespersons in the healthcare industry utilizing Wong and Page’s (2003) Servant Leadership Profile-Revised (SLPR) and comparing each salesperson’s SLPR mean score for each of the seven factors of servant leadership with their respective 2011 sales performance. For this study, sales performance was defined as sales ranking and broken down into three categories: (a) Top 20%, (b) 21%-40%, and (c) 41% or below.

**Population and Sample**

This study focused on salespersons in the healthcare industry. Convenience sampling was utilized, engaging salespersons to voluntarily participate. Convenience sampling is an acceptable sampling process as it provides useful information to answer questions and hypothesis (Creswell, 2008).

Sample size is important to statistical significance. Field (2009) suggests a range of 10 to 15 cases of data for each predictor in the model. Stevens (2001) recommends 20 study participants per variable, otherwise both the standardized coefficients and the correlations are unreliable. This study has seven predictor variables; therefore, Field (2009) suggests a minimum sample size of 70 to 105 participants and Stevens (2001)
suggests a minimum sample size of 140 participants. With a sample size of 194, the criterion for sample size was exceeded.

Hypothesis

The research question guiding this study is: Are the seven factors of servant leadership—(a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership—significant predictors of sales performance among salespersons in the healthcare industry in 2011?

The following null hypothesis was tested:

H10: Developing and empowering others, humility, authentic leadership, open participatory leadership, inspiring leadership, visionary leadership, and courageous leadership, as measured by the Servant Leadership Profile-Revised (SLPR), are not significant predictors of sales performance among salespersons in the healthcare industry in 2011.

Definition of Variables

The following descriptive variables were used in this study (see Appendix A):

Gender: Gender is the sex of the study participant and was collected in the survey attached to the servant leadership assessment instrument.

Number of years in healthcare sales: The survey attached to the servant leadership assessment instrument asked the study participants to quantify the number of years they have been in healthcare sales as a career.
Number of years in current sales position: The survey attached to the servant leadership assessment instrument asked the study participants to quantify the number of years they have been in sales as a career with the current company.

Level of Education: The survey attached to the servant leadership assessment instrument asked the study participants to quantify the level of education they have completed. Education levels include high school, some college, associate’s degree, bachelor’s degree, master’s degree, or doctorate.

Age: The survey attached to the servant leadership assessment instrument asked the study participants to quantify their age.

The following predictor variables were used in this study:

Developing and empowering others: Delegating responsibilities, shared decision-making, cultivating good relationships, contributing to the growth of others (Stephen, 2007). This servant leadership attribute is expressed numerically from 1 to 7 and is calculated from the answers from 16 questions in the SLPR.

Humility: Humbleness, taking a backseat to others (Stephen, 2007). This servant leadership attribute is expressed numerically from 1 to 7 and is calculated from the answers from eight questions in the SLPR.

Authentic leadership: Steward of the community, focus is on the best interest of others, selflessness toward others (Stephen, 2007). This servant leadership attribute is expressed numerically from 1 to 7 and is calculated from the answers from 11 questions in the SLPR.

Open participatory leadership: Listening and communication; promoting kindness, trust, honesty, and openness; genuine care for others (Stephen, 2007). This
servant leadership attribute is expressed numerically from 1 to 7 and is calculated from the answers from 10 questions in the SLPR.

*Inspiring leadership*: Common goal and vision, getting the best from others, winning team spirit (Stephen, 2007). This servant leadership attribute is expressed numerically from 1 to 7 and is calculated from the answers from seven questions in the SLPR.

*Visionary leadership*: Big picture, knowing what needs to be improved, articulating a clear direction and purpose, personal vision and mission development (Stephen, 2007). This servant leadership attribute is expressed numerically from 1 to 7 and is calculated from the answers from five questions in the SLPR.

*Courageous leadership*: Making promises and commitments, moral courage (Stephen, 2007). This servant leadership attribute is expressed numerically from 1 to 7 and is calculated from the answers from five questions in the SLPR.

The following outcome variables were used in this study:

*Sales performance*: What salespersons do that can be measured and observed in terms of each salesperson’s proficiency of contributing to the economic benefit or profitability of the organization (Pulakos et al., 2000). For this study, sales ranking expressed as a percentage is measured and expressed numerically as follows: Top 20% = 3; 21% - 40% = 2; 41% or below = 1.
**Instrumentation**

The Servant Leadership Profile-Revised (SLPR) asks 62 questions and measures the respondent’s level of agreement utilizing a 7-point Likert scale (see Appendix C). Responses to the questions measure each of the seven factors of servant leadership: (a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership. Questions are framed with positive wording. The self-assessment provides a numeric score of 1 to 7 for each of the seven factors or servant leader attributes. A score of 5 or above indicates a strong servant leader, therefore higher scores indicate stronger servant leader attributes and lower scores indicate weaker servant leader attributes. A mean score of the seven attribute scores provides an overall score of servant leadership also ranging from 1 to 7.

The SLPR is a self-assessment that measures the seven factors of servant leadership. As designed, this study required study participants to rate themselves with regard to servant leadership. Designed for self-assessment, the SLPR was the logical choice as an instrument to collect servant leadership data from study participants. Only an individual can understand his or her motivation; therefore, self-assessment is important to measuring servant leadership. Others may identify a person’s behavior as being consistent with servant leadership; however, they cannot know motivation or intent. Self-assessment can lead to higher scores (Rude, 2004); however, that does not indicate less accuracy. Self-assessment ensures consistency regarding the means of evaluation within all participants.
Validity of the SLPR is evident in the face validity as a result of the research of Page and Wong (2000) in developing their original Self Assessment of Servant Leadership Profile. A reliability analysis was run on the overall scores as well as the scores for all of the seven factors of servant leadership. Cronbach’s alpha coefficient was .92 for all 62 items. The ANOVA that accompanied the reliability analysis was significant at the $p<.001$ level $F(141, 8662) = 45.51, p = .000$. The Cronbach’s alpha coefficients for the seven factors of servant leadership were: developing and empowering others (.87), humility (.85), authentic leadership (.81), open participatory leadership (.76), inspiring leadership (.83), visionary leadership (.61), and courageous leadership (.54).

Permission was obtained from Dr. Don Page to utilize the SLPR instrument for this study (see Appendix B).

**Data Collection**

Institutional Review Board (IRB) approval was obtained to conduct this study (see Appendix D). Emails were sent to salespersons in the healthcare industry explaining the purpose and procedures of the research. The cover email indicated that completing the survey implied that the participant was providing his or her implied consent. Included in the email was a link to the survey. Participants were asked to complete the survey via the link supplied utilizing SurveyMonkey.com. Demographic questions were asked regarding gender, number of years in sales, number of years in sales with current company, age, and level of education. These demographic data were utilized to describe the sample.

**Data Analysis**

After data were collected, they were entered into SPSS 20 to determine relationships between variables utilizing discriminant analysis. Discriminant analysis can
be broken down into four parts: (a) preliminary statistics that describe the group
differences and covariances, (b) significance tests and strength of relationship statistics
for each discriminant function, (c) discriminant function coefficients, and (d) group
classification (Mertler & Vannatta, 2010).

The first step of this process was the observation of any significant differences in
group means of the predictor variables among the groups. High $F$ values indicate
significant differences between groups, and these differences provide a rough idea of
which variables may be important. Box’s $M$ tests the null hypothesis that the covariance
matrices do not differ between the groups of the outcome variable. A non-significant $M$
indicates similarity and lack of significant differences; therefore, the log determinants
should be equal or nearly equal. Eigenvalues provided information on each of the
discriminate functions produced. The maximum number of discriminant functions
produced was the number of groups minus one, or in this case, two. Canonical correlation
values were reviewed, which are the multiple correlation values between the predictor
variables and the discriminant function. The Wilks’s Lambda was reviewed to indicate
the significance of the discriminate function. The standardized discriminant function
coefficients were calculated to determine the degree to which each predictor variable
contributed to each function. The correlation coefficients were calculated to provide
insight as to the relationship between the variables and the function. A correlation
coefficient of 0.30 was considered the cut-off between important and less important
variables. Classification results were calculated to determine the percentage of predicted
categories that were correctly classified.
Summary

For this study, salespersons within the healthcare industry completed the SLPR. Statistical analysis determined the significance of servant leader attributes as predictors of sales performance among salespersons in the healthcare industry in 2011. This study was the first servant leadership study to focus on the strength of a relationship between servant leadership and sales performance. Sales performance was based on the 2011 sales ranking for each respective salesperson. A statistically significant correlation between some of the servant leadership attributes and sales performance indicated that servant leadership does impact the financial viability of an organization. Further, this indicates the need for further research in this area.
CHAPTER 4

DATA ANALYSIS

Data analysis was conducted to answer the research question: Are the seven factors of servant leadership—(a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership—significant predictors of sales performance among salespersons in the healthcare industry in 2011? To answer this question, data from completed surveys were entered into SPSS 20.

This chapter will start with descriptive statistics that describe the study participants. Next, the predictor and outcome variables will be described. This will be followed by hypotheses testing and the conclusion.

Participants’ Description

Following IRB approval, a company specializing in developing targeted email lists and conducting surveys was contracted to email surveys to salespersons in the healthcare industry in the United States. Of those, 194 surveys were utilized after eliminating surveys that were not filled out completely. Field (2009) suggests a range of 10 to 15 study participants per predictor variable. With seven predictor variables, Field’s guidelines indicate a minimum sample size range of 70 to 105 participants. Stevens (2001) recommends 20 study participants per predictor variable, in this case, 140. Our sample size of 194 exceeds the minimum requirements of both Field and Stevens.
Study participants averaged more than 11 years in healthcare sales experience, had almost 6 years of service in their current sales position and averaged almost 41 years of age (see Table 2). Study participants reported their gender as 56 female (28.9%) and 138 (71.1%) male (see Table 3).

Table 2

*Descriptive Statistics of Study Participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Range</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of years in healthcare sales</td>
<td>194</td>
<td>1-25</td>
<td>11.21</td>
<td>7.11</td>
</tr>
<tr>
<td>Number of years in current sales position</td>
<td>194</td>
<td>1-21</td>
<td>5.96</td>
<td>4.73</td>
</tr>
<tr>
<td>Age</td>
<td>194</td>
<td>23-65</td>
<td>40.79</td>
<td>10.26</td>
</tr>
</tbody>
</table>

Table 3

*Gender Frequencies of Study Participants*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>56</td>
<td>28.9</td>
</tr>
<tr>
<td>Male</td>
<td>138</td>
<td>71.1</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4 reports the breakdown of study participants by level of education: 4 participants (2.1%) had a high-school education, 28 (14.4%) reported some college, 10 (5.2%) reported having an associate’s degree, 94 (48.5%) of the participants had a bachelor’s degree, 43 had a master’s degree (22.2%), and 15 (7.7%) a doctoral degree.
This was a well-educated group with over three-fourths of the group having a bachelor’s or graduate degree.

Table 4

*Level of Education Frequencies of Study Participants*

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Some college</td>
<td>28</td>
<td>14.4</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>10</td>
<td>5.2</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>94</td>
<td>48.5</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>43</td>
<td>22.2</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>15</td>
<td>7.7</td>
</tr>
<tr>
<td>Total</td>
<td>194</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Variables Description**

The predictor variables are the seven factors of servant leadership: (a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership. Participants had the highest mean scores for open participatory leadership and the lowest for humility (see Table 5).

Salespersons in the highest sales-ranking category, the Top 20%, also had the highest servant leadership mean score, as compared to the other sales-ranking categories (see Table 6). The Top 20% sales-ranking category had a servant leadership mean score of 5.684, followed by the 21% - 40% sales-ranking category with a servant leadership mean score of 5.488, followed by the 41% or below sales-ranking category with the
Table 5

*Seven Factors of Servant Leadership*

<table>
<thead>
<tr>
<th>Servant Leadership Factors</th>
<th>N</th>
<th>Range</th>
<th>M</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing and empowering others</td>
<td>194</td>
<td>3.3-7.0</td>
<td>5.67</td>
<td>0.86</td>
</tr>
<tr>
<td>Humility</td>
<td>194</td>
<td>1.0-5.0</td>
<td>4.29</td>
<td>1.50</td>
</tr>
<tr>
<td>Authentic leadership</td>
<td>194</td>
<td>3.0-7.0</td>
<td>5.59</td>
<td>0.84</td>
</tr>
<tr>
<td>Open participatory leadership</td>
<td>194</td>
<td>2.0-7.0</td>
<td>5.96</td>
<td>0.89</td>
</tr>
<tr>
<td>Inspiring leadership</td>
<td>194</td>
<td>2.9-7.0</td>
<td>5.70</td>
<td>0.97</td>
</tr>
<tr>
<td>Visionary leadership</td>
<td>194</td>
<td>2.4-7.0</td>
<td>5.61</td>
<td>0.93</td>
</tr>
<tr>
<td>Courageous leadership</td>
<td>194</td>
<td>3.2-7.0</td>
<td>5.89</td>
<td>0.88</td>
</tr>
</tbody>
</table>

The lowest servant leadership mean score of 5.302. The overall servant leadership mean score of all study participants was 5.528. Both the Top 20% sales-ranking category and the 21% - 40% sales-ranking category had mean scores higher than the group mean.

Sales performance is the one outcome variable measured as sales ranking with three categories: (a) Top 20%, (b) 21% - 40%, and (c) 41% and below. Nearly half of the healthcare salespersons responding ranked in the Top 20% of their respective sales force (see Table 6); 88 (45.4%) ranked in the Top 20% sales-ranking category, 58 (29.8%) ranked in the 21%-40% sales-ranking category and 48 (24.8%) of the study participants were in the 41% or below sales-ranking category.

A one-way analysis of variance (ANOVA) test was conducted to determine if the means on the outcome variables were significantly different among the sales-ranking groups. Based on the $F$-ratio scores and statistical significance of both discriminant functions, there was a significant effect of the servant leadership factors on sales-ranking. There was a significant effect of the first discriminant function on sales-ranking, $F$ (2,
$191) = 27.54, p = .000$. There was a significant effect for the second discriminant function on sales ranking, $F(2, 191) = 10.17, p = .000$.

Table 6

**Servant Leadership Mean Scores and Sales Performance/Sales Ranking**

<table>
<thead>
<tr>
<th>Sales Ranking Category</th>
<th>Servant Leadership</th>
<th>SD</th>
<th>N</th>
<th>% Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>41% or below</td>
<td>5.302</td>
<td>.791</td>
<td>48</td>
<td>24.8</td>
</tr>
<tr>
<td>21% - 40%</td>
<td>5.488</td>
<td>.766</td>
<td>58</td>
<td>29.8</td>
</tr>
<tr>
<td>Top 20%</td>
<td>5.684</td>
<td>.722</td>
<td>88</td>
<td>45.4</td>
</tr>
<tr>
<td>Total</td>
<td>5.528</td>
<td>.765</td>
<td>194</td>
<td>100</td>
</tr>
</tbody>
</table>

ANOVA testing was followed by post hoc testing to provide comparisons between group means. For the first discriminant function, all sales-ranking groups differed significantly. For the second discriminant function, there were significant differences only for the 21% - 40% sales-ranking groups compared to the Top 20% and 41% and below sales-ranking groups.

As can be seen in Table 7, the group means and standard deviation for each of the predictor variables, the seven factors of servant leadership, categorized by the three sales-ranking categories show differences between the groups. If the group differences were not significantly different, the functions generated would not be very accurate in classifying study participants.
Table 7

Means and Standard Deviations of Predictor Variables as a Function of Sales Performance

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Top 20%</th>
<th></th>
<th>21%-40%</th>
<th></th>
<th>41% or below</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Develop and empower others</td>
<td>6.036</td>
<td>0.493</td>
<td>5.652</td>
<td>0.947</td>
<td>5.092</td>
<td>0.950</td>
</tr>
<tr>
<td>Humility</td>
<td>4.290</td>
<td>1.542</td>
<td>4.348</td>
<td>1.613</td>
<td>4.225</td>
<td>1.278</td>
</tr>
<tr>
<td>Authentic leadership</td>
<td>5.851</td>
<td>0.532</td>
<td>5.567</td>
<td>0.982</td>
<td>5.129</td>
<td>0.930</td>
</tr>
<tr>
<td>Open participatory leadership</td>
<td>6.317</td>
<td>0.469</td>
<td>5.687</td>
<td>1.036</td>
<td>5.619</td>
<td>1.038</td>
</tr>
<tr>
<td>Inspiring leadership</td>
<td>6.031</td>
<td>0.680</td>
<td>5.502</td>
<td>1.125</td>
<td>5.335</td>
<td>1.035</td>
</tr>
<tr>
<td>Visionary leadership</td>
<td>5.867</td>
<td>0.608</td>
<td>5.579</td>
<td>1.156</td>
<td>5.163</td>
<td>0.947</td>
</tr>
<tr>
<td>Courageous leadership</td>
<td>6.184</td>
<td>0.488</td>
<td>5.672</td>
<td>1.121</td>
<td>5.629</td>
<td>0.960</td>
</tr>
</tbody>
</table>

Table 8 includes Wilks’s Lambda, $F$ tests, degrees of freedom, and $p$ values for each predictor variable. Table 8 also provides strong statistical evidence of significant differences between means of our sales-ranking groups with one exception. Humility has a very low $F$ value (.088) and is not significant ($p = .916$), indicating it may be a weak predictor variable. All the other predictor variables are significant, with developing and empowering others having a very high $F$ value (23.166), followed by open participatory leadership (15.419), authentic leadership (12.887), inspiring leadership (10.734), visionary leadership (9.824), and courageous leadership (9.593).
Table 8

Tests of Equality and Group Means

<table>
<thead>
<tr>
<th>7 Factors of Servant Leadership</th>
<th>Wilks’s Lambda</th>
<th>$F$</th>
<th>$df1$</th>
<th>$df2$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop and empower others</td>
<td>.805</td>
<td>23.166</td>
<td>2</td>
<td>191</td>
<td>.000</td>
</tr>
<tr>
<td>Humility</td>
<td>.999</td>
<td>.088</td>
<td>2</td>
<td>191</td>
<td>.916</td>
</tr>
<tr>
<td>Authentic leadership</td>
<td>.881</td>
<td>12.887</td>
<td>2</td>
<td>191</td>
<td>.000</td>
</tr>
<tr>
<td>Open participatory leadership</td>
<td>.861</td>
<td>15.419</td>
<td>2</td>
<td>191</td>
<td>.000</td>
</tr>
<tr>
<td>Inspiring leadership</td>
<td>.899</td>
<td>10.734</td>
<td>2</td>
<td>191</td>
<td>.000</td>
</tr>
<tr>
<td>Visionary leadership</td>
<td>.907</td>
<td>9.824</td>
<td>2</td>
<td>191</td>
<td>.000</td>
</tr>
<tr>
<td>Courageous leadership</td>
<td>.909</td>
<td>9.593</td>
<td>2</td>
<td>191</td>
<td>.000</td>
</tr>
</tbody>
</table>

The Box’s $M$ test is an indicator of significant differences in the covariance matrices among groups. A significant $F$ test ($p < .001$) indicates that group covariances are not equal. Significance indicates that homogeneity of covariance cannot be assumed. Failure of homogeneity of covariance assumption may limit the interpretation of results (Mertler & Vannatta, 2010). In this study, the Box’s $M$ test was significant, $F(56, 70,465.13) = 3.73, p < .000$. This indicates significant differences in the covariance matrices among groups.

**Hypothesis Testing**

The research question for this study is: Are the seven factors of servant leadership—(a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership—significant predictors of sales performance among salespersons in the healthcare industry in 2011?

The null hypothesis being tested in this study is:
H1₀: Developing and empowering others, humility, authentic leadership, open participatory leadership, inspiring leadership, visionary leadership, and courageous leadership, as measured by the Servant Leadership Profile—Revised (SLPR) are not significant predictors of sales performance among salespersons in the healthcare industry in 2011.

Discriminant analysis is the preferred statistical technique to answer this question and test the null hypothesis because there are more than two outcome categories and the predictor variables are metric (Field, 2009; Mertler & Vannatta, 2010). In this study, there are three outcome categories: (a) Top 20%, (b) 21% - 40%, and (c) 41% and below. This study has seven predictor variables, the seven factors of servant leadership, expressed as numeric values ranging from 1 to 7.

To test the null hypothesis, discriminant analysis was conducted to determine whether the seven predictor variables, the seven factors of servant leadership (developing and empowering others, humility, authentic leadership, open participatory leadership, inspiring leadership, visionary leadership, and courageous leadership), could predict sales performance as measured by sales ranking (Top 20%, 21% - 40%, 41% or below). Two functions were generated that were significant, and the predictors were significant.

The Wilks’s Lambda provides the chi-square test of significance for each of the two functions. In Table 9 we see the Wilks’s Lambda, chi-square, degrees of freedom, and level of significance. These statistics represent the degree to which there are significant group differences in the predictor variables after the effects of the previous function have been removed (Mertler & Vannatta, 2010). These tests of significance help determine the number of functions to interpret. In this study, the overall Wilks’s Lambda
was significant, \( \Lambda = .62, \chi^2(14, N = 194) = 90.36, p = .000 \), indicating that, overall, the predictor variables differentiated among the three performance groups. In addition, the second Wilks’s Lambda was significant, \( \Lambda = .86, \chi^2(6, N = 194) = 28.72, p = .000 \). This test indicates that the predictors differentiated significantly among the three performance groups after parceling out the effects of the first discriminant function. Since both tests were statistically significant, the discriminant functions for both were interpreted.

Table 9

Wilks’s Lambda

<table>
<thead>
<tr>
<th>Test of Function(s)</th>
<th>Wilks’s Lambda</th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 through 2</td>
<td>.618</td>
<td>90.357</td>
<td>14</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.858</td>
<td>28.724</td>
<td>6</td>
<td>.000</td>
</tr>
</tbody>
</table>

Tests of significance and strength of relationship statistics for each discriminant function are presented in Tables 9 and 10. The Eigenvalues for Sales Ranking in Table 10 displays the eigenvalue, percentage of variance and canonical correlations for each discriminant function. The canonical correlation represents the correlation between the discriminant function and the levels of the outcome variable (Mertler & Vannatta, 2010). Two functions were generated and both were significant with Function 1 being the stronger of the two. By squaring the canonical correlations, the effect size is calculated indicating the percentage of variability in the function explained by the seven factors of servant leadership. In this study, \( F_1 = (.529)^2 = .280 \), and \( F_2 = (.376)^2 = .141 \).
Table 10

*Eigenvalues for Sales Ranking*

<table>
<thead>
<tr>
<th>Function</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
<th>Cumulative %</th>
<th>Canonical Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.388&lt;sup&gt;a&lt;/sup&gt;</td>
<td>70.2</td>
<td>70.2</td>
<td>.529</td>
</tr>
<tr>
<td>2</td>
<td>.165&lt;sup&gt;a&lt;/sup&gt;</td>
<td>29.8</td>
<td>100.0</td>
<td>.376</td>
</tr>
</tbody>
</table>

<sup>a</sup>First 2 canonical discriminant functions were used in the analysis

Each function was interpreted by examining the variables most related to it. Table 11 shows this process. The standardized discriminant function coefficients represent the degree to which each variable contributes to each function. The correlation coefficient represents the relationship between the variables and the functions (Mertler & Vannatta, 2010).

Table 11

*Standardized Coefficients and Correlations of Predictor Variables*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Correlation coefficients with discriminant functions</th>
<th>Standardized coefficients for discriminant functions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Function 1</td>
<td>Function 2</td>
</tr>
<tr>
<td>Developing and empowering others</td>
<td>.751*</td>
<td>.381</td>
</tr>
<tr>
<td>Humility</td>
<td>.038</td>
<td>-.046</td>
</tr>
<tr>
<td>Authentic leadership</td>
<td>.563*</td>
<td>.270</td>
</tr>
<tr>
<td>Open participatory leadership</td>
<td>.440</td>
<td>.723*</td>
</tr>
<tr>
<td>Inspiring leadership</td>
<td>.414</td>
<td>.528*</td>
</tr>
<tr>
<td>Visionary leadership</td>
<td>.489*</td>
<td>.249</td>
</tr>
<tr>
<td>Courageous leadership</td>
<td>.342</td>
<td>.578*</td>
</tr>
</tbody>
</table>

<sup>*</sup>Largest absolute correlation between each variable and any discriminant function.
Standardized discriminant function coefficients of the first discriminant function in order of strength of relationship were: developing and empowering others (2.336), courageous leadership (-.961), inspiring leadership (-.408), visionary leadership (-.378), authentic leadership (-.144), open and participatory leadership (.021), and humility (.012). My findings indicate that developing and empowering others is the strongest contributor to the first discriminant function. The rest of the predictor variables are comparatively weak contributors to the first discriminant function.

Correlation coefficients of the first discriminant function in order of strength were: developing and empowering others (.751), authentic leadership (.563), visionary leadership (.489), open participatory leadership (.440), inspiring leadership (.414), courageous leadership (.342), and humility (.038). As stated previously, correlation coefficients provide insight as to the relationship between the variables and the function. A correlation coefficient of 0.30 is generally considered the cut-off between important and less important variables (Mertler & Vannatta, 2010). In this case, developing and empowering others, visionary leadership, and open participatory leadership had the strongest relationship to the first discriminant function. These servant leadership attributes are similar to the concept of voice as developed by Covey (2004); therefore, the first discriminant function was labeled Voice.

Developing and empowering others had the strongest relationship with the first discriminant function with both a strong standardized coefficient (2.336) and a strong correlation coefficient (.751).

Standardized discriminant function coefficients of the second discriminant function in order of strength of relationship were: open participatory leadership (1.859),
authentic leadership (-.989), humility (-.411), developing and empowering others (-.339), courageous leadership (.312), inspiring leadership (-.305), and visionary leadership (.057). My findings indicate that open participatory leadership is the strongest contributor to the second discriminant function. The rest of the predictor variables are comparatively weak contributors to the second discriminant function.

Correlation coefficients of the second discriminant function in order of strength were: open participatory leadership (.723), courageous leadership (.578), inspiring leadership (.528), developing and empowering others (.381), authentic leadership (.270), visionary leadership (.249), and humility (-.046). As mentioned, a correlation coefficient of 0.30 is generally considered the cut-off between important and less important variables (Mertler & Vannatta, 2010). In this case, open participatory leadership, courageous leadership, and inspiring leadership had the strongest relationship to the second discriminant function. These servant leadership attributes closely resemble the concept of human resource management as developed by Huselid (1995); therefore, the second discriminant function was labeled Human Resource Management.

Open participatory leadership had the strongest relationship with the second discriminant function with both a strong standardized coefficient (1.859) and a strong correlation coefficient (.723).

An important consideration as to the accuracy of discriminant functions concerns the classifying of participants into appropriate groupings (Table 12). The classification of results provides an analytical tool to determine how well group membership can be predicted (Mertler & Vannatta, 2010). The top part of this table is labeled “Original.” This indicates how well the classification function predicts in the sample. Correctly
Table 12

Classification Results for All Sales Ranking Categories

<table>
<thead>
<tr>
<th>Sales Ranking</th>
<th>Predicted Group Membership</th>
<th>41% or below</th>
<th>21%-40%</th>
<th>Top 20%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Count</td>
<td></td>
<td>18.0</td>
<td>10.0</td>
<td>20.0</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>41% or below</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21%-40%</td>
<td>4.0</td>
<td>22</td>
<td>32.0</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Top 20%</td>
<td>9.0</td>
<td>3.0</td>
<td>76.0</td>
<td>88</td>
</tr>
<tr>
<td>Percentage</td>
<td></td>
<td>37.5</td>
<td>20.8</td>
<td>41.7</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>41% or below</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21%-40%</td>
<td>6.9</td>
<td>37.9</td>
<td>55.2</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Top 20%</td>
<td>10.2</td>
<td>3.4</td>
<td>86.4</td>
<td>100</td>
</tr>
<tr>
<td>Cross-Count Validated&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td>15.0</td>
<td>11.0</td>
<td>22.0</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>41% or below</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21%-40%</td>
<td>6.0</td>
<td>18.0</td>
<td>34.0</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>Top 20%</td>
<td>9.0</td>
<td>6.0</td>
<td>73.0</td>
<td>88</td>
</tr>
<tr>
<td>Percentage</td>
<td></td>
<td>31.3</td>
<td>22.9</td>
<td>45.8</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>41% or below</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21%-40%</td>
<td>10.3</td>
<td>31.0</td>
<td>58.6</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Top 20%</td>
<td>10.2</td>
<td>6.8</td>
<td>83.0</td>
<td>100</td>
</tr>
</tbody>
</table>

Note. 59.8% of original grouped cases correctly classified. 54.6% of cross-validated grouped cases correctly classified.
<sup>a</sup> Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.

classified cases appear on the diagonal of the classification table. In this study, of the 48 cases in the 41% or below sales-ranking group, 18 (38%) were predicted correctly. In the 21% - 40% sales-ranking category, 22 of the 58 cases (38%) were classified correctly. In the Top 20% sales-ranking group, 76 of 88 (86%) were classified correctly. Of the total sample of 194 cases, the overall number of cases classified correctly was 116 or 60% of the sample. This is somewhat better than chance; however, the percentage of correctly classified cases for the Top 20% sales-ranking category was 86%, indicating a higher
level of prediction for this sales performance category. The means of the discriminant functions were consistent with these results (see Table 13).

Table 13

*Functions at Group Centroids*

<table>
<thead>
<tr>
<th>Sales Ranking</th>
<th>Function 1</th>
<th>Function 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 20%</td>
<td>0.424</td>
<td>0.345</td>
</tr>
<tr>
<td>21% - 40%</td>
<td>0.241</td>
<td>-.597</td>
</tr>
<tr>
<td>41% or below</td>
<td>-1.069</td>
<td>0.088</td>
</tr>
</tbody>
</table>

A one-way analysis of variance (ANOVA) test was conducted to determine if the means of the outcome variables were significantly different among the sales-ranking groups. Based on the $F$-ratio scores and statistical significance of both discriminant functions, there was a significant effect of the factors of servant leadership on sales ranking. There was a significant effect of the first discriminant function on sales ranking, $F(2, 191) = 27.54, p = .000$. There was a significant effect for the second discriminant function on sales ranking, $F(2, 191) = 10.17, p = .000$ (see Table 14).

Post hoc tests allowed the testing of every sales-ranking group against every other sales ranking group for a set of comparisons between group means. Multiple post hoc tests are available; however, the Games-Howell procedure is the most powerful post hoc test (Field, 2009). The Games-Howell procedure is very accurate when sample sizes are unequal, offering the best performance. For the first discriminant function, all sales-ranking groups differed significantly (see Table 15).
Table 14

*Analysis of Variance (ANOVA)*

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discriminant Scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from Function 1 for</td>
<td>55.07</td>
<td>2</td>
<td>27.54</td>
<td>27.54</td>
<td>.000</td>
</tr>
<tr>
<td>Analysis 1 Within</td>
<td>191.00</td>
<td>191</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groups</td>
<td>246.07</td>
<td>193</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>246.07</td>
<td>193</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20.34</td>
<td>2</td>
<td>10.17</td>
<td>10.17</td>
<td>.000</td>
</tr>
<tr>
<td>Discriminant Scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from Function 2 for</td>
<td>20.34</td>
<td>2</td>
<td>10.17</td>
<td>10.17</td>
<td>.000</td>
</tr>
<tr>
<td>Analysis 1 Within</td>
<td>191.00</td>
<td>191</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groups</td>
<td>211.34</td>
<td>193</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>211.34</td>
<td>193</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 15

*Games-Howell Test for Discriminant Scores from Function 1 for Analysis 1*

<table>
<thead>
<tr>
<th>Column A Sales Ranking</th>
<th>Column B Sales Ranking</th>
<th>Mean Difference</th>
<th>95% Conf. Int.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A minus B</td>
<td>SE</td>
</tr>
<tr>
<td>41% or below</td>
<td>21% - 40%</td>
<td>0.845</td>
<td>.229</td>
</tr>
<tr>
<td></td>
<td>Top 20%</td>
<td>1.330</td>
<td>.193</td>
</tr>
<tr>
<td>21% - 40%</td>
<td>41% or below</td>
<td>-0.845</td>
<td>.229</td>
</tr>
<tr>
<td></td>
<td>Top 20%</td>
<td>0.486</td>
<td>.168</td>
</tr>
<tr>
<td>Top 20%</td>
<td>41% or below</td>
<td>-1.330</td>
<td>.193</td>
</tr>
<tr>
<td></td>
<td>21% - 40%</td>
<td>-0.486</td>
<td>.168</td>
</tr>
</tbody>
</table>

For the second discriminant function, there were significant differences only between the 21% - 40% sales-ranking group and the Top 20% and 41% and below sales-ranking groups (see Table 16). There was no significant difference between the Top 20% and 41% or below sales-ranking groups.
Table 16

Games-Howell Test for Discriminant Scores from Function 2 for Analysis 1

<table>
<thead>
<tr>
<th>Column A Sales Ranking</th>
<th>Column B Sales Ranking</th>
<th>Mean Difference</th>
<th>SE</th>
<th>Sig.</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>41% or below</td>
<td>21% - 40%</td>
<td>0.715</td>
<td>.224</td>
<td>.006</td>
<td>.180</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td>Top 20%</td>
<td>.011</td>
<td>.204</td>
<td>.998</td>
<td>-.478</td>
<td>.500</td>
</tr>
<tr>
<td>21% - 40%</td>
<td>41% or below</td>
<td>-.715</td>
<td>.224</td>
<td>.006</td>
<td>-1.25</td>
<td>-.180</td>
</tr>
<tr>
<td>Top 20%</td>
<td></td>
<td>-.703</td>
<td>.156</td>
<td>.000</td>
<td>-1.07</td>
<td>-.333</td>
</tr>
<tr>
<td>21% - 40%</td>
<td>Top 20%</td>
<td>-.011</td>
<td>.204</td>
<td>.998</td>
<td>-.500</td>
<td>.478</td>
</tr>
<tr>
<td>Top 20%</td>
<td>41% or below</td>
<td>.703</td>
<td>.156</td>
<td>.000</td>
<td>.333</td>
<td>1.07</td>
</tr>
</tbody>
</table>

As stated previously, the null hypothesis tested in this study is:

H10: Developing and empowering others, humility, authentic leadership, open participatory leadership, inspiring leadership, visionary leadership and courageous leadership, as measured by the Servant Leadership Profile—Revised (SLPR), are not significant predictors of sales performance among salespersons in the healthcare industry in 2011.

Based on the results of the statistical analysis, the null hypothesis is partially rejected.

**Conclusion**

Descriptive statistics defined the sample as mostly male with an average age of about 41. The 2011 sales rankings were positively skewed, with almost half of the study
participants being in the top 20%. Over 75% of the study participants had a bachelor's or graduate degree.

There were significant differences among six of the seven factors of servant leadership, and there was heterogeneity among the variances and covariance matrices. Both discriminant functions were significant.

The classification analysis indicated that 60% of cases were accurately predicted. The null hypothesis was partially rejected.
CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction and Literature

In this final chapter, the data analysis described in the previous chapter will be interpreted, providing conclusions and recommendations for further study. A review of the background and literature will be followed by a summary of the study, a summary of findings, interpretations, limitations, and conclusions and recommendations for further study. A summary of final thoughts will conclude this chapter.

Background and Literature

Effective leadership is vital to organizational viability in both good and turbulent economic times. Servant leadership scholars suggest that servant leadership is effective leadership. “Servant leadership is an understanding and practice of leadership that places the good of those led over the self-interest of the leader” (Laub, 1999, p. 81). Servant leaders serve first, valuing people by developing others, building community, displaying authenticity, as well as providing and sharing leadership.

Servant leadership was a concept developed over 30 years ago by Robert Greenleaf, a 30-year veteran business executive at American Telephone and Telegraph, the largest business organization in the world at that time. Greenleaf predicted that, “to the extent that this principle prevails in the future, the only truly viable institutions will be those that are predominantly servant-led” (Greenleaf, 1977, p. 24). Servant leaders put
other people’s needs, aspirations, and interests above their own, deliberately choosing to serve others. A commitment to people within the organization was identified as key to organizational viability.

It has been suggested in the literature that servant leadership results in a more viable organization (Autry, 2001; Blanchard, 2007; Bragdon, 2006; Covey, 2004; Greenleaf, 1977; Hunter, 2004; McGee-Cooper & Looper, 2001; Spears, 2005). Viable organizations have the ability to grow, to expand, to develop, and to adapt to the environment, insinuating revenue generation and profitability. The problem is that these claims of organizational viability through servant leadership are based on anecdotal evidence (Eicher-Catt, 2005; Farling et al., 1999; Rennaker & Novak, 2007; Russell & Stone, 2002; Sendjaya & Sarros, 2002; Smith et al., 2004; Washington et al., 2006). Business leaders may hesitate to adapt a leadership style that promises greater revenue and profitability without empirical data to substantiate such claims (Walgenbach & Hegele, 2001).

This study utilized the following definition of servant leadership: Servant leadership is an understanding and practice of leadership that places the good of those led over the self-interest of the leader (Laub, 1999). Servant leadership can be categorized into seven attributes: (a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open, participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership (Wong & Page, 2003). These seven factors stand as the main constructs that describe servant leadership in action as measured by the Servant Leadership Profile—Revised (SLPR), which provides a quantified numeric value for each of the seven attributes or factors of servant leadership. Utilization of the SLPR
provided the opportunity to empirically study the relationship, or lack thereof, between servant leadership attributes and sales performance. This was accomplished by studying salespersons in the healthcare industry in the United States by comparing their servant leadership attribute mean scores to their respective 2011 sales performance.

Salesmanship is leadership. According to Friedman (2004), a lack of understanding of salesmanship has resulted in negative stereotyping of salespersons, yet professional salespeople make a living by providing leadership. Salespersons are typically the front line of income and customer contact for an organization. The leadership that salespersons provide influences organizational success for both the customer and the organization they represent. An understanding and awareness of salesmanship “is crucial for understanding the history of American economic and social change” (p. 269). Many salespersons take on more advanced leadership roles within an organization, with the majority of chief executive officers having spent part of their career in sales (Mattson & Parinello, 2009). Salesmanship is leadership; therefore, measuring servant leadership attributes in salespersons will allow conclusions to be drawn about servant leadership and business viability.

Numerous studies have examined different variables as predictors of sales performance (Bissell, 2008; Bryant, 2005; Chipain, 2003; Davis, 2008; Gonzales, 2003; Kauffman, 2007; Killian, 2011; Mulligan, 2003; Tabbiner, 2000; Wang, 2000). The results of these studies are inconsistent. To date, no study has considered the predictability of servant leadership attributes and sales performance. In addition, little attention as to the interrelatedness of salesmanship and leadership has been considered. This study examined the significance of servant leadership attributes, with sales
performance providing a new lens to examine the effectiveness of servant leadership and how servant-led organizations can be more viable.

**Summary of the Study**

This section includes the problem, the purpose, the research question, and the research design and procedures.

**Problem**

Business organizations invest a great deal to improve leadership. Approximately 86% of the companies in the U.S. invest in leadership training (Boyett & Boyett, 1998; Zhu et al., 2004). Companies make this investment in leadership because it is understood that leadership is critical to organizational performance and profitability (Bass, 1985, 1990; Clark et al., 1992; Kotter, 1990a, 1990b; Meindl & Ehrlich, 1987; Rottenberg & Saloner, 1993; Yukl & Van Fleet, 1992; Zhu et al., 2004). Anecdotal evidence suggests that servant leadership contributes to the financial viability of an organization (Autry, 2001; Blanchard, 2007; Bragdon, 2006; Covey, 2004; Greenleaf, 1977; Hunter, 2004; McGee-Cooper & Looper, 2001; Spears, 2005).

Sales success is also critical to the success of business organizations (Bryant, 2005; Wang, 2000). The viability of a business organization is directly linked to sales performance (Wang, 2000). Sales performance directly affects a company’s profitability, both short and long term. Understanding predictors of sales performance is therefore an important issue for business leaders. Salesmanship is leadership, so studying sales performance is studying leadership performance; therefore, understanding predictors of sales performance is understanding predictors of leadership performance.
No study has examined the relationship between servant leadership and sales performance in a business organization. With limited empirical research on servant leadership, a great opportunity exists to identify outcomes related to servant leadership (Barbuto & Wheeler, 2002). Studying servant leadership to see if there is a significant relationship with sales performance in a for-profit business will provide the groundwork to begin learning how servant leadership can be instrumental in achieving desired outcomes in an organization, and therefore a more viable organization.

**Purpose**

The purpose of this study was to look at the predictability of servant leadership attributes on sales performance among salespersons in the healthcare industry in 2011. Previous servant leadership studies have examined the relationship of servant leadership with other variables: job satisfaction (Svoboda, 2008), team effectiveness (Rauch, 2007), attitudes (Daubert, 2007), culture (Herndon, 2007), trust (Dimitrova, 2008), psychological hardiness (McClellan, 2008), perceptions (Arfsten, 2006), and team commitment (Dannhauser & Boshoff, 2006). None examined the relationship between servant leadership and sales performance. By examining this relationship, this study has added to the knowledge base for a greater understanding of servant leadership, sales performance, and the financial viability of a business organization.

**Research Question**

The research question guiding this study was: Are the seven factors of servant leadership—(a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open, participatory leadership, (e) inspiring leadership, (f) visionary leadership, and
(g) courageous leadership—significant predictors of sales performance among salespersons in the healthcare industry in 2011?

Research Design and Procedures

The objective of this study was to determine the relationship of certain variables expressed as numeric values; therefore this was a quantitative study (Field, 2009). Data were collected utilizing a survey that participants completed online. Completed surveys provided descriptive variables, predictor variables, and an outcome variable with three categories. Discriminant function analysis or discriminant analysis was utilized as it is the preferred analysis to predict outcome variables that are categorical when there are more than two categories (Field, 2009; Mertler & Vannatta, 2010). Discriminant analysis determined the relationship between the predictor variables, the seven factors of servant leadership (developing and empowering others, humility, authentic leadership, open participatory leadership, inspiring leadership, visionary leadership, and courageous leadership) and the outcome variables, the three sales-ranking categories (Top 20%, 21% - 40%, and 41% or below).

After the discriminant function analysis was completed, a one-way analysis of variance (ANOVA) test was conducted to determine if the means on the outcome variables were significantly different among the sales-ranking groups. ANOVA was followed by post hoc testing, which provided a set of comparisons between group means. Multiple post hoc tests are available; however, for this study, the Games-Howell procedure was utilized. The Games-Howell procedure is the most powerful post hoc test and is very accurate when sample sizes are unequal (Field, 2009).
Sample size is important to statistical significance. Field (2009) suggests a range of 10 to 15 participants for each predictor variable. Stevens (2001) recommends 20 study participants per variable; otherwise both the standardized coefficients and the correlations are unreliable. This study has seven predictor variables. According to Field (2009), a minimum sample size of 70 to 105 participants is required. According to Stevens (2001), a minimum sample size of 140 participants is required. With a sample size of 194, the criterion for sample size was exceeded.

Following Institutional Review Board approval, a company specializing in developing targeted email lists and conducting surveys was contracted to email 4,803 surveys to salespersons in the healthcare industry. Of those, 194 surveys were utilized after eliminating surveys that were not filled out completely. Convenience sampling was utilized to engage salespersons to voluntarily participate. Convenience sampling provides useful information to answer questions and hypotheses (Creswell, 2008).

Summary of Findings

This study examined the relationship of the seven factors of servant leadership and sales performance of salespersons in the healthcare industry in 2011. The major findings of this study are described in the next three sections: descriptive statistics, variables, and primary findings; this is followed by discussion of these findings.

Descriptive Statistics

Study participants averaged more than 11 years in healthcare sales experience, had almost 6 years’ tenure in their current sales position, and averaged almost 41 years of age (see Table 2). Fifty-six of the study participants reported their gender as female (28.9%) and 138 as male (71.1%) (see Table 3).
Level of education indicates a well-educated group of study participants with nearly half having a bachelor’s degree and nearly 30% having a graduate degree; 4 participants (2.1%) had a high-school education, 28 (14.4%) reported some college, and 10 (5.2%) reported having an associate’s degree (see Table 4).

Variables

The predictor variables were the seven factors of servant leadership: (a) developing and empowering others, (b) humility, (c) authentic leadership, (d) open participatory leadership, (e) inspiring leadership, (f) visionary leadership, and (g) courageous leadership. As measured by the SLPR, mean scores for each of these factors or attributes range from 1 to 7 with higher scores indicating a higher level of servant leadership and a lower score indicating a lower level of servant leadership. A score of 5 or higher indicates servant leadership. A score of 5.6 or above indicates a strong servant leader (Wong & Page, 2003).

Study participants had a high mean score for the servant leadership attribute of developing and empowering others ($M = 5.67$). Developing and empowering others is defined as delegating responsibilities, sharing decision-making, cultivating good relationships, and contributing to the growth of others (Stephen, 2007). This factor of servant leadership has several contributing components including the delegation of responsibility to others and empowering them to do their job (Wong & Page, 2003). They remove organizational barriers so others can participate in the decision-making process. Leaders and salespersons who develop and empower others get a great deal of satisfaction helping others succeed and invest a considerable amount of time and energy helping others develop. They are willing to risk making mistakes by empowering others.
They consistently appreciate, recognize, and encourage the work of others, are willing to share power without abdicating authority or responsibility, and consistently appreciate and validate others for their contributions. They consistently encourage others to take initiative, receive great satisfaction in bringing out the best in others, and often identify talented people, giving them opportunities to grow and prosper. A salesperson who develops and empowers others focuses on finding better ways of serving others and making others successful.

Study participants had the lowest mean score for the servant leadership attribute humility \( (M = 4.29) \). Humility was the only servant leadership attribute with a mean score below 5.0. This came as a surprise. Humility is one of the key attributes of servant leadership (Wong & Page, 2003). A mean score of 4.29 does not mean the study participants lacked humility, but it does indicate less humility than required to be considered a servant leader according to Wong and Page. Humility was defined as humbleness, taking a backseat to others (Stephen, 2007). A higher score for humility indicates an attitude of serving versus the need to be front and center. A humble leader welcomes questions about processes and procedures. A salesperson with a high humility score indicates a person with an ego that is not concerned about having their name associated with every initiative undertaken. Humble leaders do not have to have the final word on everything; they easily share power and do not try to control others.

Authentic leadership had a high mean score \( (M = 5.59) \). Authentic leadership was defined as steward of the community with a focus on the best interests of others (Stephen, 2007). High authentic leadership scores indicate genuine honesty with others even when such transparency carries political risk (Wong & Page, 2003). Authentic leaders seek to
serve rather than be served and practice what they preach. Group needs and/or the needs of others come first with team success more important than personal success. Authentic leaders serve first without expecting anything in return. They are willing to make personal sacrifices while serving others and celebrate events or special occasions to build team spirit. Authentic leaders have a passion to serve others.

Study participants had the highest mean score for the servant leadership attribute of open participatory leadership ($M = 5.96$). Open participatory leadership is defined as leadership that listens and communicates to promote kindness, trust, honesty, openness, and genuine care for others (Stephen, 2007). Salespersons who actively listen to others and are receptive to what they have to say will have a higher score for this attribute (Wong & Page, 2003). Salespersons and leaders who score high for this attribute are willing to accept other people’s ideas; promote tolerance, kindness, and honesty in the workplace; and create a climate of trust and openness that facilitates participation in decision making. Leadership effectiveness is improved through empowering others, as it builds trust through honesty and empathy, and whenever possible, leaders give credit to others. They share power and authority and genuinely care about other members of the organization. Organizational members are given the responsibility and the latitude to carry out tasks.

Study participants had the third highest mean score for the servant leadership attribute, inspiring leadership ($M = 5.70$). Inspiring leadership was defined as leadership that shares a common goal and vision, getting the best from others, and creating a winning team spirit (Stephen, 2007). Inspiring leadership inspires team spirit by communicating confidence and enthusiasm (Wong & Page, 2003). Inspiring leaders are
able to transform an ordinary group of individuals into a winning team, devoting
tremendous amounts of energy promoting trust and understanding. Inspiring leaders rally
others and inspire them to achieve a common goal by communicating a vision that is
readily and enthusiastically embraced by others.

Visionary leadership had a high mean score among study participants \((M = 5.61)\). Visionary leadership was defined as a leader who understands the big picture and knows what needs to be improved with the ability to articulate a clear direction and purpose (Stephen, 2007). Visionary leaders have a good understanding as to what is taking place within the organization (Wong & Page, 2003). They have a strong sense of mission and are able to articulate a clear sense of purpose and direction. High visionary leadership scores indicate dissatisfaction with the status quo and the desire and knowhow to make improvements. Visionary leaders are proactive and take action.

Courageous leadership had the second highest mean score of the servant leadership attributes among study participants \((M = 5.89)\). Courageous leadership was defined as leadership that makes and keeps promises and commitments with moral courage (Stephen, 2007). Courageous leaders are honest with others, even if their honesty carries risk (Wong & Page, 2003). They are plain talking; they mean what they say and say what they mean. Courageous leaders have the courage to do what is right. Courageous leaders assume full responsibility for their actions and acknowledge their mistakes.

There was one outcome variable, sales performance, measured as sales ranking, with three categories: (a) Top 20%, (b) 21% - 40%, and (c) 41% and below. Nearly half of the healthcare salespersons responding ranked in the top 20% of their respective sales
force (see Table 7): 88 (45.4%) ranked in the Top 20% sales-ranking category, 58 (29.8%) ranked in the 21%-40% sales-ranking category, and 48 (24.8%) of the study participants were in the 41% or below sales-ranking category.

Primary Findings

The discriminant function analysis resulted in the following findings.

1. All group differences for the seven factors of servant leadership were significant with the exception of humility. Discriminant analysis requires that group differences need to be significant. If not, the functions generated will not be very accurate in classifying individuals (Mertler & Vannatta, 2010). Humility also had a very low $F$ value.

2. Tests of significance and strength of relationship for two functions were generated and both were significant. This finding allowed the interpretation of results from both functions.

Findings for the first discriminant function: Voice (see Table 17):

1. Standardized discriminant function coefficients of the first discriminant function in order of strength of relationship were: developing and empowering others (2.336), courageous leadership (-.961), inspiring leadership (-.408), visionary leadership (-.378), authentic leadership (-.144), open and participatory leadership (.021), and humility (.012). The standardized discriminant function coefficients represent the degree to which each predictor variable contributes to each function (Mertler & Vannatta, 2010). Findings indicate that developing and empowering others is the strongest contributor to the first discriminant function.
2. Correlation coefficients of the first discriminant function in order of strength were: developing and empowering others (.751), authentic leadership (.563), visionary leadership (.489), open participatory leadership (.440), inspiring leadership (.414), courageous leadership (.342), and humility (.038). Correlation coefficients provide insight as to the relationship between the variables and the function. A correlation coefficient of 0.30 is generally considered the cut-off between important and less important variables (Mertler & Vannatta, 2010). In this case, developing and empowering others, visionary leadership, and open participatory leadership had the strongest relationship to the first discriminant function. Based on this result, the first discriminant function was named *Voice*.

Table 17

*Standardized Coefficients and Correlations of Predictor Variables of Function 1, Voice*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Standardized Coefficients</th>
<th>Correlation Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing and empowering others</td>
<td>2.336</td>
<td>.751*</td>
</tr>
<tr>
<td>Courageous leadership</td>
<td>-0.961</td>
<td>.342</td>
</tr>
<tr>
<td>Inspiring leadership</td>
<td>-0.408</td>
<td>.4140</td>
</tr>
<tr>
<td>Visionary leadership</td>
<td>-0.378</td>
<td>.489*</td>
</tr>
<tr>
<td>Authentic leadership</td>
<td>-0.144</td>
<td>.563*</td>
</tr>
<tr>
<td>Open participatory leadership</td>
<td>0.021</td>
<td>.4400</td>
</tr>
<tr>
<td>Humility</td>
<td>0.012</td>
<td>.0380</td>
</tr>
</tbody>
</table>

*Largest absolute correlation between each variable and any discriminant function.

3. Developing and empowering others had the strongest relationship with the first discriminant function with both a strong standardized coefficient (2.336) and a strong correlation coefficient (.751).
4. The means of the discriminant function for the first discriminant function labeled *Voice* revealed that the Top 20% sales-ranking group had the highest mean score (.424), followed by the 21% - 40% sales-ranking group (.241), followed by 41% or below sales-ranking group (-1.07).

Findings for the second discriminant function: *Human Resource Management* (see Table 18):

1. Standardized discriminant function coefficients of the second discriminant function in order of strength of relationship were: open participatory leadership (1.859), authentic leadership (-.989), humility (-.411), developing and empowering others (-.339), courageous leadership (.312), inspiring leadership (-.305), and visionary leadership (.057). Findings indicate that open participatory leadership is the strongest contributor to the second discriminant function.

2. Correlation coefficients of the second discriminant function in order of strength were: open participatory leadership (.723), courageous leadership (.578), inspiring leadership (.528), developing and empowering others (.381), authentic leadership (.270), visionary leadership (.249), and humility (-.046). As mentioned, a correlation coefficient of 0.30 is generally considered the cut-off between important and less important variables (Mertler & Vannatta, 2010). In this case, open participatory leadership, courageous leadership, and inspiring leadership had the strongest relationship to the second discriminant function. Based on this result, the second discriminant function was named *Human Resource Management*. 
3. Open participatory leadership had the strongest relationship with the second discriminant function with both a strong standardized coefficient (1.859) and a strong correlation coefficient (.723).

4. The means of the discriminant function for the second discriminant function labeled *Human Resource Management* revealed that the Top 20% sales-ranking group had the highest mean score (.345), followed by 41% or below sales-ranking group (.088), followed by 21% - 40% sales-ranking group (-.597).

Table 18

*Standardized Coefficients and Correlations of Predictor Variables of Function 2, Human Resource Management*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Standardized Coefficients</th>
<th>Correlation Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open participatory leadership</td>
<td>1.859</td>
<td>.723*</td>
</tr>
<tr>
<td>Authentic leadership</td>
<td>-.989</td>
<td>.2700</td>
</tr>
<tr>
<td>Humility</td>
<td>-.411</td>
<td>-.0460</td>
</tr>
<tr>
<td>Developing and empowering others</td>
<td>-.339</td>
<td>.3810</td>
</tr>
<tr>
<td>Courageous leadership</td>
<td>.312</td>
<td>.578*</td>
</tr>
<tr>
<td>Inspiring leadership</td>
<td>-.305</td>
<td>.528*</td>
</tr>
<tr>
<td>Visionary leadership</td>
<td>.057</td>
<td>.2490</td>
</tr>
</tbody>
</table>

* *Largest absolute correlation between each variable and any discriminant function.*

Classification of results:

1. The percentage of correctly classified cases was 59.8%. Classification of results assesses the accuracy of the functions in classifying subjects in the appropriate groups (Mertler & Vannatta, 2010). This is somewhat better than chance; however, the percentage of correctly classified cases for the Top 20% sales-ranking category was
86.4%, indicating a higher level of prediction for this sales performance category. The means of the discriminant functions were consistent with these results.

ANOVA and post hoc test results:

1. The $F$-ratio scores for both discriminant functions were statistically significant. There was a significant effect of the first discriminant function on sales ranking, $F (2, 191) = 27.54$, $p = .000$. There was a significant effect for the second discriminant function on sales ranking, $F (2, 191) = 10.17$, $p = .000$.

2. The post hoc testing provided a set of comparisons between group means. For the first discriminant function, Voice, all sales-ranking groups differed significantly.

3. For the second discriminant function, Human Resource Management, post hoc testing revealed significant differences between the 21% - 40% sales-ranking group and the Top 20% and 41% or below sales-ranking groups. There were no significant differences between the Top 20% and 41% and below sales-ranking groups.

The null hypothesis tested in this study was:

$H_{10}$: Developing and empowering others, humility, authentic leadership, open participatory leadership, inspiring leadership, visionary leadership and courageous leadership, as measured by the Servant Leadership Profile—Revised (SLPR), are not significant predictors of sales performance among salespersons in the healthcare industry in 2011.

Based on the analysis completed, the null hypothesis is partially rejected.
Discussion

Prior to conducting the discriminant analysis of data, three tables were created that deserve discussion: *Seven Factors of Servant Leadership* (see Table 5), *Servant Leadership Mean Scores and Sales Performance/Sales Ranking* (see Table 6) and *Means and Standard Deviations of Predictor Variables as a Function of Sales Performance* (see Table 8).

Scores of 5.6 or higher indicate a high level of servant leadership (Wong & Page, 2003); therefore, higher scores indicate a greater degree of servant leadership and lower scores indicate a lesser degree of servant leadership. A review of Table 5 reveals that mean scores for five of the seven factors of servant leadership were above that threshold, six if the authentic leadership score is rounded off. Humility was the only factor with a mean score less than 5.6 with a score of 4.29. This indicates that study participants had a greater degree of servant leadership for six of the seven factors of servant leadership.

Nearly half of the study participants ranked in the Top 20% sales-ranking category. With high mean scores (5.6 or greater) on six of the seven factors of servant leadership and nearly half of the study participants in the Top 20% sales ranking, this was an indication that some of the factors of servant leadership might be related to sales performance and therefore might predict sales performance.

A review of Table 6 shows that the group of salespersons in the highest sales-ranking category, the Top 20%, also had the highest servant leadership mean score, as compared to the other sales-ranking categories. The Top 20% sales-ranking category had the highest servant leadership mean score (5.684) followed by the 21% - 40% sales-ranking category (5.488), followed by the 41% or below sales-ranking category, with the
The lowest servant leadership mean score (5.302). The overall servant leadership mean score of all study participants was 5.528. Both the top 20% sales-ranking category and the 21% - 40% sales-ranking category had mean scores higher than the group mean. This is a significant observation since these two sales-ranking categories represent 75% of the study participants. These descriptive statistics indicate that a salesperson in a higher sales-ranking category will also have a higher servant leadership score.

A review of Table 7 reveals that the Top 20% sales-ranking category had the highest mean score for all of the seven factors of servant leadership with the exception of humility. This suggests that salespersons with higher sales performance based on sales ranking might also have higher servant leadership attribute scores for six of the seven factors of servant leadership.

Discriminant analysis revealed two significant discriminant functions: the first discriminant function labeled Voice and the second discriminant function labeled Human Resource Management. Voice is a good predictor of sales performance; however, Human Resource Management has limited predictability of sales performance.

The first discriminant function, Voice, had the strongest relationship with the predictor variables of developing and empowering others followed by authentic leadership and visionary leadership. I defined developing and empowering others as a servant leadership attribute that delegates responsibly, shares decision-making, cultivates good relationships, and contributes to the growth of others (Stephen, 2007). Authentic leadership was defined as a steward of the community focused on the best interests of others (Stephen, 2007). Visionary leadership was defined as leadership focused on the big picture, knowing what needs to be improved within the organization with the ability
articulate a clear direction and purpose (Stephen, 2007). These three factors of servant leadership closely resemble the concept of voice as described by Covey (2004). Covey describes voice as a leadership solution to develop and empower others by helping find the voice of leadership and the voice of members of the organization. Talent, passion, need, and conscience are elements that make up voice. Leaders who embrace the concept of voice empower and inspire others to find their voice by modeling trustworthiness, building a common vision, and aligning values and goals. Collins (2001) reinforces the concept of voice with what he refers to as a level-five leader. Level-five leaders channel their ego needs away from themselves and are more focused on the greater good of building a great company. Leaders who serve others through delegation, stewardship, and vision help provide voice. The first discriminant function labeled Voice (developing and empowering others, authentic leadership, and visionary leadership) predicts sales performance.

The means of the discriminant function for Voice revealed that the Top 20% sales-ranking group had the highest mean score (.424), followed by 21% - 40% sales-ranking group (.241), followed by 41% or below sales-ranking group (-1.07). This suggests that the first discriminant function is likely to be associated with a higher sales-ranking category. Higher scores for the three factors of servant leadership of Voice, developing and empowering others, authentic leadership and visionary leadership, predict higher sales ranking. Conversely, lower scores are likely to be associated with a lower sales-ranking category. These findings were reinforced by ANOVA and post hoc testing. Based on the results of this study, it can be concluded that higher mean scores for
developing and empowering others, authentic leadership, and visionary leadership predict higher sales-ranking and therefore greater sales performance.

The second discriminant function labeled *Human Resource Management* had the strongest relationship with the predictor variables of open participatory leadership, followed by courageous leadership, followed by inspiring leadership. Open participatory leadership was defined as listening and communication; promoting kindness, trust, honesty, and openness; and a genuine care for others (Stephen, 2007). Courageous leadership was defined as leadership that makes promises and commitments with moral courage (Stephen, 2007). Inspiring leadership refers to leadership with a common goal or vision, getting the best from others and having a winning team spirit (Stephen, 2007). These three factors of servant leadership closely resemble the concept of human resource development as described by Blanchard (2007) and Huselid (1995). Participatory management or human resource management engages employees extensively in the process of training, knowledge growth, and skill development (Huselid, 1995). Leadership communicates effectively to align interests of employees and the organization. Leadership commits to employees to trust them to use their skills and abilities to design new and better ways of performing their roles. Blanchard (2007) and Huselid (1995) both concluded that servant leadership and participative management practices significantly improve financial performance, efficiency, and employee retention. This study found that *Human Resource Management*, which incorporates open participatory leadership, courageous leadership, and inspiring leadership, is only able to predict mediocre sales performance.
The means of the discriminant function for Human Resource Management revealed that the Top 20% sales-ranking group had the highest mean score (.345), followed by 41% or below sales-ranking group (.088), followed by 21% - 40% sales-ranking group (-.597). This was consistent with the first discriminant function in predicting membership in the Top 20% sales-ranking category; however, the two discriminant functions differ for the other two sales-ranking categories. ANOVA and post hoc testing were conducted to provide clarity to this inconsistency.

ANOVA and post hoc testing revealed that Human Resource Management and the predictor variables of open participatory leadership, courageous leadership, and inspiring leadership are predictors of sales performance in the 21% - 40% sales-ranking group, not the Top 20% sales-ranking group as indicated by the group centroids. There were no significant differences between the means of the Top 20% sales-ranking group and 41% or below sales-ranking group. Based on these findings, open participatory leadership, courageous leadership, and inspiring leadership will likely predict sales performance in the 21% - 40% sales-ranking group, mediocre sales performance.

Voice and developing and empowering others, authentic leadership, and visionary leadership are good predictors of sales performance. Human Resource Management’s open participatory leadership, courageous leadership, and inspiring leadership predict membership in the 21% - 40% sales-ranking group, which is mediocre sales performance. The inconsistencies of the two discriminant functions in their ability to predict sales performance may have differing explanations.

As previously discussed, discriminant analysis is the preferred statistical technique to test the null hypothesis in this study because there are more than two
outcome categories and the predictor variables are quantitative (Field, 2009; Mertler & Vannatta, 2010). The first part of discriminant analysis is an examination of the preliminary statistics that describes group differences. Predictor variables utilized to predict group membership in an outcome category need to be significantly different. When this step was completed, it was found that all the predictor variables were significantly different with the exception of humility. Humility scores of the three sales-ranking groups were homogenous. Discriminant analysis requires that group differences need to be significant; otherwise the functions generated will not be very accurate in classifying individuals (Mertler & Vannatta, 2010). One possible explanation as to the inconsistency of sales performance predictability between *Voice* and *Human Resource Management* is the homogeneity of humility between groups and how that may have influenced the discriminant functions.

Contextually based responses to the SLPR instrument could be another possible explanation for this inconsistency. The SLPR is designed to collect responses from individuals in leadership positions regardless of occupation. It is not occupation-specific. The SLPR is oriented toward leaders in a hierarchical organization (Wong & Page, 2003). A salesperson may be a member of a hierarchical organization, but salespersons often interact with customers in a variety of organizational structures. This changing environment of various organizational structures is somewhat unique to salespersons and may have caused various interpretations of the SLPR. In turn, this may have caused contextually based responses by study participants affecting mean scores for each of the seven factors of servant leadership. This may be a contributing factor to the
inconsistency of predicting sales performance between *Voice* and *Human Resource Management*.

Another possible explanation for the inconsistency of predictability of sales performance by *Voice* and *Human Resource Management* is relationship building. Relationship building is a recurring component of servant leadership. The definitions for each of the seven factors of servant leadership incorporate some aspect of relationship building. For example, inspiring leadership is partially defined by spending a tremendous amount of time and energy promoting and building trust, a key element of building relationships. Dixon and Adamson (2011) concluded that salespersons who focus on building relationships will have sales performance that ranks them at the bottom, and relationship builders will not be top sales performers. Regardless of whether you agree with Dixon and Adamson, their study indicates that there is a chance that the relationship building components of servant leadership could affect the predictability of sales performance.

In addition to the possible explanations provided, further research is needed to provide a better understanding as to the inconsistency of the predictability of sales performance by *Voice* and *Human Resource Management*.

**Interpretations**

Study participants had high mean scores for six of the seven factors of servant leadership, humility being the exception. Mean scores of the seven factors of servant leadership varied by sales ranking, with the Top 20% sales-ranking group having higher mean scores than the 21% - 40% sales-ranking group who had higher mean scores than the 41% and below sales-ranking group. Overall servant leadership mean scores were the
same, higher with the Top 20% sales-ranking group followed by the 21% - 40% sales-rank-
ing group and the 41% or below sales-ranking group having the lowest servant leadership mean score. Generally speaking, a salesperson in a high sales-ranking category is going to have a higher servant leadership score than a salesperson in a lower sales-ranking category.

Humility provided the biggest surprise of the analysis with lower mean scores. In addition, when grouped by sales-ranking category, there were not significant differences between the humility mean scores. A leader who scores high in all of the seven factors of servant leadership except humility is not a servant leader (Wong & Page, 2003). Humility is a key element of servant leadership. Wong and Page identified power and pride as the opposite of humility and state that the mere presence of power and pride indicates not only the absence of humility, but the absence of servant leadership. The SLPR is oriented toward leaders in a hierarchical organization. Salespersons may be part of a hierarchical organization, but when interacting with a customer, they are interacting on their own. Because of this, the SLPR may not be conducive to accurately measuring this servant leadership attribute among salespersons as responses may be contextually based. The context of which of these statements are responded to influences the score of the servant leadership attribute; therefore, interpreting the humility score is a matter of understanding context. In this study, the way humility was measured may have distorted mean scores.

Two significant discriminant functions were developed: Voice and Human Resource Management. The first discriminant function, Voice, and the three factors of servant leadership, developing and empowering others, authentic leadership and
visionary leadership, predict sales performance. The second discriminant function, *Human Resource Management*, and the three factors of servant leadership, open participatory leadership, courageous leadership, and inspiring leadership, predict mediocre sales performance in the 21% - 40% sales-ranking group. Applying these findings to leadership in business organizations, the results can be interpreted to conclude that business leaders with higher mean scores for developing and empowering others, authentic leadership, and visionary leadership are more likely to provide leadership resulting in a more financially viable organization. Study results could also be interpreted to conclude that business leaders with higher mean scores for open participatory leadership, courageous leadership, and inspiring leadership are more likely to provide leadership resulting in a mediocre financially viable organization.

Based on anecdotal evidence, Robert Greenleaf (1977) and others (Covey, 1989; Heskett et al., 1990; Newsom, 2000) suggested, claimed, and predicted that servant leadership results in a more viable organization. Well-known companies that are claimed to be servant-led are often cited as examples of the impact of servant leadership (Autry, 2001; Blanchard, 2007; Hunter, 2004; Spears, 2005). This study’s findings, to a degree, help substantiate Greenleaf’s and the others’ claims indicating that servant leadership will lead to financially viable organizations.

Numerous studies have been conducted in an attempt to identify predictors of sales performance, which have inconsistent results (Bissell, 2008; Bryant, 2005; Chipain, 2003; Davis, 2008; Gonzales, 2003; Kauffman, 2007; Killian, 2011; Mulligan, 2003; Tabbiner, 2000; Wang, 2000). Davis (2008) did consider leadership behavior as a predictor of sales performance. Five leadership theories were considered: leader-
member exchange theory, transactional leadership, transformational leadership, charismatic leadership, and laissez-faire leadership. Davis concluded that certain leadership behaviors positively affect sales performance: idealized influence, inspiration motivation, intellectual stimulation, and individual consideration. My findings add to the knowledge base of predicting sales performance with attributes of servant leadership and considering the relationship of leadership and sales performance. Friedman (2004) claimed that salesmanship is leadership. Hopefully this study adds support to this concept.

Limitations

Some limitations must be acknowledged prior to proceeding to conclusions and recommendations. This study depended on voluntary respondents to complete and return a survey with descriptive statistics and the SLPR. Study participants were made up of salespersons in the healthcare industry who were included in a database of a company who specializes in emailing surveys for marketing and research purposes. The survey company did screen potential study participants, and only those who identified themselves as salespersons in the healthcare industry were allowed to complete the survey. As such, this was not a random sample. Study participants came from multiple companies, but the study was limited to one industry. Participation was voluntary, yet there is no way of determining why those who responded were willing to respond or why those who did not respond did not. It is also important to consider that study participants may not have responded truthfully.
Conclusions and Recommendations

Based on the study findings, data analysis, and the review of the literature, five conclusions can be made.

1. *Voice*, which incorporates developing and empowering others, authentic leadership, and visionary leadership is a good predictor of sales performance. Higher mean scores for each of these factors of servant leadership predict higher sales performance and lower mean scores predict lower sales performance.

2. *Human Resource Management*, which incorporates open participatory leadership, courageous leadership, and inspiring leadership, predicts mediocre sales performance. These three factors of servant leadership are likely to predict membership in the 21% - 40% sales-ranking group.

3. Humility was eliminated as a predictor of sales performance due to no significant differences between groups.

4. Business organizations who want to be financially viable need to seek out leaders with high mean scores for developing and empowering others, authentic leadership, and visionary leadership or *Voice*.

5. Salespersons with higher sales-ranking tend to have higher servant leadership mean scores than do salespersons with lower sales-ranking.

The first discriminant function was labeled *Voice* and had a strong relationship with three of the seven factors of servant leadership: (a) developing and empowering others, (b) authentic leadership, and (c) visionary leadership. Analysis determined that higher servant leadership mean scores for developing and empowering others, authentic leadership, and visionary leadership were related to higher levels of sales performance.
The second discriminant function was labeled *Human Resource Management* and had a strong relationship with three of the seven factors of servant leadership: (a) open participatory leadership, (b) courageous leadership, and (c) inspiring leadership. These three factors of servant leadership predict membership in the 21% - 40% sales-ranking group and therefore mediocre sales performance.

**Recommendations for Practice**

The results of this study have practical implications for leadership and salesmanship scholars alike. The present study examines the seven factors of servant leadership as predictors of sales performance, utilizing salespersons as leaders. What the study found was that higher performing salespersons generally have higher mean scores for the seven factors of servant leadership and higher overall means scores of servant leadership. The seven factors of servant leadership are good predictors of higher level sales performance but are inconsistent with lower levels of sales performance. Likewise, leaders with higher mean scores for the seven factors of servant leadership and higher overall mean scores of servant leadership are more likely to provide leadership in a business organization that result in a more financially viable organization.

Recommendations for practice as a result of this study include:

1. Utilization of the SLPR to screen salespersons in the hiring process to quantify servant leadership mean scores.

2. Utilization of the SLPR to screen leadership applicants in the hiring process in business organizations that are concerned with financial viability to quantify servant leadership mean scores.
3. Utilization of the SLPR to screen existing salespersons to identify training opportunities to develop servant leadership attributes.

4. Utilization of the SLPR to screen persons in existing leadership positions if financial viability is linked to this leadership position to identify training opportunities to develop servant leadership attributes.

5. Develop sales training around servant leadership and the seven factors of servant leadership.

6. Develop leadership training for leadership positions linked to organizational financial viability around servant leadership.

Recommendations for Research

Further research is needed to determine if there is a relationship between servant leadership and financial viability of a business organization. This study is the first to conduct a quantitative examination of that relationship. Further research is needed examining salespersons and salesmanship as a laboratory for which to study and explore leadership. Empirical research on servant leadership in business organizations is limited.

The following topics are offered as suggestions for continuing research.

1. The results reported in this study offer some insight into the presence of a relationship between servant leadership and revenue in business organizations. More quantitative studies are needed before generalizations can be considered. Future research might utilize trade associations within a variety of industries or conduct research at individual business organizations and then combine the results of multiple organizations. Revenue can become a slippery slope as it varies from one business to another as it does
one industry to another, and the study of multiple companies within multiple industries could avoid this.

2. This study has made the argument that salesmanship equals leadership. If that argument is accepted, studying salesmanship provides an excellent laboratory for the study of leadership. Collaboration between scholars of leadership and salesmanship could provide numerous research opportunities that contribute to both fields.

3. Research and development of a servant leadership instrument specifically for salespersons, a servant salesmanship instrument, would create an opportunity to conduct numerous quantitative studies on salesmanship and leadership and avoid the potential for contextually based responses.

4. More research into the understanding of humility and how it affects salesmanship and leadership would contribute to the knowledge base of both salesmanship and servant leadership.

5. Further research and development of servant leadership training is needed to affect servant leadership attributes.

6. Further research of the seven factors of servant leadership is needed for greater clarity and understanding.

Final Thoughts

This study is the first quantitative study to examine the relationship of servant leadership attributes to revenue in a business organization and the first quantitative study to examine the predictability of servant leadership attributes to sales performance. Salespersons with higher mean scores for three factors of servant leadership, developing and empowering others, authentic leadership, and visionary leadership, had higher sales
performance. Mean scores for three factors of servant leadership, open participatory leadership, courageous leadership, and inspiring leadership, predict mediocre sales performance. Further research is needed and warranted to conclude that a relationship does exist between servant leadership and revenue in a business organization; however, this study indicates that there is at least a hint of truth to the claims made by servant leadership scholars that servant-led organizations will be more financially viable.

Studies on salesmanship contribute to the knowledge base of both salesmanship and leadership. A review of the definitions of salesmanship and leadership indicates many similarities to the degree that the case can be made that salesmanship equals leadership. This provides a new laboratory for the study of leadership that contributes to both fields. It comes as no surprise that many salespersons take on more advanced leadership roles within an organization or that the majority of chief executive officers have spent part of their career in sales.

While this study has attempted to examine the relationship of servant leadership attributes and revenue, servant leadership is a lens for viewing leadership, a philosophical foundation of leadership that focuses on serving others. The opportunity to expand on that knowledge base goes beyond making money, beyond generating revenue, beyond being a more financially viable business organization. A greater understanding of servant leadership contributes to all. Further acceptance of servant leadership within business organizations is dependent upon leadership scholars initiating and conducting quantitative research to bring out the best in salesmanship, and therefore the best in leadership throughout organizations around the world.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Instrument</th>
<th>Operational Definition</th>
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</thead>
</table>
| Gender                         | Sex of the person in the study                                           | I am                                                                     | Male = 0  
Female = 1  
Binary Variable                                         |
| Number of years in healthcare sales | Total number of years the study participant has been employed as a sales person in the healthcare industry. | Check the box next to the number of years you have been in healthcare sales. | The number of years indicated by the study participant.  
Interval Variable        |
| Number of years in current sales position | Total number of years the study participant has been employed as a sales person with his/her current employer. | Check the box next to the number of years you have been in your current sales position. | The number of years indicated by the study participant.  
Interval Variable        |
| Education | Level of education achieved. | Check the box next to the highest level of education you have completed. | High School = 1
Some College = 2
Associates = 3
Bachelors = 4
Masters = 5
Doctorate = 6
Ordinal Variable |
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<td>Age</td>
<td>Total number of years lived.</td>
<td>Check the box next to your current age.</td>
<td>The number of years indicated by the study participant.</td>
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<td>Predictor Variables</td>
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<td></td>
<td>Developing an empowering others</td>
<td>Delegating responsibilities, shared decision-making, cultivating good relationships, contributing to the growth of others</td>
<td>16 of the 62 questions from the SLPR (questions 20, 25, 27, 31, 35, 41, 42, 43, 46, 50, 52, 53, 57, 63, 65, 66). Select the answer that best describes you. Examples: I am able to transform an ordinary group of individuals into a winning team.</td>
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<tr>
<td>Humility</td>
<td>Humbleness, taking a back seat to others</td>
<td>8 of the 62 questions from the SLPR (questions 13, 18, 19, 22, 32, 33, 60, 64). Select the answer that best describes you.</td>
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<td>Examples: I am able to bring out the best in others.</td>
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<td>To be a strong leader, I need to have the power to do whatever I want without being questioned.</td>
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<td>Authentic leadership</td>
<td>Steward of the community, focus on the best interest of others, selflessness</td>
<td>11 of the 62 questions from the SLPR (questions 10, 21, 34, 48, 49, 51, 54, 55, 56, 61, 62). Select the answer that best describes you.</td>
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<td>Examples: I willingly share my power with others, but I do not abdicate my authority and responsibility.</td>
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<td>Numeric score of 1-7 Each question receives a score as follows: Strongly disagree—1 Disagree—2 Somewhat disagree—3 Undecided—4 Somewhat agree—5 Agree—6 Strongly agree—7 The mean score of the 8 questions regarding humility provide a score for this servant leadership attribute. Ordinal Variable</td>
<td>Numeric score of 1-7 Each question receives a score as follows: Strongly disagree—1 Disagree—2 Somewhat disagree—3 Undecided—4 Somewhat agree—5 Agree—6 Strongly agree—7 The mean score of the 11 questions regarding authentic</td>
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<tr>
<td>Open, participatory leadership</td>
<td>Listening and communication, promoting kindness, trust, honesty and openness, genuine care for others</td>
<td>I consistently appreciate and validate others for their contributions.</td>
<td>I want to build trust through honesty and empathy.</td>
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<tr>
<td>10 of the 62 questions from the SLPR (questions 8, 11, 12, 14, 15, 16, 38, 39, 40, 68). Select the answer that best describes you.</td>
<td>Examples: My leadership effectiveness is improved through empowering others.</td>
<td>Numeric score of 1-7</td>
<td>Each question receives a score as follows:</td>
</tr>
<tr>
<td>Strongly disagree—1</td>
<td>Disagree—2</td>
<td>Somewhat disagree—3</td>
<td>Undecided—4</td>
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</table>

<p>| Inspiring leadership | Common goal and vision, getting the best | 7 of the 62 questions from the SLPR (questions 7, 17, 23, 24, 26, 29, 30). Select | Numeric score of 1-7 | Each question receives a score as |</p>
<table>
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<tr>
<th>from others, winning team spirit</th>
<th>the answer that best describes you. Examples: I am willing to accept other people’s ideas, whenever they are better than mine.</th>
<th>Strongly disagree—1 Disagree—2 Somewhat disagree—3 Undecided—4 Somewhat agree—5 Agree—6 Strongly agree—7</th>
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<td></td>
<td>I seek to serve rather than be served.</td>
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<tr>
<td>Visionary leadership</td>
<td>5 of the 62 questions from the SLPR (questions 44, 45, 47, 58, 59). Select the answer that best describes you. Examples: I set an example of placing group interests above self-interests.</td>
<td>Strongly disagree—1 Disagree—2 Somewhat disagree—3 Undecided—4 Somewhat agree—5 Agree—6 Strongly agree—7</td>
</tr>
<tr>
<td></td>
<td>I work for the best interests of others rather than self.</td>
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</table>

Numeric score of 1-7 Each question receives a score as follows: Strongly disagree—1 Disagree—2 Somewhat disagree—3 Undecided—4 Somewhat agree—5 Agree—6 Strongly agree—7 The mean score of the 5 questions regarding visionary leadership provide a score for this servant leadership attribute. Ordinal Variable
### Courageous Leadership

Making promises and commitments, moral courage

5 of the 62 questions from the SLPR (questions 9, 28, 36, 37, 67). Select the answer that best describes you.

Examples:
To be a leader, I should be front and center in every function in which I am involved.

- Strongly disagree
- Disagree
- Somewhat disagree
- Undecided
- Somewhat agree
- Agree
- Strongly agree

I want to have the final say on everything, even areas where I don’t have the competence.

- Strongly disagree
- Disagree
- Somewhat disagree
- Undecided
- Somewhat agree
- Agree
- Strongly agree

Numeric score of 1-7
Each question receives a score as follows:
- Strongly disagree—1
- Disagree—2
- Somewhat disagree—3
- Undecided—4
- Somewhat agree—5
- Agree—6
- Strongly agree—7

The mean score of the 5 questions regarding courageous leadership provide a score for this servant leadership attribute.

### Outcome Variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Instrument</th>
<th>Operational Definition</th>
</tr>
</thead>
</table>
| Sales Performance | Sales ranking of the individual sales person compared to that of his peers in domestic sales expressed as a percentage | 2011 Sales Performance: Where did you rank as a percentage within your company’s domestic sales tram in 2011? Please check the appropriate response below: | Top 20% = 3  
21% - 40% = 2  
41% or below = 1  
Ordinal Variable |
SLRP Permission

Bill Auxier <billauxier@gmail.com>  
To: pape@bwu.ca

Dear Dr. Page,

I am a graduate student at Andrews University working on my doctorate in leadership.

For my dissertation, I would like to utilize your Servant Leadership Profile-Revised and therefore have a few questions.

1. What is the process to receive your permission?
2. How does one interpret each SLRP and collect data? Must it be done through your website or can this process be completed by me?
3. What are the costs?

I look forward to your reply.

Thank you!

Bill Auxier

Don Page <pape@bwu.ca>  
To: Bill Auxier <billauxier@gmail.com>

Tue, Nov 29, 2011 at 3:43 PM

Hello Bill,

All you need is my permission to use the instruments which I am now giving you. You can work through the website and pay the costs or do it yourself at no cost. Should you wish to do the data collection and analysis yourself, I am attaching the appropriate instruments. I would be grateful if you would send me a copy of your final results.

From: Bill Auxier [mailto:billauxier@gmail.com]  
Sent: Tuesday, November 29, 2011 4:05 AM  
To: Don Page  
Subject: SLRP Permission

[Quoted text hidden]

7 attachments

- SLProfile revised 360 Jan 04.doc  
  156K
- SL Template for individual SL profiles.xls  
  21K
- SL Assessment intro for MAL Web site.doc  
  33K
- Servant Leadership Profile Reliability and Validity.doc  
  25K

https://mail.google.com/mail/u/0?ik=28&page10023826&view=gl&lq=pape%40bwu.ca&q=trn&search=quor...
Bill Auxler <billauxler@gmail.com>  
To: Don Page <page@tuw.co>

Dr. Page,

Thank you! Thank you for granting your permission to use the SLRP instrument and for providing the tools to the data collection and analysis. I will forward a copy of my results to you upon completion!

Regards,

Bill Auxler
APPENDIX C

SURVEY
SURVEY PART A

The survey below is part of an academic study being conducted on sales performance. The purpose of this study is to examine the relationship between servant leadership attributes and sales performance.

You have been selected to participate in this study due to your employment as a salesperson in the healthcare industry.

By submitting this survey, you are agreeing to the following:
1. I am voluntarily participating and providing my consent to use this data for this study.
2. I understand that I have the right to not submit this survey during this process without penalty.
3. I understand that this information will be held in total confidence.
4. I agree to honestly answer all questions to the best of my ability.

In return, you are guaranteed confidentiality in your responses.

1. I am:
   ○ Male
   ○ Female

2. Check the box next to the number of years you have been in healthcare sales.
   ○ 1 year or less
   ○ 2 years
   ○ 5 years
   ○ 4 years
   ○ 6 years
   ○ 7 years
   ○ 8 years
   ○ 9 years
   ○ 10 years
   ○ 11 years
   ○ 12 years
   ○ 13 years
   ○ 14 years
   ○ 15 years
   ○ 16 years
   ○ 17 years
   ○ 18 years
   ○ 19 years
   ○ 20 years
   ○ 21 years
   ○ 22 years
   ○ 23 years
   ○ 24 years
   ○ 25 or more years
3. Check the box next to the number of years you have been in your current sales position.

<table>
<thead>
<tr>
<th>Years</th>
<th>1 year or less</th>
<th>2 years</th>
<th>3 years</th>
<th>4 years</th>
<th>5 years</th>
<th>6 years</th>
<th>7 years</th>
<th>8 years</th>
<th>9 years</th>
<th>10 years</th>
<th>11 years</th>
<th>12 years</th>
<th>13 years</th>
<th>14 years</th>
<th>15 years</th>
<th>16 years</th>
<th>17 years</th>
<th>18 years</th>
<th>19 years</th>
<th>20 or more years</th>
</tr>
</thead>
</table>

4. Check the box next to the highest level of education you have completed.

- High School
- Some College
- Associates Degree
- Bachelor's Degree
- Master's Degree
- Doctorate
5. Check the box next to your current age.

☐ 21  ☐ 36  ☐ 51
☐ 22  ☐ 37  ☐ 52
☐ 23  ☐ 38  ☐ 53
☐ 24  ☐ 39  ☐ 54
☐ 25  ☐ 40  ☐ 55
☐ 26  ☐ 41  ☐ 56
☐ 27  ☐ 42  ☐ 57
☐ 28  ☐ 43  ☐ 58
☐ 29  ☐ 44  ☐ 59
☐ 30  ☐ 45  ☐ 60
☐ 31  ☐ 46  ☐ 61
☐ 32  ☐ 47  ☐ 62
☐ 33  ☐ 48  ☐ 63
☐ 34  ☐ 49  ☐ 64
☐ 35  ☐ 50  ☐ 65 or older

6. 2011 Sales Performance: Where did you rank as a percentage within your company's domestic sales team in 2011? Please check the appropriate box below.

☐ Top 10%
☐ 11% to 20%
☐ 21% to 30%
☐ 31% to 40%
☐ 41% to 50%
☐ 51% or below

SURVEY PART B

PART B

PART B is the Servant Leadership Profile-Revised which is a survey instrument utilized to measure servant leadership attributes.

Servant Leadership Profile-Revised

© Paul T.P. Wong, Ph.D. & Don Page, Ph.D.
Leadership matters a great deal in the success or failure of any organization. This instrument was designed to measure both positive and negative leadership characteristics.

If you have not held any leadership position in an organization, then answer the questions as if you were in a position of authority and responsibility. There are no right or wrong answers. Simply rate each question in terms of what you really believe or normally do in a leadership or sales situation.

### 7. To inspire team spirit, I communicate enthusiasm and confidence.

<table>
<thead>
<tr>
<th>Select your response</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
</table>

### 8. I listen actively and receptively to what others have to say, even when they disagree with me.

<table>
<thead>
<tr>
<th>Select your response</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>


<table>
<thead>
<tr>
<th>Select your response</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

### 10. I am genuine and honest with people, even when such transparency is politically unwise.

<table>
<thead>
<tr>
<th>Select One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
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</table>

### 11. I am willing to accept other people’s ideas, whenever they are better than mine.

<table>
<thead>
<tr>
<th>Select One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<td>12. I promote tolerance, kindness, and honesty in the workplace.</td>
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<td>Disagree</td>
<td>Somewhat Disagree</td>
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<td>Agree</td>
<td>Strongly Agree</td>
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<th>13. To be a leader, I should be front and center in every function in which I am involved.</th>
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<td></td>
<td>Strongly Disagree</td>
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<td>Select One</td>
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<tr>
<th></th>
<th>14. I create a climate of trust and openness to facilitate participation in decision making.</th>
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<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
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<td>Select One</td>
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<tr>
<th></th>
<th>15. My leadership effectiveness is improved through empowering others.</th>
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<tr>
<td></td>
<td>Strongly Disagree</td>
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<tr>
<td>Select One</td>
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<th>16. I want to build trust through honesty and empathy.</th>
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<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
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<td>Select One</td>
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<th></th>
<th>17. I am able to bring out the best in others.</th>
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<td></td>
<td>Strongly Disagree</td>
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<td>Select One</td>
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18. I want to make sure that everyone follows orders without questioning my authority.

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<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
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19. As a leader, my name must be associated with every initiative.

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<th>Strongly Disagree</th>
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20. I consistently delegate responsibility to others and empower them to do their job.

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<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
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21. I seek to serve rather than be served.

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<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
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22. To be a strong leader, I need to have the power to do whatever I want without being questioned.

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<th>Strongly Disagree</th>
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23. I am able to inspire others with my enthusiasm and confidence in what can be accomplished.

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<th>Strongly Disagree</th>
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<td>24. I am able to transform an ordinary group of individuals into a winning team.</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Somewhat Disagree</td>
<td>Undecided</td>
<td>Somewhat Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
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<thead>
<tr>
<th>25. I try to remove all organizational barriers so that others can freely participate in decision-making.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
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<tr>
<th>26. I devote a lot of energy to promoting trust, mutual understanding and team spirit.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
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<tr>
<th>27. I drive a great deal of satisfaction in helping others succeed.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
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<th>Strongly Agree</th>
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<tr>
<th>28. I have the moral courage to do the right thing, even when it hurts me politically.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
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<tr>
<th>29. I am able to rally people around me and inspire them to achieve a common goal.</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
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### 30. I am able to present a vision that is readily and enthusiastically embraced by others.

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<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
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Select One

### 31. I invest considerable time and energy in helping others overcome their weaknesses and develop their potential.

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<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
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Select One

### 32. I want to have the final say on everything, even areas where I don't have the competence.

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<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
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Select One

### 33. I don't want to share power with others, because they may use it against me.

<table>
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<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
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<th>Somewhat Agree</th>
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Select One

### 34. I practice what I preach.

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<th>Strongly Disagree</th>
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<th>Somewhat Disagree</th>
<th>Undecided</th>
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Select One

### 35. I am willing to risk mistakes by empowering others to “carry the ball.”

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
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Select One
| 36. I have the courage to assume full responsibility for my mistakes and acknowledge my own limitations. |
|---|---|---|---|---|---|---|
| Select One | Strongly Disagree | Disagree | Somewhat Disagree | Undecided | Somewhat Agree | Agree | Strongly Agree |
| | | | | | | |

| 37. I have the courage and determination to do what is right in spite of difficulty or opposition. |
|---|---|---|---|---|---|---|
| Select One | Strongly Disagree | Disagree | Somewhat Disagree | Undecided | Somewhat Agree | Agree | Strongly Agree |
| | | | | | | |

| 38. Whenever possible, I give credit to others. |
|---|---|---|---|---|---|---|
| Select One | Strongly Disagree | Disagree | Somewhat Disagree | Undecided | Somewhat Agree | Agree | Strongly Agree |
| | | | | | | |

| 39. I am willing to share my power and authority with others in the decision making process. |
|---|---|---|---|---|---|---|
| Select One | Strongly Disagree | Disagree | Somewhat Disagree | Undecided | Somewhat Agree | Agree | Strongly Agree |
| | | | | | | |

| 40. I genuinely care about the welfare of people working with me. |
|---|---|---|---|---|---|---|
| Select One | Strongly Disagree | Disagree | Somewhat Disagree | Undecided | Somewhat Agree | Agree | Strongly Agree |
| | | | | | | |

| 41. I invest considerable time and energy equipping others. |
|---|---|---|---|---|---|---|
| Select One | Strongly Disagree | Disagree | Somewhat Disagree | Undecided | Somewhat Agree | Agree | Strongly Agree |
| | | | | | | |
42. I make it a high priority to cultivate good relationships among group members.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
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43. I am always looking for hidden talents in my workers.

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<tr>
<th>Strongly Disagree</th>
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<th>Undecided</th>
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44. My leadership is based on a strong sense of mission.

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<th>Strongly Disagree</th>
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45. I am able to articulate a clear sense of purpose and direction for my organization's future.

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<tr>
<th>Strongly Disagree</th>
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46. My leadership contributes to my employees/colleagues' personal growth.

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<th>Strongly Disagree</th>
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47. I have a good understanding of what is happening inside the organization.

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<th>Strongly Disagree</th>
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### 48. I set an example of placing group interests above self interests.

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<th>Strongly Disagree</th>
<th>Disagree</th>
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### 49. I work for the best interests of others rather than self.

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<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
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### 50. I consistently appreciate, recognize, and encourage the work of others.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
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### 51. I always place team success above personal success.

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<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
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### 52. I willingly share my power with others, but I do not abdicate my authority and responsibility.

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<tr>
<th>Strongly Disagree</th>
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<th>Somewhat Disagree</th>
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### 53. I consistently appreciate and validate others for their contributions.

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<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
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54. When I serve others, I do not expect anything in return.

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<th>Strongly Disagree</th>
<th>Disagree</th>
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55. I am willing to make personal sacrifices in serving others.

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<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
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56. I regularly celebrate special occasions and events to foster a group spirit.

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<th>Strongly Disagree</th>
<th>Disagree</th>
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57. I consistently encourage others to take initiative.

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58. I am usually dissatisfied with the status quo and know how things can be improved.

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<tr>
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59. I take proactive actions rather than waiting for events to happen to me.

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<tr>
<th>Strongly Disagree</th>
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<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select One</td>
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</tr>
</tbody>
</table>
60. To be a strong leader, I need to keep all my subordinates under control.

<table>
<thead>
<tr>
<th>Select One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

61. I find enjoyment in serving others in whatever role or capacity.

<table>
<thead>
<tr>
<th>Select One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

62. I have a heart to serve others.

<table>
<thead>
<tr>
<th>Select One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

63. I have great satisfaction in bringing out the best in others.

<table>
<thead>
<tr>
<th>Select One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

64. It is important that I am seen as superior to my subordinates in everything.

<table>
<thead>
<tr>
<th>Select One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
</table>

65. I often identify talented people and give them opportunities to grow and shine.

<table>
<thead>
<tr>
<th>Select One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

124
66. My ambition focuses on finding better ways of serving others and making them successful.

<table>
<thead>
<tr>
<th>Select One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</tbody>
</table>

67. I always keep my promises and commitments to others.

<table>
<thead>
<tr>
<th>Select your response</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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68. I grant all my workers a fair amount of responsibility and latitude in carrying out their tasks.

<table>
<thead>
<tr>
<th>Select One</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Undecided</th>
<th>Somewhat Agree</th>
<th>Agree</th>
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</tbody>
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APPENDIX D

IRB LETTER OF APPROVAL
March 22, 2012

Mr. William Auxier
Tel: (231) 944-0983
Email: billauxier@gmail.com

REG. APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS
IRB Protocol # 12-015; Application Type: Modified Protocol; Advisor: Sylvia Gonzalez
Dept.: Leadership; Category: Exempt;
Title: The relationship of servant leadership attributes and demographic variables on sales ranking of
salespersons in a medical device company in 2011.

Congratulations! Your request to modify and implement your research protocol and
informed consent for research involving human subjects entitled: "The relationship of
servant leadership attributes and demographic variables on sales ranking of
salespersons in a medical device company in 2011" IRB protocol # 12-015 has been
granted. The study is determined to be Exempt under category 46.101 (b) (2). You may
now proceed with your research. This exemption letter immediately supersedes any
previously approved protocols.

We ask that you reference the protocol number in any future correspondence regarding
this study for easy retrieval of information.

Please note that any future changes made to the study design and/or consent form require
prior approval from the IRB before such changes can be implemented.

While there appears to be no more than minimum risks with your study, should an
incidence occur that results in a research-related adverse reaction and/or physical injury,
this must be reported immediately in writing to the IRB. Any research-related physical
injury must also be reported immediately to the University Physician, Dr. Hamel, by
calling (269) 473-2222.

Please feel free to contact our office if you have any questions.

All the best in your research.

Sincerely,

[Signature]

Sarah Kimakwa
IRB, Research & Creative Scholarship

Institutional Review Board
Tel: (269) 471-6561 Fax: (269) 471-6543 E-mail: irb@andrews.edu
Andrews University, Berrien Springs, MI 49104-2885
REFERENCE LIST
REFERENCE LIST


VITA
WILLIAM R. AUXIER
3294 Holiday View Drive
Traverse City, MI  49686
(616) 805-1436
billauxier@gmail.com

EDUCATION
Andrews University, Berrien Springs, MI Ph.D. in Leadership (2013)
Eastern Michigan University, Ypsilanti, MI M.A. in Communication (1986)
University of Evansville, Evansville, IN B.S. in Business (1977)

EMPLOYMENT HISTORY
President & Chief Executive Officer, Bowers Harbor Corp. 8/99 to date
Consulting services to companies and individuals in the healthcare industry

Professional Sales Specialist, GE Healthcare 3/12 to date
Sales leadership position working with customers in the acquisition of diagnostic imaging equipment

Director, Academic Medical Centers, Applied Medical 2/11-3/12
Leadership sales and business development engaging academic medical center leadership to provide solutions in alignment with organizational goals

Vice President, Business Development, AllegiantMD 8/10-2/11
Leadership position with a start-up company responsible for new business development to grow a regional radiology group into a national practice

Director of Sales, Virtual Radiologic Corporation 3/09-7/10
Responsible for strategy development, monitoring competitive activities, establishing territories, meeting with clients, developing and training a sales team

Chief Executive Officer, Thompson Surgical Instruments 7/02-10/08
Responsible for managing a leading global organization in surgical retractor systems for multiple surgical specialties with an emphasis on spine surgery

Owner, Signs Now Traverse City 1/98-6/08
Responsible for all aspects of growing and running a profitable business

Regional Sales Director, United States Surgical Corp. 7/81-7/00
Management overseeing 8 sales people with annual sales responsibility over $5 million

PUBLICATIONS/BOOKS/PRESENTATIONS
Preliminary findings, Andrews University Business Teachers Conference June 2012
Masters of Success, Contributing author, Wall Street Journal Best Seller 2004

TEACHING EXPERIENCE
Taught surgeons proper surgical techniques with new technology
Classes reviewing sales process, techniques, strategy, terminology, knowledge, implementing change, and understanding organizational dynamics

PROFESSIONAL AFFILIATIONS
- Member, American College of Healthcare Executives
- Member, Greenleaf Society for Servant Leadership
- Member, Pi Lambda Theta-International Honor Society