Andrews University Digital Commons @ Andrews University

Dissertations

Graduate Research

2013

Exploring the Relationship Between Adventist Hospital Board Chair Leadership Behaviors and Effectiveness

Anthony M. Stahl *Andrews University* This research is a product of the graduate program in Leadership PhD at Andrews University. Find out more about the program.

Follow this and additional works at: https://digitalcommons.andrews.edu/dissertations Part of the <u>Health and Medical Administration Commons</u>

Recommended Citation

Stahl, Anthony M., "Exploring the Relationship Between Adventist Hospital Board Chair Leadership Behaviors and Effectiveness" (2013). *Dissertations*. 712. https://digitalcommons.andrews.edu/dissertations/712

This Dissertation is brought to you for free and open access by the Graduate Research at Digital Commons @ Andrews University. It has been accepted for inclusion in Dissertations by an authorized administrator of Digital Commons @ Andrews University. For more information, please contact repository@andrews.edu.



Seek Knowledge. Affirm Faith. Change the World.

Thank you for your interest in the

Andrews University Digital Library of Dissertations and Theses.

Please honor the copyright of this document by not duplicating or distributing additional copies in any form without the author's express written permission. Thanks for your cooperation.

ABSTRACT

EXPLORING THE RELATIONSHIP BETWEEN ADVENTIST HOSPITAL BOARD CHAIR LEADERSHIP BEHAVIORS AND EFFECTIVENESS

by

Anthony M. Stahl

Chair: Duane Covrig

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: EXPLORING THE RELATIONSHIP BETWEEN ADVENTIST HOSPITAL BOARD CHAIR LEADERSHIP BEHAVIORS AND EFFECTIVENESS

Name of researcher: Anthony M. Stahl

Name and degree of faculty chair: Duane Covrig, Ph.D.

Date completed: July 2013

Problem and Purpose

There is a lack of empirical research regarding the leadership behaviors that predict an effective community hospital board chair. Researchers indicate that an effective organization normally has a well-led board. However, the chair role has been largely neglected in the research of board functions and operations. With many hospitals facing reorganization or closing, it is important to understand and identify effective chair behaviors. Thus, the purpose of this study was to determine the relationship between hospital chair leadership behaviors and effectiveness, and the relationship of effective chairs to effective hospitals. Method

This study used an ex post facto research design with stated and alternative hypotheses. The study was based upon a repeated measures design where the board chairs' effectiveness and behaviors were measured more than once. An online survey using the Multifactor Leadership Questionnaire (MLQ) was administered to 333 board members serving 34 Adventist Health System hospitals. This survey measured board member perceptions of chair leadership behaviors and chair effectiveness. Patient satisfaction and clinical and financial data were also collected from each hospital to measure hospital effectiveness. Descriptive statistics, correlation, and multiple regression models were used to describe and examine the statistical relationship between variables. Of the 55 hypotheses tested, 34 (62%) were statistically significant and three others approached statistical significance.

Results and Conclusions

The chairs reviewed by respondents were all Caucasian and male, ranging from 38 to 68 years old with 70% being 51 to 66 years of age. They had college education, ranging from bachelor's degrees to doctorates, with 67% having master's degrees. The chair's length of service at their current facility ranged from 7 months to 12.9 years, with 55% serving 5 to 6 years.

With the *p* value set at .05, correlations and multiple regression analysis revealed the following:

1. There was statistical significance and a positive relationship between transformational leadership behaviors and chair effectiveness (r = .869; p = .000).

2. There was statistical significance and a positive relationship between transactional leadership behaviors and chair effectiveness (r = .382; p = .000).

3. There was no statistically significant relationship between laissez-faire leadership behaviors and chair effectiveness (r = -.122; p = .178).

4. There was statistical significance and a positive relationship between financial margin; Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) and Clinical Outcomes (CM) (r = .331; p = .000). There was no statistical significance in the relationship between hospital financial margins and patient satisfaction (r = .169; p = .066).

5. There was no statistical significance in the relationship found between chair leadership effectiveness and hospital effectiveness metrics such as EBITDA (r = -.019; p = .831), Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS; r = -160; p = .083), and CM (r = -.044; p = .632).

6. There was statistical significance and a positive relationship between chair education and chair effectiveness (r = .235; p = .009).

7. There was statistical significance and a positive relationship between chair education and the organizational metric EBITDA (r = .349; p = .000) but no statistically significant relationship between chair education and patient satisfaction (r = -.043; p = .643).

8. There was no statistically significant relationship between chair longevity and chair effectiveness (r = -.023; p = .803).

9. There was a statistically significant relationship between chair longevity and patient satisfaction as measured by Hospital Consumer Assessment of Healthcare

Providers and Systems (HCAHPS; r = .221; p = .016). However, there was statistical significance and a negative relationship between chair longevity and hospital financial success as measured by EBITDA (r = -.233; p = .010).

10. While nearing statistical significance, there was no statistically significant relationship between chair age and chair effectiveness (r = -.169; p = .061).

11. There was statistical significance and a negative relationship between chair age and hospital financial performance as measured by EBITDA (r = -203, p = .024).

Conclusions and Recommendations

In this study, both transformational and transactional leadership behaviors predicted chair effectiveness. The relationship between Laissez-faire leadership behaviors and effectiveness was not statistically significant (r = -.122; p = .178). In addition, the study showed chair education had a statistically significant relationship on the hospitals' financial margins (r = .349; p = .000). Finally, while strong financial margins predicted clinical outcomes (r = .331; p = .000), they did not have a statistically significant relationship to patient satisfaction (r = .169; p = .066).

Several recommendations to boards, hospitals, and researchers can be made from this study. First, given the significance of transformational and transactional leadership behaviors on chair effectiveness, boards may wish to screen potential chairs for these behaviors or provide training that facilitates the development of these behaviors.

Second, given the significance of chair education on chair effectiveness and hospital financial margins, boards may wish to screen chairs for higher levels of education to better predict chair and hospital effectiveness. Finally, given this study was done only on Adventist Health System hospitals and only White male chairs, other researchers may wish to replicate this study in other healthcare systems with more diverse chairs. In addition, initiating a qualitative study of chairs would provide additional answers to questions raised in this study. Andrews University

School of Education

EXPLORING THE RELATIONSHIP BETWEEN ADVENTIST HOSPITAL BOARD CHAIR LEADERSHIP BEHAVIORS AND EFFECTIVENESS

A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Anthony M. Stahl

July 2013

© Copyright by Anthony M. Stahl 2013 All Rights Reserved

EXPLORING THE RELATIONSHIP BETWEEN ADVENTIST HOSPITAL BOARD CHAIR LEADERSHIP BEHAVIORS AND EFFECTIVENESS

A dissertation presented in partial fulfillment of the requirements for the degree Doctor of Philosophy

by

Anthony M. Stahl

APPROVAL BY THE COMMITTEE:

Chair: Duane Covrig

Dean, School of Education James R. Jeffery

Member: Isadore Newman

Member: Shirley Freed

External: Loren Hamel

Date approved

To my family

TABLE OF CONTENTS

LIST OF	FIGURES	viii
LIST OF	TABLES	ix
ACKNOW	VLEDGMENTS	xvi
Chapter		
1.	INTRODUCTION	1
	Background of the Problem	1
	Statement of the Problem	4
	Purpose of the Study	4
	Research Questions	5
	Research Design	5
	Theoretical Framework	7
	Rationale/ Significance	10
	Assumptions	11
	Delimitations	11
	Definition of Terms	12
	Organization of the Study	15
2.	LITERATURE REVIEW	17
	Introduction	17
	Historical Perspective of Boards in Organizational Governance	18
	Hospital Board History	21
	Function and Role of the Board	22
	Determine Mission and Purpose	27
	Ensure Effective Planning	27
	Selection of the Chief Executive Officer	28
	Support and Evaluation of the Chief Executive Officer	29
	Ensure Financial Resources	29
	Monitor, and Strengthen Programs and Services	30
	Protect Assets and Provide Proper Financial Oversight	30
	Enhance the Organization's Public Standing	31
	Final Comments on Normative Board Roles	31
	Governance versus Micromanagement	32
	Role of the Board Chair	34
	CEO Board Chair Duality	39
	Leadership Characteristics of an Effective Board Chair	41
	Leadership and Leaders' Behaviors	45
	Transactional Leadership	48
	The subscripting the state of the subscription	.0

	Transformational Leadership	50
	Laissez-faire Leadership	53
	Multifactor Leadership Questionnaire (MLQ)	54
	Organizational Effectiveness and Leadership	56
	Relationship of Leader Effectiveness to Level of Education	59
	Relationship of Leader Effectiveness to Longevity	60
	Relationship of Leader Effectiveness to Age	61
	AHS Board Structure	62
	Summary	66
3.	METHODOLOGY	68
	Introduction	68
	Research Questions	69
	Hypotheses	69
	Research Design	. 74
	Sampling, Context and Population Description	. 77
	Variables and Instrumentation	. 81
	Data Collection	83
	Data Analysis	85
	Ethical Issues	86
	Summary	. 87
4.	RESULTS OF THE STUDY	88
	Introduction	88
	Demographic Descriptive Statistics of the Sample	89
	Survey-Descriptive Statistics	92
	Leadership Behavior Variables	93
	Chair Effectiveness	96
	Hospital Effectiveness	97
	Demographic Variables	98
	Pearson r Correlations	98
	Relationship Between Chair Leadership Behaviors and	
	Effectiveness	100
	Relationship Between Chair Formal Education and	
	Effectiveness	100
	Relationship Between Chair Longevity and Effectiveness	100
	Relationship Between Chair Age and Effectiveness	101
	Relationship Between Chair Effectiveness and Hospital	
	Effectiveness	101
	Inferential Statistics and Specific Research Hypothesis and	
	Regression Analysis	101
	Summary of Research Hypotheses	144

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	153
Introduction	
Background Problem Statement and Purpose	
Research Questions	
Research Design and Procedures	
Summary of Findings	
Correlational Findings	
Discussion	
General Question One	
Chair Transformational Leadership and Effectiveness	
Chair Transactional Leadership and Effectiveness	
Chair Laissez-faire Leadership and Effectiveness	
General Question Two	
Chair Education and Leadership Effectiveness	
Chair Education Relationship to EBITDA	
Chair Education Relationship to HCAHPS	
Chair Education Relationship to CM	
General Question Three	
Chair Longevity and Leadership Effectiveness	172
Chair Longevity Relationship to EBITDA	173
Chair Longevity Relationship to HCAHPS	174
Chair Longevity Relationship to CM	174
General Question Four	175
Chair Age and Effectiveness	175
Chair Age Relationship to EBITDA	176
Chair Age Relationship to HCAHPS	
General Question Five	178
Transformational Leadership and Hospital Effectiveness	178
Transactional Leadership and Hospital Effectiveness	179
Laissez-faire Leadership and Hospital Effectiveness	
Additional Findings	
Limitations	181
Conclusions	
Recommendations	
Recommendations for Practice	
Recommendations for Additional Research	
A Final Thought	187

Appendix

5.

A.	BOARD ROLES	
B.	LETTERS	193

C.	INFORMED CONSENT PRINTSCREEN	
D.	HCAHPS SURVEY	
REFERE	NCE LIST	222
VITA		

LIST OF FIGURES

1.	Internal and External Board Factor Model	26
2.	Leadership Elements	47
3.	Transactional Leadership Behavior Responses-MLQ	93
4.	Laissez-Faire Leadership Behavior Responses—MLQ	94
5.	Transformational Leadership Behavior Responses—MLQ	95

LIST OF TABLES

1.	Characteristics of Transformational Leadership	52
2.	MLQ Constructs	56
3.	Board Chair Relationship With Hospital and Boards	80
4.	Explanation of Variables	82
5.	Timeline for Data Collection—Board Chairs, CEOs and Board Members	85
6.	Chair Demographic Frequencies Table	91
7.	Variable Scale	92
8.	Effectiveness Questions From MLQ	97
9.	Correlation Matrix	99
10.	Model Summary of Chair Education Relationship to Effectiveness (Hypotheses 2a and 2b)	104
11.	Summary of Regression Analysis for Chair Education Relationship to Effectiveness (Hypotheses 2a and 2b)	104
12.	Model Summary of Chair Education Relationship to Effectiveness Independent of Longevity (Hypothesis 2c)	105
13.	Summary of Regression Analysis for Chair Education Relationship to Effectiveness Independent of Longevity (Hypothesis 2c)	105
14.	Model Summary of Chair Education Relationship to Effectiveness Independent of EBITDA and HCAHPS (Hypothesis 2d)	106
15.	Summary of Regression Analysis for Chair Education Relationship to Effectiveness Independent of EBITDA and HCAHPS (Hypothesis 2d)	107

16.	Model Summary for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA and CM; EBITDA Controlling for HCAHPS and CM; and CM Controlling for HCAHPS and EBITDA (Hypotheses 2e, 2f, & 2g)	107
17.	Summary of Regression Analysis for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA and CM; EBITDA Controlling for HCAHPS and CM; and CM Controlling for HCAHPS and EBITDA (Hypotheses 2e, 2f, & 2g)	108
18.	Model Summary for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Age; EBITDA Controlling for HCAHPS, CM, and Age; and CM Controlling for HCAHPS, EBITDA, and Age (Hypothesis 2h, 2i, & 2j).	110
19.	Summary of Regression Analysis for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Age; EBITDA Controlling for HCAHPS, CM, and Age; and CM Controlling for HCAHPS, EBITDA, and Age (Hypotheses 2h, 2i, & 2j)	110
20.	Model Summary for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Chair Longevity; EBITDA Controlling for HCAHPS, CM, and Chair Longevity; and CM Controlling for HCAHPS ,EBITDA, and Chair Longevity (Hypotheses 2k, 2l, & 2m)	111
21.	Summary of Regression Analysis for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Chair Longevity; EBITDA Controlling for HCAHPS, CM, and Chair Longevity; and CM Controlling for HCAHPS, EBITDA, and Chair Longevity (Hypotheses 2k, 2l, & 2m)	112
22.	Model Summary for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Chair Effectiveness; EBITDA Controlling for HCAHPS, CM, and Chair Effectiveness; CM Controlling for HCAHPS, EBITDA, and Chair Effectiveness; and Chair Effectiveness Controlling for HCAHPS, EBITDA, and CM (Hypotheses 2n, 2o, 2p, & 2q)	113

23.	Summary of Regression Analysis for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Chair Effectiveness; EBITDA Controlling for HCAHPS, CM, and Chair Effectiveness; CM Controlling for HCAHPS, EBITDA, and Chair Effectiveness; and Chair Effectiveness Controlling for HCAHPS, EBITDA, and CM (Hypotheses 2n, 2o, 2p, & 2q)	114
24.	Model Summary for the Relationship Between Chair Longevity and Effectiveness (Hypothesis 3a)	116
25.	Summary of Regression Analysis for the Relationship Between Chair Longevity and Effectiveness (Hypothesis 3a)	116
26.	Model Summary for the Relationship Between Chair Longevity and Effectiveness, Independent of Age (Hypothesis 3b)	117
27.	Summary of Regression Analysis for the Relationship Between Chair Longevity and Effectiveness, Independent of Age (Hypothesis 3b)	117
28.	Model Summary for Hypotheses the Relationship Between Chair Longevity and Effectiveness, Independent of Chair Education (Hypothesis 3c)	118
29.	Summary of Regression Analysis for the Relationship Between Chair Longevity and Effectiveness, Independent of Age (Hypothesis 3c)	119
30.	Model Summary for the Relationship Between Chair Longevity and Effectiveness, Independent of EBITDA, HCAHPS, and CM (Hypothesis 3d)	119
31.	Summary of Regression Analysis for Relationship Between Chair Longevity and Effectiveness, Independent of EBITDA, HCAHPS, and CM (Hypothesis 3d)	120
32.	Pearson <i>r</i> Correlations for the Relationship Between Chair Longevity and EBITDA, HCAHPS, and CM (Hypothesis 3e)	121
33.	Model Summary for Chair Longevity Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Age; HCAHPS When Controlling for CM and Age; and CM When Controlling for EBITDA, HCAHPS, and Age (Hypotheses 3f, 3g, & 3h)	122

34.	Summary of Regression Analysis for Chair Longevity Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Age; HCAHPS When Controlling for CM and Age; and CM When Controlling for EBITDA, HCAHPS, and Age (Hypotheses 3f, 3g, & 3h)	122
35.	Model Summary for Chair Longevity Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Effectiveness; HCAHPS When Controlling for EBITDA, CM, and Chair Effectiveness; CM When Controlling for EBITDA, HCAHPS, and Chair Effectiveness; and Chair Effectiveness When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 3i, 3j, 3k, & 3l)	123
36.	Summary of Regression Analysis for Predicting Chair Longevity Will Have a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Effectiveness; HCAHPS When Controlling for EBITDA, CM, and Chair Effectiveness; CM When Controlling for EBITDA, HCAHPS, and Chair Effectiveness; and Chair Effectiveness When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 3h, 3i, 3j, 3k, & 3l)	124
37.	Model Summary for the Relationship Between Chair Age and Effectiveness (Hypothesis 4a)	126
38.	Summary of Regression Analysis for the Relationship Between Chair Age and Effectiveness (Hypothesis 4a)	126
39.	Model Summary for the Relationship Between Chair Age and Effectiveness Independent of Chair Longevity (Hypothesis 4b)	127
40.	Summary of Regression Analysis for the Relationship Between Chair Age and Effectiveness Independent of Chair Longevity (Hypothesis 4b)	127
41.	Model Summary for the Relationship Between Chair Age and Effectiveness Independent of Chair Education (Hypothesis 4c)	128
42.	Summary of Regression Analysis for the Relationship Between Chair Age and Effectiveness Independent of Chair Education (Hypothesis 4c)	128
43.	Model Summary for the Relationship Between Chair Age and Effectiveness Independent of HCAHPS, EBITDA, and CM (Hypothesis 4d)	129

44.	Summary of Regression Analysis for the Relationship Between Chair Age and Effectiveness Independent of HCAHPS, EBITDA, and CM (Hypothesis 4d)	129
45.	Pearson r Correlations for the Relationship Between Chair Age and HCAHPS, EBITDA, and CM (Hypothesis 4e)	130
46.	Model Summary for Chair Age Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Longevity; HCAHPS When Controlling for EBITDA, CM, and Chair Longevity; CM When Controlling for HCAHPS, EBITDA, and Chair Longevity; and Chair Longevity When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 4f, 4g, 4h, & 4i)	131
47.	Summary of Regression Analysis for Chair Age Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Longevity; HCAHPS When Controlling for EBITDA, CM, and Chair Longevity; CM When Controlling for HCAHPS, EBITDA, and Chair Longevity; and Chair Longevity When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 4f, 4g, 4h, & 4i)	131
48.	Model Summary for Chair Age Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Effectiveness; HCAHPS When Controlling for EBITDA, CM, and Chair Effectiveness; CM When Controlling for HCAHPS, EBITDA, and Chair Effectiveness; and Chair Effectiveness When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 4j, 4k, 4l, & 4m)	133
49.	Summary of Regression Analysis for Chair Age Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Effectiveness; HCAHPS When Controlling for EBITDA, CM, and Chair Effectiveness; CM When Controlling for HCAHPS, EBITDA, and Chair Effectiveness; and Chair Effectiveness When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 4j, 4k, 4l, & 4m)	134
50.	Model Summary for the Relationship Between Chair Transformational Leadership Behaviors and EBITDA (Hypothesis 5a)	136
51.	Summary of Regression Analysis for the Relationship Between Chair Transactional Leadership Behaviors and EBITDA (Hypothesis 5a)	136
52.	Model Summary for the Relationship Between Chair Transformational Leadership Behaviors and HCAHPS (Hypothesis 5b)	137

53.	Summary of Regression Analysis for the Relationship Between Chair Transformational Leadership Behaviors and HCAHPS (Hypothesis 5b)	137
54.	Model Summary for the Relationship Between Chair Transformational Leadership Behaviors and CM (Hypothesis 5c)	138
55.	Summary of Regression Analysis for the Relationship Between Chair Transformational Leadership Behaviors and CM (Hypothesis 5c)	138
56.	Model Summary for the Relationship Between Chair Transactional Leadership Behaviors and EBITDA (Hypothesis 5d)	139
57.	Summary of Regression Analysis for the Relationship Between Chair Transactional Leadership Behaviors and EBITDA (Hypothesis 5d)	139
58.	Model Summary for the Relationship Between Chair Transactional Leadership Behaviors and HCAHPS (Hypothesis 5e)	140
59.	Summary of Regression Analysis for the Relationship Between Chair Transactional Leadership Behaviors and HCAHPS (Hypothesis 5e)	140
60.	Model Summary for the Relationship Between Chair Transactional Leadership and CM (Hypothesis 5f)	141
61.	Summary of Regression Analysis for the Relationship Between Chair Transactional Leadership Behaviors and CM (Hypothesis 5f)	141
62.	Model Summary for the Relationship Between Chair Laissez-faire Leadership Behaviors and EBITDA (Hypothesis 5g)	142
63.	Summary of Regression Analysis for the Relationship Between Chair Laissez-faire Leadership Behaviors and EBITDA (Hypothesis 5g)	142
64.	Model Summary for the Relationship Between Chair Laissez-faire Leadership Behaviors and HCAHPS (Hypothesis 5h)	143
65.	Summary of Regression Analysis for the Relationship Between Chair Laissez-faire Leadership Behaviors and HCAHPS (Hypothesis 5h)	143
66.	Model Summary for the Relationship Between Chair Laissez-faire Leadership Behaviors and CM (Hypothesis 5i)	144

67.	Summary of Regression Analysis for the Relationship Between Chair Laissez-faire Leadership Behaviors and HCAHPS (Hypothesis 5i)	144
68.	Summary of Research Hypotheses	146
69.	Summary of Key Relationships	167

ACKNOWLEDGMENTS

British mathematician and philosopher, Alfred Whitehead, once said, "No one who achieves success does so without acknowledging the help of others." In this section I do just that, acknowledge those who helped me on my doctoral journey. Without the encouragement, instruction, and support of family, colleagues, and professors, I could not have completed this study.

Possibly it was my family who sacrificed most, yet provided so much encouragement and moral support. I want to thank my wife Karina and boys Kristopher and Adriann for their unwavering support and encouragement during the past years. There were so many activities they participated in without my presence, such as holidays, trips to sightseeing destinations, and times with friends. I am forever grateful for their understanding and support. Also, thank you to my dad, Joel Stahl, mom, Norma Stahl, and sister, Shirlene Stahl, for their prayers and encouragement. My parents and sister are such a source of inspiration and love.

Another important community who assisted and encouraged me was my regional group—Dr. Mike Aufderhar, Yami Bazan, Dr. Carol Bradfield, Cheri Gregory, Lynda Daniel-Underwood, Eddy Witzel, and Robert Young. I am grateful for their patience, kindness, and constructive review of my work. Each gave hours of their time in providing excellent feedback. I could not ask for a better group to mentor and coach me through this process.

xvi

I owe much gratitude to my dissertation committee. I give my sincere thanks to Dr. Duane Covrig for guiding me through this process. Thanks for those weekly calls, guidance and prayer. I am grateful to Dr. Isadore Newman for his generosity in opening his home to me and shepherding me through the methodology section of this study. I am appreciative for the valuable feedback and coaching of Dr. Shirley Freed who so enriched this study with her thoughtful insight. Finally I am thankful for the expertise and guidance of Dr. Randy Haffner who served as a consultant to me and the dissertation committee.

There is no doubt I would not have completed the journey without the resolute support of my organization, Adventist Health System (AHS). I want to thank and recognize my previous boss Kevin Erich and my current boss Tim Cook. They provided continual encouragement and support along my journey. I am grateful to Dr. Donald Jernigan, AHS president, and the CEOs of Adventist Health System hospitals for giving me permission to study the board chairs. I am deeply grateful to Melissa Rego who spent hours obtaining data from Adventist Health System hospitals and scheduling appointments with over 34 CEOs. That in itself is a real achievement.

Finally, I acknowledge all wisdom comes from God. I thank Him for giving me strength to complete the dissertation. I recognize that without Him I can do nothing.

CHAPTER 1

INTRODUCTION

Background of the Problem

It is estimated there are over 2 million nonprofit organizations (NPOs) in the United States, employing almost 10% of the American workforce (Zietlow, Hankin, & Seidner, 2007). The influence of NPOs touches almost every aspect of American life. They touch our lives through libraries, hospitals, schools, churches, and advocacy groups. Hopkins (2009) points out that the United States has the most developed nonprofit sector of any country in the world. Drucker (1992), widely recognized as a leading management expert, states, "Today, we know that the nonprofit institutions are central to American society and are indeed its most distinguishing feature" (p. xiii).

The guiding force of these institutions is the board. The board is a group of individuals charged with governing an organization. They ensure the entity is fulfilling its mission through proper acquisition and use of resources, planning, oversight, and support of the organization's leadership (Andringa & Engstrom, 2007). This important body approves policy and strategic plans which are then operationalized by management. The board does not exist in a vacuum with relationship to the organization. In fact, the board's work is highly correlated to the organization's performance (Brown, 2005; Preston & Brown, 2004; Purdy & Lawless, 2012). While some researchers (Abbott, Smith, Procter, & Iacovou, 2008) claim the role of the board is not clearly defined, it is evident that the

board is involved in the strategic success of the organization, and provides the impetus for achievement (Allison & Kaye, 2005).

The chair is a central leader whose performance affects the board, the organization, and individuals served by the NPO. Dunne (2005) states, "Being a chairman is a tricky job requiring many skills. . . . A clear mind and considerable determination will need to be matched by a keen sensitivity and openness to the ideas of others" (p. 73). For-profit scandals such as Enron, Tyco, and WorldCom have placed both for-profit and nonprofit board chairs in an even more prominent role in the governance and success of the organization. These scandals have catapulted the chair into the spotlight as Congress passed new legislation, such as Sarbanes-Oxley, in order to hold the boards and their chairs more accountable. Sarbanes-Oxley contains 11 titles with specific mandates requiring better governance, stricter audits, and more detailed financial disclosure (Burke & Cooper, 2009; Hopt & Hippel, 2010). Arguably the chair is critical to nonprofit success, and has considerable influence over the board and organizational success (Harrison & Murray, 2012). Indeed, many scholars contend effective board chairs tend to lead more effective organizations (Cornforth, Harrison, & Murray, 2010).

My own experience with 13 nonprofit organizational boards, including university, hospital, church, and schools, has taught me the importance of the chair in organizational operations. I have been fascinated by the leadership of excellent board chairs who utilized the strengths of each board member and kept the group on-task. I have witnessed the effects of good boards on organizational performance, staff, and policy. Conversely, I have also sat on boards where it was disheartening to see the lack of leadership provided by the board chair. In each case I noticed that an effective chair presided over an effective

organization and a non-effective chair presided over a poorly run organization. I began to wonder if there was a relationship between chair leadership behaviors and organizational effectiveness.

While there is substantial research which focuses on the leader of a nonprofit organization (Maitlis, 2004; Powell & Steinberg, 2006; Pyzdek & Keller, 2010; Riggio & Orr, 2004; Walters, Kroll, & Wright, 2008), there is little empirical research which focuses on the board chair and little to no research which studies board chair behaviors and how they relate to organizational effectiveness. In addition, an exhaustive review of the literature revealed no studies exploring the relationship between longevity, age, and education of hospital board chairs and chair effectiveness. Studies hint that the leader's age, longevity, and education can improve leader effectiveness and organizational effectiveness (Boorom, 2009; Oshagbemi, 2004; Valentine & Prater, 2011). However, as noted, the literature appears to be silent on these areas with regard to board chairs.

One of the more complex nonprofit boards to chair in the United States is that of a hospital. There are almost 6,000 hospitals in America interfacing with a complex workforce of dietitians, nurses, doctors, and therapists. America's healthcare workforce maintains over 800,000 doctors and 2.5 million nurses (Shi & Singh, 2012). Hospitals, along with their large employment base, form part of the complex healthcare delivery system in the United States, which is facing distressed times for the system and their employees. Currently America spends more per capita for healthcare than any other country in the world. Healthcare costs in the United States have surged from 5.5% of gross domestic product in 1965 to 17% of GDP in 2007 (Shi & Singh, 2012). Jost (2007) in examining increased costs argues, "The healthcare system of the United States fails

dramatically" (p. 2). He goes on to say that the system is failing miserably, because there are millions of Americans without insurance, healthcare costs are high compared to other countries with 17% of GDP, and because almost 100,000 patients die from medical errors each year (Jost, 2007). It is within this context that hospital board chairs must navigate to bring effective leadership to hospitals. It is interesting to note there is no research regarding chairs' leadership behaviors and their possible relationship to hospital effectiveness. Considering the challenges facing healthcare today, it is crucial to understand the leadership role of the chair.

Statement of the Problem

Given the importance of the board chair to healthcare organizations in providing current and future stability in quality healthcare (Jha & Epstein, 2010), it is disappointing more has not been written about the chair's leadership of the board and the hospital. There is a clear lack of empirical research that would allow nonprofit organizations such as hospitals to understand the leadership behaviors necessary in a board chair. Kakabadse and Kakabadse (2008) write, "So, while all the evidence and research points to the importance of an effective well-led board, the one role that has been largely neglected is the most important of all: that of the chairman" (p. xviii).

Purpose of the Study

The purpose of this study is to explore the relationship of chair leadership behaviors and chair effectiveness as measured by the Multifactor Leadership Questionnaire (MLQ) and hospital effectiveness as measured by Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA), Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), and Clinical Measures (CM).

Research Questions

This study will seek to answer the following research questions:

1. What is the relationship between hospital chair leadership behaviors and effectiveness as perceived by board members and as measured by the MLQ?

2. What is the relationship between chair formal education and effectiveness as measured by the MLQ?

3. What is the relationship between hospital chair longevity and effectiveness as measured by the MLQ?

4. What is the relationship between the chair age and effectiveness as measured by the MLQ?

5. What is the relationship between chair leadership behaviors and hospital effectiveness as measured by EBITDA, HCAHPS, and CM?

Research Design

This study used a research design with stated and alternative hypotheses. Of the three types of ex post facto research, this study utilizes the most sophisticated type which used hypotheses and controls for viable alternative explanations. The study was based upon a repeated measures design where the board chairs' leadership behaviors and effectiveness were measured more than once by board members through the MLQ (Thomas, Nelson, & Silverman, 2011). In addition, the Bonferroni correction was used to

correct the problem of multiple comparisons and to control the Type I error rate for the multiple comparisons (Newman, Newman, & Brown, 2006).

According to Cottrell and McKenzie (2011) ex post facto research examines a phenomenon that has already occurred and attempts to infer cause-and-effect relationships. These studies are also called casual-comparative studies (p. 9). Researchers Ary, Jacobs, Sorenson, and Razaviah (2009) state:

When an investigation involves attribute independent variables that the researcher cannot manipulate, he or she must turn to *ex post facto* research. Ex post facto research is also appropriate when the variable actually could be manipulated but is not because it would be unethical or irresponsible to do so.... The designation of *ex post facto*, from Latin for "after the fact" indicates that **ex post facto research** is conducted after variation in the variable of interest has already been determined in the natural course of events. This method is sometimes called *causal comparative* because its purpose is to investigate cause-and-effect relationships between independent and dependent variables. Researchers use it in situations that do not permit the randomization and manipulation of variables characteristic of experimental research. (p. 332)

The MLQ designed by Avolio, Bass, and Jung (1999) was used to measure chair effectiveness. Hospital presidents sent the MLQ to 34 AHS hospital boards, surveying their 333 board members. The survey was accompanied with an email from the respective hospital president introducing the research topic and requesting board members to participate. The individual anonymity of each respondent was carefully protected. The respondent was taken to the questionnaire through a URL link imbedded within the email. The board members surveyed came from many walks of life. They were comprised of professional, nonprofessional, male and female.

Once the questionnaire information was received, IBM SPSS 20 was used to statistically analyze the data and provide statistics on relationships between the key

variables in the study. The data were used to estimate relationship between chair leadership behaviors, chair effectiveness, and organizational effectiveness within AHS.

The data obtained from the survey were used to ascertain relationships to three other data points used to measure the organizational effectiveness of each hospital. The first data point used to measure organizational effectiveness was financial effectiveness as measured by EBITDA. These data are considered the most important measure in financial effectiveness of a not-for-profit hospital and are published each month for all hospitals in AHS. A second data point is HCAHPS, which is a standardized nationwide survey of patient satisfaction. More than 10,000 individual survey results were used in this study. HCAHPS is available for all AHS hospitals on a monthly basis. A final data point used to measure hospital effectiveness was *core measures* (CM). The CMs of a hospital are key clinical data such as the rate of saving heart attack victims and conducting safe surgeries. The chair leadership behaviors were compared to these three data points which measure organizational effectiveness to discover potential relationships. In addition, the study reviewed the potential relationship between perceptions of leader effectiveness and effective hospitals.

Theoretical Framework

The theoretical framework used in this study is based on two pillars. The first pillar is organizational effectiveness and the second is leadership effectiveness and behaviors as measured by the MLQ.

During the past century the concept of organizational effectiveness has received much attention. However, it would be a mild understatement to say there is still confusion and tensions between competing theories and models relating to organizational

effectiveness (Cameron, 1986; Fiedler, 1967; Herman & Renz, 1999; Hogan & Sinclair, 1996; Shilbury & Moore, 2006). Of the multiple models espoused during the past century, this study utilizes *rational goal theory* (Campbell, 1977; Scott, 1977) which has its roots in the seminal work of Weber (1947). This concept is defined by Daft (2006) who states, "Organizational effectiveness is the degree to which an organization realizes its goals" (p. 70). He then goes on to say, "Effectiveness is a broad concept. It implicitly takes into consideration a range of variables at both the organizational and departmental levels. Effectiveness evaluates the extent to which multiple goals—whether official or operative—are attained" (p. 70).

Certainly this model of effectiveness is appropriate when goals are clear, time bound, and measurable. The methodology of rational goal theory consists of identifying the organization's outputs and then identifying how well those goals/outputs were attained. While this theoretical framework is not the most complex of models, it undoubtedly fits the healthcare industry, as goals and objectives are clear and measurements of the goals are obtained on a monthly and annual basis. Hospital organizational effectiveness is measured through multiple data points which demonstrate the hospital is meeting its goals. The data points selected for hospital effectiveness in this study are EBITDA, HCAHPS, and CM. These measurements show whether the hospital is attaining effectiveness and efficiency in serving the public while maintaining financial viability.

The second pillar of the research's theoretical framework is leadership effectiveness and behaviors as measured by the MLQ (Avolio et al., 1999; Bass, 1985). The questionnaire was developed by Bass and Avolio (1993) who wrote extensively

about the leadership theories of transformational, transactional, and laissez-faire leadership. Embedded within the survey are multiple questions asking the respondent to respond to perceived effectiveness of the leader.

The MLQ also measures leadership behaviors which have been clearly defined by scholars. The first behavior measured is transformational leadership. This behavior is a popular and well-known theory introduced by James MacGregor Burns (1978). Burns argued that leaders and followers help each other advance to a higher level. Burns differentiated this type of leadership with that of the transactional leader. Transactional leadership behavior sets goals and then rewards or punishes the follower based on the completion of the goal. For example, a manager who requests more productivity from subordinates in exchange for a reward such as a bonus exemplifies transactional leadership. In contrast, the transformational leader creates change in an organization based on personality behaviors/traits. Bass (1985, 1997) believed both behaviors to be complementary and necessary for effective leadership. Bernard Bass (1985) expanded the work of Burns to show that the leader's success is measured first by influence. Bass and Avolio (1993) worked together to carry out an empirical study which mapped the leadership styles of managers and military commanders.

The final behavior used in this study is laissez-faire. The laissez-faire leader is sharply contrasted from the transactional and transformational leader. This leader takes a hands-off approach with associates or followers. The leader does little to inspire the associate and works best in environments where the follower is already highly skilled and motivated. In such an environment, the follower may have as much or more influence

than the leader. Of all the leadership behaviors and theories, the laissez-faire leader is the least studied (Hinkin & Schriesheim, 2008; Judge & Piccolo, 2004).

The basic conceptual argument that guides this study is that the effective chair creates results and helps the organization attain its goals better than ineffective leaders.

Rationale/ Significance

The rationale for this study arises partially from the desire to discover those leadership behaviors which will assist the chair in being more effective in his role as the chair for Adventist Health System hospitals. Effective hospital chairs are often the impetus for a more effective board, which can lend itself to a more effective healthcare organization (Wertheimer, 2008).

While much is written regarding the chief executive officers of hospitals and nonprofit organizations, there is a shortage of information regarding the chair. There are several areas of significance to this study. First, this study adds to the current literature of hospital chairs and fill gaps in our knowledge regarding those behaviors which make a chair more effective in his/her job. Second, by documenting those behaviors, the information may be used to create training models for hospital chairs. Currently there are few training modules for chairs which are centered on evidence-based training that spotlights the key leadership behaviors of becoming an effective chair. Third, search committees may be armed with improved information in the recruitment stages of board chair selection within nonprofit organizations. Finally, the information from this study may also assist hospitals in recruitment policy for chairs. As Leblanc and Gillies (2010) argue, the recruitment of a high performing board chair is vital. An effective board chair begins with the selection process. Leblanc and Gillies (2010) state, "There is no doubt
that the leadership skills of the chair of the board are the most important factor in assuring effective board processes and wise decision-making" (p. 249). Scholars Kakabadse and Kakabadse (2008) go on to emphasize that the board chair needs to have a unique set of skills and qualities and that "the role of the chairman as the leader of the board of directors, is the most critical one of all for the long term success of the firm" (p. xviii). It should be noted that all of these elements will be of benefit to healthcare and society at large.

Assumptions

The following assumptions are made in reference to this study:

1. Respondents will participate freely and answer questions fully and honestly.

2. The proctored survey is fully accurate and understood by those who participate in filling out the questionnaire.

3. HCAHPS, EBITDA, and CM provide accurate data, revealing the effectiveness of hospital operations.

Delimitations

This study was delimited to a questionnaire-type instrument which was administered to the board members of Adventist Health System hospitals. As such, it is limited to a small population of Adventist hospitals. Also, since the study uses only a questionnaire, direct observation and other qualitative data are not recorded in the research. Another delimitation is the fact that this study does not explore all leadership behaviors and theories linked to nonprofit organizations. The study only explores transformational, transactional, and laissez-faire leadership behaviors.

Finally, this study is delimited to the time (June through August of 2012) and place of the research.

Definition of Terms

For the purpose of this study, the following are the definition of terms:

Adventist Health System: The largest not-for-profit Protestant healthcare system in the United States serving over 4 million patients each year. The system supports 44 hospitals and employs 55,000 individuals. Adventist Health System hospitals are comprised of 7,700-plus licensed beds (Adventist Health System, n.d.).

Board chair effectiveness: An evaluation of the board chair performance efficacy as perceived by board members and measured by the MLQ. Four of the 45 questions in the survey are used to measure board chair efficacy.

Board member: An individual named to serve on a board governing a nonprofit organization. The board member has voting power to approve budgets and policy; and works to provide general oversight to the medical staff and quality initiatives of the hospital.

Chief Executive Officer (CEO): For purposes of this study, the CEO is the highest ranking official who has formal authority to manage the hospital, its programs, and services in accordance with the goals set forth by the board.

Core Measures: Standardized data points which measure clinical and safety quality of hospitals across the United States. The CM are based on evidenced-based

guidelines established by the United States Government and hospital-certifying entities (Hickey & Brosnan, 2012). The measures include: heart attack, heart failure, pneumonia, and surgical care improvement. The CM are one of the data sets used in this study to measure the effectiveness of hospital operations.

Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) (Hickey & Brosnan, 2012): This is one of the data points used in this study to measure the effectiveness of hospital operations.

Hospital Board: For purposes of this study the definition is limited to the local community hospital boards of Adventist Health System hospitals. They provide local oversight to the mission, vision, and objectives of the hospital. The board approves major *expenditures* and fundraising initiatives and provides oversight to quality initiatives and the medical staff (M. Schultz, personal communication, 2011).

Hospital Consumer Assessment of Health Plans Survey (HCAHPS): This is a nationwide standardized publically reported survey of patients' perceptions of their hospital experience (Kavaler & Alexander, 2014). This is one of the data points used in this study to measure the effectiveness of hospital operations.

Laissez-Faire: A non-authoritarian leadership style. Laissez-faire leaders give the least possible direction to subordinates, and try to achieve control through less obvious means. The leaders do little to inspire the associate. They depend on associates to set their own goals, provide the means to carry out the goals, and have little involvement in the overall planning, organizing, or implementing process. They believe that people excel when they are left alone to respond to their responsibilities and obligations in their own way (Bass & Bass, 2009).

Leadership Behaviors: For purposes of this study leadership behaviors refer to the assessment of Transformational, Transactional and Laissez-Faire Leadership behaviors in leaders, and how it relates to leadership achievement or failure as measured by the MLQ.

Leadership (chair) Effectiveness: An evaluation of the leader's performance efficacy as measured by the Multifactor Leadership Questionnaire.

Multifactor Leadership Questionnaire (MLQ): The *MLQ Short Form 5X* is an established, valid, and reliable instrument constructed to evaluate transactional, transformational, and laissez-faire leadership traits and leader effectiveness (Avolio & Bass, 2004).

Nonprofit Organization: "An entity that is organized so that its net earnings do not inure to the benefit of individuals or other persons in their private capacity" (Hopkins, 2012, p. 349). Any revenue in excess of expenses is placed back into the operation.

Strengths, Weaknesses, Opportunities, Threats (SWOT): Is a strategic planning method which analyzes the strengths, weaknesses, opportunities, and threats of an organization. The method seeks to analyze current operations and to think about future possibilities.

Transactional Leadership: Transactional leadership is a leader exchanging with associates a reward for goals met or punishment for substandard performance. This style of leadership has little focus on personal development and focuses heavily on coercion and punishment. This style appears to be effective in emergency situations (Bass & Bass, 2009).

Transformational Leadership: Defined as a leadership behavior which transcends self-interest and focuses on empowerment and a shared vision. The transformational

leader motivates the subordinate to performance acts that supersede expectations, promoting change initiatives through a clearly articulated vision (Bass & Riggio, 2012).

Organization of the Study

This chapter reviewed the background to the problem where research showed the chair was crucial to the success of the organization, but that little research has focused on the leadership behaviors of effective chairs (Cornforth et al., 2010). The chapter reviewed the purpose of the study which was to explore the relationship of chair leadership behaviors and chair effectiveness as measured by the MLQ. The chapter went on to explore the ex post facto research design and theoretical framework. Finally the reader was offered a discussion relating to the significance of the study, assumptions, delimitations, and definition of terms.

Chapter 2 will review the literature guiding this research topic. It will review the historical perspective of nonprofit boards, function and role of the board, governance versus management, role of the chair, leadership characteristics of the chair, leadership behaviors of the chair, organizational and leadership effectiveness defined, survey tools used, and AHS hospital board structure.

Chapter 3 will explain the methodology of the study. A detailed description is provided of the following areas: research questions, hypotheses, participants, sampling procedures, research design, statistical analysis, instrument design, variables, data collection, limitations, and ethical issues.

Chapter 4 will focus on the results of the study. The chapter provides an in-depth detail of descriptive and inferential statistical results. It concludes with a summary of each hypothesis and the findings.

Finally, Chapter 5 will provide a general overview of the study again, giving a brief review of the literature, research design, and questions. The chapter then discusses the results in light of the scholarly literature providing key limitations, conclusions, and recommendations for further study.

CHAPTER 2

LITERATURE REVIEW

Introduction

Chapter 2 reviews literature that guides this study. This includes a comprehensive review of the historical perspective of nonprofit boards, function and role of the board, governance versus management, role of the chair, leadership characteristics of the chair, leadership behaviors, organizational and leadership effectiveness, and the MLQ survey tool. Finally this chapter provides a review of Adventist Health System hospital board structure.

Until the mid-1980s little attention was paid to the role of the board or the chair and their importance to the organizational effectiveness (Leblanc & Gillies, 2010). However, with the increase of corporate fraud and scandals such as Tyco and Enron (Burke & Cooper, 2009) new focus has been placed on the effectiveness of nonprofit and for-profit chairs.

Since 2000 there has been more focus on chair effectiveness. However, there is little research which explores the leadership behaviors of an effective chair. During the past 5 years scholars such as Harrison and Murray (2012) have begun to research characteristics of effective chairs. However, there is a dearth of information with relationship to hospital chair leadership behaviors which relate to chair effectiveness. In

order to clearly appreciate the role of the chair in the NPO context, the following section reviews the history of nonprofit boards in America.

Historical Perspective of Boards in Organizational Governance

As Wood (2009) comments, "History adds another dimension to our view of the world and enriches our experience" (p. 8). Understanding the board and its history assists in understanding the importance of the chair. In order to fully understand the present we must comprehend the past.

From the beginning of time we read of tribal councils and groups who assisted in making decisions for the larger body of individuals (Evans, 1958). Religious organizations such as the Catholic church used councils or boards which represented large groups of believers (Herman, 2005). Assemblies or councils are documented in the times of ancient Mesopotamia, and were used to represent groups of people or enterprises (Hall, 1997; Mehta-Jones, 2004, p. 9).

In United States history, nonprofit boards date back to colonial times where members were appointed based on their honesty, wisdom, and business acumen. The term of service varied and meeting times varied but most were spent reviewing the affairs of the organization and passing laws and ordnances. In Europe during the same timeframe, companies were run by the church or the government. However, in colonial America, distinctions between public and private domains were made. By electing officers to run the company there was a transition from individual governance and property rights to a corporate-owned and -governed entity (Hurst, 2004; Neem, 2003; Seavoy, 1982).

Harvard University took the next step in establishing a board to oversee the operation of that prestigious institution of learning. In 1636 the Massachusetts legislator named six ministers and six magistrates to govern the college (Hall, 1997; Peirce, 1833). As time progressed, however, Harvard president John Leverett was instrumental in placing external and not governmental or internal fellows to govern the college. This action muted the influence of the church and government over the affairs of the college and created a model of authority which would set the foundation for future governance of United States for-profit and nonprofit institutions.

Following in the footsteps of Harvard, Yale University took early decisions regarding governance that would also add to the board structure of future nonprofits. In order to improve fundraising opportunities, Yale moved to a majority board rule by alumni. This was revolutionary and took further control away from the church and state. Yale also worked vigorously to establish its own charter and bylaws, which set out the responsibilities, role qualifications, and limitations of the board of directors. Yale's actions established further the trustee's rights to independent judgment and ushered in the origins of holder representation (Hall, 2003). Holder representation is when those with a vested interest in the entity have representation, such as when shareholders have representation on the board of a for-profit organization.

During the following century two schools of thought were fostered in the governance of nonprofit organizations. The Jeffersonians held that legislators and civil courts held sway over private entities. Key figures such as John Sullivan, the attorney general for the Commonwealth of Massachusetts, argued that while legislatures could grant certain powers to corporations, the entity did not and should not serve at the

pleasure of the legislature (Hall, 2003). However, John Marshall's Supreme Court ruling in 1819 ensured that legislatures would not be the controlling force of the university, but more importantly the board of directors would be the oversight entity. This did not mean that government laws could not regulate private colleges, but it did place private entities under the guidance of a private board (Thelin, 2004).

Yale professor John Hall (2003), commenting on Chief Justice Marshall's decision, states:

The decision in the Dartmouth College case was perhaps the single most important judgment handed down by an American court. Marshall's decision did more than protect corporations from legislative interference: It advanced the notion that the will of the public could be expressed by other than electoral and governmental means. In doing this, it legitimated the idea of private associational initiative in the public interest. To this conception, perhaps more than any other, the nonprofit sector owes its existence. (p. 12)

Another milestone within the nonprofit board relates to the board's fiduciary reasonability to asset investment. This milestone is the *prudent man rule* which was handed down by Judge Samuel Putman in 1830. The judge stated, "Those with responsibility to invest money for others should act with prudence, discretion, intelligence, and regard for the safety of capital as well as income" (Harrington, 2005, p. 167).

The previous tenets set the foundation for the nonprofit board in the United States. While state and local governments have some oversights of nonprofits, the principle oversight duties lie with the board. The nonprofit sector continues to grow and now stands at over 2 million entities with revenues of \$1.5 trillion (BoardSource, 2010; Sobel, 2009, p. 1). Nonprofit hospital boards underwent the same journey and experienced the same outside influences as other nonprofit entities in the United States. However, one of the more defining elements unique to hospital boards dealt with deciding who was responsible for the quality of patient care, the board or the medical staff. The following section briefly reviews this key element.

Hospital Board History

The first American hospital was founded in the city of Philadelphia in 1751 (Sydney, 2009). The early hospital boards were comprised mostly of the elite who dedicated their time to fundraising and direct management of the facility (Crosson & Tollen, 2010). They did not consider themselves responsible for the safety of the patient or for the quality of care received at the hospital. This was the role of physicians and clinicians. The hospitals were heavily influenced by the Babylonian code of Hammurabi which stated that if the doctor cut out the wrong eye he should have his forehand cut off (McDonald, 2004). The spirit of the code placed the responsibility of patient safety and quality fully upon the doctor. Indeed, in the early days of American history this philosophy was generally accepted.

During the early 20th century, funding patterns for hospitals changed and doctors became the main source of revenue for the facility. The power of the medical staff increased as their ability to raise revenue increased. Conversely, the board's power waned as their contribution to the financial position diminished. Doctors governed their medical staff and took responsibility for medical errors (Crosson & Tollen, 2010; Powell & Steinberg, 2006).

However, the Illinois Supreme Court case of *Darling v. Charleston Community Hospital* in the 1960s changed the landscape for hospital boards. The case ruled that the board was ultimately responsible for ensuring competency of physicians (Crosson &

Tollen, 2010). This was formalized by administrative policies during the following years which placed the board as the ultimate authority over the physician. Hospital boards began to review quality measures and take decisions regarding physician performance. Boards began to credential physicians in order to allow them to practice in the hospital, and the medical executive committee began reporting directly to the board.

During the next several decades an increased emphasis was placed on accountability of boards for hospital operations and oversight of the medical staff. Multiple federal agencies provided greater scrutiny to the board and were starting to hold them more and more accountable. Commenting on this fact Wolper (2010) states, "The judicial system is further pressuring boards to centralize on quality agendas through verdicts delivered in malpractice cases that 'confirm the medical staff is responsible to the governing board for medical quality" (p. 78).

Yes, the board has evolved over the years, and understanding its role provides additional insights into the importance of the chair. With this historical backdrop we now move on to better understand the role and function of the board.

Function and Role of the Board

Scholars continue to refine and describe the role of the board. Carver (2011) comments, "While every other management function has been exhaustively studied and analyzed, the responsibilities of the board and distinction between board and management have been sorely neglected" (p. 16). Charan (2005) bluntly points out that "most boards are in flux and still not living up to their full potential of providing truly good governance" (p. ix). Dockery (2011) contends that "boards are the most underdeveloped and least leveraged asset of most nonprofit organizations. Few boards step up to the level

of ownership and leadership that moves organizations from average to extraordinary" (p. 65) . Nevertheless, the "board work is more critical now than ever before" (Bradham, 2009, p. x). In order to fully appreciate the board and thus the chair, it is of paramount importance to understand and clarify the role of the board within an organization and specifically a nonprofit organization.

The scholarly literature relating to nonprofit governance suggests a plethora of board roles. Brown and Guo (2010), Brown (2005), and Miller-Millesen (2003) do a masterful job of reviewing the major theoretical frameworks relating to the overall role of the board. While scholars continue to push forward the frontiers of research on this topic, the basic tenants are in place. Following is a review of the major theoretical frameworks for the role of the board.

A well-known framework for the role of the board is known as *agency theory* (Fama & Jenson, 1983; He & Sommer, 2010; Jensen & Meckling, 1976). This theory argues that the role of the board is to create a separation of power between management/CEO, owners, and the board. The board then monitors the decisions of management to protect the interests of the stakeholders. Miller-Millesen (2003) says it best with relationship to the agency theory:

The board of directors assumes responsibility for the ratification and monitoring of decisions that have been initiated and implemented by the management of the organization. In this way, risk-bearing functions are kept separate from decision structures, and stakeholders are assured that organizational resources are being used in the way in which they were intended. . . . To an agency theorist, board members have the responsibility to select and evaluate an appropriate administrator, as well as to monitor his or her actions to assure that the interests of management are aligned in such a way as to not conflict with the interests of the organization or society. (p. 522)

Another important theoretical framework which sheds light on the role of the board is *resource dependency theory* (Brown & Guo, 2010; Coombes, Morris, Allen, & Webb, 2011; Pfeffer & Salancik, 2003). The model contends that in a world of limited resources, the survival of the entity depends on obtaining resources either through assets or information. In this case the board members are in reality boundary spanners who connect the organization with resources, information, and knowledge outside the borders of the entity. This allows the organization to fulfill its mission and survive and continue to grow. The board relies on personal and professional contacts to connect the organization with outside resources and give the organization competitive advantage while reducing risk (Hendry & Kiel, 2004; Pfeffer & Salancik, 2003).

Theorists also espouse the theatrical framework of *group decision process theory* used to describe the overall function of the board (Brown, 2005; Zander, 1993, 1994). This theory focuses on the core decisions boards must make to ensure the viability and success of the organization. Weak boards suffer from poor decision making as a group and also do not have a well-defined scope of work.

Guo (2007) explores the *institutional theory* as a theoretical model for the role of the nonprofit board. Guo (2007) states the institutional theory "suggests that nonprofit board of directors serve as legitimizing devices that reflect the expectation of important institutional stakeholders in their composition and structure" (p. 462). In reality the theory shows the board's role in reacting to organizational pressures, environmental pressures, norms, laws, and regulations (Hoye & Cuskelly, 2007; Miller-Millesen, 2003; Powell, 1998).

The *democratic theory* describes another role of the board that is further explored by Guo and Musso (2007), who indicate the board is actually the representatives of the internal and external stakeholders. They go on to comment, "We argue that a better understanding of the representational capacities of nonprofit and voluntary organization is a necessary foundation for the pluralist argument that these organizations are a primary means through which the interests of citizens are presented to the state (Guo & Musso, 2007, p. 309).

The democratic theory emphasizes the monitoring function of the board. According to this theory the board members would be lay persons selected to monitor the actions of management and hold them accountable to what the constituents request (Powell & Steinberg, 2006).

Finally, the *strategic management theory* holds that the primary role of the board is strategic in nature. It should set aside enough time to dedicate its energy and resources to the strategic issues at hand. The theory states that the board should be closely involved in the long-term strategic planning of the organization and clearly establish the long-term strategic vision. In fact, not only should the board set the terms of the long-term strategy, they should monitor the progress toward that strategy (Brown & Guo, 2010; Cornforth & Edwards, 1999).

These theories provide clear theoretical frameworks for boards. Some boards will more closely align with one theory while other boards may align with multiple theories. Each theory provides the scholar with a partial view of the image while leaving other parts of the proverbial canvas opaque. In addition, the theories also provide a certain amount of overlap in explaining the role of the board. As Miller-Millesen (2003) argues,

"there is no one-size-fits-all model" (p. 523). Certainly given internal (organizational factors) and external factors (environmental factors), the board will behave differently given the internal and external pressures it faces. Figure 1 summarizes the model of internal and external factors faced by the board.



Figure 1. Internal and external board factor model; theory-based typology of board behavior. From "Understanding the Behavior of Nonprofit Boards of Directors: A Theory-Based Approach," by J. L. Miller-Millesen, 2003, *Nonprofit and Voluntary Sector Quarterly*, *32*(4), 521-547.

With a review of the major theoretical frameworks relating to the role of the board, it is now possible to place in context the normative functions of the board. Ingram (2008) provides an impressive list of those board functions which are agreed upon by major theorist and scholars. The following pages will provide a brief review of those normative functions for which major scholars validate.

Determine Mission and Purpose

There is resounding agreement that the board must determine the mission and purpose of the nonprofit organization (Axelrod, 2005; Coombes et al., 2011; Grace, McClellan, & Yankey, 2009; Ingram, 2008). The board must then jealously guard erosion to the mission and ensure the organization is fulfilling its purpose while eliminating any activity which does not assist the organization in meeting the mission. "When the board doesn't have mission in mind, day-to-day issues can dominate at the expense of the larger 'why' and 'what' of the organization" (Grace et al., 2009, p. 18). In fact, when mission is not top of mind with the board, the organization is at financial risk (Grace et al., 2009).

Ensure Effective Planning

Strategic planning is a critical function of the board and is an extension of defining the mission and purpose of the organization (Block, 1998; Houle, 1997; Ingram, 2008). The board typically begins this process by conducting a SWOT analysis and then move forward, defining top strategic initiatives for the organization during a 3- to 5-year period. The board normally lets management decide how the objectives will be met. Each of the objectives should lead the organization closer to fulfilling the mission of the entity. At least once a year the board spends time reviewing the strategic plan to discover if time

lines are being met with regard to the objectives. In addition, scholars recommend the board should take time to revise and adjust the goals and objectives of the plan. The strategic planning activities should be carried out as a partnership between top management and board members (Siciliano, 2008).

Selection of the Chief Executive Officer

Perhaps one of the most strategic roles of the board is selecting the CEO (Axelrod, 2005). "A poor choice may lead to the creation of problems and even result in failure" (Colley, 2007, p. 17). The board may choose to hire an executive search firm or they can take on the recruitment task through their own sub-committees and assistance from human resources (Zhang & Rajagopalan, 2010). Either way, the process should be discrete and transparent. Taking too long to replace the CEO can create a crisis in confidence with key stakeholders. Many times the board may have a replacement in mind. However, they should be open to multiple options when searching for a new CEO (Canals, 2010). A best practice for a board of directors is to have a succession plan in place (Wertheimer, 2008). Without a doubt, unanticipated events can take place at any time which would provoke a search for a new CEO. Succession planning then would take place while the CEO is firmly occupying the position (Gardner, 2008). Indeed,

as boards have become more engaged over the past decade, they have looked to play a more assertive role in CEO succession planning. After all, the choice of CEO is the single most important decision any board will make (apart from the sale of the company, or a very significant merger or acquisition). In the National Association of Corporate Directors' 2009 Public Company Governance Survey, over 90 percent of respondents rated CEO succession planning as a "critical" or "important" board responsibility. (Behan, 2011, p. 105)

Truly the board's focus on this important function can be the difference between success and failure, mission driven, or lack of vision.

Support and Evaluation of the Chief Executive Officer

Once a CEO is selected, the board must set forth clear expectations according to the mission, goals, and objectives of the organization. The board should provide support of the CEO by acting as a sounding board and ensuring the proper policies are in place, which would give the CEO the proper tools, environment, and ongoing training to allow for maximum success of the leader (Axelrod, 2005). When this framework is in place, the board should have a mechanism in place to provide scheduled performance evaluation to the CEO (Ingram, 2008). In reality, at each board meeting the directors are evaluating the performance of the CEO through the performance data points which are reviewed at the meeting. Poor organizational performance is a sign of poor CEO performance. Once a year the board should perform a more detailed review of the CEO's performance based on the expectations which the board set forth. The CEO should receive a concrete verbal report which provides tangible feedback on his/her performance (Carver & Carver, 2009a). Most experts agree that goals and expectations should be clear for the CEO; the board should have an executive session to review the CEO performance several times a year and the chair should share the overall performance with the CEO once a year if not more frequently. Other tools for evaluations can include a 360-degree evaluation, which, however, may take the role away from the board (Smither & London, 2009).

Ensure Financial Resources

Not-for-profit board members must be willing to play an active role in fundraising for their organization (Pakroo, 2009; Pettey, 2008). In addition to approving strategies for raising funds, they must be willing to assist in implementing the strategy and also provide funds from their own assets (Greenfield, 2008; Klausner & Small, 2005; Klein, 2009;

Pakroo, 2009). Coombes et al. (2011) have pointed out that government grants and public monies are leveling off. "As such, NPO's rely extensively on their board members as mechanisms through which to access external funding" (p. 832).

Monitor and Strengthen Programs and Services

The board ensures programs and services of the organization are in alignment with the mission (Stone & Ostrower, 2007). Any activity which does not assist the organization fulfilling its mission should be eliminated. The board should be proactive in approving major service and program initiatives. While the board does not get into the minutia of program evaluations, it is critical the board receives high-level reports on the quality of the services and programs offered to the public by the nonprofit organization. Grace et al. (2009) state, "Because the board is not involved in the detailed analyses of program outcomes, it needs to make sure it gets adequate information on the success of the overall program" (p. 87). The scholars go on to state, "The board should expect program evaluation to be based on qualitative and quantitative data gathered through a variety of methods including surveys, interviews, focus groups, pre- and post-tests, observations, and assessments of products developed from program participation" (Grace et al., 2009, p. 87). Successful boards should review program reports through the lens of program/service improvement in the light of needed resources and timelines.

Protect Assets and Provide Proper Financial Oversight

The board has the fiduciary responsibility for being accountable to the public and key stakeholders for expenditure of funds and the organization's financial security (Axelrod, 2005; Block, 1998; Carver, 2006, 2011; Carver & Carver, 2009b; Ingram,

2008). Given the recent corporate scandals such as Enron and Tyco, the government is holding boards at a higher level of accountability than ever before. Federal laws such as Sarbanes-Oxley are placing teeth in board financial oversight and accountability. Pointer and Orlikoff (2002) confirm that the board "is ultimately responsible for the organization's financial health" (p. 48).

Enhance the Organization's Public Standing

A final board role discussed in this study relates to the role of enhancing public standing. The board member is in a strategic position to communicate to the stakeholders the success of the organization and also listen to the needs of the community.

BoardSource (2010) states:

Board members can and should be their organization's best advocates. Committed board members are familiar with the work of the organization and knowledgeable about the issues it addresses. Board members engage in strategic communication and outreach by: serving as ambassadors for the organization as they move through their personal and professional lives— Speaking on behalf of the organization in formal and informal settings and sharing feedback with staff to enhance the communication efforts—Facilitating coalitions with other organizations that advance strategic communications for the organization's mission, programs, and services. (p. 216)

Final Comments on Normative Board Roles

Scholars also give mention to board roles such as ensuring the legal and ethical integrity of the organization (BoardSource, 2010; Ingram, 2008), building a competent board, recruiting new board members (Block, 1998; Ingram, 2008), and preserving the nonprofit organization's tax status (Block, 1998). The board roles (Appendix A) further summarize key scholarly works regarding the normative role of the board.

In most scholarly discussion of board roles and functions, there is a sub-theme which discusses the difference between good board governance and micromanagement. The next section will briefly explore this issue.

Governance Versus Micromanagement

The board can easily distort the lines between participating in good governance and getting involved in day-to-day management of an organization (BoardSource, 2010). "In the nonprofit literature, governance has primarily been defined as the operation of boards of directors (Stone & Ostrower, 2007, p. 416). More specifically, governance "is the board's legal authority to exercise power and authority over an organization on behalf of the community it serves" (BoardSource, 2010, p. 15). The definition in itself indicates that governance is operation of the board and not operating the day-to-day activities. In essence, the staff of an organization takes care of the daily operations such as meeting payroll, and ensuring products and services are produced and delivered in a timely manner. However, it is the board which determines direction of the organization and who should lead the organization in that direction. The board also determines who has the authority to make decisions at each level of the organizational diagram and then monitors the progress of those decisions (Gottlieb, 2001).

On the other side of the spectrum, many nonprofit boards crossed the lines and began to fulfill the management functions of the entity, which in a sense is micromanagement. BoardSource (2010) documents many of the reasons for this phenomenon. One of the clear reasons why boards enter the realm of micromanagement is because their roles are not clearly defined. It then becomes easy to begin operationalizing the decisions and policies established by the board. When the board does not trust management there is

also a tendency to begin fulfilling the management function. When confidence and trust are lacking, it is more appropriate for the board to set clear expectations of the CEO, and if those expectations are not met, then a new CEO should be selected. Another rationale why the board blurs the lines between good governance and micromanagement is clearly related to the fact that some chief executives bring improper information to the board for decisions. If this is happening, it needs to be quickly identified and corrected. When an organization is in crisis there is also a tendency for the board to become more hands-on and slip into management functions. It is also common to see the boards of new organizations overstep their governance roles. Boards providing oversight to particularly new organizations tend to take on management roles and then overstay their welcome (Dym, Egmont, & Watkins, 2011). While these reasons for board micromanagement are understandable, they are not healthy governance and should be avoided (Gottlieb, 2001). In an attempt to succinctly define the role of the board, Carver (2011) states, "The board is responsible for creating the future, not minding the shop" (p. 145).

When the board crosses the line to micromanagement, the organization will suffer and it should be corrected. McAdams (2006) comments, "Well-intentioned micromanagement can be stopped, by effective and responsive management systems, by constituent education, by clear protocols for handling complaints . . . and by the collective weight of the board falling hard on board members who have difficulty breaking bad habits" (p. 78). Sanaghan, Goldstein, and Gavel (2008) contend that the board chair is an important force within the governance structure to ensure the board is not crossing its bounds and micromanaging. "There are times with any board, however, when well-intentioned trustees cross the line into day-to-day details. . . . Board chairs can

be most effective in working one-on-one with trustees" (p. 55) to set expectations. In fact, when the board chair provides clear guidelines and the necessary information, it will "reduce the urge" of getting involved in day-to-day operations of the entity.

The previous pages set a solid foundation by reviewing the history of nonprofit boards in America and then reviewing the current roles and function of the board. With the previous in-depth analysis, this literature review will build upon the current groundwork by examining the role of the chair.

Role of the Board Chair

Scholarly literature relating to the role of the board chair is not abundant. However, adequate researchers have reviewed the topic (Carver, 2011; Dunne, 2005; Harris & Helfat, 2007; Kaiser, 2010; Kakabadse & Kakabadse, 2008; Leblanc, 2005; Lechem, 2002; Poutziouris, Smyrnios, & Klein, 2006) in order provide a satisfactory assessment relating to the role of the board chair. Without a doubt this section is crucial to the study of this dissertation. Up until 30 years ago, the chair was viewed as just another senior position in the organization (Kakabadse & Kakabadse, 2008). However, given the recent corporate scandals relating to such organizations as Enron, Tyco, and WorldCom (Burke & Cooper, 2009), the importance of the chair has taken on new meaning and significance. It is expected the board will hold the organization accountable and the chair's leadership is critical in this endeavor.

Dunne (2005) states, "Being a chairman is a tricky job requiring many skills. . . . A clear mind and considerable determination will need to be matched by a keen sensitivity and openness to the ideas of others" (p. 73). Lechem (2002) goes on to comment, "The chairman's role is one of guiding destiny, neither preempting the board

nor frustrating its participation" (p. 10). Researchers Harris and Helfat (2007) bluntly state that the chair manages board operations. Lablanc (2005) posits that the chair has the greatest ability to affect negative or positive change on the organization above any other leader within the nonprofit or for-profit organization. He goes on to indicate through his assessment tool that the chair is truly the "hub of independent leadership" (p. 661).

Scholars Andrew Kakabadse and Nada Kakabadse (2008) spent years studying over 12,000 organizations spanning 17 countries and 400 board members in order to summarize the key roles of the chair. Through their extensive research they consolidated the role of the chair into six areas which must be mastered in order to be a world-class chair.

First, the scholars are clear the chair must be the leader in establishing *roles and obligations between the board chair, CEO, and the board*. They clearly argue for separate positions between the CEO and the board chair and believe that duality creates remarkable confusion. "It is only by clearly delineating boundaries between roles that the board—and the chairman—hold that allows both to effectively function" (Kakabadse & Kakabadse, 2008, p. xx).

A second role of the chairman is *to champion the organization's mission, values and strategies* (Kaiser, 2010; Kakabadse & Kakabadse, 2008). In championing these critical areas, the board chair must excel in logic and chemistry. Board scholar John Carver (2011) agrees that the chair must have finesse while not micromanaging but at the same time approving and championing the big picture of mission and strategy.

The third identified role of the board chair is called *interrogating*. While this may have negative connotations, it actually refers to the duty of the chair to ask probing

questions and facilitate discussion. Lechem (2002) calls this role the facilitation of board discussion. Lechem (2002) argues, "The chairman must develop expert skills in guiding the board ever so diplomatically so as to achieve the desired results" (p. 6). And Dunne (2005) resoundingly agrees, indicating that facilitating communication at board meetings is a basic function of the chair. Poutziouris et al. (2006) comment, "The chairman acts as the parliamentarian for the meeting and is responsible for agenda-setting and controlling discussion on agenda items, while allowing appropriate discussion of essential items" (p. 330). Truly it is important that board members feel they may safely speak in a nonjudgmental and confidential environment. It is critical that the chair allows for the more timid board member to speak and help provide balance to the conversation so that the more domineering board members do not monopolize the conversation.

The fourth role of the chair according to Kakabadse and Kakabadse's (2008) research is to effectively *influence outcomes*. The research shows "there are five steps toward effective influencing: surfacing sentiments, working through divisions, using judicious speech, focusing on the more salient points, and scheduling meetings to align everyone's expectations" (Kakabadse & Kakabadse, 2008, p. xxi).

The fifth role of the chair is *living the values*. Kakabadse and Kakabadse (2008) assert that values such as trust and integrity are critical to the board chair's role and success of the board. Board members and senior staff of an organization wish to look to leadership who walk the talk. Regarding values, Carver (2011) eloquently states:

Values and perspectives are thus powerful, often invisible forces that determine not only organizational circumstances, activities, and goals, but even the data that organizations admit into their assessment of reality. Excellence in governance begins when boards recognize this central, determining feature of organizations. Setting goals, deploying staff, writing procedures, formulating plans, developing strategy, establishing budgets, and

all other board and staff activity depend on values and perspectives, whether those values result from debate or default. Unrecognized values can result in pernicious disparities, difficulties, and unfulfilled potential. (p. 38)

A final role mentioned by Kakabadse and Kakabadse (2008) is that of developing the board. Certainly developing the board and the chair requires at the outset an assessment of the gaps in leadership and functions. Once those gaps are clearly understood, training can take place to strengthen areas of weakness in leadership and board role functions.

There are additional roles which researchers indicate are important for the board chair. The literature indicates the chair must control the board agenda (Harris & Helfat, 2007; Leblanc & Gillies, 2010; Lechem, 2002). The chair is indeed the gatekeeper to the agenda. The agenda sets the tone for what will be discussed and then it is the chair's duty to guide the discussion and keep board members aligned with the schedule (Dunne, 2005).

Yet another important role of the board chair is to provide oversight of the CEO's work and lead out in his or her evaluation (Dunne, 2005; Leblanc, 2005; Lechem, 2002). Typically if the organization does not have duality in roles, the CEO will report to the chair. The relationship between these two most powerful leaders is critical for organizational effectiveness and success.

It should not be overlooked that the chair should be active in recruiting new board members (Leblanc, 2005). Many boards have term limits, which mean the recruitment of board members is a fundamental task for the organization. The chair should be the center of that recruitment effort. Typically a large organization would have a small nominating committee which would review the profile of the kind of board members that are needed.

The committee would report directly to the chair, who leads the process. All potential board members approved by the committee and the chair would be sent to the board for approval (Klein, 2011). The recruitment stage is most critical in developing a world-class board. To avoid selecting only members like themselves, the board can work at diversifying their membership. This can only enrich a board when there is diversification of religion, race, age, and socioeconomic status. It can take away the obvious disadvantages of a "big boys club."

A further obligation and critical role of the chair is to provide a positive public image to the community and stakeholders. This role includes a strong hand in the guidance of fundraising for nonprofit organizations (Dunne, 2005; Klein, 2011). The board and its chair are considered in nonprofit organizations to be the "owners" of the organization. It is therefore important that the owners are 100% committed to the organization in their actions and words. This would include taking on a large role in leading the fundraising strategy for the organization.

Other chair roles mentioned by scholars include evaluating board performance, review of corporate philosophy (Lechem, 2002), and leading out in establishing board committees (Dunne, 2005).

The chair will continue to be potentially the most important leader figure in any organization with relationship to direction and governance. As Poutziouris et al. (2006) comment, "The chairman, as the conductor of the board, can play a central role in ensuring the effective governance of the enterprise" (p. 330).

Because of the overwhelming body of research dealing with CEO board chair duality, the following section will provide a brief summary.

CEO Board Chair Duality

Scholars continue to question whether the role of the board chair should include that of the CEO. This section will further explore that question. Since the seminal work of Berle and Means (1932), scholars have been researching the impact relating to the separation of ownership and control, which includes the sharply debated topic of CEO duality. Dalton and Dalton (2011) do an adept job of clearly laying out the scholarly research as to whether the board chair position and the CEO should be held simultaneously by one individual.

A host of scholars argue that it is critical that these roles are separated (Bliss, 2011; Bowen, 2008; Boyd, 1995; Carver, 2011; Conger, 2009; Dalton, Daily, Ellstrand, & Johnson, 1998; Iyengar & Zampelli, 2009; Kang & Zardkoohi, 2005; MacAvoy & Millstein, 2004; Monks & Minow, 2008; Quigley & Hambrick, 2012; Tuggle, Sirmon, Reutzel, & Bierman, 2010). For example, Bliss (2011) found that firms who separate the role of board chair and CEO have better financial audits. Kang and Zardkoohi (2005) posit that those companies where the CEO enforces a duality model are more apt to make decisions which are self-serving for top-level executives. On the contrary, separation of roles enables the board to take decisions which are more closely aligned with the mission of the organization. Bowen (2008) goes on to argue that having a non-executive board chair allows for more open and nonbiased discussions in the board room. Board members are not as afraid to criticize and critique the actions of management. United States governance board experts Paul MacAvoy and Ira Millstein (2004) argue that any true reform of the board must include the separation of board chair and the CEO. They hypothesize that when there is duality, the board is not truly engaged, knowledgeable, or

active in the business of the organization. Tuggle et al. (2010) found from their research that indeed the duality model did not allow for sufficient allocation of monitoring company activities. Most of the scholars above feel that the CEO who is also the board chair will not adequately evaluate his own work within the organization. It could be compared to a student grading his own school work. Indeed, the separation of roles is consistent with the agency theory (Dey, 2008; Fama & Jenson, 1983; Jensen & Meckling, 1976), which calls for the board to closely monitor the actions of management and the CEO.

However, at the other end of the spectrum, there is a group of scholars who are not convinced there should be a separation of board chair and CEO roles (Baliga, Moyer, & Rao, 1996; Dahya, Garcia, & Van Bommel, 2009; Dey, Engle, & Liu, 2010; Faleye, 2007). Dey et al.'s (2010) research revealed that those organizations with duality had stronger financial performance. Carver and Oliver's (2002) study notes six principle published categories which argue for combining the CEO and board chair positions. First, by combining the positions, the CEO does not have to take time to align his/her relationship with the board chair. Instead the CEO can concentrate efforts on fulfilling the mission of the organization and meeting the expectation of the owners. Second, duality avoids potential conflict and showdowns of power between the CEO and the board chair. Third, duality creates clear accountability. "In any case having two separate positions creates confusion and blurs accountability" (Carver & Oliver, 2002, p. 133). Fourth, combining the CEO and board chair positions ensures that there is no external confusion relating to who is in charge of the organization. No one doubts who is in charge of the organization and no external party will be able to manipulate or "play both ends against

the middle." Fifth, while duality does lessen board independence, the committee structure can resolve most conflict-of-interest issues. Finally, history and social expectations continue to place anticipation on an organization that the CEO and the board chair are wrapped up in one position. This is possibly the weakest argument. Certainly after so many corporate scandals, the tide is turning and expectations are changing. Commenting on the six arguments for duality, Carver and Oliver (2002) state:

All the reasons for combining the CEO and the CGO roles are based on boards' behaving the way they traditionally have, not on the way they should behave. In fact, we believe that every single objection to filling the separate positions with separate people evaporates if the board governs in the more responsible manner. (p. 134)

While the debate regarding the duality of the CEO will continue, the tide is changing toward a model that dictates separation of roles. Bill Bowen, President Emeritus of the Andrew W. Mellon Foundation and Princeton University and governance expert, at one time leaned toward a duality model. However, as more research unfolded he commented, "I do not believe that the conceptual arguments for and against separating the roles of the CEO and chairman are anything close to even. In my view, the conceptual case for separation is extremely powerful—close to compelling" (Bowen, 2008, p. 53).

Leadership Characteristics of an Effective Board Chair

With a substantive review of the role of the chair we now move on to examine those leadership characteristics which are conducive to effective chairing according to the current literature. Doyle (2009) argues:

The characteristics of an effective chair are the same as for any effective leader. These are a few of the most important: Has experience, thinks strategically, commands respect, gets involved constructively, is open and transparent, has high ethical standards, is a good communicator, has formed strong networks, is cool under pressure, can work well with people, is committed to improving performance, balances regulations with strategy. (p. 57)

There are two key studies which further explore effective characteristics of board chairs. In the first study, the researchers, Harrison and Murray (2012), wished to understand the factors which led board chairs to have a positive or negative impact on the board. The study began with in-depth interviews of 21 board chairs and board members. The second phase of the study was an on-line survey of 195 board chairs, CEOs, and board members.

Upon compiling the data from the interviews and the online survey, the data revealed the following qualities are needed for an effective chair: committed to mission, communicates a broad vision, and good listening skills (Harrison & Murray, 2012, p. 423). The study went on to reveal four clusters of perceived characteristics of effective and ineffective chairs. These clusters are listed below.

1. Underlying Motivation of an Effective Chair

- a. Committed to the mission
- b. Passionate
- c. Enthusiastic
- d. Engaged
- 2. Personality of an Effective Chair
 - a. Charismatic
 - b. Inspirational
 - c. Extraverted
 - d. At ease with people of all types

- 3. Behavior of an Effective Chair
 - a. Proactive, takes initiative in raising issues
 - b. Takes time-interacts frequently; people have no feeling of being rushed
 - c. Listens, does not argue or criticize
 - d. Excellent at clarifying and/or redefining issues, making them easier to deal with
 - e. Good at finding common ground when differences arise; a good conflict manager
- 4. Characteristics of an Ineffective Chair
 - a. Used position to advance personal career or agenda
 - b. "Big ego" dictatorial
 - c. Introverted "nice" welling meaning but not able to inspire others
 - d. Reactive; inactive
 - e. Responded aggressively to issues; avoided issues altogether
 - f. Vacillated; took different positions
 - g. Created or avoided conflict (Harrison & Murray, 2012, p. 423).

Harrison and Murray (2012) also found the following to be characteristics of ineffective board chairs: who used pursued positions to advance personal careers or agenda and was dictatorial in nature (p. 423).

Another crucial study dealing with leadership characteristics of an effective board chair deals with research conducted by Donahue (2003) relating to community college board chairs. Donahue (2003) was interested in community college board chairs' perspective of their leadership role on the board. He was interested in discovering what leadership themes board chairs perceive as important to their own leadership. Donahue (2003) states, "The major questions in this study focused on the perspective of the community college board chair on his or her leadership role and the variables that influence that perspective" (p. 24).

Donahue (2003) used the qualitative method of multiple-case study design. In order to select board chairs to study, he used chain sampling. This method utilizes wellinformed people to recommend several names of individuals who fit the profile for study. In Donahue's case, the recommendations of board chairs came from the Illinois Community College Trustees Association. Once a large enough list of names was established, a second round of selection came into play, called intensity sampling. The information-rich candidates came to the top of the list. This process yielded three board chairs who would then be interviewed and studied for about 6 months.

The researcher collected data from the three board chairs through direct observation and tape-recorded interviews, which were in-depth and open-ended. The researchers also utilized detailed field notes. Donahue (2003) also indicates that the researcher used reflective journals to analyze their own feelings and perspectives of the interviews and direct observations. In addition to interviewing the board chairs, Donahue (2003) states, "An individual interview with the president and one trustee from each institution was conducted" (p. 25).

The researchers directly observed the board chairs conducting open-door and closed-door board meetings. Careful notes were kept of the actions and perceived attitudes of the board chairs. In addition, large amounts of documentation relating to the chairs were collected from the college web sites, local newspapers, and catalogues.

Finally Donahue (2003) states, "All data accumulated in this study from observations, interviews, documents, field notes and reflective journals were organized, presented, and analyzed under Creswell's framework.... The themes that emerged from the data were identified and defined" (p. 27).

The findings of this research reveal important themes or leadership characteristics that board chairs have in order to be successful. The research revealed, "There were six themes identified in this study that emerged from the data. The themes are facilitation, communication, information, participation, expectation, and collaboration" (Donahue, 2003, p. 31). The author indicates that the major theme was facilitation. These themes are consistent with prevalent literature on the subject.

Through this qualitative study Donahue (2003) clearly shows how important board chairs are to the leadership and success of the institution. As the author points out, "This study demonstrates that the leadership role of the chair is a tremendous responsibility that, when artfully performed, can yield incredible success for the college" (Donahue, 2003, p. 44). This study is valuable to the research of this study as it begins to explore those characteristics which make a board chair effective. Many characteristics are indeed behaviors which go to the heart of this study. The following section provides a literature review of leadership and leaders' behaviors.

Leadership and Leaders' Behaviors

The definition of leadership is elusive and scholars to this day are not in full agreement on what leadership really is or means (Counts, Farmer, & Shepard, 1995; Hughes, Ginnett, & Curphy, 2008). To demonstrate the complexity of opinions and breadth of the term leadership, Rost (1991) states that he analyzed 221 definitions of

leadership found in over 521 books and journals written between 1900 to 1990. Burns (1978) stated that "leadership is one of the most observed and least understood phenomena on earth" (p. 2). In order to understand the complexity of leadership, it is perhaps useful to review a few of the ways researchers define the term.

Bennis (1959) posits that leadership is the "process by which an agent induces a subordinate to behave in a desired manner" (as cited in Hughes et al., 2008, p. 4). Zaleznik (1992) described leadership as "the power to influence the thoughts and actions of other people" (p. 126). Fiedler (1967) argues that leadership is "directing and coordinating the work of group members" (as cited in Hughes et al., 2008, p. 4). Hersey and Blanchard (1988) stated that leadership is "the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation" (p. 86). Mertin (1957) defined the term as an "interpersonal relation in which others comply because they want to, not because they have to" (as cited in Hughes et al., 2008, p. 4). Burns (1978) defined leadership as "a mutual influence process grounded in shared perceptions of followers" (p. 126). Maxwell (2007) bluntly says that leadership is *influence*. Daft and Lane (2008) state that "leadership involves the influence of people to bring about change toward a desirable future" (p. 5). The same researchers depict the elements of leadership as seen in Figure 2.

In the model we find a *leader* who exudes *influence* over *followers* to fulfill a *shared purpose* or goal in order to exact *change*. Daft and Lane (2008) point out that a key element of leadership is the leader setting the example through *personal responsibility and integrity*.


Figure 2: Leadership elements. From *The Leadership Experience* (p. 5), by R. L. Daft and P. G. Lane, 2008, Mason, OH: Thomson/South-Western.

Leadership can be recognized through specific leader behaviors (Martin & Epitropaki, 2001). An accumulation of research has been conducted over the years relating to leadership behaviors (Avolio & Bass, 2008; Burns, 1978; Howell & Costley, 2006; Merton, 1957; Walter & Bruch, 2009; Yukl, Gordon, & Taber, 2002). Yukle et al. (2002) listed 12 common leadership behaviors:

- 1. Clarifying Roles
- 2. Taking Risks for Change
- 3. Monitoring Operations
- 4. Encouraging Innovative Thinking
- 5. Short-Term Planning
- 6. External Monitoring
- 7. Consulting

- 8. Envisioning Change
- 9. Supporting
- 10. Empowering
- 11. Recognizing
- 12. Developing (p. 25).

As researchers began to define specific leadership behaviors, they went on to discover that certain groupings of behaviors were more successful than others. Certain groupings were placed together, and leadership theories were developed around those groupings. Scholars such as Burns (1978) and later Bass (1985) identified three of the most important general leadership behaviors/theories that are studied and analyzed to this day. The theories are transactional leadership, transformational leadership, and laissez-faire leadership.

Transactional Leadership

During the 1970s Burns (1978) brought maturity to the theory of transactional leadership behavior. His research led him to suggest that transactional leadership was a leader exchanging a reward for goals met or punishment for substandard performance. Burns (1978) comments, "Transactional leaders approach followers with an eye to exchanging one thing for another: jobs for votes, or subsidies for campaign contributions. Such transactions comprise the bulk of the relationships among leaders and followers, especially in groups, legislatures, and parties" (p. 4).

An example of this leadership behavior is a manager who requests more productivity from subordinates in exchange for a reward such as a bonus. In the same way politicians will announce additional benefits in exchange for votes. Grint (1997) found that "the effectiveness of transactional leaders comes from authority and position" (p. 153).

While Burns (1978) viewed transactional and transformational leadership on two ends of the spectrum, Bass (1985, 1997) believed both to be complementary and necessary for effective leadership. Bass's (1985) model of transactional leadership is based on three factors (a) *contingent rewards*, (b) *active management by exception*, and (c) *passive management by exception*.

In the first factor of transactional leadership, Bass (1985) proposed that a *contingent reward* was negotiated by the leader, who is in a position of power over the follower. Research shows that when psychological rewards are provided by the leader, such as praise, the contingent reward is transformational as opposed to an economic reward, which is considered transactional (Goodwin, Wofford, & Whittington, 2001).

Bass (1997) goes on to discuss a second factor of transactional leadership which he calls active management by exception. This is behavior where the leader closely monitors the follower to identify mistakes, delays, or shortcomings in performance (Barbuto, 2005). These mistakes are corrected through punitive actions.

In the third factor, which is *passive management by exception*, the leader waits for problems to become apparent before acting in a punitive way with the follower (Bass, Avolio, Jung, & Berson, 2003; Hinkin & Schriesheim, 2008).

This style of leadership has little focus on personal development and focuses heavily on coercion and punishment. Bass (1985) indicates that leaders who subscribe to this style of leadership follow closely to the rules and are not change agents. Thus a limiting factor of this behavior is the lack of desire to promote change by the leader.

Transformational Leadership

Transformational leadership has its roots in the study of the German sociologist Max Weber (1947) who studied, among many topics, the impact of charismatic leaders. Burns (1978) continued to develop the theory of transformational leadership, defining it as a process where leaders and followers engage in a mutual process of raising one another to a higher level of morality and motivation. Bass (1985) built upon the theory of transformational leadership. He defined it in terms of how the leader affects his followers through admiration, respect, and trust. While Burns (1978) saw transformational leadership as intrinsically linked with a higher order of values, Bass (1985) viewed the behavior as amoral and used Hitler and Jones as examples of leaders with transformational behaviors.

The transformational leader moves beyond exchanging rewards for performance through aligning the self-interests and values of the follower to that of the vision, mission, and goals of the organization (Howell & Avolio, 1993). The leader puts the team first and puts self-interest to one side. The transformational leader motivates the subordinate to performance that supersedes expectations, often promoting change initiatives through a clearly articulated vision (Burns, 1978; Flood et al., 2000). In reality, leaders who are transformational in nature focus on, and engage in, activities based on beliefs, values, and common goals. This attitude raises the morality of both the leader and the follower (Bass, 1985; Flood et al., 2000). Emphasis is placed on the variation of initiatives that builds constructive relationships with the followers and advocates positive change. Table 1 compares and contrasts general transformational characteristics of the transformational leader as described by Covey (1992) and Lussier and Achua (2001).

Scholars such as Bass (1985) and Bass et al. (2003) saw three principle ways the transformational leader motivates followers. First, the leader increases their awareness of the task importance and value. In the transactional theory, followers do tasks for the reward. However, under transformational leadership, motivation comes as an individual realizes the importance of the task and impact of their own contribution. Second, transformational leaders place emphasis on getting the follower to focus first on team or organizational goals rather than their own interests. Finally, the transformational leader engages and activates the followers' higher-order needs. These three areas are indeed motivating to a point that transformational leadership is proficient at instigating deeprooted organizational change that elicits full involvement throughout the entity (London, 2002; Oke, Munshi, & Walumbwa, 2009).

In Bass's model of transformational leadership, he reveals four dimensions of leadership behavior (Bass & Avolio, 2004) which include: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

Idealized Influence: Transformational leaders have associates who view them in an *idealized* way and, as such, these leaders wield much power and influence over their followers. Idealized influence then is about building confidence between the leaders and the follower. When the follower views the leader as powerful, charismatic, confident, and visionary, this is referred to as idealized influence (attributed) (Bass & Riggio, 2006). Idealized influence (behaviors) refers to the behaviors of the leader which attract the associate to follow and garner respect from the associate. These behaviors are those such as ethics and charisma.

Inspirational Motivation: Transformational leaders are adept at casting a vision which catches the imagination of the follower and motivates them to excel in their efforts to meet the goals. Within this construct the leader is able to make pleas for going above and beyond the call of duty, and associates respond positively, improving performance expectations.

Table 1

Covey (1992, p. 286)	Lussier & Achua (2001, p. 383)
 Builds on man's need for meaning Is preoccupied with purposes, values, morals, and ethics Transcends daily affairs Is oriented toward long-term goals without compromising human values and principles Focuses on mission and strategies Releases human potential— identifying and developing new talent Designs and redesigns jobs to make them meaningful and challenging Aligns internal structures and systems to reinforce overarching values and goals 	 They see themselves as powerful agents of change. They are visionary individuals who have a high level of trust in their intuition. They take risks, but they are not reckless. They capably and clearly articulate core values that govern their behavior within the organization. They possess incredible cognitive skills and they carefully deliberate before taking action. They believe in people and demonstrate sensitivity to their needs and concerns. They demonstrate flexibility and are open to learning from experience.

Characteristics of Transformational Leadership

Intellectual Stimulation: In addition to building trust and inspiring followers,

transformational leaders also provide intellectual stimulation for the values and big ideas

of others (Bass & Avolio, 2004). Associates are encouraged to "think out of the box" and

come up with ideas which at times appear controversial. However, the transformational leaders ensure there is no reprisal or criticism for these unique and unusual ideas. The associate is encouraged to question his/her own ideas, values, and, when appropriate, to question the ideas of the leader. The questioning and brainstorming allow for the organization to change rapidly and get out of routines and ruts which may be affecting the fulfillment of the mission (Barbuto, 2005). This type of environment allows for free thinking and problem solving that would be difficult to achieve under the transactional leadership behaviors.

Individualized Consideration: Individualized consideration is another aspect of transformational leadership. This involves treating each person uniquely, conserving their own personal goals, dreams, and aspirations. Within this context, people are treated different depending on their skills, experience, talents, and knowledge (Shin & Zhou, 2003). The leader strives to help each associate reach their full potential through such avenues as coaching and counseling (Bass & Avolio, 2004, pp. 25-27).

Transactional leaders are generally successful in organizations which seek the status quo. However, in an organization that is undergoing internal and external change, transformational leaders are desired. Undoubtedly, "transformational leaders have the ability to lead change in the organization's vision, strategy, and culture as well as promote innovation in products and technologies" (Daft, 2005, p. 153).

Laissez-Faire Leadership

The laissez-faire leader is sharply contrasted from the transactionaltransformational leader. This leader takes a hands-off approach with associates or followers. The leader does little to inspire the associate and works best in environments where the follower is already highly skilled and motivated. Typically the follower has as much or more influence than the leader. Of all the leadership behaviors/theories the laissez-fair leader is the least studied (Hinkin & Schriesheim, 2008; Judge & Piccolo, 2004).

Laissez-faire leaders shrink from supervisory responsibility. They depend on associates to set their own goals, provide the means to carry out the goals, and have little involvement in the overall planning, organizing, or implementing process. In reality, the leader serves mainly as a conduit of information for the associate. This leadership style encompasses passive leaders' behaviors and does not provide the leader the influence to enact change within the organization (Bass, 1981).

The trademark of the laissez-faire leader is poor work quality, diminished sense of satisfaction, lack of decision making, avoidance of organizational issues, inefficiencies, and lack of availability. This leadership style results in a need for more structure and consistency from associates.

The previous sections summarized the leadership behaviors of transactional, transformational, and laissez-faire leadership, which are principal behaviors demonstrated by leaders throughout the globe. In order to better measure these key leadership theories, Bass and his colleagues developed an instrument called the Multifactor Leadership Questionnaire (MLQ). The following section provides additional information regarding that instrument and its history.

Multifactor Leadership Questionnaire (MLQ)

Avolio and Bass created the first instrument to measure the constructs of transformational leadership (Conger, 1999). The original survey contained 142 questions

but with additional research the instrument today is reduced to 45 questions. A sample of

the survey may be viewed in the research conducted by Duarte (2011).

Mind Garden is the organization which has exclusive custodianship of this

proprietary test. The organization provides a concise statement regarding the MLQ:

- Measures, explains and demonstrates to individuals the key factors that set truly exceptional leaders apart from marginal ones
- Differentiates effective and ineffective leaders at all organizational levels
- Assesses the effectiveness of an entire organization's leadership
- Valid across cultures and types of organizations
- Easy to administer, requires 15 minutes to complete
- Extensively researched and validated
- The MLQ provides an excellent relationship between survey data and organizational outcome
- The MLQ is the benchmark measure of Transformational Leadership. ("Multifactor Leadership Questionnaire," 2013, para. 2)

Of these 45 items, 36 items generate information about nine leadership factors and three leadership behaviors—*transactional, transformational,* and *laissez-faire*. The behaviors measured are described in the preceding sections of this document. Table 2 outlines the MLQ leadership constructs. The rating scale for leadership items is as follows: 0 = Not at all; 1 = Once in a while; 2 = Sometimes; 3 = Fairly often; = Frequently, if not always.

The revised MLQ is a short but comprehensive survey, which as Table 2 reveals,

measures a full range of leadership behaviors. Areas of measurement include: (a)

Transformational Leadership; (b) Transactional Leadership; (c) Non-Transitional

Leadership (Laissez-Faire); and (d) Leader Effectiveness.

The MLQ has excellent reliability and validity as a survey tool. According to Bass and Riggio (2012), the "MLQ scales have demonstrated good to excellent internal consistency, with alpha coefficients above the .80 level for all MLQ scales" (p. 22). They

go on to state that the "MLQ has been completed by more than 15,000 respondents and translated into many languages, ranging from German and French to Japanese and Hebrew" (Bass & Riggio, 2012, p. 22). The following section will further explore the scholarly literature relating to organizational effectiveness and its link to leadership.

Table 2

Leadership	Factor	Scale (number of
Construct		Items/Scale)
Transformational	Intellectual	Intellectual Stimulation (4 questions)
Leadership	Stimulation	
	Individualized	Individualized Consideration (4 questions)
	Consideration	
	Idealized Influence	Idealized Influence-Behavior (4 questions)
		Idealized Influence Attributed (4 questions)
	Inspirational	Inspirational Motivation (4 questions)
	Motivation	
	~	~
Transactional	Contingent Reward	Contingent Reward (4 questions)
Leadership		
	Management-by-	Management-by-Exceptions-Active (4
	Exception	questions)
		Management-by-Exception-Active (4
		questions)
Laisaar Faira	Loisson Foire	Laisage Fairs (A quastians)
Laissez-Faire	Laissez-Faire	Laissez-Faire (4 questions)
Leadership		
Leadership	Satisfaction	Satisfaction (2 questions)
Outcomes	Substaction	Substaction (2 questions)
	Extra Effort	Extra Effort (3 questions)
	Effectiveness	Effectiveness (4 questions)

MLQ Constructs

Organizational Effectiveness and Leadership

During the past century the concept of organizational effectiveness has received considerable attention. However, it would be a mild understatement to say that there is still confusion and tensions between competing theories and models relating to organizational effectiveness (Cameron, 1986; Herman & Renz, 1999; Hogan & Sinclair, 1996; Shilbury & Moore, 2006; Taylor, 1911). Frederick Taylor (1911) began a robust discussion of organizational effectiveness in the late 1800s developing the scientific management theory.

Of the many models espoused during the past century, the present study used *the rational goal theory* (Campbell, 1977; Scott, 1977) which has its roots in the seminal work of Weber (1947). This concept is defined by Daft (2005) who stated, "Organizational effectiveness is the degree to which an organization realizes its goals" (p. 75). He went on to say, "Effectiveness is a broad concept. It implicitly takes into consideration a range of variables at both the organizational and departmental levels. Effectiveness evaluates the extent to which multiple goals—whether official or operative—are attained" (p. 75).

Certainly this model of effectiveness is appropriate when goals are clear, time bound, and measurable. The methodology of the rational goal theory consists of identifying the organization's outputs and then identifying how well those goals/outputs were attained (Daft, 2006).

This study studied chair and organizational effectiveness. Chair effectiveness was measured by the MLQ and as perceived by board members of AHS. I have thoroughly discussed leadership and boards and board chairs and now turn to review effective board chairs who contributed to the success of the board and ultimately to the organization:

The quality of its leadership can make or break a board. Good governance requires sound leadership and is inhibited by weak leadership. Although an excellent board chair does not guarantee superior governance, a poor or inadequate one nearly always thwarts it. (Orlikoff, 2000, p. 24)

Eadie (2009) indicates that an effective board chair is crucial to an effective board, effective CEO, and ultimately an effective organization (p. 174). The previous section reviewed those characteristics of an effective board chair (see Leadership Characteristics of the Board Chair). For purposes of this study the definition of effectiveness of a board chair is that leader who meets the organization requirements, who operates an effective group, who effectively meets others' job-related needs, and who represents others to a higher authority. These definitions are the questions which were asked by the highly reliable MLQ survey and are consistent with the definition of Daft (2006) who states that effectiveness is meeting organizational goals.

In addition, this study used three data points to measure organizational effectiveness. The first data point is a financial efficacy measurement, EBITDA. This is an excellent measure of an organization's financial success and stability (Sundararajan et al., 2002). A second data point is a standardized measure of patient satisfaction used throughout the United States. Patient satisfaction can be defined as "the degree to which the patient's desired goals and expectations are met" (Fitzpatrick & Kazer, 2012, p. 388). The measurement used is called Hospital Consumer Assessment of Health Plans Survey (HCAHPS).

The HCAHPS survey developed and tested by the Centers for Medicare and Medicaid Services in partnership with the Agency for Healthcare Research and Quality is the first national, standardized, publicly reported survey of the patients' perspectives of hospital care. The HCAHPS survey asks patients 27 questions about their recent hospital stay 48 hours to 6 weeks after discharge. The survey contains 18 core questions and eight aspects of the patients' hospital experience such as communication with doctors, communication with nurses. . . . The survey also includes four screener questions and five demographic items, which are used for adjusting the mix of patients across hospitals. (Fitzpatrick & Kazer, 2012, p. 388)

A final measure of organizational effectiveness in this study is called core measures (CM). It measures clinical effectiveness of key interventions within a hospital. The information has been collected nationwide for each hospital since 2002 (Joint Commission Resources, 2009; Uselton, Kienle, & Murdaugh, 2010). Adventist Health Systems collects core clinical data for pneumonia, heart attack, heart failure, and surgery care improvement. The measures are based on scientific evidence, and healthcare experts and researchers are constantly evaluating the evidence to make sure that the measures and guidelines are kept up-to-date. In order to be accredited, each AHS hospital must report the results of their CM. I have explored literature about the two major variables of this study—board chair leadership and organizational effectiveness. Now I will address related demographic variables—education, longevity (tenure), and age as they relate to leadership and effectiveness.

Relationship of Leader Effectiveness to Level of Education

Conventional wisdom contends that those leaders with higher levels of education are perceived to be more effective in their work. Valentine and Prater (2011) argued this fact in their recent study of 155 public school principals. They found the perceived effectiveness of school principals increased as the level of education increased. Boles's (1976) work also contends that a factor in leadership and maturity is formal education. Klenke (1993) posits that indeed education is an important factor in creating strong leaders and individuals who are effective in their work.

To the contrary, it is interesting to note that not all literature finds a positive relationship between education and leadership effectiveness. For example, a group of scholars (Young, Crow, Murphy, & Ogawa, 2009) comment that multiple studies show

there is little evidence that perceived leadership effectiveness increases with additional graduate education. I explored education in this study as I do believe it is a predictor of leader effectiveness and also has relationship to organizational effectiveness.

The following section reviews the relationship of leader effectiveness to longevity.

Relationship of Leader Effectiveness to Longevity

The demand for effective leaders can create many opportunities for transitions which produce short tenure for leaders in the nonprofit world. The question at hand asks if one of the factors of an effective leader is longevity (Gilmore, 2003).

Kotter (1982) advanced in his work that often successful corporate leaders obtain their knowledge and success from long tenure in the organization, which allows the leader to understand the internal politics, products, services, and competition of the organization. The insider knowledge regarding a complex organization allows that leader to make better decisions as the leader has knowledge of the organizational history, culture, and abilities of the firm. The insider spends considerable time building and establishing appropriate support networks (Kotter, 1982).

Senge (1990) points out that leadership change can have a monetary, emotional, and structural effect on the organization. The researcher goes on to state that leadership longevity enhances the possibilities of a learning organization where synergy is created in advancing toward a common goal. Certainly given the fact that longevity creates stability and assists an organization in learning, there are distinct advantages for lower turnover and higher job longevity. Studies lean toward the fact that, truly, leader experience and longevity are an element in effectiveness (Fiedler, 1967; Goethals, Sorenson, & Burns,

2004). I explore the topic of leader tenure as I hypothesize that those leaders with longer tenure are more effective in their work.

The following section explores leader effectiveness as it relates to age.

Relationship of Leader Effectiveness to Age

Experience is gained with age and one could extrapolate from this thought that age adds to the effectiveness of leadership. However, the literature is mixed with regard to this premise. Kuhn (2001) found in his research that as individuals grew older, they had less of a tendency to be transformational leaders. As indicated previously by Bass (1985), transformational leadership is considered a more effective leadership behavior than others. However, an Oshagbemi (2004) study of 400 managers in the UK found that age did have an influence on leadership effectiveness. It was interesting to note, however, in his study that young as well as older managers were perceived as effective in their leadership styles. Oshagbemi (2004) discovered that as age increased there was an increased likelihood that leaders embraced participative and consultative characteristics traits. Boorom's (2009) research confirmed that there was a relationship between age and certain effective leadership styles, which was consistent to the research and work of Oshagbemi (2004). While the literature leans towards age as predictor of leadership effectiveness, there is still no resounding evidence of that fact. Given the reality that there is very little work published on the relationship between age and leadership styles and effectiveness, this study adds to the body of research regarding the relationship between the age of the board chairs and their effectiveness as leaders.

The final section of this literature review will provide the reader with an overview of Adventist Health System hospital board structure which forms the context of this study.

AHS Board Structure

Founded in 1973 the Adventist Health System (AHS) is a nonprofit healthcare network whose mission is to extend the healing ministry of Christ. Today AHS is the largest not-for-profit healthcare system in the United States. Each year AHS takes care of over 4 million patients in nine states and 44 hospital campuses. AHS has over 7,700 licensed beds and employs a team of doctors, clinicians, and staff that total 55,000 employees. In addition to 44 hospitals AHS has multiple home health agencies, nursing homes, physician practices, and outpatient clinics (Adventist Health System, n.d.).

According to M. Schultz (personal communication, 2011), Vice President of Adventist Health Systems, each of the 44 hospitals has a community board which operates under the bylaws of Adventist Health System and state law. Typically the board members are selected by being recommended by the local community board to the AHS governing board. The AHS board, which has oversight over the complete system, then reviews the community board name for approval or rejection. New board community members receive orientation materials and attend initial training relating to their role (M. Schultz, personal communication, 2011).

The community board is comprised of 9-27 members who meet every other month or six times a year. The size of the board varies given that some community boards have oversight for up to eight hospitals such as in the Orlando area. As can be anticipated, this board is large, given that it represents such a large number of facilities

located in multiple communities. Other community boards represent one hospital, which lowers the number of members needed. The Chief Executive Officer of the hospital serves as secretary of the board and reports to the chairman.

The board chairs are typically comprised of regional CEOs and/or Adventist Health System executives. Many AHS hospitals are organized into market-specific regions such as the Orlando, Tampa, or Midwest region. Each region has a market CEO who serves as CEO of the principal hospital and then serves as the board chair of the other facilities within the market. An AHS vice president then serves as the board chair of the market CEO's hospital. In some cases, hospitals do not fit into a market and then an AHS executive serves as the board chair.

All Adventist hospitals outside the state of Florida are grouped into what is called the multistate division. One corporate executive has general oversight over those facilities. Hospitals within Florida have the oversight of one executive with the exception of the Orlando hospitals. The Orlando hospitals are chaired directly by the president of AHS. All board chairs within this study are employees of Adventist Health System and are either market CEOs or executives of the corporate office.

The AHS's tightly coupled governance structure creates a relationship between local hospital boards and their CEOs that is often different from more traditional community hospital governance structures. The AHS selects Seventh-day Adventists as CEOs, and the selection process is closely managed by the corporate chair and the board chair. The recruitment of Adventist Health System corporate executives and CEOs is not generally posted on major websites or listed in major publications. As such, the local hospital board does not hire the board chairs or the chief executive officers of the

hospital. These unique board structures, however, should not have significant bearing on the data collected given that board members are sharing their perception of chair effectiveness and leadership behaviors.

Despite this unique board structure, AHS was selected given the relationship I have with the system and given the access I was granted to conduct the survey. Generally, hospital systems of this size are not willing to allow researchers this kind of access to the board.

The role of the board is delineated through the bylaws of AHS and state law. The AHS bylaws require the community board to fulfill the following obligations:

- Review bylaws on an ongoing basis (not less frequently than annually, and propose modifications to the member)
- Responsible/provide oversight for hospital's Quality Assessment & Improvement Programs & Risk Management Program
- 3. Participation in Continuing Education opportunities
- 4. Responsible for Institutional/Strategic Planning:
 - a. Capital planning
 - b. Medical staff
 - c. Financial
- 5. Evaluate Performance of Board
- 6. Responsible for Medical Staff credentialing/privileges
- 7. Approve/Receive Safety Policies & Reports
- 8. Evaluate Chief Executive Officer's performance taking into consideration (among others):

- a. Financial Operations
- b. Organization's Strategic Plan
- c. Composition of Management Team
- d. Reputation of Hospital
- e. Compliance with Corporate Mission

In addition, Medicare provides conditions and roles for the board if the hospital plans on participating in the Medicare reimbursement plan. Medicare delineates the following obligations:

- *Care of Patients:* (a) Ensure that every patient is under care of a member of the Medical Staff, and (b) Patients are admitted to hospital only on recommendation of a licensed practitioner permitted by law to admit patients.
- 2. *Institutional Plan and Budget:* (a) Review budget, (b) Oversight to improvement of land, buildings, and equipment, (c) Oversight replacement, modernization & expansion of buildings & equipment.
- 3. *Contracted Services:* Responsible for services furnished in hospital whether or not furnished under contract.

Finally, most states require specific roles and responsibilities for a hospital board. Many of the requirements are similar to AHS bylaws and Medicare requirements. For example, the state of Florida requires the board to review the bylaws at least once a year, approve policy, and provide oversight to the medical staff (M. Schultz, personal communication, 2011).

Summary

Chapter 2 examined and reviewed the literature related to boards, board leadership, leadership behaviors, and effective organizational leadership. The examination of the literature began with a historical perspective of nonprofit boards. This review was presented in order to better understand the context within which board chairs function and operate. In the United States a board of directors and nonprofit organizations have become fundamental to the very fabric of society (Drucker, 1992). Harvard and Yale pioneered the way in establishing a governance body. However, it has only been during the past 30 years that the importance of the board and the chair has taken on renewed interest.

The role and function of the board within a nonprofit setting was also reviewed as well. Multiple frameworks such as agency theory, resource dependency, group decision process, institutional, democratic, and strategic management theories are proposed by scholars (Bradham, 2009; Brown & Guo, 2010; Carver, 2006; Charan, 2005; Dockery, 2011; Guo, 2007). Other scholars' (Axelrod, 2005; Block, 1998; Canals, 2010; Carver, 2006; Grace et al., 2009) work was reviewed to provide an overview of the principal normative roles of the board such as but not limited to determining the mission and vision of the organization, planning, CEO selection, and evaluation. The review of the literature then provided a synopsis of the theory relating to governance versus director management by the board. The review proceeded to narrow the topic to the role of the board chair for nonprofit organizations. While there is not abundant information, scholars (Carver, 2011; Dunne, 2005; Harris & Helfat, 2007; Kaiser, 2010; Kakabadse & Kakabadse, 2008; Leblanc, 2005; Lechem, 2002; Poutziouris et al., 2006) point out that the principal roles

of the board chair are to, but not limited to, establish roles and obligations between the board chair and CEO; champion the organizations' mission, values, and strategies; effectively influence outcomes, living the values; create board committees; and set the board agenda. As a corollary to the role of the chair, a brief review was given to the topic of CEO/chair duality. While mixed, the literature tends to recommend that the roles of CEO and board chair should not be occupied by the same person.

Finally, this chapter examined leadership behaviors such as transformational, laissez-faire, and transactional. Critical to this discussion was the need to give scrupulous attention to the leadership styles suitable for directing complex organizations. In addition, careful review and attention was given to effectiveness of an organization and leadership within the organization. However, the literature reveals little to no attention has been given to the relationship between chair leadership behaviors and chair effectiveness. The chapter closed by providing the reader with a review of the Adventist Health System's board role for each hospital. It also reviewed the selection process for board chairs and executives of AHS who serve as chairs of the community boards. The following chapter will provide a comprehensive review of the methodology used to conduct this study.

CHAPTER 3

METHODOLOGY

Introduction

The first two chapters of this study presented an overview of nonprofit boards, their history and role, board chairs and their role, effective leaders, transformational leadership, transactional leadership, and laissez-faire leadership within various fields. Given the limited research on the topic of board chair leader behaviors in relation to chair and organizational effectiveness, further study was warranted. The purpose of this ex post facto research was to explore the relationship between chair leadership behaviors and chair effectiveness as perceived by board members of Adventist Health System community hospitals. The importance of the board chair to healthcare cannot be underestimated. The chair and board leadership to the organization is paramount to the current and future stability of quality healthcare (Jha & Epstein, 2010).

Three hundred thirty-three hospital board members from 34 Adventist Health System hospitals were invited to participate in the study. A survey was provided them which reviewed their perceptions of chair leadership behaviors and how those behaviors relate to an effective chair as measured through the MLQ.

Chapter 3 reviews the context for this study and sets out the methodology for the research. The chapter reviews the research questions, hypotheses, sampling procedures,

context and population, variables and instrumentation, data collection, data analysis, ethics, and summary.

Research Questions

This study sought to answer the following research questions:

1. What is the relationship between chair leadership behaviors and effectiveness as perceived by board members and as measured by the MLQ?

2. What is the relationship between chair formal education and effectiveness as measured by the MLQ?

3. What is the relationship between hospital chair longevity and effectiveness as measured by the MLQ?

4. What is the relationship between the chair age and effectiveness as measured by the MLQ?

5. What is the relationship between chair leadership behaviors and hospital effectiveness as measured by EBITDA, HCAHPS, and CM?

Hypotheses

According to Salkind (2008), hypotheses are used to transform research questions and objectives into measurable statements which determine the techniques to be used in testing the hypotheses (p. 121). This study delineates the following hypotheses:

Hypothesis 1a: There is a significant relationship between perceived chair transformational leadership and effectiveness as measured by the MLQ.

Hypothesis 1b: There is a significant relationship between chair transactional leadership and effectiveness as measured by the MLQ.

Hypothesis 1c: There is a significant relationship between perceived chair laissezfaire leadership and effectiveness as measured by the MLQ.

Hypothesis 2a: Chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ than those with a lower level of education.

Hypothesis 2b: Chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ, independent of age, than those with a lower level of education.

Hypothesis 2c: Chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ, independent of longevity, than those with a lower level of education.

Hypothesis 2d: Chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ, independent of EBITDA, HCAHPS, and CM, than those with lower levels of education.

Hypothesis 2e: The educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA and CM.

Hypothesis 2f: The educational level of the chair would predict unique variance in EBITDA when controlling for HCAHPS and CM.

Hypothesis 2g: The educational level of the chair would predict unique variance in CM when controlling for HCAHPS and EBITDA.

Hypothesis 2h: The educational level of the chair would predict unique variance in EBITDA when controlling for HCAHPS, CM, and age.

Hypothesis 2i: The educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA, CM, and age.

Hypothesis 2j: The educational level of the chair would predict unique variance in CM when controlling for HCAHPS, EBITDA, and age.

Hypothesis 2k: The educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair longevity.

Hypothesis 21: The educational level of the board chair would predict unique

variance in CM when controlling for EBITDA, HCAHPS, and chair longevity.

Hypothesis 2m: The educational level of the chair would predict unique variance

in EBITDA when controlling for HCAHPS, CM, and chair longevity.

Hypothesis 2n: The educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair effectiveness.

Hypothesis 2o: The educational level of the chair would predict unique variance in CM when controlling for EBITDA, HCAHPS, and chair effectiveness.

Hypothesis 2p: The educational level of the chair would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair effectiveness.

Hypothesis 2q: The educational level of the chair would predict unique variance in chair effectiveness when controlling for HCAHPS, CM, and EBITDA.

Hypothesis 3a: Chairs with more years of chair experience will have a higher score of effectiveness as measured by the MLQ than those with fewer years of chair experience.

Hypothesis 3b: Chairs with more years of chair experience will have a higher score of effectiveness as measured by the MLQ, independent of age, than those with fewer years of chair experience.

Hypothesis 3c: Chairs with more years of chair experience will have a higher score of effectiveness as measured by the MLQ, independent of chair education.

Hypothesis 3d: Chairs with more years of chair experience will have a higher score of effectiveness as measured by the MLQ, independent of EBITDA, HCAHPS, and CM, than those with fewer years of chair experience.

Hypothesis 3e: Chairs with more years of chair experience will have higher EBITDA/HCAHPS/CM scores than those with fewer years of chair experience.

Hypothesis 3f: Chair longevity would predict unique variance in EBITDA when controlling for HCAHPs, CM, and age.

Hypothesis 3g: Chair longevity would predict unique variance in HCAHPs when controlling for EBITDA, CM, and chair age.

Hypothesis 3h: Chair longevity would predict unique variance in CM when controlling for HCAHPS, EBITDA, and chair longevity.

Hypothesis 3i: Chair longevity would predict unique variance in EBITDA when controlling for HCAHPs, CM, and chair effectiveness.

Hypothesis 3j: Chair longevity would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair age.

Hypothesis 3k: Chair longevity would predict unique variance in CM when controlling for HCAHPS, EBITDA, and chair effectiveness.

Hypothesis 31: Chair longevity would predict unique variance in chair

effectiveness when controlling for HCAHPS, EBITDA, and CM.

Hypothesis 4a: Chairs who are older will have a higher score of effectiveness as measured by the MLQ than those chairs who are younger.

Hypothesis 4b: Chairs who are older will have a higher score of effectiveness as measured by the MLQ, independent of longevity, than those who are younger.

Hypothesis 4c: Chairs who are older will have a higher score of effectiveness as measured by the MLQ, independent of chair education, than those who are younger.

Hypothesis 4d: Chairs who are older will have a higher score of effectiveness as measured by the MLQ, independent of EBITDA, HCAHPS, and CM, than those who are younger.

Hypothesis 4e: Chairs who are older will have higher EBITDA/HCAHPS/CM scores than those who are younger.

Hypothesis 4f: Chair age would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair longevity.

Hypothesis 4g: Chair age would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair longevity.

Hypothesis 4h: Chair age would predict unique variance in CM when controlling for HCAHPS, EBITDA, and chair longevity.

Hypothesis 4i: Chair age would predict unique variance in longevity when controlling for HCAHPS, EBITDA, and CM.

Hypothesis 4j: Chair age would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair effectiveness.

Hypothesis 4k: Chair age would predict unique variance in HCAHPS when controlling or EBITDA, CM, and chair effectiveness.

Hypothesis 41: Chair age would predict unique variance in CM when controlling for HCAHPS, EBITDA, and chair effectiveness.

Hypothesis 4m: Chair age would predict unique variance in chair effectiveness when controlling for HCAHPS, EBITDA, and CM.

Hypothesis 5a: There is a significant relationship between chair transformational leadership behavior and organizational effectiveness as measured by EBITDA.

Hypothesis 5b: There is a significant relationship between chair transformational leadership behavior and organizational effectiveness as measured by HCAHPS.

Hypothesis 5c: There is a significant relationship between chair transformational leadership behavior and organizational effectiveness as measured by CM.

Hypothesis 5d: There is a significant relationship between chair transactional leadership behavior and organizational effectiveness as measured by EBITDA.

Hypothesis 5e: There is a significant relationship between chair transactional leadership behavior and organizational effectiveness as measured by HCAHPS.

Hypothesis 5f: There is a significant relationship between chair transactional leadership behavior and organizational effectiveness as measured by CM

Hypothesis 5g: There is a significant relationship between chair laissez-faire leadership behavior and organizational effectiveness as measured by EBITDA.

Hypothesis 5h: There is a significant relationship between chair laissez-faire leadership behavior and organizational effectiveness as measured by HCAHPS.

Hypothesis 5i: There is a significant relationship between chair laissez-faire leadership behavior and organizational effectiveness as measured by CM.

Research Design

This study used an ex post facto research design with stated and alternative hypotheses. According to Cottrell and McKenzie (2011), "**ex post facto** (after the fact)

research examines a phenomenon that has already occurred and attempts to infer causeand-effect relationships. These studies are also called causal-comparative studies" (p. 9).

Ary et al. (2009) stated:

When an investigation involves attribute independent variables that the researcher cannot manipulate, he or she must turn to *ex post facto* research. Ex post facto research is also appropriate when the variable actually could be manipulated but is not because it would be unethical or irresponsible to do so.... The designation of *ex post facto*, from Latin for "after the fact" indicates that **ex post facto research** is conducted after variation in the variable of interest has already been determined in the natural course of events. This method is sometimes called *causal comparative* because its purpose is to investigate cause-and-effect relationships between independent and dependent variables. Researchers use it in situations that do not permit the randomization and manipulation of variables characteristic of experimental research. (p. 332)

Ex post facto design was chosen in particular because the research goal for this study was to determine the relationship between leadership behaviors of the chair (independent variable) and his effectiveness and organizational effectiveness (dependent variable). Newman and Benz (1998) are clear that if the question deals with causation, then ex post facto is not appropriate. However, in the case where the question deals with relationships, then the research design of ex post facto is suitable. As seen throughout this study the research deals with relationships and thus the selection of an ex post facto design.

It should be noted there are three types of ex post facto research. "The first type looks at relationships without hypotheses. It is just exploratory or descriptive. . . . Ex post facto research with hypotheses is considered to be superior. . . . The most sophisticated type of ex post facto research has hypotheses and controls for viable alternative explanations" (Rocco & Hatcher, 2011, p. 203). This study utilized the most sophisticated type of ex post facto research design.

There are some inherent weaknesses to ex post facto methodology. Ex post facto research lacks control due to (a) inability to randomize and (b) inability to manipulate the independent variable because of its retrospective nature. A final limitation or weakness is (c) the researcher may draw inaccurate and misleading conclusions (Newman & Newman, 1994).

It should be noted the study was based upon a repeated measures design where the board chairs were measured more than once. A repeated-measures design is one in which multiple or repeated measurements are made on each experimental unit. The experimental units in this case were the nine board chairs who received repeated measurements from the board members through the MLQ (Thomas, Nelson, & Silverman, 2011).

The research utilized the MLQ prepared by Bass and Avolio which has already been tested for validity and reliability. The instrument was sent through an imbedded link in an email from the hospital CEO to all board members in Adventist Health System hospitals. The URL link was also accompanied by a message from the CEO, introducing the research topic and inviting the board members to participate in the study. The individual anonymity of each respondent was carefully protected in that I did not have access to the names of the board members. I had only the number of potential subjects from each hospital.

Once the questionnaires were filled out, I had access to the data housed on a secure web site. IBM SPSS 20 was used to statistically analyze the survey information. The data were used to determine if a relationship existed between desired leadership

behaviors (MLQ) and the (critical success factors) effectiveness of chairs as perceived by board members of AHS community hospitals.

In addition, the three organizational effectiveness data points (HCAHPS, EBITDA, and CM) were collected from each hospital. The data were used to determine if there is a relationship between chair leadership behaviors and organizational effectiveness.

The interpretation of the results from the survey was used to compare data from each hospital. Results are presented in Chapter 4 and discussed along with conclusions in Chapter 5.

The following section reviews a concise context within which the population was selected to take the survey. It then reviews the population who received the survey and discusses the chairs that were evaluated by community board members.

Sampling, Context, and Population Description

While not impossible, it is difficult to gain access to board chairs of any organization. This is evidenced partially by the limited number of studies which deal with board chairs in both the for-profit and nonprofit sectors. I considered studying several healthcare systems but found the access was limited to impossible. Scholars agree that given time constraints and inaccessibility of subjects, the sample may need to be small (Creswell, 2008; Leedy & Ormrod, 2005; Singleton & Straits, 2005). Because of the difficulties in accessing board chairs, the following logic was used in the selection process.

Given the limited access to hospital board chairs, it was decided to gain access to a hospital system within which I had a working relationship and a certain amount of

inside access—that of AHS. It was also the largest nonprofit Protestant hospital system in the United States. After careful review of the research project, the President of AHS gave me permission to approach the CEOs and active IRBs of each hospital and request permission to study their facility. Permission was obtained from 35 of the 44 hospitals to conduct research on their board chair.

It is important to understand the context and population of this research study with regard to AHS. The System was founded in 1973 and is a nonprofit healthcare network whose mission is to extend the healing ministry of Christ. Today, AHS is the largest Protestant not-for-profit healthcare system in the United States. Each year AHS hospitals take care of over 4 million patients who are seen in nine states, in one of 44 hospital campuses. AHS has over 7,700 licensed beds and a team of doctors, clinicians, and staff that total 55,000 employees. In addition to 44 hospitals, AHS has multiple home health agencies, nursing homes, physician practices, and outpatient clinics.

The constituency of AHS is the Seventh-day Adventist Church. There is a corporate board which provides oversight to AHS. The board chair is the President of the Lake Union Conference, which is an administrative office of the Seventh-day Adventist Church located in Berrien Springs, Michigan. Neither the AHS board nor its chair was part of this study. Forty-four hospitals are within the System and report in some fashion to the corporate office. Twenty-four hospitals are within Florida. Of those hospitals, eight are within the Orlando region and have as their board chair the president of AHS. The Florida hospitals outside of Orlando have either a market CEO as president or a vice president from the corporate office as their chair. Twenty hospitals are situated outside of Florida and are part of the multi-state division. A corporate vice president provides

oversight to these hospitals. Market CEOs or the corporate vice president serve as the board chair for multi-state hospitals. As noted, board chairs are primarily either the market CEO or an executive from the corporate office. It is expected these positions are to be Seventh-day Adventist church members of good standing. Thus the positions are not generally advertised to the public and are selected by corporate officials.

It should also be noted that six hospitals in the Tampa region were excluded from the study upon the request of the market CEO, and three other hospitals from various parts of the system were also excluded upon their request. Thus, of the 44 AHS hospitals, the MLQ was sent to the community board members of 35 hospitals. However, one community board had a zero response rate, thus only 34 hospitals were included in the study.

A survey was sent to 333 community board members who were asked to evaluate nine board chairs serving 22 community boards and 34 hospitals. The response rate was 37% (123) of those who received the survey. The community board is comprised of nine to 27 members who meet every other month or six times a year. Some community boards are larger and have up to seven hospitals under their oversight. Other boards are smaller and have as few as one facility under their oversight (see Table 3). The chief executive officer of the hospital serves as secretary of the board and reports to the chairman. Since I was not allowed to have direct contact with the board members and was asked to communicate to them through the chief executive officer of the hospital, it was challenging to obtain exact demographic data relating to the community board members. However, anecdotally, the board members come from diverse backgrounds and include such individuals as lawyers, nurses, doctors, ministers, accountants, entrepreneurs, and

community leaders. The next section will provide an overview of the variables and instrumentation used in this study.

Table 3

Board Chair	Hospitals	Boards	Number of Board Members	Participants	Percentage Rate
Chair A	Hospital 1 Hospital 2 Hospital 3 Hospital 4	Board Aa	27	10	27
Chair A	Hospital 5	Board Ab	13	5	38
Chair A	Hospital 6	Board Ac	12	2	16
Chair A	Hospital 7	Board Ad	23	11	48
Chair B	Hospital 8	Board Ba	15	8	53
Chair B	Hospital 9	Board Bb	14	8	57
Chair C	Hospital 10	Board Ca	12	3	25
Chair C	Hospital 11	Board Cb	16	4	25
Chair D	Hospital 12	Board Da	9	4	44
Chair E	Hospital 13	Board Ea	13	3	23
Chair E	Hospital 14	Board Eb	16	8	50
Chair E	Hospital 15	Board Ec	12	7	58
Chair F	Hospital 16 Hospital 17 Hospital 18	Board Fa	13	6	46
Chair F	Hospital 19 Hospital 20	Board Fb	14	3	21
Chair F	Hospital 21	Board Fc	12	5	42

Board Chair Relationship With Hospital and Boards

Tabl	le 3–	-Continued

Board Chair	Hospitals	Boards	Number of Board Members	Participant	Percentage Rate
Chair G	Hospital 22 Hospital 23 Hospital 24 Hospital 25 Hospital 26 Hospital 27 Hospital 28	Board Ga	27	б	22
Chair H	Hospital 29	Board Ha	13	4	31
Chair H	Hospital 30	Board Hb	15	5	33
Chair H	Hospital 31	Board Hc	24	9	38
Chair H	Hospital 32	Board Hd	12	4	33
Chair I	Hospital 33	Board Ia	13	2	15
Chair I	Hospital 34	Board Ib	11	6	55
9	34	22	333	123	37

Variables and Instrumentation

The primary independent variables for this study are transactional leadership, transformational leadership, and laissez-faire leadership. Leader effectiveness is considered to be the dependent variable of the study. In addition, organizational effectiveness as measured by EBITDA, HCAHPS, and CM is also considered a dependent variable. Additional independent variables are: education, longevity, and age. This additional variable was also compared to the dependent variable of leader effectiveness. Transactional, transformational, and laissez-faire leadership served as the hypotheses for relational testing. Table 4 provides a succinct summary of the variables for this study.

Table 4

Explanation of Variables

Variables	Independent/Dependent	Measurement
Transactional Leadership	Independent	MLQ
Transformational Leadership	Independent	MLQ
Laissez-faire Leadership	Independent	MLQ
Education	Independent	Survey
Longevity	Independent	Survey
Age	Independent	Survey
Organizational Effectiveness (HCAHPS, EBITDA, CM)	Dependent	Hospital Archive
Effectiveness	Dependent	MLQ

In order to explore the relationship between chair leadership behaviors and chair effectiveness, this study employed Avolio and Bass's (1985) Multifactor Leadership Questionnaire (MLQ Form 5X Short). The MLQ is "one of the most widely used instruments to measure transformational and transactional leadership behaviors in the organizational sciences" (Tejada, Scandura, & Pillai, 2001, p. 31).

During the past two decades the instrument has been used in over 30 countries within hospitals, schools, colleges, and government institutions. During a 10-year period
from 1995 to 2004, the MLQ was used in over 300 research programs, doctoral dissertations, and master's theses. The MLQ Short Form has been translated into numerous languages including Spanish, Portuguese, Italian, French, German, Hebrew, and Chinese (Bass & Avolio, 2004).

Although no instrument is flawless, researchers have shown from the inception of the MLQ that it is highly reliable and valid across multiple professional disciplines (Antonakis, Avolio, & Sivasubramaniam, 2003; Avolio et al., 1999; Barge & Schlueter, 1991; Lowe, Kroeck, & Sivasubramaniam, 1996; Weibler, 2004). According to Bass and Riggio (2012), the "MLQ scales have demonstrated good to excellent internal consistency, with alpha coefficients above the .80 level for all MLQ scales" (p. 22). They go on to state that the "MLQ has been completed by more than 15,000 respondents and translated into many languages, ranging from German and French to Japanese and Hebrew" (Bass & Riggio, 2012, p. 22). In a technical study conducted by Bass and Avolio (2004), they found that the MLQ reflected Cronbach Alpha scale scores ranging from .74 to .94 for a set of nine samples (N=2,154).

Data Collection

In order to collect the sensitive data for this research, it was necessary to complete and present the necessary application and supporting documents to the Institutional Review Board (IRB) of Andrews University. Full compliance with the Andrews IRB was maintained with regard to the study of human subjects. In addition, an application was submitted to each hospital that had a functioning IRB. This process was particularly challenging and took over 7 months to complete. There were times when the requirements of the hospital IRBs conflicted with each other, and lengthy negotiations

were necessary between officials. In other instances, one or more of the hospital IRBs were in conflict with the Andrews University IRB. One of the requirements of Andrews' IRB was to obtain a letter of support from each of the 34 hospital CEOs. This too was a lengthy process. However, after months of negotiation and compromise, alignment of the IRBs was confirmed, letters were received from each CEO, and approvals were obtained.

After receiving full approval from the IRB, the contact information for each assistant to the president of the 34 hospitals was collected. It was necessary to explain the research to each hospital administration as they sent the emails out to their own board of directors. Email communication was used almost exclusively with participants as research shows turnaround time for response is almost half, response quality is improved, and response rates increase (Sheehan, 2001).

In the second phase each hospital president was contacted by phone to briefly discuss the research project and review the authorization from the president of Adventist Health System and IRB approvals. Within the corporate culture of AHS, president support is critical to obtaining a strong response rates.

In the third phase, the president of each hospital sent an email message to their board members. The email contained a description of the research project (see Appendix B), an electronic consent form (Appendix C), and the MLQ web-embedded survey (Appendix D). The participant was asked to review the details of the research project, electronically sign the consent form, and take the 45-question survey.

In the fourth phase of the data collection procedure, a follow-up email (Appendix B) was sent to all participants, thanking them for their participation and urging those who had not taken the survey to complete it in a timely manner.

Finally, in the fifth phase a final email was sent to participants again asking that the survey be completed. Sheehan (2001) shows through research that multiple reminders increase participant compliance with the survey. Table 5 shows a general time line of data collection for this study.

Table 5

Timeline for Data Collection – Board Chairs, CEOs, and Board Members

Phase	Activity	Time
Phase I	Phone calls with CEO assistant	April 2012
Phase II	Phone calls with CEOs	May-June 2012
Phase III	IRB approval	January-June 2012
Phase IV	CEO mails participants	July 2012
Phase V	Follow-up email from CEO	One week later
Phase VI	Final reminder from CEO	Two weeks later

It should be noted the principal researcher was available by phone to answer any questions that participants had regarding the survey. The availability was intended to help decrease anxiety and confusion regarding the survey and assist in a high participation rate. No adverse effects on participants were anticipated from this study. Results were made available to participants upon their request.

Data Analysis

The F test was used to test the statistical significance of the proposed relationships in the hypotheses. The F test was chosen because it is very strong. The

assumptions of random selection of subjects and normal distribution of the variables can be violated without doing serious harm to the procedure (Newman et al., 2006).

Multiple linear regression was used to test for what proportion of variance can be accounted for by leadership characteristics in predicting perceived effectiveness as measured by the MLQ. In addition, multiple linear regression was used to co-vary some of the variables to test the alterative hypotheses (Newman & McNeil, 1998). Multiple linear regression was the chosen method for several reasons. First, it is more flexible than traditional analysis of variance. Second, models can be developed that reflect the specific research question being asked. Finally, as McNeil, Newman, and Fraas (2012) state, with multiple linear regression, the researcher may test relationships between categorical and continuous variables or solely between continuous variables.

There will be times where the direction of the correlation may be uncertain. In this case, a two-tailed test of significance was used to test the relationships of those variables. One-tailed tests of significance was used where the direction of the correlation was quite certain based on previous research and experience. The Bonferroni correction was used to counteract the problem of multiple comparisons and to control Type I error rate for the multiple comparisons (Newman et al., 2006).

The .05 level of significance was used since the consequences of rejecting a true null hypothesis are not so serious as to warrant a more stringent confidence level.

Ethical Issues

Various ethical issues surround research in any field of study. Within this particular research it should be noted that no individual respondent to the survey was paid any type of fee or was given any non-monetary incentives for their participation.

Furthermore, the participation in the survey was voluntary and only best practices were used in requesting participation. The identity of the hospitals and board chairs was coded in order to ensure full confidentiality.

I am an employee of one of the hospitals that was part of the study. Discussions took place with my committee and the chair to discover if this particular hospital board should participate or not in the study. It was determined there was no conflict of interest or ethical dilemmas at risk.

Summary

This chapter outlines the methodology used in this study including a review of the research questions, hypotheses, research design, context and population, variables and instrumentation, data collection, data analysis, ethics, and summary. The goal of the research was to understand the relationship between Adventist hospital board chair leadership behaviors and effectiveness as perceived by board members and that relationship to hospital effectiveness. Research was conducted using the web-based MLQ questionnaire, which was distributed to 333 board members. The survey has proven to be highly reliable and valid used by researchers across the globe in hundreds of research studies. In this ex post facto study, multiple linear regression was used to test for what proportion of variance can be accounted for by leadership characteristics in predicting perceived effectiveness as measured by the MLQ.

CHAPTER 4

RESULTS OF THE STUDY

Introduction

This study examined the relationship between Adventist chair leadership behaviors and effectiveness as perceived by board members and the relationship between chair effectiveness and hospital effectiveness. Little to no research is available that empirically studies hospital chair leadership behaviors in relationship to chair and hospital effectiveness. Therefore, the current research was conducted to identify those leadership behaviors that potentially facilitate effective chairs and may have a relation to hospital effectiveness.

The Multifactor Leadership Questionnaire (MLQ) was utilized to measure the various leadership behaviors of hospital chairs. Developed by Avolio and Bass (1995), the survey reports transformational, transactional, and laissez-faire forms of leadership. It also measures chair effectiveness as perceived by board members. The 45-question survey was sent to hospital board members who were asked to use the questionnaire to evaluate their board chair.

In collecting survey responses from board members, hospital effectiveness was also collected. In order to measure hospital effectiveness, three general data sets were gathered. The first was EBITDA, which is used to measure the financial effectiveness of hospitals and reported on the income statement as the best measure of net earnings. The

second measure of hospital effectiveness was its clinical scores or CM. A final data point was HCAHPS, which measures patient satisfaction.

This chapter reviews the results of this data collection. The first section reviews descriptive statistics of the sample, including chair age, education, and years of service. It also reviews the means, standard deviations, and minimum/maximum scores on the independent and dependent variables, showing the minimum/maximum scores along with means and standard deviations for leadership behaviors and effectiveness variables.

The second section describes the results of various inferential statistical analyses on the data using IBM SPSS 20. The Pearson Correlation coefficient was used to examine the relationship between board member perception of chair effectiveness variables, hospital effectiveness variables, and chair demographics. Multiple linear regression was used to identify relationships among variables. From the analysis, effective chair leadership behaviors were identified, and predictors of chair effectiveness were also identified.

Demographic Descriptive Statistics of the Sample

The MLQ was emailed from the president and CEO of each hospital to their local community board members. A total of 34 hospitals with a total of 22 boards and 333 board members and nine board chairs were eventually included in the study. As Table 3 in Chapter 3 shows, most chairs and many boards oversee multiple hospitals.

Table 3 shows the number of hospitals for which a chair provides oversight ranges from one to seven hospitals. In addition, it indicates that one chair provides board oversight from one to seven boards. Of the 333 board members who received the survey,

123 responded, which is a 37% response rate. Individual hospital response rates ranged from 15% to 58%.

Since I was not allowed to have direct contact with the board members and was asked to communicate to them through the chief executive officer of the hospital, it was challenging to obtain exact demographic data relating to the community board members. However, anecdotally, the board members come from diverse backgrounds and include such individuals as lawyers, nurses, doctors, ministers, accountants, entrepreneurs, and community leaders. The board members come from diverse socioeconomic, religious, and ethnic backgrounds.

As previously noted in Chapter 3, six hospitals in the Tampa region were excluded from the study upon the request of the market CEO, and three other hospitals from various parts of the system were also excluded upon their request. Thus, of the 44 AHS hospitals, the MLQ was sent to the community board members of 35 hospitals. However, one community board had a zero response rate. Therefore, only 34 hospitals and their data were included in the study.

Table 6 provides an overview of the demographics of the chairs studied in this research. All chairs were male and Caucasian. Their terms of service ranged from 7 months to 12.9 years, with 55% having between 5 to 6 years of service. The analysis shows 11% of the chairs have bachelor's degrees, 67% have master's degrees, and 22% have a doctorate. Finally, the ages of the chairs range from 38 to 66 years with 67% having an age of 51 years or older.

Table 6

Chair Demographic Frequencies Table

Variable	N	Percentage
Gender	<i>N</i> = 9	
Male	9	100
Female	0	0
Ethnicity	<i>N</i> = 9	
Caucasian	9	100
Other	0	0
Chair Longevity (22 boards)	<i>N</i> = 22*	
0-2 years		27
3-4 years		14
5-6 years		55
7-8 years		0
9-10 years		0
>11 years		4
Education	<i>N</i> = 9	
Bachelor's	1	11
Master's	6	67
Ph.D.	2	22
Age	<i>N</i> = 9	
30-40 years	1	11
41-50 years	2	22
51-60 years	3	34
61-70 years	3	34

*Most of the chairs preside over multiple hospital boards. Therefore 22 possible responses are listed for the chair longevity variable.

The following section provides additional descriptive statistics resulting from the MLQ questionnaire.

Survey-Descriptive Statistics

Table 7 depicts descriptive statistics relating to the multiple variables listed in this study. The variables are leadership behaviors (Transactional, Laissez-faire, and

Table 7

Variable Scale

Scale	Min.	Max.	Mean	SD
Transactional (0-4)	0.90	4.00	2.38	0.78
Laissez-Faire (0-4)	0.00	2.80	0.28	0.53
Transformational (0-4)	1.40	4.00	3.27	0.62
Effectiveness (0-4)	0.80	4.00	3.44	0.70
EBITDA (%)	-6.30	28.60	12.23	7.22
Core Measure Sum	0.00*	99.05	94.26	17.45
HCAHPS (%)	57.00	85.30	69.85	8.13
Chair Age (Years)	38.00	68.00	57.12	10.13
Chair Longevity (Months)	7.00	155.00	61.74	32.35
Chair Education 1=Bachelor's 2=Master's 3=PhD	1.00	3.00	1.88	0.58

Note. Board chair effectiveness and leadership behaviors, as measured by the MLQ, is an ordinal scale as 0 = N ot at all, 1 = O nce in a while, 2 = S ometimes, 3 = F airly often, 4 = F requently, if not always; N = 123. HCAHPS N > 10,000 respondents. The longevity variable is coded in months. The education variable is coded as 1 = B achelor's, 2 = M aster's, 3 = D octorate.

* No data were available for one hospital as the sample size was too small.

Transformational), chair and hospital effectiveness (Chair Effectiveness, Hospital Effectiveness; EBITDA, HCAHPS, and CM), and chair demographics (Age, Longevity, and Education).

For each of the independent and dependent variables, Table 7 depicts the maximum and minimum number along with means and standard deviations. The following sections provide additional discussion of the numbers delineated in Table 7.

Leadership Behavior Variables

The MLQ questionnaire asked board members to rank chairs on a scale from 0-4 with regard to leadership behaviors. Histograms were performed to represent the number of times the mean score occurred for transactional, laissez-faire and transformational (see Figures 3, 4, and 5). Histograms are graphical representations of frequency distributions



Figure 3: Transactional leadership behavior responses—MLQ. From *Multifactor Leadership Questionnaire [MLQ]: Manual and Sampler Set*, by B. J. Avolio and B. M. Bass, 2004, Redwood City, CA: Mind Garden.

(Jackson, 2011). The vertical or Y-axis is the scale that shows the number of times the values within an interval occurred and the horizontal or X-axis shows you the scale of values into which the measurements fit. The histograms make it easy to see where the majority of values are in the measurement scale, and the amount of variation.

Transactional leadership (Figure 3) had a normal distribution. Laissez-faire (Figure 4) was positively skewed, and Transformational (Figure 5) was negatively



Figure 4: Laissez-faire leadership behavior responses—MLQ. From *Multifactor Leadership Questionnaire [MLQ]: Manual and Sampler Set*, by B. J. Avolio and B. M. Bass, 2004, Redwood City, CA: Mind Garden.

skewed. Means and standard deviations were also calculated. The standard deviation is "a measure of the variability that describes how far the data spread is on either side of the central mean value. The standard deviation is the square root of the variance and is in the same units as the data values" (Peat, Barton, & Elliott, 2009, p. 70). The mean for

transactional leadership behavior of the chairs was 2.38 with a standard deviation of 0.78 (see Figure 3).



Figure 5: Transformational leadership behavior responses—MLQ. From *Multifactor Leadership Questionnaire [MLQ]: Manual and Sampler Set*, by B. J. Avolio and B. M. Bass, 2004, Redwood City, CA: Mind Garden.

As indicated, the transactional leadership behavior had a normal distribution. We can visually note that the most frequent measurement of the behavior occurred at the 2.0 level and then again a strong measurement was given at the 3.0 level.

In contrast, laissez-faire was positively skewed with a mean of .28 and a standard deviation of 0.53 (see Figure 4). One can visually see that most board members felt that chairs did not display laissez-faire leadership behaviors. However, several members rated chairs at a 3.0 as having a high level of laissez-faire leadership behaviors. No board member gave the chair a score above a 3 with relationship to this behavior. Overall, chairs were viewed as having very low leadership behaviors in this category.

Finally transformational leadership behavior was negatively skewed with a mean of 3.27 and standard deviation of 0.67 (see Figure 5). This histogram depicts an opposite picture from the previous. Transformational leadership behaviors ranked higher than any other behavior for board members. In fact, no board member received a score of zero. More board members gave chairs a 3.8 on a scale of zero to 4 than any other number. The next highest score was a full 4. These histograms show that the board members clearly indicated these chairs had high transformational leadership, evenly distributed transactional leadership, and low laissez-faire leadership behaviors. The next variable analyzed was chair effectiveness as measured by the MLQ questionnaire. A brief discussion of the statistics surrounding this dependent variable follows.

Chair Effectiveness

Multiple questions were asked and compiled to measure effectiveness of the chair. The MLQ asked board members to indicate their perception of chair effectiveness through a series of four questions. The questions along with the corresponding descriptive statistics may be observed in Table 8.

An analysis of Table 8 shows the mean for each question was above a 3 for all four questions on a scale of 0-4. Standard deviations ranged from .53 to 1.14. On a scale of 0-4, each question received a maximum of 4. However, question 3 received no rating under a 2, and question 4 received no rating under a 1. When taking the average of the four questions, we find a mean of 3.27 with a standard deviation of 0.62, indicating that chairs received high scores relating to board member perception of chair effectiveness. In addition, the low standard deviation provides stronger reliability of the data. The next series of variables reviewed deal with hospital effectiveness.

Table 8

Effectiveness Questions From MLQ

Questions	Min.	Max.	Mean	SD
1. Is effective in meeting my job-related needs.	0.00	4.00	3.24	0.95
2. Is effective in representing me to higher authority.	0.00	4.00	3.08	1.14
3. Is effective in meeting organizational requirements.	2.00	4.00	3.70	0.53
4. Leads a group that is effective.	1.00	4.00	3.63	0.67

Note. N = 123. Effectiveness, as measured by the MLQ, is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always.

Hospital Effectiveness

Hospital financial effectiveness was measured through EBITDA percentage (see Table 7). The lowest EBITDA was -6.30% while the highest was 28.60%. The average EBITDA was at 12.23% with a standard deviation of 7.22%. A second measure of hospital effectiveness relates to clinical effectiveness measured through CM. The sum of CM was assigned to each hospital. One hospital was so small that CM were not tracked and thus received a 0 percentage ranking. The maximum sum of CM received by a hospital was 99.05%. The average sum of CM was 94.26% with a standard deviation of 17.45. Table 7 provides additional details and descriptive statistics for the CM. A final measure of hospital effectiveness was the HCAHPS scores, which measure patient satisfaction. The ratings used were percentage of the top box scores received by the hospitals between January-September 2012. The lowest score was 57% and the highest was 85.30%. The variable has a mean of 69.85% and a standard deviation of 8.13. In the final section, demographic variables are reviewed.

Demographic Variables

Finally, chair age, longevity, and education were also measured as independent variables in the study (see Table 7). The chairs' ages ranged from 38 to 68 years old with a mean of 57.12 and a standard deviation of 10.13. The chairs' longevity ranged from 7 months to 12.9 years, indicating a wide range of tenure among chairs. The longevity variable has a mean of 61.74 months (5 years) with a standard deviation of 32.25 (3 years) indicating a robust variation in the tenure of chairs. A final demographic variable was chair education. The educational levels range from a bachelor's degree to terminal degrees. A majority of the chairs had master's degrees, while one had a bachelor's degree and one had a PhD. In the following section, this study will review the correlation table reviewing correlations between variables.

Pearson r Correlations

Pearson *r* correlations were run for each variable studied which came to a total of 56 correlations. The results appear in Table 9. This was done to clarify relationships between key variables. Although the following sections will not provide a comprehensive review of each correlation, they will assess those results which align with the research questions.

Table 9

Correlation Matrix

Variables	Value	1	2	3	4	5	6	7	8	9	10
Transactional (1)	r	1									
	р										
Transformational (2)	R	.483	1								
	Р	.000									
Laissez-faire (3)	r	.046	142	1							
	р	.612	.116								
Effectiveness (4)	r	.382	.869	112	1						
	р	.000	.000	.178							
EBITDA (5)	r	279	109	119	019	1					
	р	.002	.231	.191	.831						
HCAHPS (6)	r	125	187	105	160	.169	1				
	р	.174	.041	.257	.083	.066					
Chair Age (7)	r	032	201	067	169	203	.560	1			
	р	.729	.026	.463	.061	.024	.000				
Chair Longevity (8)	r	.047	112	.043	023	233	.221	.638	1		
	р	.608	.216	.641	.803	.010	.016	.000			
Chair Education (9)	r	050	.194	102	.235	.349	043	391	053	1	
	р	.584	.031	.261	.009	.000	.643	.000	.560		
CM (10)	r	127	074	127	044	.331	.209	.110	070	036	1
	р	.162	.417	.163	.632	.000	.023	.228	.444	.690	

Note. Board chair effectiveness and leadership behaviors, as measured by the MLQ, is an ordinal scale as 0 = N at all, 1 = O nce in a while, 2 = S ometimes, 3 = F airly often, 4 = F requently, if not always. The longevity variable is coded in months. The education variable is coded ordinally: 1 = B achelor's, 2 = M aster's, 3 = D octorate.

Relationship Between Chair Leadership Behaviors and Effectiveness

There was a statistically significant and positive relationship between chair transformational leadership behaviors and effectiveness (r = .869; p = .000). In addition, there was a statistically significant and positive relationship between transactional chair leadership behaviors and effectiveness (r = .382; p = .000). The results showed there was a statistically significant and positive relationship between chair transformational leadership behaviors and chair transactional leadership behaviors (r = .483; p = .000). There was no statistically significant relationship between chair laissez-faire behaviors and effectiveness (r = .112; p = .178).

Relationship Between Chair Formal Education and Effectiveness

There was a statistically significant and positive relationship between chair education and effectiveness (r = .235; p = .009). Also, there was a statistically significant and positive relationship between chair education and EBITDA (r = .349; p = .000). There was a statistically significant and positive relationship between chair education and chair transformational leadership (r = .194; p = .031). Finally, there was a statistically significant and negative relationship between chair education and age (r = -.391; p = .000).

Relationship Between Chair Longevity and Effectiveness

There was no statistical significance between chair longevity and effectiveness (r = -.023; p = .803). Also there was a statistically significant and negative relationship between chair longevity and EBITDA (r = -.233; p = .010). Finally there was a

statistically significant and positive relationship between chair longevity and HCAHPS (r = .221; p = .016).

Relationship Between Chair Age and Effectiveness

While nearing statistical significance, there was no statistical significance between age and chair effectiveness (r = -.169; p = .061). Also there was a statistically significant and negative relationship between chair age and EBITDA (r = -.203; p =.024). Finally, there was a statistically significant and positive relationship between chair age and HCAHPS (r = .560; p = .000).

Relationship Between Chair Effectiveness and Hospital Effectiveness

There was no statistical significance between chair effectiveness and EBITDA (r = -.019; p = .831). There was no statistical significance between chair effectiveness and HCAHPS (r = -.160; p = .083). Finally, there was no statistical significance between chair effectiveness and CM (r = -.004; p = .632).

Further analysis of correlations will appear later in this chapter when hypotheses are discussed. The following section will report statistical results from correlations and regression analysis by each hypothesis in this study.

Inferential Statistics and Specific Research Hypothesis and Regression Analysis

The hypotheses described in Chapter 3 were analyzed using statistical procedures. These procedures include Pearson's *r* correlation, *F*-tests, and independent *t*-tests. Finally, both alpha levels of .01 and .05 were used to determine the significance of relationships. A .01 level decreases the probability of making a Type I error when sample size remains constant.

The first general question explores the relationship that exists between hospital chair leadership behaviors and chair organizational effectiveness as perceived by board members as measured by the Multifactor Leadership Questionnaire (MLQ).

Hypothesis 1a predicted there was a significant relationship between transformational leadership and chair effectiveness as measured by the MLQ. Correlations were run using Pearson's Correlations Coefficient to discover if there is a relationship. The analysis of the data found there is a statistically significant and positive relationship between transformational leadership and chair effectiveness. The Pearson rvalue =.869 and p is .000. The results are illustrated in Table 9 for Specific Hypothesis 1a.

Hypothesis 1b predicted there was a significant relationship between transactional leadership and perceived chair effectiveness as measured by the MLQ. Again, correlations were run using Pearson's Correlations Coefficient to discover if there was a relationship. The analysis of the data found there was a statistically significant and positive relationship between transactional leadership and perceived board effectiveness as measured by the MLQ. The Pearson *r* value =.338 and *p* is .000. The results are illustrated in Table 9 for Hypothesis 1b.

The final hypothesis (hypothesis 1c) related to the first general question, which predicted there was a significant relationship between laissez-faire leadership and perceived chair effectiveness as measured by the MLQ. Correlations were run using Pearson's Correlations Coefficient to discover if there was a relationship. The analysis of

the data found there was no statistically significant relationship between laissez-faire leadership and perceived chair effectiveness as measured by the MLQ. The Pearson r value = -.122 and p is .178. The results are illustrated in Table 9 for Hypothesis 1c.

The second general question explores the relationship between chair formal education and chair effectiveness. The following hypothesis attempts to answer the general question.

Hypothesis 2a predicted that chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ than those with a lower level of education. Correlations were run using Pearson's Correlations Coefficient to discover if there was a relationship. The analysis of the data found there was a statistically significant and positive relationship between higher levels of education and scores of effectiveness as perceived by board members and as measured by the MLQ. The Pearson r value =.235 and p is .000. The results are illustrated in Table 9 for Specific Hypothesis 2a.

Hypothesis 2b predicted chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ, independent of age. The analysis of the data showed support for this hypothesis in that chairs' education was statistically significant and positively related to the chairs' effectiveness. This hypothesis was significant at the .05 alpha level. The *F* value is 3.972 and *df* 1 is 2 and *df* 2 is 120. The *p* value of .021 was significant. The results are illustrated in Table 10 for specific hypothesis 2b. The other variable of significance was chair education at the .05 alpha level with a *p* value of .041. The chair education was statistically significant and positively related in accounting for a significant amount of unique variance in predicting

chair effectiveness when controlling for age. The variable of chair age was non-

significant. These results are illustrated in Table 11.

Table 10

Model Summary of Chair Education Relationship to Effectiveness (Hypotheses 2a and 2b).

Model	<i>R</i> ²	Adj R ²	df1/df2	F	Р	Sig.
	.062	.046	2/120	3.972	.021	*

* $p \le .05$ and significant at the .05 alpha level. Board chair effectiveness as measured by the MLQ.

Table 11

Summary of Regression Analysis for Chair Education Relationship to Effectiveness (Hypotheses 2a and 2b)

Descriptive Variable	В	Т	р	Sig.
Constant	3.346	6.573	.000	
Chair age	006	952	.343	
Chair education	.241	2.069	.041	*

Note. Chair education variable coded ordinally: 1 = Bachelor's, 2 = Master's, 3 = Doctorate. * $p \le .05$ and significant at the .05 alpha level.

Hypothesis 2c predicted that chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ, independent of longevity, than those with a lower level of education. The analysis of the data showed that this hypothesis was statistically significant at the .05 alpha level. The *F* value is 3.500 and *df* 1 is 2 and *df* 2 is 120. The *p* value of .033 was statistically significant at the .05 alpha

level. For specific hypotheses 2c see Table 12, which indicates chair education was statistically significant at the .01 level with a p value of 010. Chair education was

Table 12

Model Summary of Chair Education Relationship to Effectiveness Independent of Longevity (Hypothesis 2c)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.	
	.055	.039	2/120	3.500	.033	*	

* $p \leq .05$ and significant at the .05 alpha level. Board chair effectiveness as measured by the MLQ.

positively related in accounting for a significant amount of unique variance in predicting chair effectiveness when controlling for longevity. The variable of chair longevity is nonsignificant. The specific variable results are illustrated in Table 13.

Table 13

Summary of Regression Analysis for Chair Education Relationship to Effectiveness Independent of Longevity (Hypothesis 2c)

Descriptive Variable	В	Т	Р	Sig.
Constant	2,920	11.783	.000	
Chair Longevity	.000	116	.908	
Chair Education	.283	2.633	.010	**

Note. Chair education variable coded ordinally: 1 = Bachelor's, 2 = Master's, 3 = Doctorate. ** $p \le .01$ and significant at the .01 alpha level. Hypothesis 2d predicted chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ, independent of EBITDA, HCAHPS, CM, than those with lower levels of education. The analysis of the data showed this hypothesis was statistically significant at the .05 alpha level. The *F* value is 2.614 and *df* 1 is 4 and *df* 2 is 114. The *p* value of .039 is significant at the .05 alpha level. The results are illustrated in Table 14 for Specific Hypothesis 2d.

Table 14

Model Summary of Chair Education Relationship to Effectiveness Independent of EBITDA and HCAHPS (Hypothesis 2d)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.084	.052	4/114	2.614	.039	*

* $p \le .05$ and significant at the .05 alpha level. Board chair effectiveness as measured by the MLQ.

The only statistically significant variable in this model is chair education, which was statistically significant at the .05 alpha level with a *p* value of .011. The chair education was positively related in accounting for a significant amount of unique variance in predicting chair effectiveness when controlling for EBITDA, HCAHPS, and CM. This information is displayed in Table 15.

Hypothesis 2e stated the educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA and CM. Regression analysis was performed and the values are shown in Tables 16 and 17. As one can see from Table 16 there is overall statistical significance. Therefore further analysis was provided regarding Table 15

Summary of Regression Analysis for Chair Education Relationship to Effectiveness Independent of EBITDA and HCAHPS (Hypothesis 2d)

Descriptive Variable	В	Т	Р	Sig.
Constant	4.346	1.112	.268	
HCAHPS	011	-1.423	.155	
EBITDA	008	671	.503	
СМ	006	152	.880	
Chair Education	.310	2.595	.011	**

Note. Chair education variable coded ordinally: 1 = Bachelor's, 2 = Master's, 3 = Doctorate. ** $p \le .01$ and significant at the .01 alpha level. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A p value of .016 is a correction for adjusted Type I error buildup.

Table 16

Model Summary for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA and CM; EBITDA Controlling for HCAHPS and CM; and CM Controlling for HCAHPS and EBITDA (Hypotheses 2e, 2f, & 2g)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.190	.169	3/115	9.016	.000	**

** $p \le .01$ and significant at the .01 alpha level. Board chair effectiveness as measured by the MLQ.

individual variables in Table 17. The analysis revealed that the level of chair education did not account for any statistical significant and unique variance in predicting HCAHPS when controlling for EBITDA and core measure. The HCAHPS variable was not significant at the .05 alpha level with a p value of .335. As such, the data do not support hypothesis 2e.

Table 17

Summary of Regression Analysis for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA and CM; EBITDA Controlling for HCAHPS and CM; and CM Controlling for HCAHPS and EBITDA (Hypotheses 2e, 2f, & 2g)

Descriptive Variable	В	Т	Р	Sig.
Constant	8.790	2.994	.003	
HCAHPS	006	928	.335	
EBITDA	.041	5.175	.000	**
СМ	072	2.331	.022	*

* $p \le .05$ and significant at the .05 alpha level. ** $p \le .01$ and significant at the .01 alpha level. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A p value of .016 is a correction for adjusted Type I error buildup.

Hypothesis 2f stated the educational level of the chair would predict unique variance in EBITDA when controlling for HCAHPS and CM. Regression analysis was performed and the values are shown in Tables 16 and 17. As one can see from Table 16, there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 17. The analysis reveals that the level of chair education was positively related in accounting for statistical significance and unique variance in predicting EBITDA when controlling for HCAHPS and core measure. The variable is significant at the .01 alpha level with a *p* value of .000. As such, the data supported hypothesis 2f.

Hypothesis 2g stated the educational level of the chair would predict unique variance in CM when controlling for HCAHPS and EBITDA. Regression analysis was performed and the values are shown in Tables 16 and 17. As one can see from Table 17 there is overall statistical significance. Therefore further analysis is provided regarding

individual variables in Table 17. The analysis reveals that the level of chair education was negatively related in accounting for statistical significance and unique variance in predicting CM when controlling for HCAHPS and EBITDA. The CM variable is statistically significant at the .05 alpha level with a p value of .022. As such, the data supported hypothesis 2g.

Hypothesis 2h stated the educational level of the chair would predict unique variance in EBITDA when controlling for HCAHPS, CM, and age. Regression analysis was performed and the values are shown in Tables 18 and 19. As one can see from Table 18, there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 19. The analysis reveals that the level of chair education was positively related in accounting for statistical significance and unique variance in predicting EBITDA when controlling for HCAHPS, core measure, and age. The EBITDA variable is significant at the .01 alpha level with a *p* value of .000. As such, the data supported hypothesis 2h.

Hypothesis 2i stated the educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA, CM, and age. Regression analysis was performed and the values are shown in Tables 18 and 19. As one can see from Table 18, there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 19. The analysis reveals that the level of chair education was positively related in accounting for statistical significance and unique variance in predicting HCAHPS when controlling for EBITDA, core measure, and age. The variable is significant at the .01 alpha level with a *p* value of .001. As such, the data supported hypothesis 2i.

Table 18

Model Summary for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Age; EBITDA Controlling for HCAHPS, CM, and Age; and CM Controlling for HCAHPS, EBITDA, and Age (Hypotheses 2h, 2i, & 2j)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.319	.295	4/114	13.367	.000	**

** $p \le .01$ and significant at the .01 alpha level.

Table 19

Summary of Regression Analysis for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Age; EBITDA Controlling for HCAHPS, CM, and Age; and CM Controlling for HCAHPS, EBITDA, and Age (Hypotheses 2h, 2i, & 2j)

Descriptive Variable	В	Т	Р	Sig.
Constant	11.892	4.270	.000	
HCAHPS	.017	2.266	.025	*
СМ	-102	-3.501	.001	**
EBITDA	.030	3.943	.000	**
Age	028	-4.645	.000	**

Note. Education was used as the dependent variable in SPSS.

* $p \le .05$ and significant at the .05 alpha level. ** $p \le .01$ and significant at the .01 alpha level. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A p value of .016 is a correction for adjusted Type I error buildup.

Hypothesis 2j stated the educational level of the chair would predict unique variance in CM when controlling for HCAHPS, EBITDA, and age. Regression analysis was performed and the values are shown in Tables 18 and 19. As one can see from Table 18, there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 19. The analysis reveals that the level of chair education was negatively related in accounting for statistical significance and unique variance in predicting CM when controlling for HCAHPS, EBITDA, and age. The CM variable is significant at the .01 alpha level with a *p* value of .001. As such, the data supported hypothesis 2j.

Hypothesis 2k stated the educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair longevity. Regression analysis was performed and the values are shown in Tables 20 and 21. As one can see from Table 20, there was overall significance. Therefore further analysis is provided regarding individual variables in Table 21. The analysis reveals that the level of chair education did not account for statistical significant and unique variance in predicting EBITDA when controlling for HCAHPS, core measure, and longevity. The HCAHPS variable was not significant at the .05 alpha level with a p value of .275. As such, the data do not support hypothesis 2k.

Table 20

Model Summary for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Chair Longevity; EBITDA Controlling for HCAHPS, CM, and Chair Longevity; and CM Controlling for HCAHPS, EBITDA, and Chair Longevity (Hypotheses 2k, 2l, & 2m)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.195	.166	4/114	6.887	.000	**

** $p \le .01$ and significant at the .01 alpha level. Board chair effectiveness as measured by the MLQ.

Hypothesis 21 stated the educational level of the chair would predict unique

variance in CM when controlling for EBITDA, HCAHPS and chair longevity. Regression

analysis was performed and the values are shown in Table 20 and 21. As one can see

from Table 20 there is overall statistical significance. Therefore further analysis is

provided regarding individual variables in Table 21. The analysis reveals that the level of

Table 21

Summary of Regression Analysis for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Chair Longevity; EBITDA Controlling for HCAHPS, CM, and Chair Longevity; and CM Controlling for HCAHPS, EBITDA, and Chair Longevity (Hypotheses 2k, 2l & 2m)

Descriptive Variable	В	Т	р	Sig.
Constant	8.836	3.004	.003	
HCAHPS	007	-1.097	.275	
СМ	073	-2.343	.021	*
EBITDA	.043	5.193	.000	**
Longevity	.001	.771	.442	

Note. Education was used as the dependent variable in SPSS.

* $p \le .05$ and significant at the .05 alpha level. ** $p \le .01$ and significant at the .01 alpha level. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A p value of .016 is a correction for adjusted Type I error buildup.

chair education was negatively related in accounting for statistical significance and unique variance in predicting CM when controlling for EBITDA, HCAHPS, and chair longevity. The variable is significant at the .05 alpha level with a p value of .021. As such, the data supported hypothesis 2l.

Hypothesis 2m stated that the educational level of the chair would predict unique

variance in EBITDA when controlling for HCAHPS, CM, and chair longevity.

Regression analysis was performed and the values are shown in Tables 20 and 21. As one can see from Table 20 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 21. The analysis reveals that the level of chair education was positively related in accounting for statistical significant and unique variance in predicting EBITDA when controlling for HCAHPS, CM, and longevity. The EBITDA variable is significant at the .01 alpha level with a *p* value of .000. As such, the data supported hypothesis 2m.

Hypothesis 2n stated the educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair effectiveness. Regression analysis was performed and the values are shown in Tables 22 and 23. As one can see from Table 22 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 23. The analysis reveals that the level of chair education did not account for statistical significance and unique variance in predicting HCAHPS when controlling for EBITDA, core measure, and chair

Table 22

Model Summary for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Chair Effectiveness; EBITDA Controlling for HCAHPS, CM, and Chair Effectiveness; CM Controlling for HCAHPS, EBITDA, and Chair Effectiveness; and Chair Effectiveness Controlling for HCAHPS, EBITDA, and CM (Hypotheses 2n, 2o, 2p & 2q)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.236	.209	4/114	8.783	.000	**

** $p \le .01$ and significant at the .01 alpha level. Board chair effectiveness as measured by the MLQ.

effectiveness. The HCAHPS variable was not significant at the .05 alpha level with a p value of .582. As such, the data do not support hypothesis 2n.

Hypothesis 20 stated the educational level of the chair would predict unique variance in CM when controlling for EBITDA, HCAHPS, and chair effectiveness. Regression analysis was performed and the values are shown in Tables 22 and 23. As one can see from Table 22 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 23. The analysis reveals that the level of chair education was negatively related in accounting for statistical significance and unique variance in predicting CM when controlling for EBITDA, HCAHPS, and chair

Table 23

Summary of Regression Analysis for Chair Education Predicting a Unique Variance in: HCAHPS Controlling for EBITDA, CM, and Chair Effectiveness; EBITDA Controlling for HCAHPS, CM, and Chair Effectiveness; CM Controlling for HCAHPS, EBITDA, and Chair Effectiveness; and Chair Effectiveness Controlling for HCAHPS, EBITDA, and CM (Hypotheses 2n, 2o, 2p, & 2q)

Descriptive Variable	В	Т	Р	Sig.
Constant	7.518	2.586	.011	
HCAHPS	003	552	.582	
СМ	067	-2.213	.029	*
EBITDA	.040	5.177	.000	**
Effectiveness (MLQ)	.180	2.595	.011	*

Note. N = 123, Board chair effectiveness as measured by the MLQ is an ordinal scale: 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always.

* $p \le .05$ and significant at the .05 alpha level. ** $p \le .01$ and significant at the .01 alpha level. Education was used as the dependent variable in SPSS. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A p value of .016 is a correction for adjusted Type I error buildup.

effectiveness. The variable is significant at the .05 alpha level with a p value of .029. As such, the data supported hypothesis 20.

Hypothesis 2p stated the educational level of the chair would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair effectiveness. Regression analysis was performed and the values are shown in Tables 22 and 23. As one can see from Table 22 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 23. The analysis reveals that the level of chair education was positively related in accounting for a significant and unique variance in predicting EBITDA when controlling for HCAHPS, CM, and chair effectiveness. The EBITDA variable is statistically significant at the .01 alpha level with a p value of .000. As such, the data supported hypothesis 2p.

Finally, hypothesis 2q stated the educational level of the chair would predict unique variance in chair effectiveness when controlling for HCAHPS, CM, and EBITDA. Regression analysis was performed and the values are shown in Tables 22 and 23. As one can see from Table 22 there is overall significance. Therefore further analysis is provided regarding individual variables in Table 23. The analysis reveals that the level of chair education was positively related in accounting for statistical significance and unique variance in predicting effectiveness when controlling for HCAHPS, CM, and EBITDA. The effectiveness variable is statistically significant at the .05 alpha level with a *p* value of .011. As such, the data supported hypothesis 2q.

The third general question of this study explores the relationship between chair longevity and effectiveness. The following specific hypotheses answer this question.

Hypothesis 3a predicted chairs with more years of chair experience will have a higher score of effectiveness as measured by the MLQ than those with fewer years of chair experience. The analysis of the data showed that this hypothesis was not statistically significant at the .05 alpha level. The *F* value is .063 and *df* 1 is 1 and *df* 2 is 121. The *p* value of .803 is non-significant at the .05 alpha level. The results are illustrated in Table 24 for specific hypothesis 3a. The variable of longevity is not statistically significant, which is displayed in Table 25.

Table 24

Model Summary for the Relationship Between Chair Longevity and Effectiveness (Hypothesis 3a)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.001	008	1/121	.063	.803	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 25

Summary of Regression Analysis for the Relationship Between Chair Longevity and Effectiveness (Hypothesis 3a)

Descriptive Variable	В	Т	р	Sig.
Constant	3.471	25.472	.000	
Longevity	.000	250	.803	

* $p \le .05$ and significant at the .05 alpha level. ** $p \le .01$ and significant at the .01 alpha level.

Hypothesis 3b predicted chairs with more years of chair experience will have a higher score of effectiveness as measured by the MLQ, independent of age, than those with a few years of chair experience. The analysis of the data showed that this hypothesis is not statistically significant at the .05 alpha level. The *F* value is 2.560 and *df* 1 is 2 and *df* 2 is 120. The *p* value of .081 is not statistically significant at the .05 alpha level. The results are illustrated in Table 26 for specific hypothesis 3b. The statistically significant at the variable in this model is age, which is statistically significant at the .05 alpha level with a *p* value of .026. The variable of age is negatively related to chair effectiveness when controlling for longevity as can be observed in Table 27.

Table 26

Model Summary for the Relationship Between Chair Longevity and Effectiveness, Independent of Age (Hypothesis 3b)

Model	R^2	Adj R ²	df1/df2	F	р	Sig.
	.041	.025	2/120	2.560	.081	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 27

Summary of Regression Analysis for the Relationship Between Chair Longevity and Effectiveness, Independent of Age (Hypothesis 3b)

Descriptive Variable	В	Т	Р	Sig.
Constant	4.275	11.190	.000	
Longevity	.003	1.240	.218	
Age	018	-2.249	.026	*

* $p \leq .05$ and significant at the .05 alpha level.

Hypothesis 3c predicted chairs with more years of chair experience will have a higher score of effectiveness as measured by the MLQ, independent of chair education, than those with fewer years of chair experience. The analysis of the data showed that this hypothesis is statistically significant at the .05 alpha level. The F value is 3.500 and df 1 is 2 and df 2 is 120. The p value of .033 is statistically significant at the .05 alpha level. The statistically significant at the .05 alpha level. The results are illustrated in Table 28 for specific hypothesis 3c. The statistically significant at the .01 alpha level with a p value of .010. The variable of education is positively related to chair effectiveness as can be observed in Table 29.

Table 28

Model Summary for the Relationship Between Chair Longevity and Effectiveness, Independent of Chair Education (Hypothesis 3c)

Model	R^2	Adj R ²	df1/df2	F.	р	Sig.
	.055	.039	2/120	3.500	.033	*

Note. NS = not significant.

* $p \le .05$ and significant at the .05 alpha level. Board chair effectiveness as measured by the MLQ.

Hypothesis 3d predicted that chairs with more years of chair experience will have a higher score of effectiveness as measured by the MLQ, independent of EBITDA, HCAHPS, CM, than those with fewer years of chair experience. The analysis of the data showed that this hypothesis is not statistically significant at the .05 alpha level. The Fvalue is .887 and df 1 is 4 and df 2 is 114. The p value of .474 is not statistically
Summary of Regression Analysis for the Relationship Between Chair Longevity and Effectiveness, Independent of Age (Hypothesis 3c)

Descriptive Variable	В	Т	р	Sig.
Constant	2.920	11.783	.000	
Education	.283	2.633	.010	**
Longevity	.000	116	.908	

Note. Board chair effectiveness as measured by the MLQ. The education variable is coded ordinally: 1 = Bachelor's, 2 = Master's, 3 = Doctorate.

** $p \le .01$ and significant at the .01 alpha level.

significant at the .05 alpha level. The results are illustrated in Table 30 for Specific

hypothesis 3d. All specific variables are not statistically significant as can be observed in

Table 31.

Table 30

Model Summary for the Relationship Between Chair Longevity and Effectiveness, Independent of EBITDA, HCAHPS, and CM (Hypothesis 3d)

Model	<i>R</i> ²	Adj R ²	<i>df</i> 1/ <i>df</i> 2	F	Р	Sig.
	.030	004	4/114	.887	.474	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Hypothesis 3e predicted chairs with more years of chair experience will have

higher EBITDA/HCAHPS/CM than those with fewer years of chair experience.

Correlations were run using Pearson's Correlations Coefficient to discover if there is a

Summary of R	legression A	nalysis for	· Relationsh	ip Between	Chair I	Longevity	and
Effectiveness,	Independen	t of EBITL	DA, HCAHP	PS, and CM	(Hypot	hesis 3d)	

Descriptive Variable	В	Т	р	Sig.
Constant	7.088	1.830	.070	
EBITDA	.006	.523	.602	
HCAHPS	014	-1.606	.111	
СМ	029	703	.483	
Longevity	.000	.183	.855	

Note. Board chair effectiveness as measured by the MLQ. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A *p* value of .016 is a correction for adjusted Type I error buildup.

relationship. The analysis of the data found there was a statistically significant relationship between EBITDA and chair longevity. The longer the chairs serve, the lower the EBITDA of the hospital. The Pearson r value = -.233 and p is .010. The analysis also shows there is a positive relationship between HCAHPS and chair longevity. The Pearson r value is .221 and p is .016. Finally, the analysis shows that CM and longevity have no statistically significant relationship. The Pearson r is -.070 and the p value is .444. The results are illustrated in Table 32 for specific hypothesis 3e.

Hypothesis 3f stated chair longevity would predict unique variance in EBITDA when controlling for HCAHPS, CM, and age. Regression analysis was performed and the values are shown in Tables 33 and 34. As one can see from Table 33 there was overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 34. The analysis reveals chair longevity did not account for statistical

Variable	1 <i>r/p</i>	2 r/p	3 r/p	4 <i>r/p</i>	
Longevity (1)	1				
HCAHPS (2)	.221/.016	1			
EBITDA (3)	233/.010	.169/.066	1		
CM (4)	070/.444	.209/.023	.331/.000	1	

Pearson r Correlations for the Relationship Between Chair Longevity and EBITDA/HCAHPS, and CM (Hypothesis 3e)

Note. Board chair leadership behaviors as measured by the MLQ. The longevity variable is coded in months.

significance and unique variance in predicting EBITDA when controlling for HCAHPS, CM, and chair age. The EBITDA variable was not statistically significant at the .05 alpha level with a p value of .485. As such, the data do not support hypothesis 3f.

Hypothesis 3g stated chair longevity would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair age. Regression analysis was performed and the values are shown in Tables 33 and 34. As one can see from Table 33 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 34. The analysis reveals chair longevity was negatively related in accounting for statistical significance and unique variance in predicting HCAHPS when controlling for EBITDA, CM, and chair age. The variable is statistically significant at the .01 alpha level with a *p* value of .004. As such, the data supported hypothesis 3g.

Hypothesis 3h stated chair longevity would predict unique variance in CM when

Model Summary for Chair Longevity Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Age; HCAHPS When Controlling for CM and Age; and CM When Controlling for EBITDA, HCAHPS, and Age (Hypotheses 3f, 3g, & 3h)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.694	.463	4/114	26.461	.000	**

** $p \le .01$ and significant at the .01 alpha level. Board chair effectiveness as measured by the MLQ.

Table 34

Summary of Regression Analysis for Chair Longevity Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Age; HCAHPS When Controlling for CM and Age; and CM When Controlling for EBITDA, HCAHPS, and Age (Hypotheses 3f, 3g, & 3h)

Descriptive Variable	В	Т	Р	Sig.
Constant	-329.501	-2.415	.017	
EBITDA	282	744	.485	
HCAHPS	-1.082	-2.935	.004	**
CM	3.266	2.280	.024	*
Age	2.645	8.919	.000	**

Note. Board chair effectiveness as measured by the MLQ.

* $p \leq .05$ and significant at the .05 alpha level.

** $p \le .01$ and significant at the .01 alpha level. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A *p* value of .016 is a correction for adjusted Type I error buildup.

controlling for HCAHPS, EBITDA, and chair age. Regression analysis was performed and the values are shown in Tables 33 and 34. As one can see from Table 33 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 34. The analysis reveals that the level of chair longevity was positively related in accounting for statistical significance and unique variance in predicting CM when controlling for HCAHPS, core EBITDA, and chair age. The CM variable is statistically significant at the .05 alpha level with a *p* value of .024. As such, the data supported hypothesis 3h.

Hypothesis 3i stated chair longevity would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair effectiveness. Regression analysis was performed and the values are shown in Tables 35 and 36. As one can see from Table 35 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 36. The analysis reveals that chair longevity was negatively related in accounting for statistically significant and unique variance in predicting EBITDA when controlling for HCAHPS, CM, and chair effectiveness. The EBITDA variable was statistically significant at the .05 alpha level with a *p* value of .006. As such, the data support hypothesis 3i.

Table 35

Model Summary for Chair Longevity Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Effectiveness; HCAHPS When Controlling for EBITDA, CM, and Chair Effectiveness; CM When Controlling for EBITDA, HCAHPS, and Chair Effectiveness; and Chair Effectiveness When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 3i, 3j, 3k, & 3l)

Model	<i>R</i> ²	Adj R ²	df1/df2	F	Р	Sig.
	.120	.089	4/114	3.883	.005	**

** $p \le .01$ and significant at the .01 alpha level. Board chair effectiveness as measured by the MLQ.

Summary of Regression Analysis for Predicting Chair Longevity Will Have a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Effectiveness; HCAHPS When Controlling for EBITDA, CM, and Chair Effectiveness; CM When Controlling for EBITDA, HCAHPS, and Chair Effectiveness; and Chair Effectiveness When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 3h, 3i, 3j, 3k, & 3l)

Descriptive Variable	В	Т	Р	Sig.
Constant	-43.118	246	.806	
EBITDA	-1.312	-2.787	.006	**
HCAHPS	1.073	2.914	.004	**
СМ	.446	.245	.807	
Effectiveness (MLQ)	.764	.183	.855	

Note. N = 123. Board chair effectiveness as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always. Longevity was used as the dependent variable in SPSS.

** $p \le .01$ and significant at the .01 alpha level. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A *p* value of .016 is a correction for adjusted Type I error buildup.

Hypothesis 3j stated chair longevity would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair effectiveness. Regression analysis was performed and the values are shown in Tables 35 and 36. As one can see from Table 34 there is overall significance. Therefore further analysis is provided regarding individual variables in Table 36. The analysis reveals that chair longevity was positively related in accounting for statistical significance and unique variance in predicting HCAHPS when controlling for EBITDA, CM, and chair effectiveness. The variable is significant at the .01 alpha level with a *p* value of .004. As such, the data supported hypothesis 3j.

Hypothesis 3k stated chair longevity would predict unique variance in CM when controlling for HCAHPS, EBITDA, and chair effectiveness. Regression analysis was performed and the values are shown in Tables 35 and 36. As one can see from Table 35 there is overall significance. Therefore, further analysis is provided regarding individual variables in Table 36. The analysis reveals that chair longevity did not account for statistical significance and unique variance in predicting CM when controlling for HCAHPS, EBITDA, and chair effectiveness. The CM variable is not statistically significant at the .05 alpha level with a *p* value of .807. As such, the data did not support hypothesis 3k.

Hypothesis 31 stated chair longevity would predict unique variance in chair effectiveness when controlling for HCAHPS, EBITDA, and CM. Regression analysis was performed and the values are shown in Tables 35 and 36. As one can see from Table 35 there is overall significance. Therefore further analysis is provided regarding individual variables in Table 36. The analysis reveals that chair longevity did not account for statistical significance and unique variance in predicting chair effectiveness when controlling for HCAHPS, EBITDA, and CM. The chair effectiveness variable is not statistically significant at the .05 alpha level with a *p* value of .855. As such, the data did not support hypothesis 31.

The fourth general question explores the relationship between the chair age and effectiveness. The following hypotheses began to answer the question:

Hypothesis 4a predicted that chairs who are older will have a higher score of effectiveness as measured by the MLQ than those chairs who are younger. The analysis of the data showed this hypothesis was not statistically significant at the .05 alpha level. The *F* value is 3.568 and df 1 is 1 and df 2 is 121. The *p* value of .061 is not statistically significant at the .05 alpha level. The results are illustrated in Table 37 for specific

125

hypothesis 4a. Age is not a statistically significant variable with relationship to chair effectiveness as illustrated in Table 38.

Table 37

Model Summary for the Relationship Between Chair Age and Effectiveness (Hypothesis 4a)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.029	.021	1/121	3.568	.061	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 38

Summary of Regression Analysis for the Relationship Between Chair Age and Effectiveness (Hypothesis 4a)

Descriptive Variable	В	Т	р	Sig.
Constant	65.588	14.346	.000	
Age	012	-1.889	.061	

Note. Board chair effectiveness as measured by the MLQ.

Hypothesis 4b predicted chairs who are older will have a higher score of effectiveness as measured by the MLQ, independent of longevity, than those who are younger. The analysis of the data showed this hypothesis was not statistically significant at the .05 alpha level. The *F* value is 2.560 and *df* 1 is 2 and *df* 2 is 120. The *p* value of .081 is not significant at the .05 alpha level. The results are illustrated in Table 39 for specific hypothesis 4b. The other variable of statistical significance is chair age at the .05

alpha level with a *p* value of .026. The variable of chair longevity is not statistically significant at a *p* value of .218 as displayed in Table 40.

Table 39

Model Summary for the Relationship Between Chair Age and Effectiveness Independent of Chair Longevity (Hypothesis 4b)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.041	.025	2/120	2.560	.081	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 40

Summary of Regression Analysis for the Relationship Between Chair Age and Effectiveness Independent of Chair Longevity (Hypothesis 4b)

Descriptive Variable	В	Т	р	Sig.
Constant	4.275	11.190	.000	
Age	018	.008	.026	*
Longevity	.003	.003	.218	

Note. Board chair effectiveness as measured by the MLQ. NS = not significant. * $p \le .05$ and significant at the .05 alpha level.

Hypothesis 4c predicted chairs who are older will have a higher score of effectiveness as measured by the MLQ, independent of chair education, than those who are younger. The analysis of the data showed this hypothesis was statistically significant at the .05 alpha level. The F value is 3.972 and df 1 is 2 and df 2 is 120. The p value of .021 is significant at the .05 alpha level. The results are illustrated in Table 41 for specific

hypothesis 4c. The statistically significant variable in this model is education, which is significant at the .05 alpha level with a p value of .041. The variable of age was not statistically significant at a p value of .343. The education variable was positively related in accounting for a statistically significant amount of unique variance in predicting levels of effectiveness. This information is displayed in Table 42.

Table 41

Model Summary for the Relationship Between Chair Age and Effectiveness Independent of Chair Education (Hypothesis 4c)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.249	.046	2/120	3.972	.021	*

** $p \le .01$ and significant at the .01 alpha level. Board chair effectiveness as measured by the MLQ.

Table 42

Summary of Regression Analysis for the Relationship Between Chair Age and Effectiveness Independent of Chair Education (Hypothesis 4c)

Descriptive Variable	В	Т	Р	Sig.
Constant	3.346	6.573	.000	
Age	006	952	.343	
Education	.241	2.069	.041	*

Note. Board chair effectiveness as measured by the MLQ. The education variable is coded ordinally: 1 = Bachelor's, 2 = Master's, 3 = Doctorate.

* $p \leq .05$ and significant at the .05 alpha level.

Hypothesis 4d predicted chairs who are older will have a higher score of effectiveness as measured by the MLQ, independent of EBITDA, HCAHPS, and CM,

than those who are younger. The analysis of the data showed this hypothesis was not statistically significant at the .05 alpha level. The F value is 1.273 and df 1 is 4 and df 2 is 114. The p value of .285 is non-significant at the .05 alpha level. The results are illustrated in Table 43 for specific hypothesis 4d. There are no statistically significant specific variables in this model as reflected in Table 44.

Table 43

Model Summary for the Relationship Between Chair Age and Effectiveness Independent of HCAHPS, EBITDA, and CM (Hypothesis 4d)

Model	R^2	Adj R ²	<i>df</i> 1/ <i>df</i> 2	F	Р	Sig.
	.043	.009	4/114	1.273	.285	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 44

Summary of Regression Analysis for the Relationship Between Chair Age and Effectiveness Independent of HCAHPS, EBITDA, and CM (Hypothesis 4d)

Descriptive Variable	В	Т	р	Sig.
Constant	8.249	2.081	.040	
EBITDA	.001	.097	.923	
HCAHPS	005	0.426	.671	
СМ	040	961	.339	
Chair Age	011	-1.236	.219	

Note. Board chair effectiveness as measured by the MLQ. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A *p* value of .016 is a correction for adjusted Type I error buildup.

Hypothesis 4e predicted chairs who are older will have higher

EBITDA/HCAHPS/CM than those who are younger. Correlations were run using Pearson's Correlations Coefficient to discover if there is a relationship. The analysis of the data found there is a positive and statistically significant relationship between HCAHPS and chair age. The Pearson r value = .560 and p is .000. The analysis also shows there is a negative and statistically significant relationship between EBITDA and chair age. The Pearson r value is -.203 and p is .024. Finally the analysis shows that CM have no statistically significant relationship to age. The Pearson r is .110 and p is .228. The results are illustrated in Table 45 for specific hypothesis 4e.

Table 45

	1	2	3	4
Variable	r/p	r/p	r/p	r/p
Age (1)	1			
HCAHPS (2)	.560/.000	1		
EBITDA (3)	203/.024	.169/.066	1	
CM (4)	.110/.228	.209/.023	.331/.000	1

Pearson r Correlations for the Relationship Between Chair Age and HCAHPS, EBITDA, and CM (Hypothesis 4e)

Hypothesis 4f stated chair age would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair longevity. Regression analysis was performed and the values are shown in Tables 46 and 47. As one can see from Table 46 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 47. The analysis reveals chair age was negatively related in accounting for a statistically significant and unique variance in predicting EBITDA when controlling

for HCAHPS, CM, and chair longevity. The EBITDA variable was significant at the .05

alpha level with a p value of .043. As such, the data support hypothesis 4f.

Table 46

Model Summary for Chair Age Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Longevity; HCAHPS When Controlling for EBITDA, CM, and Chair Longevity; CM When Controlling for HCAHPS, EBITDA, and Chair Longevity; and Chair Longevity When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 4f, 4g, 4h, & 4i)

Model	R^2	Adj R ²	df1/df2	F	р	Sig.
	.685	.674	4/114	61.981	.000	**

Note. Chair effectiveness as measured by the MLQ.

** $p \le .01$ and significant at the .01 alpha level.

Table 47

Summary of Regression Analysis for Chair Age Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Longevity; HCAHPS When Controlling for EBITDA, CM, and Chair Longevity; CM When Controlling for HCAHPS, EBITDA, and Chair Longevity; and Chair Longevity When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 4f, 4g, 4h, & 4i)

Descriptive Variable	В	Т	р	Sig.
Constant	116.179	3.618	.000	
EBITDA	185	-2.042	.043	*
HCAHPS	.646	9.197	.000	**
СМ	-1.140	-3.369	.001	**
Chair longevity	.155	.017	.000	**

Note. Chair effectiveness as measured by the MLQ. Age used as dependent variable in SPSS. * $p \le .05$ and significant at the .05 alpha level.

** $p \le .01$ and significant at the .01 alpha level. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A *p* value of .016 is a correction for adjusted Type I error buildup.

Hypothesis 4g stated chair age would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair longevity. Regression analysis was performed and the values are shown in Tables 46 and 47. As one can see from Table 46 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 47. The analysis reveals chair longevity was positively related in accounting for a statistically significant and unique variance in predicting HCAHPS when controlling for EBITDA, CM, and chair effectiveness. The variable is significant at the .01 alpha level with a *p* value of .000. As such, the data supported hypothesis 4g.

Hypothesis 4h stated chair age would predict unique variance in CM when controlling for HCAHPS, EBITDA, and chair longevity. Regression analysis was performed and the values are shown in Tables 46 and 47. As one can see from Table 46 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 47. The analysis reveals chair age was negatively related in accounting for a statistically significant and unique variance in predicting CM when controlling for EBITDA, HCAHPS, and chair longevity. The CM variable is significant at the .01 alpha level with a *p* value of .001. As such, the data did not support hypothesis 4h.

Hypothesis 4i stated chair age would predict unique variance in chair longevity when controlling for HCAHPS, EBITDA, and CM. Regression analysis was performed and the values are shown in Tables 46 and 47. As one can see from Table 46 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 47. The analysis reveals chair age was positively related in accounting for a statistically significant and unique variance in predicting longevity when controlling

132

for EBITDA, HCAHPS, and CM. The chair age variable was significant at the .01 alpha level with a p value of .000. As such, the data support hypothesis 4i.

Hypothesis 4j stated chair age would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair effectiveness. Regression analysis was performed and the values are shown in Tables 48 and 49. As one can see from Table 48 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 49. The analysis reveals chair age was negatively related in accounting for a statistically significant and unique variance in predicting EBITDA when controlling for HCAHPS, CM, and chair effectiveness. The EBITDA variable was significant at the .01 alpha level with a p value of .001. As such, the data support hypothesis 4j.

Hypothesis 4k stated chair age would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair effectiveness. Regression analysis was performed and the values are shown in Tables 48 and 49. As one can see from Table 48,

Table 48

Model Summary for Chair Age Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Effectiveness; HCAHPS When Controlling for EBITDA, CM, and Chair Effectiveness; CM When Controlling for HCAHPS, EBITDA, and Chair Effectiveness; and Chair Effectiveness When Controlling for HCAHPS, EBITDA, and CM (Hypothesis 4j, 4k, 4l, & 4m)

Model	R^2	Adj R ²	df1/df2	F	р	Sig.
	.472	.454	4/114	25.510	.000	**

Note. Chair effectiveness as measured by the MLQ.

** $p \leq .01$ and significant at the .01 alpha level. Chair effectiveness as measured by the MLQ.

Summary of Regression Analysis for Chair Age Predicting a Unique Variance in: EBITDA When Controlling for HCAHPS, CM, and Chair Effectiveness; HCAHPS When Controlling for EBITDA, CM, and Chair Effectiveness; CM When Controlling for HCAHPS, EBITDA, and Chair Effectiveness; and Chair Effectiveness When Controlling for HCAHPS, EBITDA, and CM (Hypotheses 4j, 4k, 4l, & 4m)

Descriptive Variable	В	Т	р	Sig.
Constant	119.105	2.825	.006	
EBITDA	382	-3.365	.001	**
HCAHPS	.794	8.961	.000	**
СМ	-1.110	-2.536	.013	*
Effectiveness (MLQ)	-1.242	-1.236	.219	

Note. N = 123. Board chair effectiveness as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always. Age is used as dependent variable in SPSS.

* $p \leq .05$ and significant at the .05 alpha level.

** $p \le .01$ and significant at the .01 alpha level. Bonferroni Corrections; Alpha of .05 divided by 3 comparisons = .016. A *p* value of .016 is a correction for adjusted Type I error buildup.

there is overall significance. Therefore further analysis is provided regarding individual variables in Table 49. The analysis reveals chair age was positively related in accounting for a statistically significant and unique variance in predicting HCAHPS when controlling for EBITDA, CM, and chair effectiveness. The variable is significant at the .01 alpha level with a *p* value of .000. As such, the data supported hypothesis 4k.

Hypothesis 4l stated chair age would predict unique variance in CM when

controlling for HCAHPS, EBITDA, and chair effectiveness. Regression analysis was

performed and the values are shown in Tables 48 and 49. As one can see from Table 48

there is overall significance. Therefore further analysis is provided regarding individual

variables in Table 49. The analysis reveals chair age was negatively related in accounting

for a statistically significant and unique variance in predicting CM when controlling for EBITDA, HCAHPS, and chair effectiveness. The CM variable is statistically significant at the .01 alpha level with a p value of .013. As such, the data did not support hypothesis 41.

Hypothesis 4m stated chair age would predict unique variance in chair effectiveness when controlling for HCAHPS, EBITDA, and CM. Regression analysis was performed and the values are shown in Tables 48 and 49. As one can see from Table 48 there is overall statistical significance. Therefore further analysis is provided regarding individual variables in Table 49. The analysis reveals age did not account for a statistically significant and unique variance in predicting chair effectiveness when controlling for HCAHPS, EBITDA, and CM. The chair effectiveness variable was not statistically significant at the .05 alpha level with a *p* value of .219. As such, the data did not support hypothesis 4m.

The final general question in this study explores the relationship between chair leadership behaviors and hospital effectiveness as measured by EBITDA, HCAHPS, and CM. The following hypothesis began to answer this question:

Hypothesis 5a predicted there is a significant relationship between chair transformational leadership behavior and organizational effectiveness as measured by EBITDA. The analysis of the data showed this hypothesis was not statistically significant at the .05 alpha level. The *F* value is 1.451 and *df* 1 is 1 and *df* 2 is 121. The *p* value of .231 is not significant at the .05 alpha level. The results are illustrated in Table 50 for hypothesis 51. The variable of transformational leadership is non- significant as illustrated in Table 51.

135

Model Summary for the Relationship Between Chair Transformational Leadership Behaviors and EBITDA (Hypothesis 5a)

Model	R^2	Adj R ²	df1/df2	F	Р	Sig.
	.012	.004	1/121	1.451	.231	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 51

Summary of Regression Analysis for the Relationship Between Chair Transactional Leadership Behaviors and EBITDA (Hypothesis 5a)

Descriptive Variable	В	Т	р	Sig.
Constant	16.405	4.655	.000	
Transformational	-1.275	-1.205	.231	NS

Note. N = 123. Board chair transformational behavior as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always. NS = Not Significant.

Hypothesis 5b predicted there is a significant relationship between chair transformational leadership behavior and organizational effectiveness as measured by HCAHPS. The analysis of the data showed this hypothesis was significant at the .05 alpha level. The *F* value is 4.259 and *df* 1 is 1 and *df* 2 is 117. The *p* value of .041 is significant at the .05 alpha level. The results are illustrated in Table 52 for specific hypothesis 5b. The variable of transformational leadership has a negatively statistically significant relationship with chair effectiveness as illustrated in Table 53.

Model Summary for the Relationship Between Chair Transformational Leadership Behaviors and HCAHPS (Hypothesis 5b)

Model	R^2	Adj R ²	df1/df2	F	р	Sig.
	.035	.027	1/117	4.259	.041	*

Note. NS = not significant.

* $p \le .05$ and significant at the .05 alpha level. Board chair effectiveness as measured by the MLQ.

Table 53

Summary of Regression Analysis for the Relationship Between Chair Transformational Leadership Behaviors and HCAHPS (Hypothesis 5b)

Descriptive Variable	В	Т	Р	Sig.
Constant	77.854	19.703	.000	
Transformational	-2.451	-2.061	.041	*

Note. N = 123. Board chair transformational behavior as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always. * $p \le .05$ and significant at the .05 alpha level.

Hypothesis 5c predicted there is a significant relationship between chair transformational leadership behavior and organizational effectiveness as measured by CM. The analysis of the data showed this hypothesis was not statistically significant at the .05 alpha level. The *F* value is .663 and df 1 is 1 and df 2 is 121. The *p* value of .417 is not significant at the .05 alpha level. The results are illustrated in Table 54 for specific hypothesis 5c. The variable of transformational leadership is not significant as illustrated in Table 55.

Model Summary for the Relationship Between Chair Transformational Leadership Behaviors and CM (Hypothesis 5c)

Model	R^2	Adj R ²	df1/df2	F	р	Sig.
	.005	003	1/121	.663	.417	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 55

Summary of Regression Analysis for the Relationship between Chair Transformational Leadership Behaviors and CM (Hypothesis 5c)

Descriptive Variable	В	t	р	Sig.
Constant	101.101	11.830	.000	
Transformational	-2.089	814	.417	NS

Note. N = 123. Board chair transformational behavior as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always. NS = not significant.

Hypothesis 5d predicted there is a significant relationship between chair transactional leadership behavior and organizational effectiveness as measured by EBITDA. The analysis of the data showed this hypothesis was statistically significant at the .01 alpha level. The *F* value is 10.224 and *df* 1 is 1 and *df* 2 is 121. The *p* value of .002 is significant at the .01 alpha level. The results are illustrated in Table 56 for specific hypothesis 5d. The variable of transactional leadership has a negative relationship with EBITDA and is statistically significant as illustrated in Table 57.

Model Summary for the Relationship Between Chair Transactional Leadership Behaviors and EBITDA (Hypothesis 5d)

Model	R^2	Adj R ²	df1/df2	F	р	Sig.
	.078	.070	1/121	10.224	.002	**

** $p \le .01$ and significant at the .01 alpha level. Board chair effectiveness as measured by the MLQ.

Table 57

Summary of Regression Analysis for the Relationship Between Chair Transactional Leadership Behaviors and EBITDA (Hypothesis 5d)

Descriptive Variable	В	Т	р	Sig.
Constant	18.389	9.082	.000	
Transactional	-2.582	-3.189	.002	**

Note. N = 123. Board chair transactional behavior as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always. ** $p \le .01$ and significant at the .01 alpha level.

Hypothesis 5e predicted there is a significant relationship between chair transactional leadership behavior and organizational effectiveness as measured by HCAHPS. The analysis of the data showed this hypothesis was not statistically significant at the .05 alpha level. The F value is 1.868 and df 1 is 1 and df 2 is 117. The p value of .174 is not statistically significant at the .05 alpha level. The results are illustrated in Table 58 for specific hypothesis 5e. The variable of transactional leadership is not significant as illustrated in Table 59.

Model Summary for the Relationship Between Chair Transactional Leadership Behaviors and HCAHPS (Hypothesis 5e)

Model	R^2	Adj R ²	df1/df2	F	р	Sig.
	.016	.007	1/117	1.868	.174	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 59

Summary of Regression Analysis for the Relationship Between Chair Transactional Leadership Behaviors and HCAHPS (Hypothesis 5e)

Descriptive Variable	В	Т	р	Sig.
Constant	72.948	30.598	.000	
Transactional	-1.308	-1.367	.174	

Note. N = 123. Board chair transformational behavior as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always.

Hypothesis 5f predicted there is a significant relationship between chair transactional leadership behavior and organizational effectiveness as measured by CM. The analysis of the data showed this hypothesis was not statistically significant at the .05 alpha level. The *F* value is 1.982 and *df* 1 is 1 and *df* 2 is 121. The *p* value of .162 is not significant at the .05 alpha level. The results are illustrated in Table 60 for specific hypothesis 5f. The variable of transactional leadership is not statistically significant as illustrated in Table 61.

Model Summary for the Relationship Between Chair Transactional Leadership and CM (Hypothesis 5f)

Model	R^2	Adj R ²	df1/df2	F	р	Sig.
	.016	.008	1/121	1.982	.162	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 61

Summary of Regression Analysis for the Relationship Between Chair Transactional Leadership Behaviors and CM (Hypothesis 5f)

Descriptive Variable	В	Т	Р	Sig.
Constant	101.032	19.983	.000	
Transactional	-2.839	-1.408	.162	

Note. N = 123. Board chair transformational behavior as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always.

Hypothesis 5g predicted there is a significant relationship between chair laissezfaire leadership behavior and organizational effectiveness as measured by EBITDA. The analysis of the data showed this hypothesis was not statistically significant at the .05 alpha level. The F value is 1.727 and df 1 is 1 and df 2 is 121. The p value of .191 is not statistically significant at the .05 alpha level. The results are illustrated in Table 62 for specific hypothesis 5g. The variable of laissez-faire leadership is not statistically significant as illustrated in Table 63.

Model Summary for the Relationship Between Chair Laissez-faire Leadership Behaviors and EBITDA (Hypothesis 5g)

Model	R^2	Adj R ²	df1/df2	F	р	Sig.
	.014	.006	1/121	1.727	.191	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 63

Summary of Regression Analysis for the Relationship Between Chair Laissez-Faire Leadership Behaviors and EBITDA (Hypothesis 5g)

Descriptive Variable	В	t	р	Sig.
Constant	12.864	17.278	.000	
Laissez-faire	-1.619	-1.314	.191	

Note. N = 123. Board chair laissez-faire behavior as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always.

Hypothesis 5h predicted there is a significant relationship between chair laissezfaire leadership behavior and organizational effectiveness as measured by HCAHPS. The analysis of the data showed this hypothesis was not statistically significant at the .05 alpha level. The F value is 1.296 and df 1 is 1 and df 2 is 117. The p value of .257 is not significant at the .05 alpha level. The results are illustrated in Table 64 for specific hypothesis 5h. The variable of laissez-faire leadership is not statistically significant as illustrated in Table 65.

Model Summary for the Relationship Between Chair Laissez-faire Leadership Behaviors and HCAHPS (Hypothesis 5h)

Model	R^2	Adj R ²	df1/df2	F	р	Sig.
	.011	.003	1/117	1.296	.257	NS

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 65

Summary of Regression Analysis for the Relationship Between Chair Laissez-Faire Leadership Behaviors and HCAHPS (Hypothesis 5h)

Descriptive Variable	В	t	Р	Sig.
Constant	70.311	83.070	.000	
Laissez-faire	-1.718	-1.138	.257	

Note. N = 123. Board chair laissez-faire behavior as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always.

Hypothesis 5i predicted there is a significant relationship between chair laissezfaire leadership behavior and organizational effectiveness as measured by CM. The analysis of the data showed this hypothesis was not statistically significant at the .05 alpha level. The F value is 1.972 and df 1 is 1 and df 2 is 121. The p value of .163 is not statistically significant at the .05 alpha level. The results are illustrated in Table 66 for specific hypothesis 5i. The variable of laissez-faire leadership is not statistically significant as illustrated in Table 67.

Model Summary for the Relationship Between Chair Laissez-faire Leadership Behaviors and CM (Hypothesis 5i)

Model	R^2	Adj R^2	df1/df2	F	Р	Sig.	
	.016	.008	1/121	1.972	.163	NS	

Note. NS = not significant. Board chair effectiveness as measured by the MLQ.

Table 67

Summary of Regression Analysis for the Relationship Between Chair Laissez-faire Leadership Behaviors and HCAHPS (Hypothesis 5i)

Descriptive Variable	В	t	Р	Sig.
Constant	95.429	53.826	.000	
Laissez-faire	-4.177	-1.404	.163	

Note. N = 123. Board chair laissez-faire behavior as measured by the MLQ is an ordinal scale as 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always.

The final section of this chapter provides a summary Table of research hypotheses giving an overview of the results.

Summary of Research Hypotheses

Of the 55 hypotheses tested, 34 (62%) were statistically significant and three others approached statistical significance, before applying the Bonferroni correction. Major results of this data analysis reveal statistically significant relationship between chair transformational leadership behaviors and effectiveness as measured by the MLQ. In addition, there is a statistically significant relationship between chair transactional leadership behaviors and effectiveness as measured by the MLQ. revealed there was no statistical significance between laissez-faire leadership behaviors and chair effectiveness as measured by the MLQ. The data analysis also reviewed the relationship of effectiveness to chair age, longevity, and education. The results are summarized in Table 68, which reviews each hypotheses showing the p value and indicating whether the hypothesis was significant.

Chapter 5 reviews the research results, implications, conclusions, and recommendations for further study.

Summary of Research Hypotheses

Hypothesis #	Hypotheses	<i>p</i> -Value	Significant
1a	There is a significant relationship, between transformational leadership and chair effectiveness as measured by the MLQ.	0.000	Yes
1b	There is a significant relationship between transactional leadership and perceived chair effectiveness as measured by the MLQ.	0.000	Yes
1c	There is a significant relationship between laissez-faire leadership and perceived chair effectiveness as measured by the MLQ.	0.178	No
2a	Chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ than those with a lower level of education.	0.009	Yes
2b	Chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ, independent of age, than those with a lower level of education.	0.041	Yes
2c	Chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ, independent of longevity, than those with a lower level of education.	0.010	Yes
2d	Chairs with higher levels of education will have a higher score of effectiveness as measured by the MLQ, independent of EBITDA, HCAHPS, and CM, than those with lower levels of education.	0.011	Yes
2e	The educational level of the chair predicts unique variance in HCAHPS when controlling for EBITDA and CM.	0.335	No

Table 68—*Continued*.

Hypotheses #	Hypotheses	<i>p</i> -Value	Significant
2f	The educational level of the chair would predict unique variance in EBITDA when controlling for HCAHPS and CM.	0.000	Yes
2g	The educational level of the chair would predict unique variance in CM when controlling for HCAHPS and EBITDA.	0.022	Yes
2h	The educational level of the chair would predict unique variance in EBITDA when controlling for HCAHPS, CM, and age.	0.000	Yes
2i	The educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA, CM, and age.	0.025	Yes
2j	The educational level of the chair would predict unique variance in CM when controlling for HCAHPS, EBITDA, and age.	0.001	Yes
2k	The educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair longevity.	0.275	No
21	The educational level of the chair would predict unique variance in CM when controlling for EBITDA, HCAHPS, and chair longevity.	0.021	Yes
2m	The educational level of the chair would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair longevity.	0.000	Yes
2n	The educational level of the chair would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair effectiveness.	0.582	No

Hypotheses #	Hypotheses	<i>p</i> -Value	Significant
20	The educational level of the chair would predict unique variance in CM when controlling for EBITDA, HCAHPS, and chair effectiveness.	0.029	Yes
2p	The educational level of the chair would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair effectiveness.	0.000	Yes
2q	The educational level of the chair would predict unique variance in chair effectiveness when controlling for HCAHPS, CM, and EBITDA.	0.011	Yes
3a	Chairs with more years of chair experience will have a higher score of effectiveness as measured by the Multifactor Leadership Questionnaire than those with fewer years of chair experience.	0.803	No
3b	Chairs with more years of chair experience will have a higher score of effectiveness as measured by the Multifactor Leadership Questionnaire, independent of age, than those with fewer years of chair experience.	0.218	No
3с	Chairs with more years of chair experience will have a higher score of effectiveness as measured by the MLQ, independent of chair education.	0.908	No
3d	Chairs with more years of chair experience will have a higher score of effectiveness as measured by the MLQ, independent of EBITDA, HCAHPS, and CM, than those with fewer years of chair experience.	0.855	No
Зе	Chairs with more years of experience will have higher EBITDA/HCAHPS/CM than those with fewer years of chair experience.		

Hypotheses #	Hypotheses	<i>p</i> -Value	Significant
	EBITDA	0.010	Yes
	HCAHPS	0.016	Yes
	СМ	0.444	No
3f	Chair longevity would predict unique variance in EBITDA when controlling for HCAHPS, CM, and age.	0.485	No
3g	Chair longevity would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair age.	0.004	Yes
3h	Chair longevity would predict unique variance in CM when controlling for HCAHPS, EBITDA, and chair longevity.	0.024	Yes
3i	Chair longevity would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair effectiveness.	0.006	Yes
3ј	Chair longevity would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair age.	0.004	Yes
3k	Chair longevity would predict unique variance in CM when controlling for HCAHPS, EBITDA, and chair effectiveness.	0.807	No
31	Chair longevity would predict unique variance in chair effectiveness when controlling for HCAHPS, EBITDA, and CM.	0.855	No
4a	Chairs who are older will have a higher score of effectiveness as measured by the MLQ, than those chairs who are younger.	0.061	No
4b	Chairs who are older will have a higher score of effectiveness as measured by the MLQ, independent of longevity.	0.026	Yes

Hypotheses #	Hypotheses	<i>p</i> -Value	Significant
4c	Chairs who are older will have a higher score of effectiveness as measured by the MLQ, independent of chair education, than those who are younger.	0.343	No
4d	Chairs who are older will have a higher score of effectiveness as measured by the MLQ, independent of EBITDA, HCAHPS, CM, than those who are younger.	0.219	No
4e	Chairs who are older will have higher EBITDA/HCAHPS/CM than those who are younger.		
	EBITDA	0.024	Yes
	HCAHPS	0.000	Yes
	СМ	0.228	No
4f	Chair age would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair longevity.	0.043	Yes
4g	Chair age would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair longevity.	0.000	Yes
4h	Chair age would predict unique variance in CM when controlling for HCAHPS, EBITDA, and chair longevity.	0.001	Yes
4i	Chair age would predict unique variance in chair longevity when controlling for HCAHPS, EBITDA, and CM.	0.000	Yes
4j	Chair age would predict unique variance in EBITDA when controlling for HCAHPS, CM, and chair effectiveness.	0.001	Yes
4k	Chair age would predict unique variance in HCAHPS when controlling for EBITDA, CM, and chair effectiveness.	0.000	Yes

Hypotheses #	Hypotheses	<i>p</i> -Value	Significant
41	Chair age would predict unique variance in CM when controlling for HCAHPS, EBITDA, and chair effectiveness.	0.013	Yes
4m	Chair age would predict unique variance in chair effectiveness when controlling for HCAHPS, EBITDA, and CM.	0.219	No
5a	There is a significant relationship between chair transformational leadership behavior and organizational effectiveness as measured by EBITDA.	0.231	No
5b	There is a significant relationship between chair transformational leadership behavior and organizational effectiveness as measured by HCAHPS.	0.041	Yes
5c	There is a significant relationship between chair transformational leadership behavior and organizational effectiveness as measured by CM.	0.417	No
5d	There is a significant relationship between chair transactional leadership behavior and organizational effectiveness as measured by EBITDA.	0.002	Yes
5e	There is a significant relationship between chair transactional leadership behavior and organizational effectiveness as measured by HCAHPS.	0.174	No
5f	There is a significant relationship between chair transactional leadership behavior and organizational effectiveness as measured by CM.	0.162	No
5g	There is a significant relationship between chair laissez-faire leadership behavior and organizational effectiveness as measured by EBITDA.	0.191	No

Hypotheses #	Hypotheses	<i>p</i> -Value	Significant
5h	There is a significant relationship between chair laissez-faire leadership behavior and organizational effectiveness as measured by HCAHPS.	0.257	No
5i	There is a significant relationship between chair laissez-faire leadership behavior and organizational effectiveness as measured by CM.	0.163	No

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This study explored the relationship between Adventist Health System hospital chair leadership behaviors, effectiveness, and hospital effectiveness. The following sections review the study detailing the research background, problem statement, purpose, research questions, design, and procedures. Finally, there is a summary of the findings, a discussion of these findings related to the literature and practice, conclusions, limitations, recommendations, and final thoughts.

Background Problem Statement and Purpose

Healthcare in the United States is in crisis. An aging population, poorer health, and increased expenses are placing pressure on a system that now costs 17% of America's gross domestic product (Battistella, 2010; Fleece & Houle, 2011). There are almost 6,000 hospitals in the United States interfacing with a complex workforce of dietitians, nurses, doctors, and therapists. America's healthcare workforce consists of over 800,000 doctors and 2.5 million nurses (Shi & Singh, 2012). Hospitals, along with their large employment base, are central to this complex healthcare delivery system, and they are facing distressed times. Jost (2007) noted, "The healthcare system of the United States fails dramatically" (p. 2). He goes on to say that the system is failing miserably

153

first, because there are millions of Americans without insurance; second, because healthcare costs represent around 16% of GDP (today they are at 17% of GDP) and, finally, because almost 100,000 patients die from medical errors each year (Jost, 2007). Given the current crisis, one third of America's hospitals are poised to close or restructure within the next 8 years (Fleece & Houle, 2012).

Given this healthcare crisis, hospital leadership, including that of the board, is an important element to keeping hospitals operating. The chair is critical to hospital success, and has considerable influence over organizational achievement (Harrison & Murray, 2012). In fact, many scholars contend effective board chairs tend to lead more successful organizations (Brown, 2005; Cornforth et al., 2010).

Considering the challenges facing healthcare today, it is important to understand the leadership role of the chair. Most literature addressing the chair focuses principally on the board (Brown, 2005; Carver, 2011; Carver & Carver, 2006; Conger, 2009; Dunne, 2005; Harris & Helfat, 2007; Kaiser, 2010; Kakabadse & Kakabadse, 2008; Leblanc, 2005; Lechem, 2002; Poutziouris et al., 2006; Wertheimer, 2008). In fact, there has been little to no research focusing on hospital board chair leadership effectiveness and little work connecting that to organizational effectiveness. This ground-breaking study fills that gap, identifying effective leadership behaviors of Adventist Health System hospital board chairs. It also explains the relationship between effective chair leadership behavior and hospital effectiveness.

In order to measure hospital effectiveness, this study relied upon the theoretical framework of *the rational goal theory* (Campbell, 1977; Scott, 1977) which has its roots in the seminal work of Weber (1947). This concept is defined by Daft (2006) who states,

154
"Organizational effectiveness is the degree to which an organization realizes its goals" (p. 75). In order to measure hospital goals (effectiveness), this study selected what are considered three of the most important hospital goals which are measureable over time. The areas of hospital effectiveness are financial margins as measured by EBITDA, patient satisfaction scores as measured by HCAHPS, and clinical scores as measured by CM. These measurements show whether the hospital is attaining effectiveness and efficiency in serving the public while maintaining financial viability.

While three specific metrics were used to measure hospital effectiveness, the Multifactor Leadership Questionnaire (MLQ) was used to measure efficacy and leadership behaviors of the board chair (Avolio et al., 1999; Bass, 1985). The 360-degree questionnaire was developed by Alovio and Bass who wrote extensively about the leadership theories of transformational, transactional, and laissez-faire leadership. Embedded within the survey are multiple questions asking the respondent to rate the perceived effectiveness of the leader. The instrument is highly reliable and valid (Bass & Riggio, 2006).

Research Questions

This study sought to answer the following research questions:

1. What is the relationship between hospital chair leadership behaviors and effectiveness as perceived by board members and as measured by the MLQ?

2. What is the relationship between chair formal education and effectiveness as measured by the MLQ?

3. What is the relationship between hospital chair longevity and effectiveness as measured by the MLQ?

4. What is the relationship between the chair age and effectiveness as measured by the MLQ?

5. What is the relationship between chair leadership behaviors and hospital effectiveness as measured by EBITDA, HCAHPS, and CM?

Research Design and Procedures

This study used an ex post facto research design with stated and alternative hypotheses. Of the three types of ex post facto research, this study utilized the most sophisticated type which has hypotheses and controls for viable alternative explanations. In addition, the Bonferroni correction was used to counteract the problem of multiple comparisons and to control the Type 1 error rate for the multiple comparisons (Newman et al., 2006).

According to Cottrell and McKenzie (2011), "ex post facto (after the fact) research examines a phenomenon that has already occurred and attempts to infer causeand-effect relationships. These studies are also called causal-comparative studies" (p. 9). It should be noted that this study was based upon a repeated measures design where the board chairs were measured more than once (Thomas, Nelson, & Silverman, 2011).

Data were collected from two sources—a survey and hospital effectiveness data. In order to explore the relationship between chair leadership behaviors and chair effectiveness, this study employed Avolio and Bass's (1985) Multifactor Leadership Questionnaire—Form 5X short (MLQ). The MLQ is "one of the most widely used instruments to measure transformational and transactional leadership behaviors in the organizational sciences" (Tejada et al., 2001, p. 31). During the past two decades the instrument has been used in over 30 countries within hospitals, schools, colleges, and

government institutions. During a 10-year period from 1995 to 2004 the MLQ was used in over 300 research programs, doctoral dissertations, and master's theses.

After receiving IRB approvals from multiple hospitals and my university, each hospital was contacted again and further details were given on the process for contacting their board members. It was necessary to explain the detailed process to each hospital administrator as they had direct contact with their community board and would be the person to invite the board members to participate in the study. Email communication was used almost exclusively with participants as research shows turnaround time for response is almost half, response quality is improved, and response rates increase (Sheehan, 2001).

After speaking with each hospital CEO, I sent them the email invitation to participate in the research along with the informed consent (see Appendix C). In turn, the CEO of each hospital forwarded the message to their board members. The email contained a description of the research project (Appendix B), an electronic consent form (Appendix C), and the MLQ URL-linked survey (Appendix D). The participant was asked to review the details of the research project, electronically sign the consent form, and take the 45-question survey.

Each CEO sent to board members the email link to the survey. Three hundred and thirty-three members received the invitation and 123 responded, which is a 37% response rate. The CEOs sent several follow-up reminders to board members in the following weeks. Sheehan (2001) shows through research that multiple reminders increase participant compliance with the survey and that was the case in this study. The reminders increase form 80 participates to 123. Once data were collected, they were coded, tabulated, and entered into IBM SPSS version 20.

The second source of data came from data about the hospital's EBITDA, HCAHPS, and CM. In some cases the data resided at the corporate office, and in other cases the data were collected by calling the hospital and asking them to share their information. The letter that each CEO signed authorizing the study included an explicit approval for hospital officers to provide the data for research purposes. A brief description of each data point follows.

EBITDA is an acronym for earnings before interest, taxes, depreciation, and amortization (Hickey & Brosnan, 2012). EBITDA numbers provide a way to evaluate a company's performance without having to factor in financing decisions, accounting decisions, or tax environments. EBITDA was collected for the first 6 months of 2012.

HCAHPS is an acronym for Hospital Consumer Assessment of Health Plans Survey. It is a nationwide standardized publically reported survey of patients' perceptions of their hospital experience (Kavaler & Alexander, 2014). The HCAHPS survey contains 18 patient perspectives on care and patient rating items that encompass eight key topics: communication with nurses, communication with doctors, pain management, communication about medicines, responsiveness of hospital staff, cleanliness of the hospital environment, discharge information, and quietness of the hospital environment. The survey is 32 questions in length (see Appendix D). Over 10,000 patient surveys collected from the 34 participating hospitals are included in this study. The surveys covered the first 6 months of 2012.

Core Measures (CM) are standardized data points which measure clinical and safety quality of hospitals across the United States. The CM's are based on evidencedbased guidelines established by the United States Government and hospital-certifying

entities (Hickey & Brosnan, 2012). There are 35 CMs altogether, in four categories (acute myocardial infarction, pneumonia, congestive heart failure, and surgical care improvement project). For each core measure the hospital must track compliance and report the results publically. For example, in the category of acute myocardial infarction, the hospital must track such measures as whether the hospital gave the heart attack patient an aspirin within 24 hours of arrival to the hospital. The percentage of compliance is reported for each hospital.

Summary of Findings

A total of 34 hospitals, 22 boards, 333 board members and nine board chairs participated in the study. As Table 3 shows, most chairs and many boards oversee multiple hospitals. Of the 333 board members who received the survey, 123 responded, which is a 37% response rate. Individual hospital response rates ranged from 15% to 58%.

Because I was not allowed to have direct contact with the board members and was asked to communicate to them through the chief executive officer of the hospital, it was challenging to obtain exact demographic data relating to the community board members. However, anecdotally, the board members come from diverse backgrounds and include such individuals as lawyers, nurses, doctors, ministers, accountants, entrepreneurs, and community leaders.

Six hospitals in the Tampa region were excluded from the study upon the request of an AHS administrator. Three other hospitals from various parts of the system were also excluded upon their request. Thus, of the 44 AHS hospitals, the MLQ was sent to the

community board members of 35 hospitals. However, one community board had a zero response rate.

Table 6 presents an overview of the demographics of the chairs studied in this research. All chairs were male and Caucasian. Their terms of service ranged from 7 months to 12.9 years, with 55% having between 5 to 6 years of service. The analysis shows 11% of the chairs have bachelor's degrees, 67% have master's degrees, and 22% have a doctorate. Finally, the age of the chairs ranges from 38 to 66 years with 67% having an age of 51 years or older.

Table 7 depicts descriptive statistics relating to additional variables in this study. There are chair leadership behaviors (transactional, laissez-faire, and transformational), and hospital effectiveness variables (EBITDA, HCAHPS, and CM). For each of the variables, the table depicts the maximum and minimum scores along with means and standard deviations.

The MLQ questionnaire asked board members to rank chairs on a scale from 0-4 with regard to leadership behaviors. The mean for transactional leadership behavior of the board chairs was 2.38, indicating responses just above the middle of the scale and a standard deviation of 0.78, suggesting low variability. The transactional leadership behavior has a normal distribution. In contrast, board members did not score many chairs as having laissez-faire leadership behaviors. The mean for this behavior is .28 with a standard deviation of 0.53 indicating responses at the bottom of the 0 to 4 scale. Finally transformational leadership behaviors ranked higher than any other behavior for board members. The behavior had a mean of 3.27, indicating responses were toward the top of the scale with a standard deviation of .062, suggesting low variability.

Table 9 also delineates three variables used for hospital effectiveness. The hospital financial effectiveness was measured through EBITDA percentages. The lowest EBITDA was -6.30%, indicating a financial loss while the highest was 28.60%, indicating a strong financial margin. The average EBITDA was at 12.23% with a standard deviation of 7.22%, suggesting higher variability. A second measure of hospital effectiveness was clinical effectiveness as measured through CM, which indicates to what degree a hospital is adhering to a set of care practices outlined as best practice. One hospital was so small that CM were not tracked and thus received a 0 percentage ranking. The maximum sum of CM received by a hospital was 99.05%. The average sum of CM was 94.26% with a standard deviation of 17.45, indicating high variability. The high variability is partially due to the lack of data for the small hospital. A final measure of hospital effectiveness was the HCAHPS scores, which measure patient satisfaction. The ratings used were percentage of the top box scores received by the hospitals between January-September 2012. The lowest score was 57% and the highest was 85.30%. The variable has a mean of 69.85% with a standard deviation of 8.13, indicating low variability.

Correlational Findings

This section reviews the correlations and regressions used in this study. Table 6 reviews correlations of the research variables and Table 7 provides regression analysis results for each of the research hypotheses. I do not review each correlation or regression shown in Table 7, but highlight the central discoveries.

This study identified chair behaviors which were perceived to be more effective than others. For example, there was statistical significance and a positive relationship

between transformational leadership behaviors and chair effectiveness (r = .869; p = .000). In addition, there was a statistical significance and a positive relationship between transactional leadership behaviors and chair effectiveness (r = .382; p = .000). However, there was no statistically significant relationship between laissez-faire leadership behaviors and chair effectiveness (r = .122; p = .178).

This study also identified relevant discovers with regard to chair demographics and effectiveness. For example, there was a statistically significant and positive relationship between chair education and chair effectiveness (r = .235; p = .009). There was a positive and statistically significant relationship between chair longevity and patient satisfaction as measured by HCAHPS (r = .221; p = .016). Finally, there was a statistically significant and positive relationship between chair age and HCAHPS (r = .560; p = .000).

In addition, this study identified relevant discoveries with regard to the relationship between chair effectiveness as measured by the MLQ and hospital effectiveness as measured through effectiveness metrics (HCAHPS, EBITDA, and CM). For example, there was no statistically significant relationship found between chair leadership effectiveness and hospital effectiveness metrics such as EBITDA (r = -.019; p = .831), HCAHPS (r = -160; p = .083), and CM (r = -.044; p = .632). Further analysis is provided within this section.

Finally, unintended discoveries were examined in this section. For example, there was a statistically significant and positive relationship between hospital financial margins (EBITDA) and clinical outcomes (CM) (r = .331; p = .000). There was no statistically

significant relationship between hospital financial margins and patient satisfaction (r = .169; p = .066).

I did not summarize all the key findings in this section but the two tables do show the main results. In the next section I review the correlations and regressions that most matched each research question and discuss these findings in relation to the literature.

Discussion

This section discusses the central findings of this study in light of the literature and practices, relating those findings to the five research questions.

Table 7 summarizes the key correlations studied with the five research questions. The general approach to summarizing is related to the relationship between chair leadership behaviors and effectiveness. It is that unique relationship that has been understudied in previous research as well as the unique focus of this study, and for that reason is referenced frequently in the discussion below.

General Question 1

The first general research question sought to understand the relationship between hospital chair leadership behaviors and chair effectiveness as perceived by board members and measured by the MLQ. For purposes of this study three of the most important leadership behaviors identified by Burns (1978) and later Bass (1985) were used—transformational, transactional, and laissez-faire leadership.

Chair Transformational Leadership and Effectiveness

I predicted there would be a statistically significant relationship between chair transformational leadership behaviors and chair effectiveness. The results of this study

affirm this prediction (r = .869 and p = .000). Table 7 suggests that chair transformational leadership is a predictor of chair effectiveness. The r value of .869 indicates near perfect correlation, which is unusual in social science research.

While few studies have examined hospital chair leadership, my findings are consistent with research regarding other organizational leaders. Scholars indicate that leaders who championed the organizations' mission, values, and strategies predicted organization success (Kaiser, 2010; Kakabadse & Kakabadse, 2008). Covey (1992) observed that transformational leaders who were preoccupied with the mission and vision of the organization can motivate individuals to personally perform better. This has also been empirically demonstrated by others (Avolio & Bass, 2008; Avolio et al., 1999; Bass, 1985; Wang, Oh, Courtright, & Colbert, 2011).

Kakabadse and Kakabadse (2008) assert that trust and integrity are critical to the board chairs' role and success of the board. Carver (2011) agrees with this assessment, indicating that successful leaders must demonstrate strong values such as integrity. Again, scholars have repeatedly shown that transformational leadership behaviors inspire personal effectiveness from the work of others (Bass, 1985; Burns, 1978).

Donahue (2003), one of the few scholars to study effective boards, found that effective characteristics of the board chair include communicator, facilitator, and collaborator. These are also characteristics that portray a transformational leader (Bass, 1985; Lussier & Achua, 2001).

Harrison and Murray (2012) studied both effective and ineffective board chairs, and found effective chairs to be charismatic, inspirational, and extraverted (p. 423). Again, these are characteristics of transformational leadership (Bass, 1985; Lussier &

Achua, 2001). My findings are consistent with the literature that transformational leadership behaviors predict overall leader effectiveness.

Chair Transactional Leadership and Effectiveness

I predicted there would be a statistically significant relationship between transactional chair leadership behaviors and chair effectiveness. The results of this study affirm the prediction (r = .338; p = .000). Table 69 indicates there was a statistically significant and positive relationship between transactional leadership and perceived chair effectiveness. While this behavior does not account for the same level of effectiveness as transformational, it was statistically significant.

This form of leadership behavior—exchanging behavior or performance for a reward or punishment—may have little focus on personal development but it appears useful for helping group dynamics. These findings are consistent with the literature. Bass (1985) indicates that leaders who subscribe to this style of leadership follow closely to the rules, which brings success to groups. Grint (1997) found that "the effectiveness of transactional leaders comes from authority and position" (p. 153). This type of leadership can improve project success and help in times of emergency (Hackman & Johnson, 2009). It is reasonable to see how transactional leadership would help hospitals that have projects and strategic initiatives that must be carried out.

Scholars such as Kakabadse and Kakabadse (2008) indicate that the board chair must be the leader in establishing roles and obligations between the board chair, CEO, and the board. "It is only by clearly delineating boundaries between roles that the board—and the chairman—hold that allows both to effectively function" (Kakabadse & Kakabadse, 2008, p. xx). Transactional leadership has also been shown to help in establishing roles and obligations of subordinates (O'Sullivan & Dooley, 2009).

Finally, it is interesting to note the findings of the current study are consistent with previous research by Bass (1985) who agreed that transformational leadership augments the effects of transactional leadership behaviors. This study shows there is a statistically significant and positive relationship between transactional leadership behaviors and transformational leadership behaviors as seen in Table 69 (r = .483; $p \le$.0009). While transactional leadership lacks the agency of change and visionary elements of transformational leadership, both behaviors appear to overlap in bringing elements of success to an organization.

Chair Laissez-Faire Leadership and Effectiveness

I also explored the relationship between laissez-faire leadership behaviors and effectiveness. There was no statistically significant relationship between laissez-faire leadership behaviors (r = -.122 and p = .178). This would indicate that those chairs who were perceived as having laissez-faire leadership behaviors were also not perceived as effective. The statistical results are consistent with other studies. Schilling (2009) noted laissez-faire leadership behaviors are considered ineffective. Researchers Harrison and Murray (2012) noted less effective chairs

used position to advance personal career or agenda; (had a) big ego, dictatorial (reported by some); (were) introverted, nice, well-meaning but not able to inspire others; (were) uncomfortable in leadership position, reactive; inactive, responded aggressively to issues; avoided issues altogether, vacillated; took different positions depending on who s/he spoke to last, and created or avoided conflict. (p. 423)

Table 69

Summary of Key Relationships

Relationships	<i>r</i> value	p value	Significant
Chair Leadership Behaviors			
Between chair transformational leadership behaviors and effectiveness	0.869	0.000	Yes
Between chair transactional leadership behaviors and effectiveness	0.382	0.000	Yes
Between chair laissez-faire leadership behaviors and effectiveness	-0.112	0.178	No
Chair Education			
Between chair educational level and effectiveness	0.235	0.009	Yes
Between chair educational level and EBITDA	0.349	0.000	Yes
Between chair educational level and HCAHPS	-0.043	0.643	No
Between chair educational level and CM	-0.036	0.690	No
Chair Longevity			
Between chair longevity and effectiveness	-0.023	0.803	No
Between chair longevity and EBITDA	-0.233	0.010	Yes
Between chair longevity and HCAHPS	0.221	0.016	Yes
Between chair longevity and CM	-0.070	0.444	No
Chair Age			
Between chair age and effectiveness	-0.169	0.061	No
Between chair age and EBITDA	-0.203	0.024	Yes
Between chair age and HCAHPS	0.560	0.000	Yes
Between chair age and CM	0.110	0.228	No

Table 69—*Continued*.

Relationships	<i>r</i> value	p value	Significant
Chair leadership behavior relationship to hospital effectiveness metrics			
Transformational leadership behavior to EBITDA	-0.109	0.231	No
Transformational leadership behavior to HCAHPS	-0.187	0.041	Yes
Transformational leadership behavior to CM	-0.074	0.417	No
Transactional leadership behavior to EBITDA	-0.279	0.002	Yes
Transactional leadership behavior to HCAHPS	-0.125	0.174	No
Transactional leadership behavior to CM	-0.127	0.162	No
Laissez-faire leadership behavior to EBITDA	-0.119	0.191	No
Laissez-faire leadership behavior to HCAHPS	-0.105	0.257	No
Laissez-faire leadership behavior to CM	-0.127	0.163	No

Note. Board chair effectiveness and leadership behaviors, as measured by the MLQ, is an ordinal scale: 0 = Not at all, 1 = Once in a while, 2 = Sometimes, 3 = Fairly often, 4 = Frequently, if not always. The longevity variable is coded in months. The education variable is coded ordinally as 1 = Bachelor's, 2 = Master's, 3 = Doctorate.

The laissez-faire leader, unlike the transactional and transformational leader, does little to inspire the associate and seems to works best in environments where the follower is already highly skilled and motivated. This style encompasses passive leader behaviors and does not provide the leader the influence to enact change within the organization (Bass, 1981).

General Question 2

The second general question of this study reviewed the relationship between chair education and hospital effectiveness. The chairs in this study had education ranging from bachelors to doctorates.

Chair Education and Leadership Effectiveness

I predicted that chairs with higher levels of education would have higher scores of effectiveness as measured by the MLQ. An analysis of the correlation matrix in Table 9 shows there was a statistically significant and positive relationship between education and chair effectiveness (r = .235; p = .009) as measured by the MLQ and perceived by board members.

These results are consistent with the literature. Valentine and Prater (2011) observed similar findings in their recent study of 155 public school principals. They found the perceived effectiveness of school principals increased as the level of education increased. Boles's (1976) work also contends that a factor in leadership and maturity is formal education. The findings of these scholars are consistent with my findings and suggest that education levels are important for chair effectiveness in carrying out his/her duties given that those with higher levels of education have additional skills, knowledge, and habits.

Chair Education Relationship to EBITDA

The next group of hypotheses reviewed the relationship between chair education and organizational effectiveness metrics as measured by HCAHPS, EBITDA, and CM. These hypotheses assisted in producing a more robust explanation of general question 2 and produced fascinating results.

I hypothesized that the higher the educational level of the chair, the higher the EBITDA, which is seen to be true (r = .349; p = .000). The results suggest chair education is a predictor of EBITDA in these hospitals. It suggests that higher levels of chair education will predict larger hospital margins. There may be various reasons for this correlation.

These findings mirror some research about the connection of education to higher production. For example, Horn and Schaffner (2003) state, "Education is highly valued by employers, who interpret the educational level of their workforce as an indicator of company productivity and, by extension, profit" (p. 154). Frisch (2012) shows that a company's top leaders' education affects the strategic decisions of the organization and thus profits.

Also, the chair's education may influence chair business acumen, leading the board in high-level strategic initiatives of expense management and revenue generation. Therefore it is reasonable that the chair's level of education has a positive relationship to the hospital's earnings.

Chair Education Relationship to HCAHPS

I predicted higher levels of education would result in higher HCAHPS scores. However, the correlation matrix in Table 9 shows there is no statistically significant relationship between chair education and HCAHPS (r = -.043; p = .643).

While the chair has influential strategic oversight regarding patient satisfaction, practices, and policy, there may be several influences that limit the ability of chair

education to predict patient satisfaction. Scholarly literature shows that patient satisfaction is achieved through complex processes that rely heavily on those near the patient, the professional who "cares and has interpersonal sensitivity" (Bell, Kravitz, Thom, Krupat, & Azari, 2002; Kivlin, 2002; Phillips, Chiriboga, & Jang, 2012). In fact, a study of 10,225 patients, which was released in 2012 by J.D. Power and Associates, shows that patient satisfaction relies more on interpersonal relationship of the care team than other factors such as a high-tech facility (Brimmer, 2012).

Chair Education Relationship to CM

Finally, I explored the relationship between chair educational level and CM and found there was no statistically significant relationship between the two (r = .036; p = .690).

There are several possible explanations for this result. While the hospital board chair is a central leadership figure in the facility, it does not mean their education level will have a direct relationship to all organizational effectiveness matrixes such as CM. Part of leadership is creating leaders at all levels who may have more influence over organizational matrix than the top leader. Certainly a factor of leadership is growing new leaders (Bennis & Townsend, 2005). In fact, Bass (1985) clearly points out that transformational leaders are those who truly care and develop their followers. Many of these followers in turn become leaders in their own sphere of influence and make great change in areas such as CM. Second, this study shows repeatedly that the chair appears to have more relationship over hospital financial effectiveness than over clinical effectiveness. It would appear leaders at other levels of the hospital have more direct influence over this metric.

General Question 3

The third general question examined the relationship between chair longevity and leadership and hospital effectiveness. Chairs served in their hospitals from 7 months to almost 13 years. It produced mixed results.

Chair Longevity and Leadership Effectiveness

I explored the relationship between chair longevity and effectiveness. The correlation matrix in Table 9 shows there is no significant relationship between chair longevity and effectiveness (r = -.023; p = .803).

The results suggest that chair longevity is not a predictor of chair effectiveness. The literature is mixed regarding the relationship between leader longevity to leader effectiveness. Burtch (2011) found in a recent study of city managers that there was no statistically significant relationships between tenure and a manager's effectiveness, suggesting longevity is not a factor in leadership effectiveness.

However, Kotter (1982) advanced in his literature that often successful corporate leaders obtain their knowledge and success from long tenure in the organization, which allows the leader to understand the internal politics, products, services, and competition of the organization. The insider knowledge regarding a complex organization allows that leader to make better decisions as the leader has knowledge of the organizational history, culture, and abilities of the firm. The insider spends considerable time building and establishing appropriate support networks (Kotter, 1982). While mixed, studies lean toward the fact that leader longevity is an element in effectiveness (Fiedler, 1967; Goethals et al., 2004).

The findings of this study suggest chair effectiveness is related more to leadership behaviors and education than on a relationship to the amount of time the chair has worked with the board.

It is interesting to note that while this study did not find a statistically significant relationship between chair longevity and effectiveness, it did find that longevity has a statistically significant relationship to several of the hospital effectiveness metrics such as HCAHPS and EBITDA, which are discussed below.

Chair Longevity Relationship to EBITDA

I explored the relationship between chair longevity and EBITDA. The results showed there was a statistically significant and negative relationship between chair longevity and EBITDA (r = -.233; p = .010). This indicates that chairs with more years presiding over a hospital had lower EBITDA percentages than those with fewer years of experience. There are several possible explanations for this.

Chaganti, Damanpour, and Mankelwicz (2005) argue that if top leaders such as the CEO stay too long, they may have a negative impact on organizational performance. Huber (2003) argues that leaders in positions for long periods may become callous to the business environment, and this tends to affect the finances of the company. They become "Stale in the Saddle." This is a potential explanation for the negative relationship between chair longevity and financial margins. Another explanation may be that leaders who are in positions for a long time become more sensitive to issues other than money and soften to human needs of employees that don't always translate into financial effectiveness.

Chair Longevity Relationship to HCAHPS

I proceeded to explore the relationship between chair longevity and improved patient satisfaction scores (HCAHPS). The results showed there was a statistically significant and positive relationship between chair longevity and HCAHPS (r = .221; p = .016). The results of this study suggest that chair longevity is a predictor of HCAHPS in hospital settings.

One explanation for this relationship is that it takes time (longevity) for the chair to be *in tune* with the issues at the hospital and grapple at top levels with patient satisfaction metrics in order to align leadership at all levels to the patient satisfaction goals. This thought is consistent with Nohria and Khurana (2010) who argue in their handbook on leadership theory that those leaders such as the CEO who have served longer periods of time in an organization have longer to align with leadership and gain credibility, which allows time to grapple with and improve HCAHPS. Another explanation is that chair longevity may be an indicator of stable leaders at all levels of the organization which may create a climate for caring staff at the bedside.

Chair Longevity Relationship to CM

Finally, I explored the relationship between chair longevity and hospital clinical outcomes as measured through CM and found there was no statistically significant relationship between chair longevity and CM (r = -.070; p = .444). The results suggest that chair longevity is not a predictor of CM.

As reviewed previously, although the chair is a central leadership figure, it would not be expected that all metrics have relationship to the chair. It is possible that in the case of CM, other leadership such as the Chief Medical Officer, Chief Nursing Officer,

and CEO may have more relationship and influence over this metric. The next section deals with general question 4, which looks at the relationship of the chair age to several variables reviewed in this study.

General Question 4

The fourth general question reviewed the relationship between chair age and effectiveness as measured by the MLQ. The chairs participating in this study ranged from 38 to 68 years old.

Chair Age and Effectiveness

I predicted in this study that chairs who are older would have higher scores of effectiveness as measured by the MLQ than those who are younger. An analysis of the data shows that while nearing statistical significance there was no statistically significant relationship between chair age and effectiveness (r = -.169; p = .061).

The literature as well is mixed with regard to how age relates to effectiveness and work performance. Quinones, Ford, and Teachout (1995) argue that age reflects, or has a correlation to, experience and thus the older that individuals become, the more productive and effective they become. However, Arvey and Murphy (1998) provide a counter-argument stating that with age, health and energy decrease and thus effectiveness decreases. McEvoy and Cascio's (1989) study, based on 96 studies, found that age was fully unrelated to effectiveness and performance. This is consistent with Kuhn (2001) who found in his research that as an individual grew older they had less of a tendency to be transformational leaders.

However, Oshagbemi's (2004) study of 400 managers in the U.K. found that age did have an influence on leadership effectiveness. It was interesting to note, however, in his study that young as well as older managers were perceived as effective in their leadership styles. Oshagbemi (2004) discovered that as age increased, there was an increased likelihood that leaders embraced participative and consultative characteristics traits. While the literature leans towards age as a predictor of leadership effectiveness, there is still no resounding evidence of that fact.

Given the results of this study it is suggested that leadership behaviors and education are better predictors of chair effectiveness than age. More study is required with regard to the relationship of chair age and chair effectiveness. It is fascinating to note, however, the age of the chair has statistical significance to several key organizational metrics under review in the next section.

Chair Age Relationship to EBITDA

I predicted that chairs who were older would have higher EBITDA percentages. An analysis of the data shows there was a statistically significant and negative relationship between age and EBITDA (r = -0.203; p = .024) suggesting that younger chairs are a predictor of larger financial margins.

The results are fascinating and could be explained in several ways. First, research shows younger leaders are more transformational than older leaders (Kuhn, 2001). This study mirrors the research showing that there was a relationship between younger chairs and transformational leadership (r = -201; p = .06). As indicated previously by Bass (1985), transformational leadership is considered a more effective leadership behavior than others. In addition, research shows there is a relationship between transformational

leadership and company profits (Krumm, 2000) thus supporting the suggestion in this study that the younger leaders have a tendency to have better EBITDA percentages.

A second explanation is that younger leaders may be willing to take more risks. They also may be willing to work harder for results. Bass and Bass (2009) point out that "older leaders have been found to be generally more conservative and more likely to avoid taking risks. . . . They want more information and higher probabilities of success and may be content with lower payoffs as a consequence" (p. 181). Other scholars echo this (Hämäläinen & Saarinen, 2007; Ihlenfeldt, 2011; Iorg, 2007).

Third, this study shows younger chairs had higher levels of education (r = -391; p = .000) and also found there was a relationship between education and EBITDA (r = .349; p = .000). Researchers such as Horn and Schaffner (2003) also found that leader education was tied to company profits. This study mirrors the research by suggesting that younger, highly educated and transformational chairs account for stronger financial margins (EBITDA).

Chair Age Relationship to HCAHPS

I predicted that older chairs would preside over hospitals with higher HCAHPS scores. The results show there was a statistically significant and positive relationship between chair age and chair HCAHPS (r = .560; p = .000), which suggests that chair age is a predictor of HCAHPS.

There are several potential explanations for explaining these research results. First, some researchers argue that older leaders become more effective (Quinones et al., 1995). Certainly it could be suggested that with age the chair has gained additional experience and becomes more effective in leading high-level strategies to improve HCAHPS. Second, some scholars contend that with age an individual becomes more concerned for the well-being of others (Sternberg & Jordan, 2005). So with age the chair may place more emphasis on the well-being of the patient. I am not suggesting that young chairs are not concerned about the well-being of the patients. Indeed, most hospital leaders are patient-focused. The research simply suggests that with age the focus toward the patients may be more pronounced, thus producing a stronger emphasis through the hospital on HCAHPS. Thus we see younger leaders taking risks to increase organizational profits while potentially older leaders focus on patient satisfaction issues.

General Question 5

The final general research question attempted to close the research circle by asking what the relationship was between chair leadership behaviors and hospital effectiveness. The leadership behaviors were measured through the MLQ survey. The hospital effectiveness was measured through financial margins (EBITDA), patient satisfaction (HCAHPS), and clinical outcomes (CM).

Transformational Leadership and Hospital Effectiveness

The first set of hypotheses analyzed the relationship of transformational leadership behaviors to hospital effectiveness as measured by EBITDA, HCAHPS, and CM. The analysis of the data shows there is no relationship between transformational leadership and EBITDA (r = -.109; p = .231) or CM (r = -.074; p = .417). However, there was a statistically significant and negative relationship with HCAHPS (r = -.187; p = .041).

These findings both support and contradict other studies of leadership. In fact, multiple scholars indicate that effective chairs tend to lead more effective organizations (Brown, 2005; Cornforth et al., 2010). This study has reviewed literature which predicts transformational leaders are partially responsible for growing effective organizations (Bass, 1985; Bass & Riggio, 2012; MacKenzie, Podsakoff, & Rich, 2001). It would be desirable to conduct additional research and replicate this study with a larger sample from additional healthcare systems. In addition, the sample could be derived from other nonhealthcare entities. Also including a qualitative component of key informant interviews and focus groups to understand the results would be desirable.

Transactional Leadership and Hospital Effectiveness

The second set of hypotheses dealing with general question 5 reviewed the relationship between *transactional* leadership behaviors and hospital effectiveness. The analysis of the data shows there is no relationship between transactional leadership and HCAHPS (r = -.125; p = .174) or CM (r = -127; p = .162). However, there is a statistically significant negative relationship with EBITDA (r = -.279; p = .002).

These are fascinating findings regarding the relationship of transactional leadership to organizational effectiveness. Studies show that in order for transactional leadership to be effective there is a need for strong parallel transformational leadership to be present. The research shows that transformational leadership influences followers and organizations to perform above and beyond the call of duty (MacKenzie et al., 2001). Scholars argue that using these behaviors (transactional and transformational) in unison or having "ambidexterity" permits executives to perform different leadership roles

depending on the situation at hand and thus are more effective (Carmeli & Halevi, 2009). In light of what scholars state, it could be suggested that the chair may need to exhibit less transactional leadership and more transformational leadership behaviors.

Laissez-faire Leadership and Hospital Effectiveness

The final set of hypotheses dealing with general question 5 reviewed the relationship between *laissez-faire* leadership and hospital effectiveness. An analysis of the data revealed no surprises. There was no statistically significant relationship between laissez-faire leadership behaviors and EBITDA (r = -.119; p = .191), HCAHPS (r = -.105; p = 257), or CM (r = -.127; p = .163).

Several of the Adventist Health System chairs had average to high levels of laissez-faire leadership. The literature is clear this behavior is ineffective (Avolio et al., 1999; Bass, 1985; Harms & Credé, 2010; Schilling, 2009; Xirasagar, Samuels, & Stoskopf, 2005). The leadership style is non-authoritarian, leaving people alone to respond to their responsibilities and obligations in their own way. It is suggested that chairs should model transformational and transactional leadership behaviors while eliminating the elements of laissez-faire leadership behaviors.

Additional Findings

The focus of this study was the relationship of chair leadership behavior to leadership and hospital effectiveness. Multiple relationships were discovered and reviewed through 55 hypotheses. However, during the course of this study two unintended relationships were discovered which deserve review. The correlation matrix (see Table 9) shows there was a statistically significant and positive relationship between EBITDA and CM (r = 331; p = .000). There are several possible explanations for the result. One, may be that the hospital that provides improved CM gains financial margins. The opposite may also be true. Those hospitals with a strong earnings base may ensure the highest quality of clinical outcomes. Finally, both variables may feed off each other: Better clinical outcomes may influence income, and revenue may influence improved clinical outcomes.

The second unintended finding dealt with the relationship between financial margins (EBITDA) and patient satisfaction (HCAHPS). The correlation matrix in Table 9 shows that while approaching statistical significance at the .05 level, there was not a statistically significant relationship between hospital financial margins and patient satisfaction (r = .169; p = .066). This suggests that money does not have a relationship with financial margins nor do financial margins have a relationship to patient satisfaction. As stated before, the patient satisfaction is strongly related to doctors, nurses, and staff who truly care about their patients' well-being (Bell et al., 2002; Kivlin, 2002; Phillips et al., 2012). While strong financial margins can purchase hospital structures, state-of-art equipment, and highly paid doctors and nurses, it may not have relationship to intrinsic behaviors such as caring. Certainly this study had multiple limitations, which will be reviewed in the next section.

Limitations

While this study reported many findings, it also had multiple limitations which are normal when researching a complex topic such as hospital board chairs' relationship to effectiveness. Note the following limitations:

1. The study was limited to the honesty of those answering the survey and to the data they provided about chairs.

2. Clearly the independent variable cannot be manipulated by the researcher. Because of this fact, causation cannot be inferred nor can internal validity be demonstrated.

 The leadership behavior information gathered is based on perceptions.
Certainly perceptions can change daily, and the answers provided to the survey depend on the perceptions at the time of survey completion.

4. The study relates to the fact that no verbal explanation was given the survey recipients. This lends itself to individual interpretation of the instrument and could lead to personal interpretation and misunderstanding of certain questions.

5. A total of 333 board members were invited to participate in the study.

However, 123 responded to the survey, providing a response rate of 37%. As such this study does not represent even a majority of the targeted sample.

6. Whereas this study had a sufficient response rate to calculate significance, it did not have enough responses to generalize results to the entire chair population.

7. All chairs studied are exclusively executives of Adventist Health System. As such there is not a diversity of chairs who serve while working in other businesses.

8. Using a frequency scale is limiting and can create difficulties when collecting the data. Interpretation of the data is dependent on the individual, and differences between selecting, for example, 3 as opposed to 4 on the scale is left to personal interpretation.

9. Geographic location has a certain amount of effect on EBITDA given the payer mix and financial stability of the population. Some locations have wealthy populations with private insurance and thus EBITDA is naturally high while other hospitals are located in poor locations where larger percentages cannot pay their hospital bill, which drives down EBITDA.

10. The AHS community board structure is unique in that while the boards evaluate the CEO, they do not hire or fire the CEO or the board chair. In addition, board chairs are either AHS corporate executives or hospital CEOs serving as chair of a sister hospital. This again limits the generalization which can be made between AHS community boards and other NPO boards in the USA.

11. Within this study the CEO was a "gatekeeper" with regard to the survey. He/She had the direct contact with the board members in inviting them to participate in the study. This could be viewed as a limiting factor and, in some cases, as positive because the CEO has more influence over the board members than the researcher, and participation rates were potentially higher given the involvement of the CEO.

Conclusions

While many findings were reported here, 11 major findings were:

1. There was statistical significance and positive relationship between transformational leadership behaviors and chair effectiveness (r = .869; p = .000).

2. There was statistical significance and positive relationship between transactional leadership behaviors and chair effectiveness (r = .382; p = .000).

3. There was no statistically significant relationship between laissez-faire leadership behaviors and chair effectiveness (r = -.122; p = .178).

4. There was statistical significance and positive relationship between financial margin (EBITDA) and clinical outcomes (CM) (r = .331; p = .000). There was no statistical significance in the relationship between hospital financial margins and patient satisfaction (r = .169; p = .066).

5. There was no statistical significance in the relationship found between chair leadership effectiveness and hospital effectiveness metrics such as EBITDA (r = -.019; p = ..031), HCAHPS (r = -160; p = ..083), and CM (r = -.044; p = ..632).

6. There was statistical significance and a positive relationship between chair education and chair effectiveness (r = .235; p = .009).

7. There was statistical significance and a positive relationship between chair education and the organizational metric measuring hospital financial success (EBITDA) (r = .349; p = .000) yet not a statistically significant relationship between chair education and patient satisfaction (r = -.043; p = .643).

8. There was no statistically significant relationship between chair longevity and chair effectiveness (r = -.023; p = .803).

9. There was a statistically significant relationship between chair longevity and patient satisfaction as measured by HCAHPS (r = .221; p = .016). However, there was statistical significance and a negative relationship between chair longevity and hospital financial success as measured by EBITDA (r = .233; p = .010).

10. While nearing statistical significance, there was no statistically significant relationship between chair age and chair effectiveness (r = -.169; p = .061).

11. There was statistical significance and negative relationship between chair age and hospital financial performance as measured by EBITDA (r = -203, p = .024).

Recommendations

The previous sections have carefully reviewed the major results of the study along with limitations. The following provides recommendations for chairs, board members, hospitals, and researchers.

Recommendations for Practice

The results of this study have practical application for chairs of Adventist Health System, as well as other similar hospital boards. This study identified transformational leadership as an effective behavior for chairs. Secondly the study identified chair level of education as having a relationship to hospital effectiveness and financial margins. Given this:

1. Recruitment procedures may be designed and administered to assist in finding transformational chairs. Search committees may be armed with improved information in recruitment stages to select chairs who better fit the profile needed to lead. Leblanc and Gillies (2010) argue that the recruitment of a high performing chair is vital. An effective chair begins with the selection process. Leblanc and Gillies (2010) state, "There is no doubt that the leadership skills of the chair of the board are the most important factor in assuring effective board processes and wise decision-making" (p. 249).

The information from this study may assist in creating diagnostic tools such as
360-degree surveys to assist current chairs in understanding their leadership behavior
strengths and weaknesses.

3. AHS may wish to ensure all board chairs have a minimum of a master's degree in the recruitment stage, and in the case of current board chairs, AHS may wish to bring all chairs to a minimum of a master's-level degree.

4. Given there is a statistically significant and negative relationship between chair longevity and EBITDA (r = -.233; p = .010), boards may wish to consider rotation of chairs or term limits.

5. More training is needed for chairs and board members to work together to create a transformational environment within their facilities. Currently there are few training modules for chairs that are centered on evidence-based training or that highlight the key leadership behaviors of an effective chair.

Recommendations for Additional Research

This study sets forth foundational findings that establish relationship but do not establish causality. The following are recommendations for further research:

1. Carry out hierarchical linear modeling of the data to test nesting possibilities. This would allow for measuring multiple aspects of the data such as comparing the effectiveness of the chair among multiple hospitals where he/she presides.

2. Replicate the current study to review consistency of results. The study would be conducted studying the same board chairs and hospitals and using the same survey instrument. However, in order to improve the survey response rate the researcher may wish to request that the CEO and board chair place the survey on the board meeting agenda and proctor the survey at that meeting. In this way it is proposed that the response rate may reach over 90%. The only disadvantage of this technique is that board members may feel rushed to finish the evaluation and may feel undue pressure from the chair and CEO.

3. Conduct a qualitative study using focus groups and key informant interviews to provide answers to many of the unresolved questions of this study.

4. Broaden the study to other hospital systems and compare results among hospital systems both for profit and nonprofit. In addition, the study could be broadened to non-healthcare entities.

5. Replicate this current study in regard to chair leadership behaviors' relationship to organizational effectiveness metrics. This study found there was little relationship between effective chair leadership behaviors and hospital effectiveness metrics. This is counterintuitive and is not fully supported by current scholarly literature. Replicating this facet of the study is important. It would be informative to expand the sample and add further hospital effectiveness metrics.

6. Use hospital metrics over time (trending) as the unit of measure instead of a point in time in order to control for a point-in-time bias.

7. Study the relationship between hospital CEOs and their board chairs and that relationship to hospital effectiveness.

8. Clearly define and distinguish levels of effectiveness of the board, board chair, CEO, and organization and then study those dependent variables in relationship to other determined independent variables.

A Final Thought

John Maxwell (2008) once said, "Everything rises and falls on leadership" (p. 123). Echoing Maxwell's sentiments Bass stated that leadership is the most critical factor to organizational success (Bass & Stogdill, 1990). These are bold statements of which the fine points will be argued for years to come. However, there is no doubt that leadership is important to organizational change management and success. Given that modern healthcare is going through a greater change than that of the second industrial revolution

(Hagenow, 2001), there is ongoing need for hospital leaders at all levels to perform at the highest caliber.

This study sought to determine the relationship between leadership behaviors of chairs and effectiveness, and that relationship to hospital effectiveness. The collective evidence reported through this study adds to the body of literature, which indicates that transformational leadership is a predictor of leadership effectiveness. In addition, multiple chair demographics, including education level, had a positive relationship to hospital effectiveness metrics. May this study provide information inspiring effective hospital leadership for the 21st century.

APPENDICES

APPENDIX A

BOARD ROLES
BOARD ROLES

Axelrod	Block	Houle	Ingram	BoardSource
Determine mission and purpose	Determine organization	Assure mission congruence and set board	Determine mission and purpose	Determine organization's
Select and support chief executive Review the executive's performance	mission Recruit, hire, evaluate, reward, evaluate, if necessary, the executive director	Select the executive and establish conditions of employment	Select chief executive Support chief executives and assess performance	Select and support the executive, review his or her performance
Plan for the future	Set policies and adopt plans for the organization's operations	Approve and periodically revise long-range plans for the institution	Ensure effective organizational planning	Engage in strategic planning
Approve and monitor the organization's programs and services		Oversee the programs of the institution to assure objectives are being achieved	Determine, monitor, and strengthen the organization's programs and services	Approve and monitor the organization's programs and services
Provide sound financial management	Approve budget, establish fiscal policies and financial controls, monitor finances	Manage and secure adequate financial resources	Manage resources effectively	Ensure effective fiscal management
Ensure adequate financial recourses	Provide adequate resources		Ensure adequate resources	Raise money
Advance organizations' public image	Develop organizational visibility	Integrate the organization with its social environment	Enhance the organization's public standing	Enhance the organization's public image
Strengthen its own effectiveness as a board	Recruit and select new board members and provide them with orientation to the board's business	Continuously appraise itself and periodically devote time to analyzing composition/performance	Recruit new board members and assess board performance	Carefully select and orient new board members and organize for efficient operation
	Ensure that the organization's corporate governance documents are updated and all reports are filed as required	Assure that its basic legal an ethical responsibilities are being fulfilled	Ensure legal and ethical integrity and maintain accountability	
	Protect and preserve the organization's tax exempt status			
		Work closely and interactively with the chief executive/staff		Understand the relationship between board and staff
		Serve as an orbiter in conflicts between staff		

APPENDIX B

LETTERS



September 27, 2011

Duane Covrig, PhD Institutional Review Board (IRB) Andrews University Berrien Springs, MI 49104

Dear Dr. Covrig:

Anthony Stahl is currently working for Florida Hospital Heartland Division as Vice President of Support and Ancillary Services. Currently he is working on a research project entitled: Exploring the Relationship Between Board Chair Leadership Behaviors and Chair Effectiveness as Perceived by Board Members and CEO's of Adventist Health Systems.

It is my understanding data will be collected from board members and CEO's during the later part of this year. Adventist Health Systems approves of this data collection and study as long as the confidentially of board members, board chairs and CEO's are fully protected.

Should you have further questions please feel free to contact me at 407-975-1401.

Sincerely.

Donald L. Jernigan, Ph.D. President and CEO



June 28, 2012

Anthony Stahl Tel: (863) 381-2018 Email: <u>Anthony.Stahl@ahss.org</u>

RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTSIRB Protocol #: 12-002Application Type: OriginalDept.: LeadershipReview Category: ExpeditedAction Taken: ApprovedAdvisor: Duane CovrigTitle: Exploring the Relationship Between Adventist Hospital Board Chair Leadership BehaviorsBehaviorsand Effectiveness as Perceived by Board Members and that Relationship to Hospital Effectiveness

This letter is to advise you that the Institutional Review Board (IRB) has approved your IRB application for research involving human subjects entitled: *"Exploring the Relationship Between Adventist Hospital Board Chair Leadership Behaviors and Effectiveness as Perceived by Board Members and that Relationship to Hospital Effectiveness"* IRB protocol number 12-002 under Expedited category. The decision is based on the *Florida Hospital, Portia, Littleton and Parker Adventist Hospitals and Adventist Midwest Health Institutional Review Boards* which are duly constituted according to the Federal Rules. This approval is valid until June 28, 2013. If your research is not completed by the end of this period you must apply for an extension at least four weeks prior to the expiration date. We also ask that you inform the IRB Office whenever you complete your research.

Please note that any future changes made to the study design and/or informed consent form require prior approval from 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.

We wish you all the best in your research.

Sincerely,

Hunderen

Sarah Kimakwa IRB, Research & Creative Scholarship

> Institutional Review Board - 4150 Administration Dr Room 322 - Berrien Springs, MI 49104-0355 Tel: (269) 471-6361 Fax: (269) 471-6543 E-mail: irb@andrews.edu

Porter Adventist Hospital

Joint IRB Office 2525 South Downing Street Denver, Colorado 80210-5876 Phone: 303-778-2554 Fax: 303-778-5650

Friday, April 13, 2012

Anthony Stahl, PhD. Florida Hospital Heartland Medical Center 3512 Peugeot St Sebring, FL 33872

RE: Study Number 1395

Exploring the relationship between Adventist Health System hospital board chair leadership behaviors and effectiveness as perceived by board members and that relationship to hospital effectiveness

NEW PROTOCOL Expedited:

Cover letter dated March 2, 2012 requesting initial review and approval of a survey to be conducted among hospital boards in the Adventist network. Included find:

- Non-Exempt Application

- Letter from Porter Adventist Hospital's CEO, Randy Haffner
- Research Impact Statement
- Invoice (Requesting waiver of the review fee)
- Letter from Florida Hospital Heartland Division CEO, Donald Jernigan, PhD.
- Florida Hospital IRB Letter and Approval
- Consent (IRB NE T# 298998-1, Version Date 1/11/12)
- Survey 1
- Survey 2
- Protocol (IRBNET# 298998-1 Version Date 1/11/12)
- References
- Investigator CV, NIH Training

Dear Dr. Stahl:

This letter is to inform you of the action taken by the Porter, Littleton and Parker Joint IRB regarding the above-mentioned submission.

The board's action	is as follows:		
Action: Approval E	Expedited	This action	occurred on: 4/09/2012 &
Recusing/abstainin	g member(s): None.		4/10/2012
Stipulations: None	2.		
Recommendations/	Comments: The full board ackno	owledged this review at the April 10, 2	2012 meeting.
Research Sites:	Porter A dventist Hospital	Littleton Adventist Hospital	Parker Adventist Hospital

Sub-Investigators: None.

We extend the healing ministry of Christ by caring for those who are ill and by nurturing the health of the people in our communities.

Porter Adventist Hospital Centura Health.

Joint IRB Office 2525 South Downing Street Denver, Colorado 80210-5876 Phone: 303-778-2554 Fax: 303-778-5650

Study #: 1395

Principal Investigator: Anthony Stahl, PhD. Initial Approval Date: 4/9/2010

Expiration Date: 4/8/2013

Review Interval: 12 months

Investigator Information/Responsibilities

- If this response contains a board requested stipulation, you must submit your response within 90days from the date of the 1 letter. The JOINT IRB office will send reminders at approximately 30, and 60 days. The board will take necessary action to suspend the research due to non-compliance, if a response is not received within 90 days.
- 2. Continuing review providing among other things, an update on the progress of the study and any new information that has come to light since the inception of the study is required. The review must occur within 1 year (or sooner if designated by the IRB) from the anniversary date of the convened meeting at which the IRB reviewed and approved the protocol. You must submit your report at least 45 days before the expiration date to give the IRB adequate time to review the report, and avoid a lapse in approval. If the approval expires, cease enrollment until approval is given by the fully convened IRB. The study expiration date is referenced above, and is included on responses sent from the IRB office. Please be cognizant of your expiration date. You may also receive a reminder notification from the IRB office prior to the expiration date.
- 3. You are required, at all times during this research, to promptly report to the Board any changes in research activity, unanticipated problems in the research, adverse events, or scientific misconduct involving risks to subjects or others.
- You must refrain from initiating changes in this approved research without first obtaining the Board's review and approval. This includes study advertisements, and minor changes to any protocol documents or consent forms (you must use the stamped IRB approved consent form). Pre-approval is not required where the initiation of a research change is necessary to eliminate apparent immediate hazard to human subjects. Failure to comply with these obligations may result in the termination of the Board's approval of this research.
- 5. All future submissions must include a cover letter with the IRB study number, full study title, investigator name, a detailed description, and a summary of changes for all revisions.
- 6. Research study participant records (only for studies where Centura is a designated site or studies conducted by Centuraemployed physicians) shall keep records of experimental drugs and devices 30 years after date of experiment (medical record must also be retained); Non-drug and device records shall be kept 10 years after date of research
- 7. The Porter, Littleton and Parker JOINT IRB is organized and operates according to the ICH Good Clinical Practice guidance, complies with applicable laws, and regulation as described in [21 CFR Parts 50, 56] & [45 CFR 46].

Melody Rael Porter and Littleton Adventist Hospitals Joint IRB Manager

We extend the healing ministry of Christ by caring for those who are ill and by nurturing the health of the people in our communities.



June 13, 2012

Anthony Stahl, MSA, SPHR Vice President Support & Ancillary Services & Compliance Officer/Privacy Officer Florida Hospital Heartland Medical Center 3512 Peugeot St Sebring, FL 33872

Protocol Title: AMH 2012-05 (1220120599) Internal #: New Appl

Exploring the Relationship between Adventist Health System Hospital Board Chair Leadership Behaviors and Effectiveness as Perceived by Board Members and that Relationship to Hospital Effectiveness

Reviewed For: Initial Submission

Dear Mr. Stahl:

The Research Review Board has reviewed the above referenced item. The status is as follows:

RESEARCH REVIEW BOARD ACTION:

Approved

Meeting Date: 6/ 13/ 2012

Next Expiration Date: 6/ 12/ 2013

COMMENTS:

Consent form reviewed by RRB: IRBNET #: 298998-1 Version Date:: 1/11/12. Version date of Protocol reviewed by RRB: IRBNET #: 298998-1 Version Date:: 1/11/12.

Sincerely yours,

eluca (Prestmmp

Rebecca C Preston, MD Chair, Research Review Board (IRB 00002450, IRB 00003793)

Research Review Board

La Grange Treatment Pavilion 1325 Memorial Drive La Grange, Illinois 60525 708.245.8156 www.keepingyouwell.com



Florida Hospital Institutional Review Board 212 E. Winter Park Street Orlando, FL 32804 Telephone: (407) 303-5581 Fax: (407) 303-3638 FWA: 00002060 IRB Registration #: 00000842

DATE:	January 30, 2012
TO: FROM:	Anthony Stahl, MSA Florida Hospital Institutional Review Board (IRB)
PROJECT TITLE:	[298998-1] Exploring the relationship between Adventist Health System hospital board chair leadership behaviors and effectiveness as perceived by board members and that relationship to hospital effectiveness
SPONSOR:	Non-Funded
REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE:	January 30, 2012
EXPIRATION DATE:	January 29, 2013
REVIEW TYPE:	Expedited Review
REVIEW CATEGORY:	Expedited review category #7

Note: If this is an expedited or exempt action, the IRB members will be made aware at the next convened meeting.

NOTE: BEFORE BEGINNING THIS PROJECT AT FLORIDA HOSPITAL, YOU MUST OBTAIN THE APPROVAL OF BOTH THE IRB AND THE OFFICE OF RESEARCH ADMINISTRATION.

Thank you for your submission of New Project materials for this project. The Florida Hospital IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a study design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulations. Material reviewed for this submission includes:

- Application Form IRB Application (UPDATED: 01/11/2012)
- Letter Invitation Letter from CEO (UPDATED: 01/11/2012)
- Letter Approval/Support Letter from AHS President (UPDATED: 01/8/2012)
- Proposal Background and References (UPDATED: 01/11/2012)
- Protocol Protocol (UPDATED: 01/11/2012)

- Questionnaire/Survey Part 1 (UPDATED: 01/26/2012)
- Questionnaire/Survey Part 2 (UPDATED: 01/11/2012)

Please remember that informed consent is a process beginning with a description of the study and assurance of participant understanding followed by a FHIRB approved signed consent form. Informed consent must continue throughout the study via a dialogue between the researcher and research participant. Federal regulations require that each participant receives a copy of the consent document.

Please note that any revision to previously approved materials must be approved by the FHIRB prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED (WHICH INCLUDES SERIOUS AND UNEXPECTED) PROBLEMS involving risks to subjects or others must be reported promptly to this office. Please use the appropriate reporting forms for that submission. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project. Based on the risks, this project requires continuing review by this committee at a time period as noted above. Please use the appropriate forms for this procedure. The FHIRB reviews renewal submissions one month prior to the study expiration noted above, as well. Your documentation for continuing review should be received with sufficient time for review and continued approval before one month prior to the expiration date of January 29, 2013.

Please note that all research records must be retained according to ORA's Research Records Retention and Storage SOP.

If you have any questions, please contact the Florida Hospital IRB at 407 303 5581 or <u>FH.IRB.general@flhosp.org</u>. Please include your project title and IRBNet ID number in all correspondence with this office.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within the Florida Hospital IRB records.

Generated on IRBNet



May 8, 2012

Institutional Review Board (IRB) Andrews University 4150 Administration Dr. Room 210 Berrien Springs, MI 49104-0355

Dear Andrew's University IRB:

We would like to participate in Anthony Stahl's dissertation study entitled "Exploring the Relationship between Board Chair Leadership Behaviors and Chair Effectiveness as Perceived by Board Members and that Relationship to Hospital Effectiveness." We give institutional consent for him to collect data from hospital board members. We also understand he will be comparing these results to available data on hospital effectiveness using EBDIT, Core measures and HCAHPS as provided by each hospital. We understand this study is being done in partial fulfillment of Anthony's PhD program at Andrews University.

We plan to distribute the survey to the board members through our email system in order to protect the identity of board members and insure the highest level of anonymity and confidentiality. For the sake of connecting board member responses to hospitals effectiveness, hospitals will be identified in the instruments. It is our understanding however that the study will use pseudo names for hospitals upon publication.

Should you have any further questions please feel free to contact me at.

Sincerely

Ken Bacon President and CEO

Dear Board Member:

I am pleased to invite you to take part in a research study that investigates the relationship between board chair leadership behaviors and chair effectiveness and that relationship to hospital effectiveness within Adventist Health System Hospitals. This research involves a brief self-administered survey instrument and is being conducted as part of a doctoral dissertation. You were chosen for the study because of your current role as a board member.

The purpose of the research study is to determine the relationship between board chair leadership behaviors and chair effectiveness and that relationship to hospital effectiveness within Adventist Health System Hospitals. As a leader within the hospital board you are part of that determination. You are asked to complete a confidential Mulit- Factor Leadership questionnaire (MLQ) within 7-10 business days via a secure process that ensures anonymity. While your participation is purely voluntary, it is critical to the significance of the study and to its findings. The 15 to 20 minute survey contains 45 questions.

This research is timely and relevant to Adventist Health System and other nonprofit organizations because the isolation of an evidenced-based model of successful leadership styles can influence leadership development initiatives for board chairs, succession planning and best practice leadership guidelines throughout the organization and across similar nonprofit entities. More profoundly, the potential benefits of such a purposeful healthcare leadership model for board chairs will be evident in more effective, efficient care delivery to the communities served.

Completion of the survey serves as your consent to participate in the study. You will receive one email reminder throughout the study period. Please ignore the standard email reminder if you have already completed the survey. Questions related to the research study may be forwarded directly to the researcher (Anthony Stahl) at Anthony.stahl@ahss.org. Thank you for your willingness to participate

This had previously been sent to you as a board member, if you've already completed thank you. If not, please take a few moments to complete the survey via the link provided below. Thank you.

Dear Board Member:

You have been selected to take part in a brief survey which is being sent out to board members serving Adventist Health System Hospitals. The research is being conducted by Anthony Stahl (doctoral student at Andrews University) who is studying the relationship between hospital board chair leadership behaviors and effectiveness and that relationship to hospital effectiveness.

To begin the survey, simply click on the link below. (If the link doesn't work, simply cut & paste it into your browser.) Once you access the survey, you will be required to create a USER ID LOGIN (using an email address) and a PASSWORD (of your choosing - Passwords are case sensitive). The email address that is used as the USER ID LOGIN does NOT have to be your real email address (it can be a bogus email), but it does need to be created in a valid email address format. Once the USER ID LOGIN and PASSWORD are created, you will have access to your survey. Please know there will be no way for the researcher to link your responses back to you.

www.mindgarden.com/login/key/a204-4fede49582d26

I want to thank you in advance for taking time out of your day to complete this survey.

Sincerely

Anthony Stahl Vice President

Florida Hospital Heartland

863-402-3366

PS. The attached document provides further information regarding the survey.

CONSENT TO PARTICIPATE IN RESEARCH

You are being asked to participate in a research study conducted by Doctoral Candidate, Anthony Stahl from the Department of Education at Andrews University. The results of the study will contribute to the completion of a dissertation. As a board member/CEO/Board Chair for Adventist Health System you match the initial criteria for participation in this study.

Purpose of the Study

The purpose of the study is to explore the relationship between board chair leadership behaviors and chair effectiveness as perceived by board members and CEOs of Adventist Health Systems

1 I understand that in order to participate in this study I must be either be a **Board chair, CEO,** and or a board member of Adventist Health System.

2 I understand that I will complete a Multifactor Leadership Questionnaire (MLQ, and that the MLQ is a 45-question survey designed to identify current leadership style with(s) the organization (Transformational, Transactional, Non-transactional.)

Time:

3. I understand that it will take approximately 15 to 20 minutes to complete the survey.

Risks:

I have been informed that the study will bear no more than minimal risks.

Voluntary Participation:

I understand that participation is voluntary, that refusal to participate involves no penalty or loss of benefit to which the subjects are otherwise entitled, and that I may discontinue participation at any time without penalty or loss to which the subjects are otherwise entitled if I had completed participation in the research.

Benefits:

I understand that once the research is complete, I will receive a summary report of the findings. And that I can use this information to better understand the relationship between board chair leadership behaviors and chair effectiveness

Confidentiality

I have been informed that only researcher and dissertation committee members will have access to data collected for the study and that no other person will be able to see or use the data. In addition, that data will be under the custody of the researcher.

I have been informed and understand that should I have any questions or concerns about the research, I should feel free to contact Anthony Stahl (Principle Investigator) at (863) 3812018; email <u>astahl4@yahoo.com</u>; Mail: 3512 Peugeot St – Sebring, Florida, 33872 or Dr. Duane Covrig (Dissertation Chairperson) at (269)471-3475; Email; Covrig@andrews.edu

I have read and understand the information provided regarding the research and by pressing ACCEPT, I give my informed consent to participate in this study

APPENDIX C

INFORMED CONSENT PRINTSCREEN



APPENDIX D

HCAHPS SURVEY

HCAHPS Survey

SURVEY INSTRUCTIONS

- You should only fill out this survey if you were the patient during the hospital stay named in the cover letter. Do not fill out this survey if you were not the patient.
- Answer all the questions by checking the box to the left of your answer.
- You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

```
    ☐ Yes
    ☑ No → If No, Go to Question 1
```

You may notice a number on the survey. This number is used to let us know if you returned your survey so we don't have to send you reminders. Please note: Questions 1-25 in this survey are part of a national initiative to measure the quality of care in hospitals. OMB #0938-0981

Please answer the questions in this survey about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

YOUR CARE FROM NURSES

- 1. During this hospital stay, how often did nurses treat you with <u>courtesy and respect</u>?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always
- 2. During this hospital stay, how often did nurses <u>listen carefully to you</u>?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴□ Always

- During this hospital stay, how often did nurses <u>explain things</u> in a way you could understand?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always
- 4. During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always
 - ⁹□ I never pressed the call button

March 2013

YOUR CARE FROM DOCTORS

- 5. During this hospital stay, how often did doctors treat you with <u>courtesy and respect</u>?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always
- 6. During this hospital stay, how often did doctors <u>listen carefully</u> to you?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always
- 7. During this hospital stay, how often did doctors <u>explain things</u> in a way you could understand?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always

THE HOSPITAL ENVIRONMENT

- 8. During this hospital stay, how often were your room and bathroom kept clean?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴□ Always
- 9. During this hospital stay, how often was the area around your room quiet at night?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴□ Always

- YOUR EXPERIENCES IN THIS HOSPITAL
- 10. During this hospital stay, did you need help from nurses or other hospital staff in getting to the bathroom or in using a bedpan?
 - ¹ Yes
 - ² No \rightarrow If No, Go to Question 12
- 11. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always
- 12. During this hospital stay, did you need medicine for pain?
 - ¹ Yes
 - ² No \rightarrow If No, Go to Question 15
- 13. During this hospital stay, how often was your pain well controlled?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴□ Always
- 14. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always

March 2013

- 15. During this hospital stay, were you given any medicine that you had not taken before?
 - ¹ Yes

² No \rightarrow If No, Go to Question 18

- 16. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴□ Always
- 17. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?
 - ¹ Never
 - ² Sometimes
 - ³ Usually
 - ⁴ Always

WHEN YOU LEFT THE HOSPITAL

- 18. After you left the hospital, did you go directly to your own home, to someone else's home, or to another health facility?
 - ¹ Own home
 - ² Someone else's home
 - ³ Another health facility → If Another, Go to

Question 21

- 19. During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?
 - ¹ Yes
 - ² No
- 20. During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?
 - ¹ Yes ² No

OVERALL RATING OF HOSPITAL

Please answer the following questions about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

- 21. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?
 - $^{0}\Box$ 0 Worst hospital possible
 - ¹ 🗌 1
 - ² 2 2
 - ³□ 3
 - ⁴ 4
 - 5□ 5
 - ⁶□ 6

⁷□ 7

8 **□** 8

⁹□ 9

¹⁰**□**10 Best hospital possible

3

March 2013

- 22. Would you recommend this hospital to your friends and family?
 - ¹ Definitely no
 - ² Probably no
 - ³ Probably yes
 - ⁴ Definitely yes

UNDERSTANDING YOUR CARE WHEN YOU LEFT THE HOSPITAL

- 23. During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left.
 - ¹ Strongly disagree
 - ² Disagree
 - ³ Agree
 - ⁴□ Strongly agree
- 24. When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.
 - ¹ Strongly disagree
 - ² Disagree
 - ³ Agree
 - ⁴ Strongly agree
- 25. When I left the hospital, I clearly understood the purpose for taking each of my medications.
 - ¹ Strongly disagree
 - ² Disagree
 - ³ Agree
 - ⁴ Strongly agree
 - ⁵ I was not given any medication when I left the hospital

ABOUT YOU

There are only a few remaining items left.

- 26. During this hospital stay, were you admitted to this hospital through the Emergency Room?
 - ¹ Yes
 - ² No
- 27. In general, how would you rate your overall health?
 - ¹ Excellent
 - ² Very good
 - ³ Good
 - ⁴□ Fair
 - ⁵ Poor
- 28. In general, how would you rate your overall <u>mental or emotional</u> <u>health</u>?
 - ¹ Excellent
 - ² Very good
 - ³ Good
 - ⁴□ Fair
 - ⁵ Poor
- 29. What is the highest grade or level of school that you have <u>completed</u>?
 - ¹ 8th grade or less
 - ² Some high school, but did not graduate
 - ³ High school graduate or GED
 - ⁴ Some college or 2-year degree
 - ⁵ 4-year college graduate
 - ⁶ More than 4-year college degree

March 2013

30.	Are you of Spanish, Hispanic or Latino origin or descent?	32.	What language do you <u>mainly</u> speak at home?
	 ¹ No, not Spanish/Hispanic/Latino ² Yes, Puerto Rican ³ Yes, Mexican, Mexican American, Chicano ⁴ Yes, Cuban ⁵ Yes, other Spanish/Hispanic/Latino 		 ¹□ English ²□ Spanish ³□ Chinese ⁴□ Russian ⁵□ Vietnamese ⁶□ Some other language (please print):
31.	What is your race? Please choose one or more.		
	 ¹ White ² Black or African American ³ Asian ⁴ Native Hawaiian or other Pacific Islander ⁵ American Indian or Alaska Native 		

THANK YOU

Please return the completed survey in the postage-paid envelope.

[NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

[RETURN ADDRESS OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

Questions 1-22 and 26-32 are part of the HCAHPS survey and are works of the U.S. Government. These HCAHPS questions are in the public domain and therefore are NOT subject to U.S. copyright laws. The three Care Transitions Measure® questions (Questions 23-25) are copyright of The Care Transitions Program® (<u>www.caretransitions.org</u>).

March 2013

HCAHPS Survey

SURVEY INSTRUCTIONS

- You should only fill out this survey if you were the patient during the hospital stay named in the cover letter. Do not fill out this survey if you were not the patient.
- Answer all the questions by completely filling in the circle to the left of your answer.
- You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:
 - 0 Yes
 - No → If No, Go to Question 1

You may notice a number on the survey. This number is used to let us know if you returned your survey so we don't have to send you reminders. Please note: Questions 1-25 in this survey are part of a national initiative to measure the quality of care in hospitals. OMB #0938-0981

Please answer the questions in this survey about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

YOUR CARE FROM NURSES

- 1. During this hospital stay, how often did nurses treat you with <u>courtesy and</u> <u>respect</u>?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always
- 2. During this hospital stay, how often did nurses listen carefully to you?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always

- 3. During this hospital stay, how often did nurses <u>explain things</u> in a way you could understand?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always
- 4. During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always
 - ⁹0 I never pressed the call button

March 2013

YOUR CARE FROM DOCTORS

- 5. During this hospital stay, how often did doctors treat you with <u>courtesy</u> <u>and respect</u>?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always
- 6. During this hospital stay, how often did doctors listen carefully to you?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always
- 7. During this hospital stay, how often did doctors <u>explain things</u> in a way you could understand?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always

THE HOSPITAL ENVIRONMENT

- 8. During this hospital stay, how often were your room and bathroom kept clean?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always

- 9. During this hospital stay, how often was the area around your room quiet at night?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always

YOUR EXPERIENCES IN THIS HOSPITAL

- 10. During this hospital stay, did you need help from nurses or other hospital staff in getting to the bathroom or in using a bedpan?
 - ¹0 Yes
 - ²0 No → If No, Go to Question 12
- 11. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always
- 12. During this hospital stay, did you need medicine for pain?
 - ¹0 Yes
 - ²0 No \rightarrow If No, Go to Question 15
- 13. During this hospital stay, how often was your pain well controlled?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always

March 2013

- 14. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always
- 15. During this hospital stay, were you given any medicine that you had not taken before?
 - ¹0 Yes
 - ²0 No → If No, Go to Question 18
- 16. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always
- 17. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?
 - ¹0 Never
 - ²0 Sometimes
 - ³0 Usually
 - ⁴0 Always

WHEN YOU LEFT THE HOSPITAL

- 18. After you left the hospital, did you go directly to your own home, to someone else's home, or to another health facility?
 - ¹0 Own home
 - ²**0** Someone else's home
 - ³0 Another health facility → If Another, Go to Question 21

March 2013

- 19. During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?
 - ¹0 Yes
 - ²**0** No
- 20. During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?
 - ¹0 Yes
 - ²0 No

OVERALL RATING OF HOSPITAL

Please answer the following questions about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

- 21. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?
 - ⁰0 0 Worst hospital possible
 - ¹0 1
 - ²**0** 2
 - ³0 з
 - ⁴**0** 4
 - ⁵**0** 5
 - ⁶0 6
 - ⁷**0** 7
 - ⁸0 8
 - °**0** 9
 - ¹⁰0 10 Best hospital possible

- 22. Would you recommend this hospital to your friends and family?
 - ¹0 Definitely no
 - ²0 Probably no
 - ³0 Probably yes
 - ⁴0 Definitely yes

UNDERSTANDING YOUR CARE WHEN YOU LEFT THE HOSPITAL

- 23. During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left.
 - ¹0 Strongly disagree
 - ²0 Disagree
 - ³O Agree
 - ⁴0 Strongly agree
- 24. When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.
 - ¹0 Strongly disagree
 - ²0 Disagree
 - ³0 Agree
 - ⁴0 Strongly agree
- 25. When I left the hospital, I clearly understood the purpose for taking each of my medications.
 - ¹0 Strongly disagree
 - ²0 Disagree
 - ³0 Agree
 - ⁴0 Strongly agree
 - ⁵0 I was not given any medication when I left the hospital

ABOUT YOU

There are only a few remaining items left.

- 26. During this hospital stay, were you admitted to this hospital through the Emergency Room?
 - ¹0 Yes
 - ²0 No
- 27. In general, how would you rate your overall health?
 - ¹0 Excellent
 - ²0 Very good
 - ³O Good
 - ⁴0 Fair
 - ⁵0 Poor
- 28. In general, how would you rate your overall mental or emotional health?
 - ¹0 Excellent
 - ²0 Very good
 - ³0 Good
 - 40 Fair
 - ⁵0 Poor
- 29. What is the highest grade or level of school that you have <u>completed</u>?
 - ¹0 8th grade or less
 - ²0 Some high school, but did not graduate
 - ³0 High school graduate or GED
 - 40 Some college or 2-year degree
 - ⁵0 4-year college graduate
 - ⁶0 More than 4-year college degree

March 2013

30. Are you of Spanish, Hispanic or Latino origin or descent?

- ¹0 No, not Spanish/Hispanic/Latino
- ²0 Yes, Puerto Rican
- ³0 Yes, Mexican, Mexican American, Chicano
- ⁴0 Yes, Cuban
- ⁵0 Yes, other Spanish/Hispanic/Latino

31. What is your race? Please choose one or more.

- ¹0 White
- ²**0** Black or African American
- ³0 Asian
- ⁴0 Native Hawaiian or other Pacific Islander
- ⁵0 American Indian or Alaska Native

32. What language do you <u>mainly</u> speak at home?

- ¹0 English
- ²0 Spanish
- ³0 Chinese
- ⁴0 Russian
- ⁵0 Vietnamese
- ⁶0 Some other language (please print):

THANK YOU

Please return the completed survey in the postage-paid envelope.

[NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

[RETURN ADDRESS OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

Questions 1-22 and 26-32 are part of the HCAHPS survey and are works of the U.S. Government. These HCAHPS questions are in the public domain and therefore are NOT subject to U.S. copyright laws. The three Care Transitions Measure® questions (Questions 23-25) are copyright of The Care Transitions Program® (<u>www.caretransitions.org</u>).

March 2013

Sample Initial Cover Letter for the HCAHPS Survey

[HOSPITAL LETTERHEAD]

[SAMPLED PATIENT NAME] [ADDRESS] [CITY, STATE ZIP]

Dear [SAMPLED PATIENT NAME]:

Our records show that you were recently a patient at [NAME OF HOSPITAL] and discharged on [DATE OF DISCHARGE]. Because you had a recent hospital stay, we are asking for your help. This survey is part of an ongoing national effort to understand how patients view their hospital experience. Hospital results will be publicly reported and made available on the Internet at <u>www.medicare.gov/hospitalcompare</u>. These results will help consumers make important choices about their hospital care, and will help hospitals improve the care they provide.

Questions 1-25 in the enclosed survey are part of a national initiative sponsored by the United States Department of Health and Human Services to measure the quality of care in hospitals. Your participation is voluntary and will not affect your health benefits.

We hope that you will take the time to complete the survey. Your participation is greatly appreciated. After you have completed the survey, please return it in the pre-paid envelope. Your answers may be shared with the hospital for purposes of quality improvement. [OPTIONAL: You may notice a number on the survey. This number is used to let us know if you returned your survey so we don't have to send you reminders.]

If you have any questions about the enclosed survey, please call the toll-free number 1-800-xxxxxxx. Thank you for helping to improve health care for all consumers.

Sincerely,

[HOSPITAL ADMINISTRATOR] [HOSPITAL NAME]

Note: The OMB Paperwork Reduction Act language must be included in the mailing. This language can be either on the front or back of the cover letter or questionnaire, but cannot be a separate mailing. The exact OMB Paperwork Reduction Act language is included in this appendix. Please refer to the Mail Only, and Mixed Mode sections, for specific letter guidelines.

March 2013

Sample Follow-up Cover Letter for the HCAHPS Survey

[HOSPITAL LETTERHEAD]

[SAMPLED PATIENT NAME] [ADDRESS] [CITY, STATE ZIP]

Dear [SAMPLED PATIENT NAME]:

Our records show that you were recently a patient at [NAME OF HOSPITAL] and discharged on [DATE OF DISCHARGE]. Approximately three weeks ago we sent you a survey regarding your hospitalization. If you have already returned the survey to us, please accept our thanks and disregard this letter. However, if you have not yet completed the survey, please take a few minutes and complete it now.

Because you had a recent hospital stay, we are asking for your help. This survey is part of an ongoing national effort to understand how patients view their hospital experience. Hospital results will be publicly reported and made available on the Internet at <u>www.medicare.gov/hospitalcompare</u>. These results will help consumers make important choices about their hospital care, and will help hospitals improve the care they provide.

Questions 1-25 in the enclosed survey are part of a national initiative sponsored by the United States Department of Health and Human Services to measure the quality of care in hospitals. Your participation is voluntary and will not affect your health benefits. Please take a few minutes and complete the enclosed survey. After you have completed the survey, please return it in the pre-paid envelope. Your answers may be shared with the hospital for purposes of quality improvement. [*OPTIONAL*: You may notice a number on the survey. This number is used to let us know if you returned your survey so we don't have to send you reminders.]

If you have any questions about the enclosed survey, please call the toll-free number 1-800-xxxxxxx. Thank you again for helping to improve health care for all consumers.

Sincerely,

[HOSPITAL ADMINISTRATOR] [HOSPITAL NAME]

Note: The OMB Paperwork Reduction Act language must be included in the mailing. This language can be either on the front or back of the cover letter or questionnaire, but cannot be a separate mailing. The exact OMB Paperwork Reduction Act language is included in this appendix. Please refer to the Mail Only, and Mixed Mode sections, for specific letter guidelines.

March 2013

OMB Paperwork Reduction Act Language

The OMB Paperwork Reduction Act language must be included in the survey mailing. This language can be either on the front or back of the cover letter or questionnaire, but cannot be a separate mailing. The following is the language that must be used:

English Version

"According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0938-0981. The time required to complete this information collected is estimated to average 8 minutes for questions 1-25 on the survey, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: Centers for Medicare & Medicaid Services, 7500 Security Boulevard, C1-25-05, Baltimore, MD 21244-1850."

March 2013

REFERENCE LIST

REFERENCE LIST

- Abbott, S., Smith, R., Procter, S., & Iacovou, N. (2008). Primary care trusts. *Public Policy and Administration*, *23*(1), 43-59. doi:10.1177/0952076707083285
- Adventist Health System. (n.d.). *About us*. Retrieved November 10, 2012, from https://www.adventisthealthsystem.com/about-us
- Allison, M., & Kaye, J. (2005). Strategic planning for nonprofit organizations: A practical guide and workbook. Hoboken, NJ: Wiley.
- Andringa, R. C., & Engstrom, T. W. (2007). The nonprofit board answer book: A practical guide for board members and chief executives. San Francisco: Jossey-Bass; BoardSource.
- Antonakis, J., Avolio, B., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, 14(3), 261-295.
- Arvey, R. D., & Murphy, K. R. (1998). Performance evaluation in work settings. Annual Review of Pshychology, 49(1), 141-168.
- Ary, D., Jacobs, L. C., Sorenson, C., & Razavieh, A. (2009). Introduction to research in education (8th ed.). Belmont, CA: Wadsworth.
- Avolio, B. J., & Bass, B. M. (1985). *Multifactor leadership questionnaire* (3rd ed.). Menlo Park, CA: Mind Garden.
- Avolio, B. J., & Bass, B. M. (1995). *Multifactor Leadership Questionnaire manual and questionnaire*. Menlo Park, CA: Mind Garden.
- Avolio, B. J., & Bass, B. M. (2004). *Multifactor leadership questionnaire [MLQ]: Manual and sampler set.* [Redwood City, CA]: Mind Garden.
- Avolio, B. J., & Bass, B. M. (2008). Developing potential across a full range of leadership: Cases on transactional and transformational leadership. Mahwah, NJ: Lawrence Earlbaum.

- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 72(4), 441-462. doi:10.1348/096317999166789
- Axelrod, N. R. (2005). Board leadership and development. In R. D. Herman (Ed.), The Jossey-Bass handbook of nonprofit leadership and management. San Francisco: John Wiley & Sons.
- Baliga, B. R., Moyer, R. C., & Rao, R. S. (1996). CEO duality and firm performance: What's the fuss? *Strategic Management Journal*, *17*(1), 41-53. doi: 10.1002/(sici)1097-0266(199601)17:1<41::aid-smj784>3.0.co;2-#
- Barbuto, J. E. (2005). Motivation and transactional, charismatic, and transformational leadership: A test of antecedents. *Journal of Leadership & Organizational Studies*, 11(4), 26-40. doi:10.1177/107179190501100403
- Barge, J. K., & Schlueter, D. W. (1991). Leadership as organizing: A critique of leadership instruments. *Management Communication Quarterly*, 4(4), 541-570.
- Bass, B. M. (1981). Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications (2nd ed.). New York: Free Press.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bass, B. M. (1997). Does the transactional-transformational leadership paradigm transcend organizational and national boundaries? *American Psychologist*, 52, 130-139.
- Bass, B. M., & Avolio, B. J. (2004). *MLQ manual & sampler set* (3rd ed.). Retrieved September 4, 2011, from http://www.mindgarden.com/products/mlqc.htm#mlqrs
- Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207-218.
- Bass, B. M., & Avolio, J. B. (1993, Spring). Transformational leadership and organizational culture. *Public Administration Quarterly*, 112-121.
- Bass, B. M., & Bass, R. (2009). *The Bass handbook of leadership: Theory, research, and managerial applications*. New York: Free Press.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Bass, B. M., & Riggio, R. E. (2012). *Transformational leadership*. London, England: Taylor & Francis.

- Bass, B. M., & Stogdill, R. M. (1990). Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications. New York: Free Press.
- Battistella, R. M. (2010). *Health care turning point: Why single payer won't work.* Cambridge, MA: MIT Press.
- Behan, B. (2011). *Great companies deserve great boards: A CEO's guide to the boardroom*. New York: Palgrave Macmillan.
- Bell, R. A., Kravitz, R. L., Thom, D., Krupat, E., & Azari, R. (2002). Unmet expectations for care and the patient-physician relationship. *Journal of General Internal Medicine*, 17, 817-824.
- Bennis, W. G. (1959). Leadership theory and administrative behavior: The problem of authority. Administrative Science Quarterly, 4, 259-260.
- Bennis, W. G., & Townsend, R. (2005). *Reinventing leadership: Strategies to empower the organization*. New York: Harper Collins.
- Berle, A., & Means, G. (1932). *The modern corporation and private property*. New York: Macmillan.
- Bernhard, F., & O'Driscoll, M. P. (2011). Psychological ownership in small familyowned businesses: Leadership style and nonfamily-employees' work attitudes and behaviors. *Group & Organization Management*, 36(3), 345-384. doi: 10.1177/1059601111402684
- Bliss, M. A. (2011). Does CEO duality constrain board independence? Some evidence from audit pricing. *Accounting & Finance*, *51*(2), 361-380. doi:10.1111/j.1467-629X.2010.00360.x
- Block, S. R. (1998). *Perfect nonprofit boards: Myths, paradoxes, and paradigms*. Needham Heights, MA: Simon & Schuster.
- BoardSource. (2010). *The handbook of nonprofit governance*. San Francisco: Jossey-Bass.
- Boles, H. W. (1976). *Multidisciplinary readings in educational leadership*. New York: MSS Information.
- Boorom, R. (2009). Spiritual leadership: A study of the relationship between spiritual leadership theory and transformational leadership (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 305133283)
- Bowen, W. G. (2008). *The board book: An insider's guide for directors and trustees*. New York: W.W. Norton.

- Boyd, B. K. (1995). CEO duality and firm performance: A contingency model. *Strategic Management Journal*, *16*(4), 301-312. doi:10.1002/smj.4250160404
- Bradham, J. (2009). *The truth about what nonprofit boards want: The nine little things that matter most.* Hoboken, NJ: John Wiley & Sons.
- Brimmer, K. (2012). Patient satisfaction more influenced by hospital staff than facilities. Retrieved March 25, 2013, from http://www.healthcarefinancenews.com/news/ patient-satisfaction-more-influenced-hospital-staff-facilities
- Brown, W. A. (2005). Exploring the association between board and organizational performance in nonprofit organizations. *Nonprofit Management and Leadership*, *15*(3), 317-339. doi:10.1002/nml.71
- Brown, W. A., & Guo, C. (2010). Exploring the key roles for nonprofit boards. *Nonprofit* and Voluntary Sector Quarterly, 39(3), 536-546. doi: 10.1177/0899764009334588
- Burke, R. J., & Cooper, C. L. (2009). *Research companion to corruption in organizations*. Cheltenham, UK: Edward Elgar.
- Burns, J. M. (1978). Leadership. New York: Harper & Row.
- Burtch, P. H. (2011). The effect of leadership flexibility and effectiveness on city manager tenure (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 878538664)
- Cameron, K. S. (1986). Effectiveness as paradox: Consensus and conflict in conceptions of organizational effectiveness. *Management Science*, *32*, 539-553.
- Campbell, J. P. (1977). On the nature of effectiveness. In P. S. Goodman & J. M. Pennings (Eds.), *New perspectives on organizational effectiveness*. San Francisco: Jossey-Bass.
- Canals, J. (2010). Building respected companies: Rethinking business leadership and the purpose of the firm. Cambridge, UK: Cambridge University Press.
- Carmeli, A., & Halevi, M. Y. (2009). How top management team behavioral integration and behavioral complexity enable organizational ambidexterity: The moderating role of contextual ambidexterity. *Leadership Quarterly*, 20(2), 207-218.
- Carver, J. (2006). Boards that make a difference: A new design for leadership in nonprofit and public organizations. San Francisco: Jossey-Bass.
- Carver, J. (2011). Boards that make a difference: A new design for leadership in nonprofit and public organizations. Somerset, NJ: John Wiley & Sons.

- Carver, J., & Carver, M. M. (2006). *Reinventing your board: A step-by-step guide to implementing policy governance*. San Francisco: Jossey-Bass.
- Carver, J., & Carver, M. M. (2009a). *Evaluating CEO and board performance*. San Francisco, CA: Wiley.
- Carver, J., & Carver, M. M. (2009b). *The governance of financial management: A Carver policy governance guide*. San Francisco: Jossey-Bass.
- Carver, J., & Oliver, C. (2002). Corporate boards that create value: Governing company performance from the boardroom. San Francisco: Jossey-Bass.
- Chaganti, R., Damanpour, F., & Mankelwicz, J. (2005). CEO power cycles and corporate performance cycles: An examination of the relationship between changes in power and changes in performance. In A. Rahim & R. T. Golembiewski (Eds.), *Current topics in management* (Vol. 10; pp. 133-160). New Brunswick, NJ: Transaction.
- Charan, R. (2005). Boards that deliver advancing corporate governance from compliance to competitive advantage. San Francisco: Jossey-Bass.
- Colley, J. L. (2007). *Principles of general management: The art and science of getting results across organizational boundaries*. New Haven: Yale University.
- Conger, J. A. (1999). Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. *The Leadership Quarterly*, *10*(2), 145-170.
- Conger, J. A. (2009). *Boardroom realities: Building leaders across your board*. San Francisco: Jossey-Bass.
- Coombes, S. M. T., Morris, M. H., Allen, J. A., & Webb, J. W. (2011). Behavioural orientations of non-profit boards as a factor in entrepreneurial performance: Does governance matter? *Journal of Management Studies*, 48(4), 829-856. doi: 10.1111/j.1467-6486.2010.00956.x
- Cornforth, C., & Edwards, C. (1999). Board roles in the strategic management of nonprofit organizations: Theory and practice. *Corporate Governance: An International Review*, 7(4), 346-362. doi:10.1111/1467-8683.00165
- Cornforth, C., Harrison, Y., & Murray, V. (2010, January). *What makes chairs of governing boards effective?* Paper presented at the National Council for Voluntary Organizations and the Charity Trustee Network, Seattle, WA.
- Cottrell, R. R., & McKenzie, J. F. (2011). *Health promotion and education research methods using the five-chapter thesis/dissertation model*. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db= nlabk&AN=337288
- Counts, G. E., Farmer, R. F., & Shepard, I. S. (1995). Leadership: Too elusive for definition? *Journal of Leadership & Organizational Studies*, 2(3), 30-41. doi: 10.1177/107179199500200304
- Covey, S. (1992). Principle-centered leadership. New York: Free Press.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.
- Crosson, F. J., & Tollen, L. A. (2010). *Partners in health: How physicians and hospitals can be accountable together*. San Francisco, CA: Jossey-Bass.
- Daft, R. L. (2005). The leadership experience. Mason, OH: Thomson South-Western.
- Daft, R. L. (2006). *Organization theory and design*. Mason, OH: Thompson-South Western.
- Daft, R. L., & Lane, P. G. (2008). *The leadership experience*. Mason, OH: Thomson/South-Western.
- Dahya, J., Garcia, L. G., & Van Bommel, J. (2009). One man two hats: What's all the commotion! *Financial Review*, *44*(2), 179-212. doi:10.1111/j.1540-6288.2009.00215.x
- Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal*, 19(3), 269-290. doi:10.1002/(sici)1097-0266(199803)19:3<269::aid-smj950>3.0.co;2-k
- Dalton, D. R., & Dalton, C. M. (2011). Integration of micro and macro studies in governance research: CEO duality, board composition, and financial performance. *Journal of Management*, 37(2), 404-411. doi:10.1177/0149206310373399
- Dey, A. (2008). Corporate governance and agency conflicts. *Journal of Accounting Research*, 46(5), 1143-1181. doi:10.1111/j.1475-679X.2008.00301.x
- Dey, A., Engle, E., & Liu, X. G. (2010). *CEO and board chair roles: To split or not to split*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1412827
- Dockery, D. S. (2011). Christian leadership essentials: A handbook for managing Christian organizations. Nashville, TN: B&H Academic.
- Donahue, J. (2003). A case study of select Illinois community college board chair perspectives on their leadership role. *Community College Review*, *31*(2), 21-46. doi: 10.1177/009155210303100202

- Doyle, J. (2009). *The elements of effective board governance*. Washington, DC: Community College Press.
- Drucker, P. F. (1992). *Managing the non-profit organization: Practices and principles*. New York: HarperBusiness.
- Duarte, S. A. (2011). A study of differences between CEO and employee perceptions of leadership styles and organizational characteristics in service organizations of Orange County, California (Unpublished doctoral dissertation). University of La Verne, La Verne, CA.
- Dunne, P. (2005). *Running board meetings: How to get the most from them*. London: Kogan Page.
- Dym, B., Egmont, S., & Watkins, L. (2011). Managing leadership transition for nonprofits: Passing the torch to sustain organizational excellence. Upper Saddle River, NJ: FT Press.
- Eadie, D. C. (2009). *Extraordinary board leadership: The keys to high-impact governing*. Sudbury, MA: Jones and Bartlett.
- Evans, G. (1958). Ancient Mesopotamian assemblies. *Journal of the American Oriental Society*, 78(1), 1-11.
- Faleye, O. (2007). Does one hat fit all? The case of corporate leadership structure. Journal of Management and Governance, 11(3), 239-259. doi: 10.1007/s10997-007-9028-3
- Fama, E. F., & Jenson, M. C. (1983). Separation of ownership and control. *Journal of Law & Econonics*, 26, 301-326.
- Fiedler, F. E. (1967). A theory of leadership effectiveness. New York: McGraw-Hill.
- Fitzpatrick, J. J., & Kazer, M. W. (2012). *Encyclopedia of nursing research*. New York: Springer.
- Fleece, J., & Houle, D. (2011). *New health age: The future of health care in America*. Naperville, IL: Sourcebooks.
- Fleece, J., & Houle, D. (2012). *Why one third of hopsitals will close by 2020*. Retrieved December 25, 2012, from http://www.kevinmd.com/blog/2012/03/onethird-hospitals-close-2020.html
- Flood, P. C., Hannan, E., Smith, K. G., Turner, T., West, M. A., & Dawson, J. (2000). Chief executive style, consensus decision making, and top management team effectiveness. *European Journal of Work and Organizational Psychology*, 9(3), 401-420.

- Frisch, S. (2012). *The impact of a CEO's task knowledge on the leader life cycles*. Munich, Germany: GRIN Verlag. doi:10.3239/9783656221050.
- Gardner, R. J. (2008). Corporate leadership selection: Impact on American business, employees, and society. Bloomington, IN: AuthorHouse.
- Gilmore, T. N. (2003). *Making a leadership change: How organizations and leaders can handle leadership transitions successfully*. Lincoln, NE: Authors Choice Press, iUniverse.
- Goethals, G. R., Sorenson, G. J., & Burns, J. M. (2004). *Encyclopedia of leadership*. Thousand Oaks, CA: Sage.
- Goodwin, V. L., Wofford, J. C., & Whittington, J. L. (2001). A theoretical and empirical extension to the transformational leadership construct. *Journal of Organizational Behavior*, 22(7), 759-774. doi:10.1002/job.111
- Gottlieb, H. (2001). *Why boards micro-manage and how to get them to stop*. Retrieved from http://www.help4nonprofits.com/NP_Bd_MicroManage_Art.htm
- Grace, K. S., McClellan, A., & Yankey, J. A. (2009). *The nonprofit board's role in mission, planning, and evaluation*. Washington, DC: BoardSource.
- Greenfield, J. M. (2008). *Fundraising responsibilities of nonprofit boards*. Washington, DC: BoardSource.
- Grint, K. (1997). *Leadership: Classical, comtemporary, and critical approaches*. New York: Oxford University Press.
- Guo, C. (2007). When government becomes the principal philanthropist: The effects of public funding on patterns of nonprofit governance. *Public Administration Review*, 67(3), 458-473. doi:10.1111/j.1540-6210.2007.00729.x
- Guo, C., & Musso, J. A. (2007). Representation in nonprofit and voluntary organizations: A conceptual framework. *Nonprofit and Voluntary Sector Quarterly*, 36(2), 308-326. doi:10.1177/0899764006289764
- Hackman, M. Z., & Johnson, C. E. (2009). *Leadership: A communication perspective*. Long Grove, IL: Waveland Press.
- Hagenow, N. R. (2001). Care executives: Organizational intelligence for these times. *Nursing Administration Quarterly*, 25(4), 30-35.
- Hall, P. D. (1997). *A history of nonprofit boards in the United States*. Washington, DC: National Center for Nonprofit Boards.
- Hall, P. D. (2003). A history of nonprofit boards in the United States. *BoardSource*. Retrieved May 2011 from http://links2leadership.com/boardLEADERSHIP.html

- Hämäläinen, R. P., & Saarinen, E. (Eds.). (2007). *Systems intelligence in leadership and everyday life*. Helsinki, Finland: Helsinki University of Technology, Systems Analysis Laboratory.
- Harms, P. D., & Credé, M. (2010). Emotional intelligence and transformational and transactional leadership: A meta-analysis. *Journal of Leadership & Organizational Studies, 17*(1), 5-17. doi:10.1177/1548051809350894
- Harrington, J. C. (2005). *The challenge to power: Money, investing, and democracy*. White River Junction, VT: Chelsea Green.
- Harris, D. A., & Helfat, C. E. (2007). The board of directors as a social network. *Journal of Management Inquiry*, 16(3), 228-237. doi:10.1177/1056492607305901
- Harrison, Y. D., & Murray, V. (2012). Perspectives on the leadership of chairs of nonprofit organization boards of directors: A grounded theory mixed-method study. *Nonprofit Management and Leadership*, 22(4), 411-437. doi: 10.1002/nml.21038
- He, E., & Sommer, D. W. (2010). Separation of ownership and control: Implications for board composition. *Journal of Risk and Insurance*, 77(2), 265-295. doi: 10.1111/j.1539-6975.2010.01351.x
- Hendry, K., & Kiel, G. C. (2004). The role of the board in firm strategy: Integrating agency and organizational control perspectives. *Corporate Governance: An International Review*, *12*(4), 500-520. doi:10.1111/j.1467-8683.2004.00390.x
- Herman, R. D. (2005). *The Jossey-Bass handbook of nonprofit leadership and management*. San Francisco: Jossey-Bass.
- Herman, R. D., & Renz, D. O. (1999). Theses on nonprofit organizational effectiveness. Nonprofit and Voluntary Sector Quarterly, 28(2), 107-126. doi: 10.1177/0899764099282001
- Hersey, S., & Blanchard, K. (1988). *Management of organizational behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Hickey, J. V., & Brosnan, C. A. (2012). *Evaluation of health care quality in advanced practice nursing*. New York: Springer.
- Hinkin, T. R., & Schriesheim, C. A. (2008). An examination of "non-leadership": From laissez-fair leadership to reward omission and punishment omission. *Journal of Applied Psychology*, 93(6), 1234-1248.
- Hogan, R., & Sinclair, R. (1996). Intellectual, ideological, and political obstacles to the advancement of organizational science. *The Journal of Applied Behavioral Science*, 32(4), 378-389. doi:10.1177/0021886396324003

- Hopkins, B. R. (2009). *Starting and managing a nonprofit organization: A legal guide* (5th ed.). Hoboken, NJ: John Wiley & Sons.
- Hopkins, B. R. (2012). *Starting and managing a nonprofit organization: A legal guide* (6th ed.). Hoboken, NJ: John Wiley & Sons.
- Hopt, K. J., & Hippel, T. V. (2010). *Comparative corporate governance of non-profit organizations*. Cambridge, UK: Cambridge University Press.
- Horn, C. E., & Schaffner, H. A. (2003). Work in America: An encyclopedia of history, policy, and society. Santa Barbara, CA: ABC-CLIO.
- Houle, C. O. (1997). *Governing boards: Their nature and nurture*. San Francisco: Jossey-Bass.
- Howell, J.M., & Avolio, B.J. (1993). Transformational leadership, transactional leadership, locus of control, and support. *Journal of Applied Psychology*, 78(6), 891-893.
- Howell, J. P., & Costley, D. L. (2006). *Understanding behaviors for effective leadership*. Upper Saddle River, NJ: Prentice Hall.
- Hoye, R., & Cuskelly, G. (2007). Sport governance. Amsterdam: Elsevier.
- Huber, G. P. (2003). *The necessary nature of future firms: Attributes of survivors in a changing world*. Thousand Oaks, CA: Sage.
- Hughes, R. L., Ginnett, R. C., & Curphy, G. J. (2008). *Leadership: Enhancing the lessons* of experience. New York: McGraw-Hill Irwin.
- Hurst, J. W. (2004). *The legitimacy of the business corporation in the law of the United States, 1780-1970.* Clark, NJ: Lawbook Exchange.
- Ihlenfeldt, W. A. (2011). *Visionary leadership: A proven pathway to visionary change*. Bloomington, IN: AuthorHouse.
- Ingram, R. T. (2008). *Ten basic responsibilities of nonprofit boards*. Washington, DC: BoardSource.
- Iorg, J. (2007). The character of leadership: Nine qualities that define great leaders. Nashville, TN: B & H Publishing.
- Iyengar, R. J., & Zampelli, E. M. (2009). Self-selection, endogeneity, and the relationship between CEO duality and firm performance. *Strategic Management Journal*, 30(10), 1092-1112. doi:10.1002/smj.776
- Jackson, S. L. (2011). *Research methods: A modular approach*. Belmont, CA: Wadsworth/Cengage Learning.

- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, *3*, 305-360.
- Jha, A., & Epstein, A. (2010). Hospital governance and the quality of care. *Health Affairs*, 29(1), 182-187. doi:10.1377/hlthaff.2009.0297
- Joint Commission Resources. (2009). *Meeting the Joint Commission's infection* prevention and control requirements: A priority area. Oak Brook, IL: Author.
- Jost, T. S. (2007). *Health care at risk a critique of the consumer-driven movement*. Durham, NC: Duke University Press.
- Judge, T. A., & Piccolo, R. F. (2004). Transformation and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755-768.
- Kaiser, M. M. (2010). *Leading roles: 50 questions every arts board should ask*. Waltham, MA: University Press of New England.
- Kakabadse, A., & Kakabadse, N. (2008). *Leading the board: The six disciplines of world class chairmen*. New York: Palgrave Macmillan.
- Kang, E., & Zardkoohi, A. (2005). Board leadership structure and firm performance. *Corporate Governance: An International Review*, 13(6), 785-799. doi: 10.1111/j.1467-8683.2005.00470.x
- Kavaler, F., & Alexander, R. S. (2014). *Risk management in healthcare institutions: Limiting liability and enhancing care* (3rd ed.). Burlington, MA: Jones & Bartlett Learning.
- Kivlin, J. D. (2002). Improving patient satisfaction in pediatric ophthaomology. *American Orthoptic Journal*, 52, 104-109.
- Klausner, M., & Small, J. (2005). Failing to govern? The disconnect between theory and reality in nonprofit boards, and how to fix it. *Stanford Social Innovation Review*, *3*, 42-50.
- Klein, K. (2009). *Reliable fundraising in unreliable times: What good causes need to know to survive and thrive.* San Francisco, CA: Jossey-Bass.
- Klein, K. (2011). Fundraising for social change. San Francisco, CA: Jossey-Bass.
- Klenke, K. (1993). Leadership education at the great divide: Crossing into the twentyfirst century. *Journal of Leadership & Organizational Studies*, 1(1), 111-127. doi: 10.1177/107179199300100110

- Kotter, J. P. (1982). General managers are not generalists. *Organizational Dynamics*, 10(4), 4-19.
- Krumm, D. J. (2000). *Psychology at work: An introduction to industrial/organizational psychology*. New York: Worth Publishers.
- Kuhn, T. M. (2001). *The relationship between employee personality traits and preferred leadership style* (Unpublished doctoral dissertation). University of Nevada, Reno.
- Leblanc, R. (2005). Assessing board leadership. *Corporate Governance: An International Review*, 13(5), 654-666. doi:10.1111/j.1467-8683.2005.00457.x
- Leblanc, R., & Gillies, J. M. (2010). *Inside the boardroom: How boards really work and the coming revolution in corporate governance*. Toronto: J. Wiley & Sons.
- Lechem, B. (2002). *Chairman of the board: A practical guide*. New York: John Wiley and Sons.
- Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design* (8th ed.). Upper Saddle River, NJ: Pearson Education.
- London, M. (2002). *Leadership development: Paths to self-insight and professional growth*. Mahwah, NJ: Lawrence Erlbaum.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analysis of the MLQ literture. *The Leadership Quarterly*, 7(3), 208-218.
- Lussier, R. N., & Achua, C. F. (2001). *Leadership theory, application, and skill development*. Cincinnati, OH: South-Western College.
- MacAvoy, P. W., & Millstein, I. M. (2004). *The recurrent crisis in corporate governance*. Stanford, CA: Stanford Business Books.
- MacKenzie, S. B., Podsakoff, P. M., & Rich, G. A. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the Academy of Marketing Science*, 29(2), 115-134. doi:10.1177/03079459994506
- Maitlis, S. (2004). Taking it from the top: How CEOs influence (and fail to influence) their boards. *Organization Studies*, 25(8), 1275-1311. doi: 10.1177/0170840604046318
- Martin, R., & Epitropaki, O. (2001). Role of organizational identification on implicit leadership theories (ILTs), transformational leadership and work attitudes. *Group Processes & Intergroup Relations*, 4(3), 247-262. doi: 10.1177/1368430201004003005

- Maxwell, J. (2008). *Go for gold: Inspiration to increase your leadership impact.* Nashville, TN: Thomas Nelson.
- Maxwell, J. C. (2007). *The 21 irrefutable laws of leadership: Follow them and people will follow you.* Nashville, TN: Thomas Nelson.
- McAdams, D. R. (2006). What school boards can do: Reform governance for urban schools. New York: Teachers College Press.
- McDonald, P. (2004). *Oxford dictionary of medical quotations*. New York: Oxford University Press.
- McEvoy, G. M., & Cascio, W. F. (1989). Cumulative evidence of the relationship between employee age and job performance. *Journal of Applied Psychology*, 74, 11-17.
- McNeil, K. A., Newman, I., & Fraas, J. W. (2012). *Designing general linear models to test research hypotheses*. Lanham, MD: University Press of America.
- Mehta-Jones, S. (2004). Life in ancient Mesopotamia. St. Catharines, ON: Crabtree.
- Merton, R. K. (1957). Social theory and social structure. New York: Free Press.
- Miller-Millesen, J. L. (2003). Understanding the behavior of nonprofit boards of directors: A theory-based approach. *Nonprofit and Voluntary Sector Quarterly*, 32(4), 521-547. doi:10.1177/0899764003257463
- Monks, R. A. G., & Minow, N. (2008). *Corporate governance*. Hoboken, NJ: John Wiley & Sons.
- Multifactor Leadership Questionnaire. (2013). Retrieved March 2013 from http://www.mindgarden.com/products/mlq.htm
- Neem, J. N. (2003). Politics and the origins of the nonprofit corporation in Massachusetts and New Hampshire, 1780-1820. *Nonprofit and Voluntary Sector Quarterly*, 32(3), 344-365. doi:10.1177/0899764003254593
- Newman, I., & Benz, C. R. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*. Edwardsville, IL: Southern Illinois University Press.
- Newman, I., & McNeil, K. A. (1998). *Conducting survey research in the social sciences*. Lanham, MD: University Press of America.
- Newman, I., & Newman, C. (1994). *Conceptual statistics for beginners*. Lanham, MD: University Press of America.

- Newman, I., Newman, C., & Brown, R. (2006). *Conceptual statistics for beginners*. Lanham, MD: University Press of America.
- Nohria, N., & Khurana, R. (2010). *Handbook of leadership theory and practice: An HBS centennial colloquium on advancing leadership*. Boston, MA: Harvard Business Press.
- Oke, A., Munshi, N., & Walumbwa, F. (2009). The influence of leadership on the innovation processes and activities. *Organizational Dynamics*, *38*(1), 64-72.
- Orlikoff, J. E. (2000). A board as good as its chair. Trusteeship, 8(4), 24-28.
- Oshagbemi, T. (2004). Age influences on the leadership styles and behavior of managers. *Employee Relations*, 26(1), 14-29.
- O'Sullivan, D., & Dooley, L. (2009). Applying innovation. Thousand Oaks: Sage.
- Pakroo, P. (2009). *Starting & building a nonprofit: A practical guide*. Berkeley, CA: Nolo.
- Peat, J., Barton, B., & Elliott, E. (2009). *Statistics workbook for evidence-based health care*. Oxford, UK: Wiley-Blackwell.
- Peirce, B. (1833). A history of Harvard University, from its foundation, in the year 1636, to the period of the American Revolution. Cambridge, MA: Brown, Shattuck.
- Pettey, J. G. (2008). *Ethical fundraising: A guide for nonprofit boards and fundraisers*. Hoboken, NJ: Wiley.
- Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. Stanford, CA: Stanford Business Books.
- Phillips, K. L., Chiriboga, D. A., & Jang, Y. (2012). Satisfaction with care: The role of patient-provider racial/ethnic concordance and interpersonal sensitivity. *Journal* of Aging and Health, 24(7), 1079-1090. doi:10.1177/0898264312453068
- Pointer, D., & Orlikoff, J. (2002). *The high performance board: Principles of nonprofit* organization governance. San Francisco: Jossey-Bass.
- Poutziouris, P., Smyrnios, K., & Klein, S. (2006). *Handbook of research on family business*. Cheltenham, UK: E. Elgar.
- Powell, W. W. (1998). *The new institutionalism in organizational analysis*. Chicago, IL: Chicago University Press.
- Powell, W. W., & Steinberg, R. (2006). *The nonprofit sector: A research handbook*. New Haven, CT: Yale University Press.

- Preston, J. B., & Brown, W. A. (2004). Commitment and performance of nonprofit board members. *Nonprofit Management and Leadership*, 15(2), 221-238. doi: 10.1002/nml.63
- Purdy, J. M., & Lawless, J. (2012). Learning about governance through nonprofit board service. *Journal of Management Education*, 36(1), 33-65. doi: 10.1177/1052562911418196
- Pyzdek, T., & Keller, P. A. (2010). *The Six Sigma handbook: A complete guide for green belts, black belts, and managers at all levels.* New York: McGraw-Hill.
- Quigley, T. J., & Hambrick, D. C. (2012). When the former CEO stays on as board chair: Effects on successor discretion, strategic change, and performance. *Strategic Management Journal*, 33(7), 834-859. doi:10.1002/smj.1945
- Quinones, M. A., Ford, J. K., & Teachout, M. S. (1995). The relationship between work experience and job performance: A conceptual and meta-analytic review. *Personnel Psychology*, 48(4), 887-910.
- Riggio, R. E., & Orr, S. S. (2004). *Improving leadership in nonprofit organizations*. San Francisco: Jossey-Bass.
- Rocco, T. S., & Hatcher, T. (2011). *The handbook of scholarly writing and publishing*. San Francisco, CA: Wiley.
- Rost, J. C. (1991). Leadership for the twenty-first century. New York: Praeger.
- Salkind, N. J. (2008). *Statistics for people who (think they) hate statistics* (3rd ed.). Los Angeles: Sage.
- Sanaghan, P., Goldstein, L., & Gaval, K. D. (2008). *Presidential transitions: It's not just the position, it's the transition*. Westport, CT: Praeger Trade.
- Schilling, J. (2009). From ineffectiveness to destruction: A qualitative study on the meaning of negative leadership. *Leadership*, 5(1), 102-128. doi: 10.1177/1742715008098312
- Scott, W. R. (1977). Effectiveness of organizational effectiveness studies. In P. S. Goodman & J. M. Pennings (Eds.), *New perspectives on organizational effectiveness* (pp. 63-95). San Francisco: Jossey-Bass.
- Seavoy, R. E. (1982). *The origins of the American business corporation 1784-1855*. Westport, CT: Greenwood Press.
- Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Bantam Doubleday Dell.

- Sheehan, K. (2001). *E-mail survey response rates: A review*. Retrieved September 28, 2011, from http://jcmc.indiana.edu/vol6/issue2/sheehan.html
- Shi, L., & Singh, D. A. (2012). Delivering health care in America: A systems approach. Burlington, MA: Jones & Bartlett Learning.
- Shilbury, D., & Moore, K. A. (2006). A study of organizational effectiveness for national Olympic sporting organizations. *Nonprofit and Voluntary Sector Quarterly*, 35(1), 5-38. doi: 10.1177/0899764005279512
- Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal*, *46*(6), 703-714.
- Siciliano, J. I. (2008). A comparison of CEO and director perceptions of board involvement in strategy. *Nonprofit and Voluntary Sector Quarterly*, 37(1), 152-162. doi: 10.1177/0899764007301287
- Singleton, R. A., & Straits, B. C. (2005). *Approaches to social research* (4th ed.). New York: Oxford University Press.
- Smither, J. W., & London, M. (2009). Performance management: Putting research into action. San Francisco: Jossey-Bass.
- Sobel, S. P. (2009). *Preparing the new redefined Form 990 for nonprofit organizations*. Bloomington, IN: AuthorHouse.
- Sternberg, R. J., & Jordan, J. (2005). *A handbook of wisdom: Psychological perspectives*. Cambridge, UK: Cambridge University Press.
- Stone, M. M., & Ostrower, F. (2007). Acting in the public interest? Another look at research on nonprofit governance. *Nonprofit and Voluntary Sector Quarterly*, 36(3), 416-438. doi:10.1177/0899764006296049
- Sundararajan, V., Enoch, C., San Jose, A., Hilbers, P., Krueger, R., Moretti, M., & Slack, G. (2002). *Financial soundness indicators: Analytical aspects and country practices*. Washington, DC: International Monetary Fund.
- Sydney, G. F. (1919). The Quaker colonies: A chronicle of the proprietors of the Delaware [Project Gutenberg EBook]. Retrieved from http://www.earlyamerica.com/ebooks/books/QuakerColonies/ QuakerColonies.html
- Taylor, F. W. (1911). Shop management. New York: Harper & Brothers.
- Tejada, M., Scandura, T. A., & Pillai, R. (2001). The MLQ revisited: Psychometric properties and recommendations. *The Leadership Quarterly*, *12*, 31-52.

- Thelin, J. (2004). *A history of American higher education*. Baltimore, MD: Johns Hopkins University Press.
- Thomas, J. R., Nelson, J. K., & Silverman, S. J. (2011). *Research methods in physical activity*. Champaign, IL: Human Kinetics.
- Tuggle, C. S., Sirmon, D. G., Reutzel, C. R., & Bierman, L. (2010). Commanding board of director attention: Investigating how organizational performance and CEO duality affect board members' attention to monitoring. *Strategic Management Journal*, 31(9), 946-968. doi:10.1002/smj.847
- Uselton, J. P., Kienle, P. C., & Murdaugh, L. B. (2010). *Assuring continuous compliance with Joint Commission standards: A pharmacy guide*. Bethesda, MD: American Society of Health-System Pharmacists.
- Valentine, J. W., & Prater, M. (2011). Instructional, transformational, and managerial leadership and student achievement: High school principals make a difference. *NASSP Bulletin*, 95(1), 5-30. doi:10.1177/0192636511404062
- Walter, F., & Bruch, H. (2009). An affective events model of charismatic leadership behavior: A review, theoretical integration, and research agenda. *Journal of Management*, 35(6), 1428-1452. doi:10.1177/0149206309342468
- Walters, B. A., Kroll, M., & Wright, P. (2008). CEO ownership and effective boards: Impacts on firm outcomes. *Strategic Organization*, 6(3), 259-283. doi: 10.1177/1476127008093519
- Wang, G., Oh, I.-S., Courtright, S. H., & Colbert, A. E. (2011). Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research. *Group & Organization Management*, 36(2), 223-270. doi: 10.1177/1059601111401017
- Weber, M. (1947). *The theory of social and economic organization* (A. M. Henderson & T. Parsons, Trans.). New York: The Free Press.
- Weibler, J. (2004). *New perspectives on leadership research*. Mering, Schwab: Rainer Hampp.
- Wertheimer, M. R. (2008). The board chair handbook. Washington, DC: BoardSource.
- Wolper, L. (2010). Health care administration: Managing organized delivery systems (5th ed.). Sudbury, MA: Jones & Bartlett Learning.
- Wood, G. S. (2009). *The purpose of the past: Reflections on the uses of history*. New York: Penguin Books.

- Xirasagar, S., Samuels, M. E., & Stoskopf, C. H. (2005). Physician leadership styles and effectiveness: An empirical study. *Medical Care Research and Review*, 62(6), 720-740. doi:10.1177/1077558705281063
- Young, M. D., Crow, G. M., Murphy, J., & Ogawa, R. T. (2009). *Handbook of research* on the education of school leaders. London, England: Taylor & Francis.
- Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership & Organizational Studies*, 9(1), 15-32. doi:10.1177/107179190200900102
- Zaleznik, A. (1992). Managers and leaders: Are they different? *Harvard Business Review*, 70(2), 126-135.
- Zander, A. (1993). *Making boards effective: The dynamics of nonprofit governing boards*. San Francisco: Jossey-Bass.
- Zander, A. (1994). Making groups effective. San Francisco: Jossey-Bass.
- Zhang, Y., & Rajagopalan, N. (2010). CEO succession planning: Finally at the center stage of the boardroom. *Business Horizons*, 53(5), 455-462.
- Zietlow, J. T., Hankin, J. A., & Seidner, A. G. (2007). *Financial management for nonprofit organizations: Policies and practices*. Hoboken, NJ: John Wiley & Sons.

VITA

VITA

EDUCATION:

ANDREWS UNIVERSITY

2013	Doctor of Philosophy in Leadership
2000	Master of Science in Administration
	WALLA WALLA COLLEGE
1990	Bachelor of Science in Business Administration

CAREER HISTORY:

2010-Present	FLORIDA HOSPITAL HEARTLAND DIVISION, Sebring, FL Administrator/Florida Heartland Medical Center-Lake Placid
	Vice President Florida Hospital Heartland Medical Center-Sebring and Wauchula Campuses
	Vice President-Support and Ancillary Services
	Executive Director Human Resources and Organizational Development/Compliance Officer
2006-2010	FRANK R. HOWARD MEMORIAL HOSPITAL, Willits, CA Human Resources & Marketing Director
1992-2006	ADRA NETWORK, Silver Spring, MD Bureau Chief for Program Management – International Headquarters Executive Director – ADRA Peru

AFFILIATIONS:

American College of Health Care Executives Society for Human Resources Management American Society for Healthcare Human Resources Administration Health Care Compliance Association

Executive Director – ADRA Nicaragua